

## The Thoughtful Assessment of Prior Learning: Hastening, Ensuring and Enhancing Graduation

David Starr-Glass, University of New York, Prague, Czech Republic; SUNY Empire State College, International Programs (Prague)

### Introduction

Presently, in U.S. higher education, the average time that it takes a full-time enrolled student to complete a four-year degree is about 55 months. In fact, only about 40 percent of full-time enrollees graduate on time and for those who are enrolled part-time, the time-to-graduate (if in fact they ever graduate) is disproportionately longer (Vedder et al., 2010, p. 125). There are multiple reasons for this extended graduation time but, particularly for part-time students, a significant issue is that many find it necessary to work in order to finance their college studies (Bound, Lovenheim, & Turner, 2007). However, students who undertake prior learning assessment (PLA) earn their baccalaureate degrees between 6 1/2 to 10 months earlier, depending on the number of PLA credits received (Klein-Collins, 2010, p. 43). Engagement in PLA also seems to do more than simply reduce time-to-graduate – it significantly contributes to higher levels of academic persistence, institutional retention and successful degree completion (CAEL, 2011a, 2011b; Chappell, 2012; Klein-Collins, 2010, pp. 34-42).

Of course, high drop-out rates (or deliberately planned “stop-out” rates), low retention, and increased graduation time have always been a concern for students and institutions of higher education. However, these statistics translate into very significant human problems as college tuition escalates and graduate debt becomes increasingly onerous. The tuition rates of U.S. higher education have outstripped inflation by 360 percent during the last 25 years, which might be less concerning if the college degree had shown a similar increase in economic value – but it has not (Archibald & Feldman, 2010, 2012). True, college education does continue to provide long-term economic benefit for graduates in the workplace; however, measured in terms of lifelong earning power, the financial return on most college degrees has decreased over the last two decades (Dale & Krueger, 2002, 2011). At the same time – and making that financial return particularly salient – graduates are increasingly required to assume worrisome levels of tuition-related debt. In 2012, more than 70 percent of college graduates had an average student-loan debt of \$29,400 (Reed & Cochrane, 2013). Debt can exert significant pressure on the new graduate, especially if it is not offset by securing a well-paying job, but it is important to note that student debt can also persist into old age. In 2004, only one percent of households headed by those aged 65-74 were still paying their college loans. In 2010, that had increased to four percent. Admittedly the percentage of the elderly with outstanding federal student loans is relatively low, but their debt level is nevertheless not insignificant – in 2013 it amounted to a little more than \$18 billion (GAO, 2014).

College tuition, graduate debt, and time-to-graduate are all moving upward and show little sign of slowing down, let alone of dropping. Against this economic and financial backdrop it is hardly surprising that the impact of PLA is being reassessed and reconsidered. PLA obviously has the potential of generating more credits in a shorter time, but is PLA only about expediting graduation?

This article argues that PLA can contribute positively not simply to the *quantity* of credits available to the undergraduate, but to the *quality* of those credits – their diversity, richness, and relevance to the student and his or her future. Robertson (2011) has claimed that PLA has “the potential to assist students to define themselves in empowering ways ... [which] may be particularly relevant to individuals from colonized populations who have experienced disempowering histories” (p. 105). This article argues that PLA does in fact possess a remarkable potential for redefining and empowering students, whatever their previous social, economic or academic histories.

The first section of this article situates learning within our social, cultural, and lifeworld and considers the broad approaches that PLA has taken. The second section then focuses on two widely used PLA philosophies – the credit exchange and developmental models – and considers these through the prism of learner transformation. This section is followed by a reflection on the PLA process and provides suggestions and recommendations that might be helpful for institutions creating, or expanding, their PLA efforts. The article concludes with a brief review of issues explored and a suggested way forward with PLA work.

### **Perspectives and Consequences of Learning Recognition**

Learning is the process of creating, refining, elaborating and consolidating knowledge about the physical, social and cultural worlds in which we are embedded. Sometimes we are actively engaged and focused on the process of learning; sometimes, it is only on reflection that we become aware that learning has taken place. Sometimes, we deliberately initiate new discovery and knowledge-acquisition within structured social, vocational or educational contexts; sometimes, learning occurs spontaneously, incidentally and as the barely recognized byproduct of our wider world engagement. In all of these senses, learning can be said to be situated because “activities, tasks, functions, and understandings do not exist in isolation; they are part of broader systems of relations in which they have meaning” (Lave & Wenger, 1991, p. 53).

One of the initial problems of recognizing and validating learning is associated with language. In English we differentiate between *teaching* and *learning*, setting up a dichotomy that separates actors, splits a process, and privileges the dominance and authority of those who teach. The difference in verbs suggests a difference in the roles, responsibilities and the identities of those who engage in instructional situations. It also infers a sense of directionality – a transmission process, in which learners are seen as the object of teaching, not as the subjects of their own learning. However, this separation and polarity is not evident in other languages. In Hebrew, for instance, both the acts of teaching (*limaid*) and of learning (*lamad*) use the same verbal root. The distinction only comes about through a difference in verb intensity – “teaching” is a more focused, sustained and deliberate form of “learning.” The semantic difference does not imply a discontinuity between one process of teaching and a separate process of learning; rather, it recognizes a common process that is differentiated by different zones of engagement and intensity. Similarly, in Czech, the acts of teaching (*učit*) and of learning (*učit se*) have an obvious semantic similarity. The only difference is that “learning” employs the reflexive verb. Rather than “teaching” and “learning” being seen in opposition, “learning” is understood as an internalized and personally elaborated version of what is presented through “teaching” – to learn is to “teach” oneself.

It may well be that in the English-speaking world we approach learning and the recognition of learning with an almost subliminal bias that learning requires – and can only be truly manifested through – a separate process of teaching. Language is socially created and culturally preserved, and perhaps this flickering unconscious bias of duality may itself be the product of deeper and more persistent structures of power, authority and legitimacy in our English-speaking cultures (Pokorny, 2012).

As we approach learning and its recognition, it may be prudent to keep in mind Fenwick's (2010) warning of "mistaking learning as a single object when in fact it is enacted as multiple objects, as very different things in different logics" and that learning is better understood "as a messy object, existing in different states, or perhaps a series of different objects that are patched together through some manufactured linkages" (p. 80).

### The Fluidity of Learning

Because of the diverse nature and fluidity of learning, some have found it useful to capture its more distinct forms through a conceptual typology that utilizes two dimensions: formal structure and intentionality.

- **Formal Learning:** (formal/ intentional). This kind of learning is planned, intentional and takes place within a formalized framework that might be academic, professional or vocational. Within that framework the learner systematically acquires new knowledge, skills and competencies all of which will subsequently be assessed, evaluated and validated by the educational provider. The formal outcome of this process is normally aggregated and certified in the form of a certificate, diploma or degree that can then be used by the learner for academic, professional or legal purposes. In formal learning, the learner is aware that knowledge gains will be formally assessed and he or she is purposefully engaged in that process (Cedefop, 2009, p. 73).
- **Informal Learning:** (informal/intentional). This kind of learning is planned and intentional. It is often workplace related and may be provided by organizations through training and development programs, although it can also result from less formal organizational involvement. Informal learning is "predominantly unstructured, experiential, and non-institutionalized" (Marsick & Volpe, 1999, p. 4), and it is generally "oriented to a focus on action; governed by non-routine conditions; concerned with tacit dimensions that must be made explicit; delimited by the nature of the task, the way in which the problems are framed, and the [learner's] work capacity" (Watkins & Marsick, 1992, p. 287). There are differences in the use of this term. American *informal learning* is referred to as *non-formal learning* in the European literature, where it has been defined as learning "embedded in planned activities not always explicitly... but which contain an important learning element... [and] is intentional from the learner's point of view" (Cedefop, 2009, p. 75). In this article American terminology has been used throughout.
- **Incidental Learning:** (informal/unintentional). This kind of learning is "never planned or intentional ... [and] almost always takes place although people are not always conscious of it" (Marsick & Watkins, 1990, p. 12). Incidental learning is casual and spontaneous, with new knowledge being created and acquired through social, cultural and lifeworld engagement. Again, there is a difference between American and European usage. American *incidental learning* is generally referred to as *informal learning* in Europe but, as the European definition suggests, both of these kinds of learning are essentially the same: (European) informal learning occurs through "daily activities related to work, family or leisure ... [it] is not organized or structured in terms of objectives, time or learning support ... [and is] mostly unintentional from the learner's perspective" (Cedefop, 2009, p. 74).

This typology identifies different kinds of learning that can occur. Although such a classification has utility it should not obscure the simple fact that learning is richly varied, continuously acquired and possesses great fluidity. Although formal learning is *designed to be recognized* – by both learner and other interested parties – that recognition should not lead to formal learning being unduly privileged. Beneath the "visible tip" of formal education and learning there lies a more massive, and often more significant, expansiveness of submerged and presently invisible learning that is "usually ignored, unrecognized or taken for granted as simply day-to-day getting by" (Livingstone, 2000, para. 3).

For adult learners, especially for those who have delayed college entrance, the submerged iceberg of

informal and incidental learning can be considerable, but it is usually unrecognized – by the individual and by others. PLA is based on the understanding that: (a) this massive, submerged and taken for granted of knowledge exists; (b) that it is often of considerable value for the learner and for others; and (c) that with sufficient care it can be rendered visible. Challis (1993) expressed it as follows: (1) “learning is worthy and capable of gaining recognition and credit, regardless of the time, place and context in which it has been achieved”; and (2) the assessment of prior experiential learning “represents a move to accept that learning is not dependent upon any particular formal setting, and to acknowledge it as being of value in its own right” (p. 1).

### Perspectives of Learning Recognition

If learning is inherently continuous, diverse and fluid, it would seem that any assessment of prior learning should itself reflect these qualities. These qualities, and a more holistic appreciation of learning, are increasingly apparent in contemporary PLA work; however, in its evolutionary history PLA developed out of separate traditions and philosophical perspectives, each of which had a particular emphasis and agenda. Building on the contributions of earlier scholars (in particular Saddington, 1998 and Weil & McGill, 1989), a number of modern writers suggest that PLA has assumed – and has to some extent amalgamated – four distinct perspectives (Breier, 2005; Fenwick, 2000).

- **A Technical/Market Perspective:** The central issue in this perspective is the active translation of prior experience into acceptable college-level equivalences in order to provide educational and (potentially) economic advantage for the learner. In seeking to provide the learner with college-level equivalencies, PLA assessors will initially focus on informal learning and prior experience. However, in an ongoing search for college-acceptable credits, learners might not simply rely on a history of *prior experience*, but might also be actively counseled to *acquire knowledge* through independent self-directed study that will eventually be evaluated. The technical/market perspective recognizes the economic value of PLA for the learner and tends to focus on objective comparisons, adequacy of analysis, and the reliability and validity of the outcomes derived from that analysis (Starr-Glass, 2012a).
- **A Disciplinary-Specific Perspective:** The central issue is what might be thought of as an “internal” recognition of other kinds of learning by the academy itself. This internally-initiated recognition accepts that there might be alternative ways of knowledge production – ways that can originate in nontraditional and informal ways – but that these can only be recognized and assessed by the college and its faculty. The recognition and acceptance of non-taught academic credits is circumscribed by the paradigmatic nature of the academic disciplines in the academy. Interestingly, Shulman (1993) noted that the word *discipline* is apt in describing academic areas of interest “because it not only denotes a domain but also suggests a process: a community that disciplines is one that exercise quality, control, judgment, evaluation, and paradigmatic definition” (p. 6). That paradigmatic definition represents a cluster of accepted and professionally-reproduced assumptions, beliefs, epistemological preferences and theoretical models – all of which contribute to, and which come to define, the discipline’s “games, practices, and strategies” (Bernstein, 1996, p. 170). From this perspective, PLA recognizes the possibility that learners *might* have acquired the knowledge, skills and competencies associated with the discipline through informal learning; however, college-level equivalencies are only granted if the candidate’s prior experience very closely matches the standards, expectations and understandings of the discipline.
- **A Critical/Radical Perspective:** The central issue is the acceptance and legitimization of different ways of learning and knowing – different epistemological assumptions, ontological frameworks and structures of knowledge. On one hand, the critical/radical perspective seeks to liberate and empower learners by appreciating and validating their incidental and informal learning experiences. On the other hand, this perspective *also* challenges formal academic communities to rescript their traditional, socially-constructed and culturally-mediated understandings of knowledge, knowing and knowledge-production.

Often, the resonant political messages in this perspective are about promoting broader inclusion in learning and educational worlds, increasing social justice and empowering those who had been historically neglected, ignored or marginalized by traditional higher education systems (Harris, 1999, 2000; Michelson, 1996, 1997; Volbrecht, 2009).

- **A Liberal/Humanist Perspective:** Here, the central issue is a concern for the growth and development of adult learners, particularly those who enter higher education later in life. Adult learners often have a wealth of knowledge that has been gained through experience within their workplace, military service and communities. This richness, however, is usually unrecognized by the individual and often discounted by the formal educational system (Berglund, 2014). The liberal/humanist perspective recognizes this hidden knowledge-capital and seeks to have it recognized, celebrated and further utilized. From this perspective, PLA accepts the rich resources that learners often possess and uses a process of assessment and validation designed, among other things, to empower the individual, to bring about changes in self-perception and self-efficacy, and to contribute to personal growth, change and transformation.

These learning recognition perspectives reflect different agendas and concerns, and it would be all too easy to see them as distinctive and mutually exclusive. It might, however, be more profitable to look for the commonalities that they incorporate. Each recognizes the centrality of the learner, an appreciation of the diversity of learning experiences and an understanding of the consequences of knowledge recognition. For institution, and for their faculties who engage in PLA, a key issue is that PLA evaluators should be aware of these different recognition perspectives and not simply rely on (or reflexively impose) their own preferred approaches.

### **Consequences of Learning Recognition**

Although PLA is connected with reductions in time-to-graduate, it also seems that student engagement with the PLA process yields other significant benefits. First, it might be useful to gain a sense of the extent to which PLA is actually used in U.S. higher education. Recent research has shown that students who earned their baccalaureate degrees were, on average, likely to have earned 20.1 PLA credits (CAEL, 2011a). This average did not differ significantly between those graduating from public or from private non-profit institutions, but there was a difference associated with college size. Those attending middle-sized institutions (with student populations of 10,000-20,000) earned the highest number of PLA credits (21.5); whereas, those at large institutions (more than 20,000 students) earned the lowest (9.6). The reason for this difference is unclear, but it may reflect differing institutional attitudes toward PLA, levels of organizational engagement and advisement, or more rigid and bureaucratic graduation policies.

Second, so far as minority students are concerned, research has highlighted the connection between the amount of PLA credits earned and positive student outcomes such as increased graduation rates, reduced time-to-graduate and reduced tuition costs. This research focused on what were described as underserved students, that is, those who self-defined as having low-incomes, or as belonging to the black non-Hispanic, or Hispanic communities. Positive outcomes were associated with students in all of these categories (CAEL, 2011b). Research has also indicated that Hispanic and Latino students utilize a PLA initiative as successfully as other groups, with institutional opportunities – rather than ethnicity – being the most important factor (Klein-Collins & Olson, 2014).

Third, research has also examined the connection between degree completion and time-to-graduate for older students. A study of more than 62,000 adult learners (defined as being older than 25) at 48 four-year American colleges found that: (a) those who had engaged in a PLA process had significantly higher graduation rates (43 percent) than those who had earned no PLA credits (15 percent); (b) on average, students who

earned relatively few PLA credits (13-24) completed their degrees 6.6 months sooner, while those with more extensive PLA engagement (49 or more credits) saved 10.1 months; (c) most PLA students (56 percent) who had still not graduated seven years after initial registration had accumulated 80 percent or more credits required to graduate, while only 22 percent of non-PLA students had made similar progress; and (d) at an institutional level, the best student outcomes (defined as successful graduation and time-to-graduate) occurred when there were multiple PLA initiatives and where PLA credits were used to fulfill a range of contingencies: granting advanced standing or placement, waiving course prerequisites, meeting general education requirements, and satisfying specific program or academic major requirements (Klein-Collins, 2010, p. 7-8).

### **Hastening, Ensuring and Enhancing Graduation**

The advantages and benefits of PLA – for both students and colleges – are increasingly being recognized. Institutionally, there has been an accelerating interest and commitment to PLA over the last 40 years, and there is ample evidence to suggest that this commitment to, and utilization of, PLA will increase in the next decade (Travers, 2012a, 2012b). Increasingly, colleges are recognizing the financial benefits associated with PLA and are integrating PLA into their business models; indeed, a recent publication has urged colleges to adopt pricing models that view prior learning assessment “as a [sic] something of a loss leader – a service whose fees may not cover all associated costs but is assumed to have significant returns over time that will benefit the students and the institution alike” (Klein-Collins, 2015, p. 3).

Colleges are beginning to seriously consider PLA as part of a bundle of practices that will reduce the financial pressures that they are currently experiencing. Many colleges have been proactive in this regard, but just as many are responding to increasing demands that will make PLA options more widely available, more effectively utilized and even compulsory. Throughout the U.S., state legislatures have recognized the value of PLA for their institutions of higher education, and for the well-being of their citizens, their local communities and their economies, and are mandating that PLA is made available to all students (Ohio Board of Regents, 2015; Sherman, Klein-Collins, & Palmer, 2012).

But what does the process of PLA actually entail?

Two broad approaches exist in PLA: the exchange credit model and the developmental model. Both of these models deserve some explanation, as does the impact that they might have on the candidates who seek PLA through them (Cameron & Miller, 2004; Trowler, 1996).

### **Credit Exchange: Standardized Tests and Anticipatory Formal Learning**

In U.S. higher education, standardized tests made their appearance for admission purposes following World War II. Standardized tests became an effective expedient in dealing with the massive inflow of veterans who sought higher education benefits under the GI Bill, allowing “admission committees to evaluate grades and courses from schools with which they were not familiar ... to open the doors of educational opportunity to a broad range of students who were not part of the traditional privileged college-going population” (Wightman, 2003, p. 50). In practice, standardized examinations actually tended to have the opposite effect by preserving an educational status quo and limiting student diversity; however, standard examination were easy to administer, were believed to produce objective results, and in time became part of the college landscape being used not only for admission purposes but also for granting college credits.

Students who currently utilize PLA credit exchange options are probably most interested in accelerating the degree process. They might feel that they are capable of successfully demonstrating their skills and competencies, “challenging” preliminary studies offered by their colleges, and of using the time gained by taking

these examinations to focus their efforts on more demanding academic coursework.

Credit exchange options allow students to earn credits and to use them to meet their graduation requirements. From that perspective, they seem similar to other PLA initiatives; however, conceptually they are quite distinct. In credit exchange the knowledge that candidates are expected to demonstrate has not been acquired through incidental learning, informal learning or prior experience. Instead, the knowledge being assessed has usually been purposefully studied by the candidate prior to the test. Knowledge is usually assessed and validated by an independent third-party agency, after which it is presented to the candidate's college for inclusion in the student's transcript. This *anticipatory formal learning* provides learners with a way of managing their college experiences by selecting areas of study that they believe will provide them with maximum utility (Gambescia & Dagavarian, 2007; Ryu, 2013).

The opportunity for anticipatory formal learning has increased significantly with the availability of open educational resources (OER) and massive open online courses (MOOCs), most of which are open source, low cost or free. This trend in free educational resources is likely to increase in the future. It has raised a multitude of questions regarding the content, learning quality and evaluation methodology associated with OERs and MOOCs, and how the certificates of completions and performance badges earned through these options might be interpreted and validated by the accepting college.

Some consider that MOOCs are a new way forward in higher education and have forcefully advocated for their greater acceptance. However, there are very significant issues about their quality, pedagogies, completion rates and impact on future learning. All of these issues will have a bearing on whether, why and how MOOCs might yield credits for the PLA process (Haggard, 2013; Hayes, 2015; Starr-Glass, 2015). Presently, there are more questions than answers; nevertheless, despite the wild exuberance and unrestrained rhetoric that surrounds them, it is likely that OERs and MOOCs will persist and will become a growing source of potential credits that students might want to bring into their colleges (Camilleri et al., 2012; Conrad, 2012, 2013; Friesen & Wihak, 2013; Haggard, 2013; Klein-Collins & Wertheim, 2013).

Osman (2004) suggested that the credit exchange model provides two benefits for students who want to utilize PLA. First, those who have a clear idea about what subject areas they are interested in are provided with a simple, low-cost, and effective way of obtaining and using those credits. Second, those who are less certain about areas of study – or who are hesitant about other forms of PLA – can use credit exchange to first explore, identify and obtain useable credits before considering other PLA options. Adopting either of these strategies gives PLA candidates a greater sense of ownership and control over their credit accumulation and ultimately of their degrees. Credit exchange may well be the preferred option for students who are more academically engaged, motivated and capable of pre-planning their college trajectory, minimizing costs and shortening the time-to-graduate.

### **Developmental Models: Portfolio Assessment**

In this type of PLA, candidates present a portfolio in which they document the kinds of learning that they possess and which they believe might be accepted for credit by the college. The thrust of the submission is not a demonstration of what has been *done*, but an exploration and explanation of what has been *learned*. In that sense, the portfolio becomes a presentation of self, albeit limited and shaped by the kinds of academic credits that are being sought. This can be a powerful and self-affirming presentation for the candidate, but in practice it can also present considerable challenges. Typically, the challenges and possible limitations are imposed by the student's lack of writing skills, poor organizational abilities, and – often most significantly – by the candidate's inability to articulate narratives in ways that resonate with the structures and contents of

academically-defined disciplines (Starr-Glass, 2002; Stenlund, 2010).

Developing an effective PLA portfolio is a matter of a product and a process. The *product* is a well-written and carefully documented writing that will allow evaluators to clearly see the candidate's knowledge. But this product is the outcome of a dynamic *process* of reflection, self-assessment and introspection. This process can be challenging, but it can often become a transformative personal and educational experience. Recognizing this potential, many colleges support the candidate with active coaching and mentoring opportunities (Conrad, 2008). However, when institutional guidance and support are offered, there is always the danger that the resulting narrative will be shaped in ways that are unauthentic and designed to accommodate, or even to replicate, institutional ideals and pre-conceived requirement standards. In this situation, the candidate can feel "caught between diversity and standardization" (Sweygers, Soetewey, Meeus, Struyf, & Pieters, 2009), or can realize that he or she is being pressured to assume the institution's "preferred identity" (Hamer, 2010).

In assembling and narrating their PLA portfolios, candidates should be helped to understand the perspectives of their evaluators: what criteria they will use in assessing the portfolio, what concerns and questions they will need to resolve and what language they use (Travers et al., 2011). The underlying paradox in PLA portfolio production is that it involves "assessing an individual's learning that has occurred mostly *outside* formal education and training, but it [also] requires high levels of knowledge of these formal education and training contexts and the structure of qualifications and language used in education" (Wheeler et al., 2003, p. 29, emphasis in original). This challenges all participants in the process – but probably more crucially PLA mentors, advisors and evaluators – to be constantly open to the possibilities of other-than-formal learning and of accepting and legitimizing other ways of knowing. As Fenwick (2010) put it, the exploration of other ways of learning is about "expanding our own, and others[']", opportunities to actively meet difference. Not to simply treat it as another worldview, a curiosity, which can be folded into one's own little settled ontology ... [meeting] difference on its own terms, as a unique and different world to our own" (p. 93).

As with the credit exchange approach, PLA portfolio development can result in identifying and earning academic credits, accelerating time-to-graduation and reducing tuition costs. However, thoughtfully guided and supported portfolio development can also produce a shift in the way that candidates come to see themselves. Portfolio production – especially as part of a more extensive collegewide PLA appreciation – can also bring about changes in the ways in which students view their institution. Noting the wide range of benefits associated with PLA, Klein-Collins (2010) noted that some college administrators saw PLA as "a powerful motivator, as a booster of self-esteem and self-confidence by validating students' existing skills and knowledge, and as something that enhances student and alumni loyalty to the institution" (p. 57).

PLA portfolio development centers on a process that is not about descriptions and equivalencies, but which is inherently learning-centered – centered not only on prior learning, but on the present learning of reviewing and reflecting on the past. Portfolio development is not a matter of ticking off the required boxes, but of actually engaging candidates in a learning process that provides the opportunity for self-reflection, personal discovery and additional knowledge-gains. Assembling and writing a portfolio, interacting and collaborating with skilled PLA specialists, and reshaping and perhaps reconstructing experience in the light of reflection, can all potentially provide candidates with valuable insight and opportunities.

Many involved in PLA work – and certainly the present writer – find it easy to relate with what a PLA candidate confided to researchers: "You told us that if we allowed it to, this experience [portfolio preparation] would change us. I was so angry with you for saying that because I liked who I was and didn't want to change.



But you were right. And I'm glad" (Stevens, Gerber, & Hendra, 2010, p. 377). Many students ostensibly undertake PLA portfolio development to accelerate degree completion, but engagement in the process challenges them "to assign value to life's experiences through critical reflection and reflective discourse and to act on the newly constructed knowledge ... [increasing] the learner's awareness of the ways she or he learns from experience and foster[ing] the capacity for transformative learning" (p. 401). Others who have developed portfolios have "learned to see their lives, past and future, in terms of learning ... [agreeing] that this was both an understanding and a skill that had become, to them, valuable in itself" (Thomas, Collins, & Plett, 2002, p. 13). These, and countless other acknowledgements, suggest that PLA portfolio development is often a truly transformative experience.

### **Transformative Learning in the PLA Experience**

Transformative learning takes place within the context of learning itself: it is not an addition or a separate dimension. Transformative learning represents a deeply personal and insightful shift in how we understand our learning, what it accomplishes for us and the ways in which we are changed by our immersion in it. In his seminal work on the perspective transformations of adult learners, Mezirow (1990) understood transformations as part of a process of the individual becoming critically aware "of how and why our presuppositions have come to constrain the way we perceive, understand, and feel about our world; of reformulating these assumptions to permit a more inclusive, discriminating, permeable and integrative perspective ... [of] acting on these new understandings" (p. 14).

Any form of PLA "cannot be seen only as recognising prior learning, but also as recognising learning taking place during the assessment process ... when one's prior experiences are reflected on and questioned" (Fejes & Andersson, 2015, p. 152). Engagement in the PLA process can stimulate learners to consider the fluidity of knowledge acquisition, to reflect on the different ways in which knowledge is represented and recognized, and to reformulate many of those presuppositions that previously constrained their learning potentials (Whittaker, Whittaker, & Cleary, 2006). Those engaged in the PLA process can come to value their own knowledge acquisition and to appreciate that their learning potential is not dependent on the distinctions between formal and informal contexts.

Perhaps more importantly, learners can come to recognize that learning is fluid, continuous and divided by neither context nor time. Obviously, the stress in PLA is on the *past* (prior) learning, but engagement with what has become historic learning can often transform learners, leading them to recognize more clearly the learning that is taking place in the *present* and will continue in the *future*. In PLA through portfolio development, learners are challenged to find and retrieve learning experienced in their pasts. In PLA through credit exchange, they are challenged to plan and complete learning that will be experienced in their futures. Both PLA approaches can result in more academic credits, but both can also encourage learners to claim ownership of their learning, to be more motivated and persistent in their knowledge-creation, and to gain control of their college trajectories. Engagement in PLA might also trigger an appreciation that future learning – *life-long learning* – is not only a possibility, but is an essential, inevitable and attainable objective in the candidate's life (Carneiro, 2011).

It is suggested that the potentials for transformative learning are higher in PLA through portfolio development than in credit exchange. However, it is important to recognize that *both* approaches present transformative experiences, and that transformative learning is *only one* of the outcomes of any PLA process. Rather than see portfolio assessment and credit exchange as "either/or" alternatives, it is important to appreciate that PLA is at its richest – and arguably at its best – when it embraces a flexible, inclusive and holistic perspective. A specific approach should not be mandated or used to restrict the value of PLA for the candidate.

Optimally, mentors should work with candidates to carefully review the whole spectrum of PLA options, including both credit exchange and portfolio development. In planning PLA experience, the mentor should thoughtfully engage with candidates to more fully understand *their* experiences, interests and aspirations.

Likewise, the institution should be committed to offering a wide spectrum of PLA options and alternatives that are developed around the student population that they serve. Central to this institutional commitment should be the prevailing recognition that PLA has multiple outcomes – not simply accumulating credits, but adding to the quality of learner’s total educational experience. These potentials should not simply be recognized; they should be pursued and promoted.

### **Considerations and Recommendations**

PLA provides multiple benefits and advantages for students and their colleges. There is an accelerating recognition of the value of PLA and the awarding of credit for prior learning. However, some institutions of higher education have only recently come to this recognition; some only offer limited options for their students; and a few have still not decided to fully utilize the benefits provided by awarding credit for prior learning (AACRAO, 2015; Lakin, Seymour, Nellum, & Crandal, 2015).

The following considerations and recommendations might be useful in promoting PLA and in developing more effective and responsive options within institutions to better serve all students.

- **Clear and Transparent Institutional Commitment:** Travers and her associates found that five factors were critical for institutional success: (a) PLA should be clearly perceived as an integral part of the institution’s educational mission and should enjoy strong and unequivocal institutional commitment; (b) PLA should be seen to be actively supported by the institution; (c) the program should have well-defined and consistently applied policies and procedures regarding how credits will be assessed; (d) those conducting an evaluation of PLA portfolios should be trained and experienced, with PLA regarded institutionally as a valid part of faculty development; and (e) the programs should provide clear feedback to the candidates regarding the evaluation process and its outcomes (Travers, 2013; Travers & Evans, 2011).
- **Centrality of Students and Student Value:** Although PLA provides multiple benefits for multiple actors, it is the student who is central in the process. Institutions that see PLA as limited, marginal and essentially product-oriented misunderstand the centrality of students and the value that accrues to these students. To understand PLA only in terms of credit exchange significantly deprives students of the enriching and potentially transformative aspects of portfolio development. For the institution, expanding the scope of PLA – making it a more integrated enterprise and accentuating the centrality of learners – is more expensive: support and advisement have to be offered, evaluators have to be trained, and time and resources have to be provided. Investment and adding value should not be confused with short-term expense. PLA institutional expense can be readily assessed; however, the enduring value of PLA work – and the ways in which that value is perceived inside and outside the institution – is more difficult to measure. Adding value to the PLA process, recognizing the centrality of students and demonstrating a commitment to student aspirations provides institutional benefits, not only from the current student population but from future graduates and alumni.
- **Clear and Expressed Faculty Commitment:** Many institutions of higher education offer only limited PLA options for their students. Some have suggested that this reticence may, in part, be a remnant of the *knowledge wars* in which higher education saw itself as having a monopoly in knowledge production and as being the sole arbiter of what constitutes knowledge (Brown & Lauder, 2006; Kincheloe, 2011). Often, the reluctance to accept and recognize credit for prior learning is strongest within the faculty. But in a contemporary world – where learning sources are ubiquitous, fluid and freely accessible – institutions of higher education have to carefully consider the impression that they and their faculties present by failing

to accept prior learning assessment. PLA has had an active and growing presence in the American college scene for more than 40 years: it is not going to vanish. Faculty exposure and development is required to engage faculty more actively in PLA, particularly in portfolio development. Present and future students are going to ask for more PLA possibilities and may decide that faculties and institutions that do not offer these possibilities are insular, non-responsive and not deserving of their presence or tuition.

- **Deepening Faculty Appreciation for PLA:** Unfortunately, when faculty members are brought into the PLA process, it is often only as subject-matter experts or academic arbiters. The unintended consequences of this practice are distancing academic faculty from the core values of PLA and raising unconsidered dichotomies between formal and informal learning. PLA should not be presented to faculty as some remote bureaucratic function, but as a critical way of providing benefit for both learners *and* faculty members. Institutional PLA should seek to inform faculty of the process, dynamics and assumptions of PLA, presenting it as a valuable part of faculty development. PLA allows faculty to gain a first-hand appreciation of learners – of their concerns, desires, experiences and personal narratives. Faculty involvement with PLA raises fundamental questions about the nature of learning, the legitimacy of different knowledge systems, subject-specific paradigms and the potential for interdisciplinary boundary crossings. All of these dimensions are of considerable importance for thoughtful teachers and professional educators. For these dimensions to be fully developed, faculty has to be trained, involved and included in PLA initiatives. For a more comprehensive awareness of and commitment to PLA, institutions should ensure that faculty is not only engaged in PLA efforts but that such involvement is clearly connected to faculty advancement and promotion. PLA has been noted to bring about transformative possibilities for learners and PLA candidates; however, PLA can also be transformative for those who engage in the process as mentors, faculty advisors and practitioners (Starr-Glass, 2012b).
- **Present and Future Orientation:** PLA practitioners are motivated, infuse their practice with enthusiasm and professionalism and are concerned to engage candidates in a positive and supportive manner (Leiste & Jensen, 2011; Travers & Evans, 2011). However, they are sometimes too preoccupied with the past. Of course, PLA does focus on *prior* learning, but in engaging with students, evaluators need to see beyond the past and into the present, and into the future, as well. The PLA process provides a new learning experience that can enable candidates to reconsider their learning, consider their present academic engagement and plan for their futures. The outcomes of the PLA process is not simply a reconsideration of what has occurred: it is a means of situating present and future within that past – seeing progressions, evolving patterns and personal development. Engagement with PLA should provide students with a language for examining their past and for anticipating their futures – a language rich in metaphor, reconsideration of self-narrative and reflection on experience (Starr-Glass, 2002; Travers et al., 2011).
- **Continuing Student Engagement with PLA:** Often PLA is initiated early in the student’s college life to provide entrance credits, advanced standing or to challenge introductory coursework. This early engagement can certainly provide learners with pragmatic benefits, but after these have been secured, PLA might seem either inapplicable or irrelevant. Regrettably, early engagement can be interpreted – by learners, faculty and institutions – as limiting PLA to the beginning stages of the student’s academic trajectory; something on the margins or periphery of formal learning. This is unfortunate, because PLA is not an isolated and marginal credit-earning opportunity; rather, it is an ongoing possibility that extends throughout the learner’s college life – one that can yield rich academic and personal advantages. Mentors, advisors and faculty should consider the ongoing potentials of PLA and the benefits derived from it, and encourage students to see PLA as something that is always available.
- **Constantly Uncovering the Unexpected:** All too often, PLA is represented as a means of confirming disciplinary-based and institutionally-legitimized knowledge. However, PLA is neither peripheral nor divorced from the active learning in the academy – rather, it is a significant aspect of the student’s academic and educational development. Thoughtful PLA is not an effort to discover what prior experience and

unrecognized knowledge *we think* the candidate possesses; rather, it is a joint enterprise in which the candidate and evaluator explore these possibilities. Thoughtful PLA can help candidates discover new aspects about themselves that are not only useful in reducing time-to-graduate, but also allow them to re-evaluate themselves and reconsider their learning and academic potentials. Hopefully, those engaged in PLA might be able to make better continuing use of that process in their ongoing transformations within college and beyond (Starr-Glass, 2012b).

## Conclusion

The fact that PLA can reduce time-to-graduate by providing academic credits that students would otherwise have had to earn through formal learning is logical. That PLA leads to time and cost reduction is also clear, but perhaps more importantly, this logic is not an abstraction: it is demonstrable that students using PLA actually do reduce the cost and time associated with graduation. This, however, is only part of the story. PLA allows students to incorporate their own unique experiences, knowledge and learning into their formal learning plans and into their degrees. Potentially, this alignment of knowledge and learning can result in qualifications that are better shaped to assist graduates in their future lives and careers. PLA allows learners in formal education to claim some degree of ownership over their learning: challenging courses when they believe they are able to do so, rather than when it is offered; focusing on new learning experiences that will benefit them, rather than on what has been prescribed; and utilizing their own unique learning, rather than simply picking generic options from a list of electives.

Traditionally, PLA has been seen as most powerful when dealing with more mature adult learners who often possess a richness of experiential learning. However, PLA has an in-built efficiency – both in terms of quantity (the ratio of time and effort inputs to outputs) and of quality (the ratio of learning quality inputs to outputs). These efficiencies are not – and should not be – restricted only to the adult learner, but should be thoughtfully offered to all students in higher education. This is particularly relevant at a time when high-quality “nontraditional” learning opportunities have become ubiquitous, easily accessed and often have little or no economic cost.

From an economic perspective, PLA improves efficiency in earning a degree in terms of accelerated time-to-graduate, tuition costs and graduate debt burden. But more importantly, PLA contributes to the quality of the undergraduate experience in terms of increased self-efficacy, academic engagement and persistence. There is a positive connection between the extent of PLA engagement and all of these student success measures; however, we need more research to tease out causality – whether more successful students might have adopted PLA, or whether PLA engagement brings about these success factors.

Whatever the dynamic, processes and causation, the extensive benefits of PLA are being increasingly recognized. Given the present economic and financial strains on students and higher education, many – particularly state legislatures – are focusing on the economic promise of PLA, recommending, requiring and mandating that credit for prior learning be made available. Hopefully, this will stimulate a more thoughtful revitalization of PLA in colleges and universities and among faculty. However, in these reconsiderations, all of those considering PLA should better appreciate that it is not simply a way of hastening graduation, but that it also significantly contributes to ensuring that students do graduate and enhancing the quality of their degrees.

## References

- AACRAO (American Association of Collegiate Registrars and Admissions Officers). (2014). *Credit for prior learning practices: Results of the AACRAO December 2014 60-Second Survey*. Washington, DC: AACRAO. Retrieved from [http://www.aacrao.org/docs/default-source/PDF-Files/aacrao\\_dec\\_2014\\_60\\_second\\_survey\\_credit\\_for\\_prior\\_learning\\_practices.pdf?sfvrsn=4](http://www.aacrao.org/docs/default-source/PDF-Files/aacrao_dec_2014_60_second_survey_credit_for_prior_learning_practices.pdf?sfvrsn=4)

- Archibald, R. B., & Feldman, D. H. (2010). *Why does college cost so much?* Oxford, UK: Oxford University Press.
- Archibald, R. B., & Feldman, D. H. (2012). *The anatomy of college tuition*. Washington, DC: American Council on Education. Retrieved from <http://www.acenet.edu/news-room/Documents/Anatomy-of-College-Tuition.pdf>
- Berglund, L. (2014). A model concerning the assessment of knowledge and skills in the workplace. *Prior Learning Assessment Inside Out*, 2(2), 1-10. Retrieved from <http://www.plaio.org/index.php/home/article/view/72/122>
- Bernstein, B. (1996). *Pedagogy, symbolic control and identity*. London, UK: Taylor and Francis.
- Bound, J., Lovenheim, M. F., & Turner, S. (2007). *Understanding the decrease in college completion rates and the increased time to the baccalaureate degree*. Population Studies Center Research Report #07-626. Ann Arbor, MI: University of Michigan. Retrieved from <http://www.psc.isr.umich.edu/pubs/pdf/rr07-626.pdf>
- Breier, M. (2005). A disciplinary-specific approach to the recognition of prior informal experience in adult pedagogy: “rpl” as opposed to “RPL.” *Studies in Continuing Education*, 27(1), 51-65.
- Brown, P., & Lauder, H. (2006). Globalization, knowledge and the myth of the magnet economy. *Globalization, Societies and Education*, 4(1), 25-57.
- CAEL (Council for Adult and Experiential Learning). (2011a, August). *Moving the starting line through prior learning assessment (PLA)*. Research Brief. Chicago, IL: Author. Retrieved from [http://www.cael.org/pdfs/PLA\\_research\\_brief\\_avg\\_credit](http://www.cael.org/pdfs/PLA_research_brief_avg_credit)
- CAEL (Council for Adult and Experiential Learning). (2011b, April). *Underserved students who earn credit through prior learning assessment (PLA) have higher degree completion rates and shorter time-to-degree*. Research Brief. Chicago, IL: Author. Retrieved from [http://www.cael.org/pdfs/126\\_pla\\_research\\_brief\\_1\\_underserved04-2011](http://www.cael.org/pdfs/126_pla_research_brief_1_underserved04-2011)
- Cameron, R., & Miller, P. (2004, October 29). *RPL: Why has it failed to act as a mechanism for social change?* Paper presented at the Social Change in the 21<sup>st</sup> Century Conference, Centre for Social Change Research, Queensland University of Technology, Brisbane, Australia. Retrieved from [http://epubs.scu.edu.au/cgi/viewcontent.cgi?article=1030&context=gcm\\_pubs](http://epubs.scu.edu.au/cgi/viewcontent.cgi?article=1030&context=gcm_pubs)
- Camilleri, A. F., Ferrari, L., Haywood, J., Maina, M., Pérez-Mateo, M., Soldado, R. M., ... Tannhäuser, A-C. (2012). *Open learning recognition: Taking open educational resources a step further*. OERTest Consortium. Retrieved from <http://efquel.org/wp-content/uploads/2012/12/Open-Learning-Recognition.pdf>
- Carneiro, R. (Ed.). (2011). *Accreditation of prior learning as a lever for lifelong learning: Lessons learnt from the New Opportunities Initiative, Portugal*. UNESCO Institute for Lifelong Learning/MENON Network/Centro de Estudos dos Povos e Culturas de Expressão Portuguesa, Universidade Católica Portuguesa. Retrieved from [http://www.ucp.pt/site/resources/documents/CEPCEP/Accreditation\\_final.pdf](http://www.ucp.pt/site/resources/documents/CEPCEP/Accreditation_final.pdf)
- Cedefop (European Centre for the Development of Vocational Training). (2009). *European guidelines for validating non-formal and informal learning*. Luxemburg: Office for Official Publications of the European Communities. Retrieved from [http://www.cedefop.europa.eu/en/Files/4054\\_EN.PDF](http://www.cedefop.europa.eu/en/Files/4054_EN.PDF)
- Challis, M. (1993). *Introducing APEL*. London, UK: Routledge.
- Chappell, J. M. (2012). *A study of prior learning assessment in degree completion*. Theses, Dissertations, and Capstones Paper #410. Marshall University. Retrieved from <http://mds.marshall.edu/cgi/viewcontent.cgi?article=1410&context=etd>
- Conrad, D. (2008). Building knowledge through portfolio learning in prior learning assessment and recognition. *The Quarterly Review of Distance Education*, 9(2), 139-150.
- Conrad, D. (2012). Assessment challenges in open learning: Way-finding, fork in the road, or end of the line? *Open Praxis*, 5(1), 41-47. Retrieved from <http://www.openpraxis.org/index.php/OpenPraxis/article/view/17/pdf>

- Conrad, D. (2013). Pondering change and the relationship of prior learning assessment to MOOCs and knowledge in higher education. *Prior Learning Assessment Inside Out*, 2(1). Retrieved from <http://www.plaio.org/index.php/home/article/view/51/87>
- Dale, S. B., & Krueger, A. B. (2002). Estimating the payoff to attending a more selective college: An application of selection on observables and unobservables. *Quarterly Journal of Economics*, 117(4), 1491-1527.
- Dale, S. B., & Krueger, A. B. (2011, February 16). *Estimating the return to college selectivity over the career using administrative earning data*. Industrial Relations Working Paper #563. Princeton, NJ: Princeton University. Retrieved from <http://arks.princeton.edu/ark:/88435/dsp01gf06g265z>
- Fejes, A., & Andersson, P. (2015). Recognition of prior learning within elderly care work. In S. Bohlinger, U. Haake, C. H. Jørgensen, H. Toiviainen, & A. Wallo (Eds.), *Working and learning in times of uncertainty: Challenges to adult, professional and vocational education* (pp. 145-156). Rotterdam, The Netherlands: Sense Publishers.
- Fenwick, T. (2000). Expanding conceptions of experiential learning: A review of the five contemporary perspectives on cognition. *Adult Education Quarterly*, 50(4), 243-272.
- Fenwick, T. (2010). Workplace “learning” and adult education: Messy objects, blurry maps and making difference. *European Journal for Research on the Education and Learning of Adults*, 1(1-2), 79-95. Retrieved from [http://www.rela.ep.liu.se/issues/10.3384\\_rela.2000-7426.201011/rela0006/10.3384\\_rela.2000-7426.rela0006.pdf](http://www.rela.ep.liu.se/issues/10.3384_rela.2000-7426.201011/rela0006/10.3384_rela.2000-7426.rela0006.pdf)
- Friesen, N., & Wihak, C. (2013). From OER to PLAR: Credentialing for open education. *Open Praxis*, 5(1), 49-58. Retrieved from <http://www.openpraxis.org/index.php/OpenPraxis/article/view/22/pdf>
- Gambescia, S. F., & Dagavarian, D. A. (2007). Review of prior learning assessment options for adult continuing education degree programs. *Journal of Continuing Higher Education*, 55(3), 38-48.
- GAO (Government Accountability Office). (2014, September 10). *Older Americans: Inability to repay student loans may affect financial security of a small percentage of retirees*. Testimony before the Special Committee on Aging, U.S. Senate by Charles A. Jeszeck (Highlights of GAO-14-866T). Washington, DC: Author. Retrieved from <http://www.gao.gov/assets/670/665709.pdf>
- Haggard, S. (2013). *The maturing of the MOOC: Literature review of massive open online courses and other forms of online distance learning*. Department for Business, Innovation and Skills Research Paper #130. London, UK: BIS. Retrieved from [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/240193/13-1173-maturing-of-the-mooc.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/240193/13-1173-maturing-of-the-mooc.pdf)
- Hamer, J. (2010). Recognition of prior learning: Normative assessment or co-construction of preferred identities? *Australian Journal of Adult Learning*, 50(1), 100-115.
- Harris, J. (1999). Ways of seeing the recognition of prior learning: What contribution can such practices make to social inclusion? *Studies in the Education of Adults*, 31(2), 124-138. Retrieved from <http://www.plaio.org/index.php/home/article/view/56/83>
- Harris, J. (2000). *The recognition of prior learning: Power, pedagogy, and possibility. Conceptual and implementation guides*. Pretoria, South Africa: Human Sciences Research Council.
- Hayes, S. (2015). *MOOCs and quality: A review of the recent literature*. Gloucester, UK: The Quality Assurance Agency for Higher Education (QAA). Retrieved from <http://www.qaa.ac.uk/en/Publications/Documents/MOOCs-and-Quality-Literature-Review-15.pdf>
- Kincheloe, J. L. (2011). Critical pedagogy and the knowledge wars of the twenty-first century. In K. Hayes, S. R. Steinberg, & K. Tobin (Eds.), *Key works in critical pedagogy* (pp. 385-405). Rotterdam, The Netherlands: Sense Publishers.
- Klein-Collins, R. (2010). *Fueling the race to postsecondary success: A 48-institution study of prior learning assessment and adult student outcomes*. Study by the Council for Adult and Experiential Learning. Washington, DC: CAEL. Retrieved from [http://www.cael.org/pdf/PLA\\_Fueling-the-Race.pdf](http://www.cael.org/pdf/PLA_Fueling-the-Race.pdf)

- Klein-Collins, R. (2015). *PLA is your business: Pricing and other considerations for the PLA business model: Findings from a national survey of PLA program leaders*. Study by the Council for Adult and Experiential Learning. Washington, DC: CAEL. Retrieved from [http://www.cael.org/pdfs/2015\\_cael\\_pla\\_business\\_model](http://www.cael.org/pdfs/2015_cael_pla_business_model)
- Klein-Collins, R., & Olson, R. (2014). *Random access: The Latino student experience with prior learning assessment*. Study by the Council for Adult and Experiential Learning. Washington, DC: CAEL. Retrieved from [http://www.cael.org/pdfs/latinos\\_and\\_pla\\_2014](http://www.cael.org/pdfs/latinos_and_pla_2014)
- Klein-Collins, R., & Wertheim, J. B. (2013). The growing importance of prior learning assessment in the degree-completion toolkit. *New Directions for Adult and Continuing Education*, 140, 51-60.
- Lakin, M. B., Seymour, D., Nellum, C. J., & Crandal, J. R. (2015). *Credit for prior learning: Charting institutional practice for sustainability*. Washington, DC: American Council on Education. Retrieved from <https://www.acenet.edu/news-room/Documents/Credit-for-Prior-Learning-Charting-Institutional-Practice-for-Sustainability.pdf>
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge, UK: University of Cambridge Press.
- Leiste, S. M., & Jensen, K. (2011). Creating a positive prior learning assessment (PLA) environment: A step-by-step look at university PLA. *International Review of Research in Open and Distance Learning*, 12(1), 61-79. Retrieved from <http://www.irrodl.org/index.php/irrodl/article/view/898/1770>
- Livingstone, D. (2000). *Exploring the icebergs of adult learning: Findings of the first Canadian survey of informal learning practices*. NALL Working Paper #10-2000. Research Network on New Approaches to Lifelong Learning, Ontario Institute for Studies in Education, University of Toronto. Retrieved from <http://nall.oise.utoronto.ca/res/10exploring.htm>
- Marsick, V. J., & Volpe, M. (1999). The nature and need for informal learning. In V. Marsick, & M. Volpe (Eds.), *Informal learning on the job* (pp. 1-9). Williston, VT: Berrett-Koehler.
- Marsick, V. J., & Watkins, K. E. (1990). *Informal and incidental learning in the workplace*. New York, NY: Routledge.
- Mezirow, J. (1990). How critical reflection triggers transformative learning. In J. Mezirow and Associates (Eds.), *Fostering critical reflection in adulthood* (pp. 1-20). San Francisco, CA: Jossey-Bass.
- Michelson, E. (1996). Beyond Galileo's telescope: Situated knowledge and the assessment of experiential learning. *Adult Education Quarterly*, 46(4), 185-196.
- Michelson, E. (1997). The politics of memory: The recognition of experiential learning. In S. Walters (Ed.), *Globalization, adult education and training: Impacts and issues* (pp. 141-153). London, UK: Zed Books.
- Ohio Board of Regents. (2015). *PLA with a purpose: Prior learning assessment and Ohio's college completion agenda*. Columbus, OH: Ohio Board of Regents. Retrieved from [https://www.ohiohighered.org/sites/ohiohighered.org/files/uploads/PLA/PLA-with-a-Purpose\\_Report\\_FINAL\\_041614\\_0.pdf](https://www.ohiohighered.org/sites/ohiohighered.org/files/uploads/PLA/PLA-with-a-Purpose_Report_FINAL_041614_0.pdf)
- Osman, R. (2004). Access, equity and justice: Three perspectives on recognition of prior learning (RPL) in higher education. *Perspectives in Education*, 22(4), 139-145.
- Pokorny, H. (2012). Assessing prior experiential learning: Issues of authority, authorship and identity. *Journal of Workplace Learning*, 24(2), 119-132.
- Reed, M., & Cochrane, D. (2013). *Student debt and the class of 2012*. Report of the Project on Student Debt, Institute for College Access and Success. Washington, DC: TICAS. Retrieved from <https://assets.documentcloud.org/documents/885390/student-debt-and-the-class-of-2012.pdf>
- Robertson, L. H. (2011). An application of PLAR in the development of the aboriginal self: One college's experience. *International Review of Research in Open and Distance Learning*, 12(1), 96-108. Retrieved from <http://www.irrodl.org/index.php/irrodl/article/view/1029>
- Ryu, M. (2013). *Credit for prior learning: From the student, campus, and industry perspectives*. American Council on Education, Center for Policy Research and Strategy. Washington, DC: ACE. Retrieved from <http://www.acenet.edu/news-room/Documents/Credit-for-Prior-Learning-Issue-Brief.pdf>

- Saddington, T. (1998). Exploring the roots and branches of experiential learning. *Lifelong Learning in Europe*, 3(2), 133-138.
- Sherman, A., Klein-Collins, R., & Palmer, I. (2012). *State policy approaches to support prior learning assessment*. Washington, DC: Council for Adult and Experiential Learning and HCM Strategists. Retrieved from <http://www.cael.org/pdfs/college-productivity-resource-guide2012>
- Shulman, L. S. (1993). Teaching as community property: Putting an end to pedagogical solitude. *Change*, 25(6), 6-7.
- Starr-Glass, D. (2002). Metaphor and totem: Exploring and evaluating prior experiential learning. *Assessment & Evaluation in Higher Education*, 27(3), 221-231.
- Starr-Glass, D. (2012a). Partial alignment and sustained tension: Validity, metaphor, and prior learning assessment. *Prior Learning Assessment Inside Out*, 1(2), 1-14. Retrieved from <http://www.plaio.org/index.php/home/article/view/33>
- Starr-Glass, D. (2012b). PLA and transformational potential: Reflections through the prism of appreciative inquiry. *Prior Learning Assessment Inside Out*, 1(1), 1-12. Retrieved from <http://www.plaio.org/index.php/home/article/view/2>
- Starr-Glass, D. (2015). Redemption through MOOCs? Valuing aggregation and pricing disaggregation in higher education markets. In A. Mesquita, & P. Peres (Eds.), *Furthering higher education possibilities through massive open online courses* (pp. 22-48). Hershey, PA: IGI-Global.
- Stenlund, T. (2010). Assessment of prior learning in higher education: A review from a validity perspective. *Assessment & Evaluation in Higher Education*, 35(7), 783-797.
- Stevens, K., Gerber, D., & Hendra, R. (2010). Transformational learning through prior learning assessment. *Adult Education Quarterly*, 60(4), 377-404.
- Sweygens, A., Soetewey, K., Meeus, W., Struyf, E., & Pieters, B. (2009). Portfolios for prior learning assessment: Caught between diversity and standardization. *The Journal of Continuing Higher Education*, 57(2), 92-103.
- Thomas, A., Collins, M., & Plett, L. (2002). *Dimensions of the experience of prior learning*. Research Network for New Approaches to Lifelong Learning Working Paper #52. Retrieved from <http://nall.oise.utoronto.ca/res/52AlanThomas.pdf>
- Travers, N. L. (2012a). What is next after 40 years? Part 1: Prior learning assessment, 2012 and after. *Journal of Continuing Higher Education*, 60(1), 43-47.
- Travers, N. L. (2012b). What is next after 40 years? Part 2: Prior learning assessment, 2012 and after. *Journal of Continuing Higher Education*, 60(2), 117-121.
- Travers, N. L. (2013). PLA philosophy, policy, and practical implications: Revisiting the 2009 Hoffman, Travers, Evans, and Treadwell study. *Journal of Continuing Higher Education*, 61(1), 54-58.
- Travers, N. L., & Evans, M. T. (2011). Evaluating prior learning assessment programs: A suggested framework. *The International Review of Research in Open and Distance Learning*, 12(1), 151-160. Retrieved from <http://www.irrodl.org/index.php/irrodl/article/view/971/1776>
- Travers, N. L., Smith, B., Ellis, L., Brady, T., Feldman, L., Hakim, K., .... & Treadwell, A. (2011). Language of evaluation: How PLA evaluators write about student learning. *International Review of Research in Open and Distance Learning*, 12(1), 80-95. Retrieved from <http://www.irrodl.org/index.php/irrodl/article/view/946/1758>
- Trowler, P. (1996). Angels in marble? Accrediting prior experiential learning in higher education. *Studies in Higher Education*, 21(1), 7-29.
- Vedder, R., Gillen, A., Bennett, D., Denhart, M., Robe, J., Holbrook, T., ... Malesick, M. (2010). *25 ways to reduce the cost of college*. Washington, DC: Center for College Affordability and Productivity. Retrieved from [http://www.centerforcollegeaffordability.org/uploads/25Ways to Reduce the Cost of College.pdf](http://www.centerforcollegeaffordability.org/uploads/25Ways%20to%20Reduce%20the%20Cost%20of%20College.pdf)



- Volbrecht, T. (2009). New courses for Trojan horses: Rethinking RPL in a South African teacher education curriculum. *Studies in Continuing Education*, 31(1), 13-27.
- Watkins, K. E., & Marsick, V. J. (1992). Towards a theory of informal and incidental learning in organizations. *International Journal of Lifelong Education*, 11(4), 287-300.
- Weil, S. W., & McGill, I. (1989). *Making sense of experiential learning: Diversity in theory and practice*. Milton Keynes, UK: Society into Research in Higher Education/ Open University.
- Wheelahan, L., Dennis, N., Firth, J., Miller, P., Newton, D., Pascoe, S., & Brightman, R., (2003). *A report on recognition of prior learning (RPL) policy and practice in Australia in 2002*. Final report commissioned by the Australian Qualifications Framework Advisory Board. Lismore, Australia: Southern Cross University. Retrieved from [http://www.avetra.org.au/abstracts\\_and\\_papers\\_2003/refereed/Wheelahan.pdf](http://www.avetra.org.au/abstracts_and_papers_2003/refereed/Wheelahan.pdf)
- Whittaker, S., Whittaker, R., & Cleary, P. (2006). Understanding the transformative dimension of RPL. In P. Andersson, & J. Harris (Eds.), *Re-theorising the recognition of prior learning* (pp. 301-319). Leicester, UK: NIACE.
- Wightman, L. F. (2003). Standardized testing and equal access: A tutorial. In M. J. Chang, D. Witt, J. Jones, & K. Hakuta (Eds.), *A compelling interest: Examining the evidence on racial dynamics in colleges and universities* (pp. 49-96). Stanford, CA: Stanford University Press.