Strengthening PLAR: Integrating theory and practice in post-secondary education

By Joy Van Kleef

Based on an extensive analysis of the literature on prior learning assessment and recognition (PLAR) and adult learning, this article proposes a conceptual model for PLAR in education that aligns selected theoretical and applied elements of PLAR with the basic beliefs and values that are its foundation. The model addresses essential knowledge and skills, the selection of assessment methods and tools, and the societal forces that influence PLAR's implementation in post-secondary institutions. The study concludes that there is a lack of cohesion in educators' conceptual understandings and use of PLAR, and that the selection of PLAR assessments would be enriched if educators were to use methods and tools aligned with PLAR's basic beliefs and the theoretical perspectives that support those beliefs. Further, PLAR practitioners who have expertise in the subject matter being assessed, a solid knowledge of PLAR, and an open attitude toward alternative forms of assessment can bring wider acceptance of PLAR.

Over the past 25 years, colleges and universities in Canada have adopted prior learning assessment and recognition (PLAR) as a means of increasing adult participation in education and promoting lifelong learning. However, most educators would agree that PLAR has made only limited inroads into the day-to-day practices of most post-secondary educational institutions. Low levels of faculty support for PLAR have been attributed to a number of factors, including institutional concern about the academic integrity of current assessment practices and the potential impact of PLAR on the credibility of institutional credentials (Butler, 1993; Halberstadt, 1986; Harriger, 1991; Merriam & Brockett, 1997; Preston, 1981; Wheelehan, 2003). A contributing factor may also be the deficit in research and discourse to assist university and college educators in considering the relationship of PLAR to adult learning and their own professional practice. In short, a lack of understanding of PLAR and the contribution it can make to educators' appreciation of non-formal and informal learning may add to its undervaluation.

In an evaluation of the link between the assessment of prior experiential learning (APEL) and lifelong learning, Evans (1988) made the point that the need to understand how people learn, reason, and solve problems is fundamental to recognizing the need for APEL systems but that educational theory related to APEL was still in its infancy. Nearly a decade later, Topping (1996) made a similar finding in his review of the literature on prior learning assessment in the United States. His conclusion was shared by Harris who, in 2000, noted that there is in Great Britain "little APEL literature that explains or theorizes the practice and even less that problematizes existing theorizations" (p. 1).

Harris reiterated this concern in 2006 when she examined gaps in the literature on recognition of prior learning (RPL) and pointed out that pursuing specific lines of theoretical inquiry, such as the implications of viewing prior learning as a form of learning with unquestionable transferability, would help to establish RPL as an arena of contemporary academic concern. This idea is in fact presented in one of the few publications on PLAR and learning theory to be published: *Re-theorizing the Recognition of Prior Learning* (2006), a collection of university-based writings, is a rare light shining into shaded aspects of PLAR.

PLAR is commonly defined as the identification, measurement, and recognition of learning (knowledge, skills, and attitudes) acquired outside educational institutions through work and other life experience (Burke & Van Kleef, 1997; Human Resources Development Canada, 1995; Ontario Council of Regents Prior Learning Assessment Committee, 1992; Wong, 1996). It is most frequently used by post-secondary institutions to determine eligibility for program enrolment and academic credit, and to assist adult learners in developing meaningful personal, educational, or career plans.

In this article, I propose a conceptual model that aligns theoretical and applied elements of PLAR with the basic beliefs and values that are its foundation. These alignments clarify and strengthen PLAR's theoretical underpinnings in post-secondary education and position it conceptually in the field of education. The purpose of this article is to promote understanding and discussion among educators and researchers (particularly at colleges and universities) of PLAR's implications for professional practice, and thereby promote PLAR as belonging on the agenda of contemporary academic discussions. As such, and in accordance with the approach put for by Harris (2006), it combines theoretical rationales, the development of practices, and the realization of political and policy objectives. This article does not offer a comprehensive or timeless representation of the current state of research on PLAR. The proposed model's potential applications to PLAR outside formal educational contexts are not considered, nor are PLAR's conceptual weaknesses, as addressed elsewhere in the extant literature. Further commentary and critiques by other researchers may assist in developing a more robust model.

IDENTIFYING THE RELEVANT LITERATURE

A combination of electronic database, manual, and Internet searches were used in researching the literature referenced in this article. Because PLAR does not have an organized body of knowledge, literature searches are less systematic than would be ideal. Literature on adult learning theory and theory building was identified using manual selection of course resources from St. Francis Xavier University's Master of Adult Education program, Athabasca University's Adult Learning and Development course in its Master of Distance Education program, and the literature collection of the Canadian Institute for Recognizing Learning. Electronic database searches were conducted using the library at Ontario Institute for Studies in Education (OISE), to locate the literature cited in the bibliographies of the literature used in the aforementioned graduate programs. Five theoretical perspectives that shared alignment with PLAR were selected.

Doctoral dissertations on PLAR were identified by searching ProQuest UMI and ERIC. PLAR-related literature was also selected from the *New Approaches to Lifelong Learning* annotated bibliography at the University of Toronto, bibliographic information contained in the *PLAR State of the Field Review* conducted by Wihak (2004) for the Canadian Council on Learning, and the 1996 – 2000 curricula of the National Institute for the Assessment of Experiential Learning, located in Princeton, New Jersey.

Additional literature on PLAR was identified through direct communication with authors in Great Britain, Ireland, Australia, the United States, and Sweden, and by conducting searches on the websites of provincial, national, and international educational authorities, institutions, and research organizations. Internet searches sought to identify relevant literature on adult learning and PLAR using the keywords prior learning, prior experiential learning, recognition of prior learning, assessment of prior experiential learning (APEL), experiential learning, adult learning theory, and quality assurance and prior learning. Manual and electronic searches revealed relevant literature in the following journals:

- Adult Education Quarterly
- Innovative Higher Education
- Journal of On-line Learning and Teaching
- New Directions for Adult and Continuing Education
- New Directions for Continuing Education
- New Directions for Experiential Learning
- Studies in the Education of Adults

All relevant literature was reviewed and categorized according to its relevance to each element in the emerging conceptual model for PLAR in education. Summaries were prepared for sources having alignment with at least one element. Alignments were then established across elements of the model.

A CONCEPTUAL MODEL FOR PLAR IN EDUCATION

The proposed conceptual model for PLAR in education draws on the work of Frankena (1970) and Hager (1999). Its five elements begin to address the theoretical research gap on PLAR by presenting basic beliefs and theoretical perspectives that are conducive to PLAR, and by identifying methods and tools, as well as the knowledge, skills and attitudes of practitioners that align with those beliefs and perspectives. The focus of this article is on PLAR in post-secondary education but the model may also have application to other types and levels of learning (e.g. secondary education).

Basic Beliefs Underpinning PLAR

This foundation element of the conceptual model for PLAR in education are the basic beliefs underpinning PLAR (see Figure 1). It is the basis for the development of a supportive conceptual perspective on PLAR and drives the identification of knowledge and skills necessary to assess prior learning, and the selection of appropriate assessment methods and tools.

Figure 1: Basic Beliefs

> **Box A: Basic Beliefs**
> The basic beliefs that underpin the concept of PLAR

There are at least three basic beliefs that form the rationale for PLAR and its professional practice. They are:

1. Post-secondary-level learning occurs outside the sponsorship of academic institutions through work and other life experience.

2. It is possible to assess prior learning without jeopardizing student success, credential integrity, or institutional credibility.

3. Relevant learning should be assessed and recognized by post-secondary institutions.

Over the past decade, qualitative and quantitative research has begun to produce evidence that PLAR leads to increased access to programs, academic credit awards, and advanced standing (Aarts et al., 1999; Aarts et al., 2003; Douglas College, 2000; Evans, 1995). Adult learners who have undertaken PLAR have been found to be successful in their subsequent studies, achieving higher course grades and graduation grade point averages, as well as having lower course failure rates and higher program completion rates than traditional students (Aarts et al., 1999; Pearson, 2000). In a recent study, Arscott, Crowther, Ungarian, and Young (2007) found assessment of prior learning to be a rigorous, collaborative, valid, and reliable process, and a positive indicator of future success in both education and employment in the human services field.

Proponents of PLAR believe that assessment of prior learning should be adopted by post-secondary institutions given evidence that it eliminates unnecessary duplication of learning; promotes confidence and motivation (Freers, 1994; Smith, 2002; Snyder, 1990); and increases learner motivation to persist within educational programs (Billingham & Travaglini, 1981; Harriger, 1991; Idyll, 1993; Kent, 1996; Pearson, 2000), and to pursue further education (Aarts et al., 1999; Aarts et al., 2003; Snyder, 1990; Thomas, Collings, & Plett, 2001; OECD, 2003). However, these documented, practical benefits can mask PLAR's less explored limitations. Peruniak (1993), for instance expressed concerns about the challenge PLAR presents to the integrity of experiential learning and its integrative power. Furthermore, in a recent collection of writings edited by Andersson and Harris (2006), international authors examine theories and concepts associated with PLAR and the contradictions that emerge in academic practice based on five themes: knowledge, pedagogy, learning, identity, and power. But even these rich sources of critical inquiry do not take issue with the three basic beliefs presented in this article.

Selected Theoretical Perspectives Aligned with PLAR's Basic Beliefs
The basic beliefs underpinning PLAR are aligned with a number of theoretical perspectives related to adult learning, as noted in Box B of Figure 2.

Figure 2: Selected Theoretical Perspectives

Box A
Basic Beliefs
The basic beliefs that underpin the concept of PLAR

Box B
Selected Theoretical Perspectives
Perspectives that align with PLAR's basic beliefs
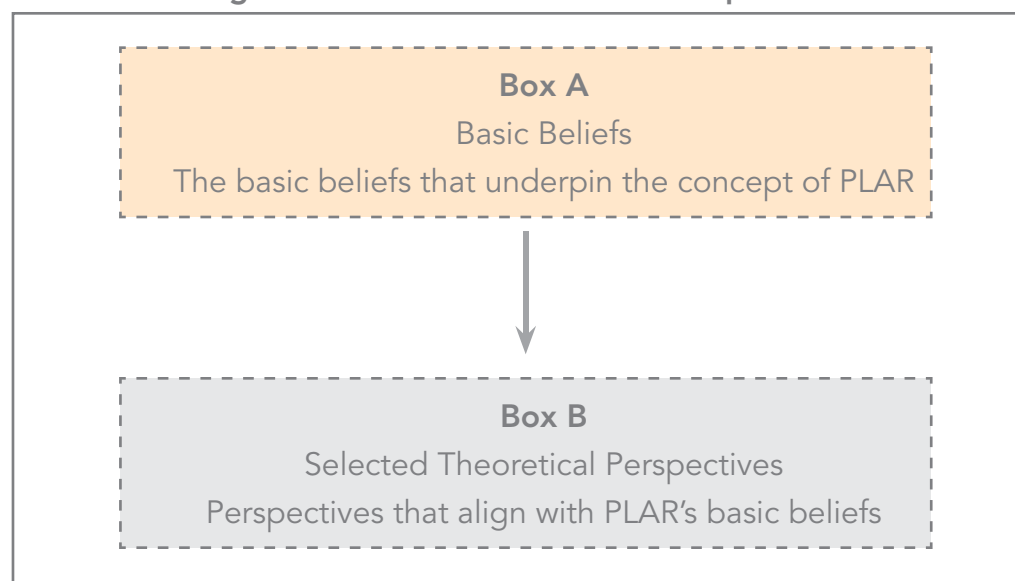
There are several areas of adult learning theory that are positively aligned with PLAR. Four of these are discussed in the following section. They relate to: (a) the role of experience in learning, (b) the nature and value of reflection in learning, (c) informal theorizing, and (d) theoretical perspectives on the assessment of student learning.

Role of Experience in Learning

Perhaps the most prevalent formal theoretical idea relating adult learning to PLAR is the concept that experience is central to learning. As one of the most influential progressive theorists in North American education, Dewey (1939) considered learning to be a process for which experience is the primary resource. He contended that experience is at the heart of education and that education's value lies in the ways in which it helps learners to make sense of and gain from their experience. Experience, for Dewey (1916) implied mindfulness, thinking, predicting, and reflecting.

Eduard Lindeman, a theorist and proponent of progressive adult education, focussed on non-vocational learning and emphasized the importance of using education to teach democratic modes of thought, attitudes, and behaviours (Brookfield, 1987). Although Lindeman (1926) considered adult education to be for non-vocational rather than academic or occupational purposes, the importance he placed on experience is applicable to both. Lindeman was unequivocal in his view that "the resource of highest value in adult education is the learner's experience" (p. 4).

The influence of humanist philosophy on education has also strengthened the importance placed on the role of experience in adult learning. Knowles (1970) argued that adults and their experiences are so intertwined that "an adult is what he [sic] has done" and that "when an adult is in a situation in which his experience is not being used, or its worth is minimized, it is not just his experience that is being rejected – he [sic] feels rejected as a person" (p. 44).

The importance of experience as a distinguishing characteristic of adult learning is shared by Brookfield (1987) and Jarvis (1987a, 1987b), as well as cognitive psychologists such as Bruner (1973) and Piaget (1978), who emphasized the interactive nature of the relationship between learning and experience.

Alignment with PLAR

The conceptual links between experiential learning theory and PLAR are reasonably clear. If learning activities should reflect as closely as possible the real world settings in which practice takes place, so too should the assessment activities that verify learning. Educators who use experiential learning theory to inform their practice attempt to simulate real life because the more authentic the learning activity and the assessment of that activity, the more likely it is that a person will be able to display their learning in actual practice (Caffarella & Barnett, 1994). PLAR assesses actual real-life learning, that is, competence developed through experience. Educators who place a high premium on experience as a source of learning are likely to find conceptual kinship with PLAR. Since most post-secondary faculty have no formal teacher training and rely heavily on reflection on their experience with students and colleagues to become good teachers (Cranton & Carusetta, 2004), they may be receptive to a greater exploration of the links between experience and learning.

The Nature and Value of Reflection in Learning

Many theorists and practitioners agree that experience does not necessarily produce learning and that a key ingredient that turns experience into learning is the act of reflection. Mezirow (1978) used critical theories of transformational learning to describe the adult learning process and to position it firmly within a framework of adult growth and development. Mezirow referred to past experience as a primary resource for learner reflections in the production of new learning. His theories are based on the idea that reflection is used to construct meaning from a new situation or problem, as well as to reflect on the assumptions upon which previously held perspectives are based. This act of critical reflection on past experience and the resulting framework of knowing that is created lead to a transformation of perspective that is fundamental to an individual's way of seeing the world.

In a rare article on transformative learning and prior learning assessment, McGinley (1995) noted Mezirow's (1978) idea that development through adulthood is directly connected to an enhanced capacity to validate prior learning through reflective discourse and to act upon the resulting insights. Other theorists such as Kolb (1981) share Mezirow's view that experience is transformed into knowledge through reflection. Jarvis (1987a) argued that not all learning (for example memorization), involves reflection. Jarvis modified Kolb's model of experiential learning by adding skills and attitude components, thus increasing the applicability of Kolb's model to formal education through the use of learning outcomes.

Freire (1970) proposed an approach to adult learning that emphasizes real life problem solving through reflection and raising consciousness. Assessment of learning from this perspective is an activity shared between learner and teacher, with an emphasis on reflection that acknowledges context, as well as the

values and experiences that learners bring to a learning situation. Contemporary authentic assessment practices that include reflection on the realities of learners' own situations, as opposed to more standardized assessments, are consistent with Freire's teachings. For example, Shor (1992) suggested that instruments used to measure student learning should be based on a student-centred, co-operative curriculum that emphasizes self-assessment, narrative grading, portfolio assessments, group projects and performances, individual exhibitions, and essay examinations that promote critical thinking.

Alignment with PLAR

Reflection is a common component of PLAR assessment methods and tools. Reflection-based activities draw strong support from practitioners and adult learners who have participated in qualitative PLAR research. Moreover, the works of the aforementioned scholars suggest that using reflection in post-secondary teaching, learning, and assessment enriches the overall educational process, and that it could contribute to increasing the perceived value of the reflective aspects of PLAR. In the model proposed in this paper, the act of reflection is a fundamental component of PLAR and can be used by learners before, during, and following the assessment process to consider the nature of their prior learning in relation to themselves and educators' expected outcomes.

Informal Theorizing

Informal adult learning theories are the understandings that individual practitioners develop based on reflections on their experience. When the concepts of experience, reflection, and self-direction are integrated, they result in a professional practice that Schon (1983) referred to as reflection-in-action and reflection-on-action. Reflection-in-action occurs at the time of encountering a problem, sometimes in a matter of moments. Reflection-on-action occurs during follow-up. According to Schon, these types of reflection generate informal theories that are more directly relevant to educators than formal learning theories. Formal theories have significance in the refining and changing of informal theories of practice, but they are not the source of those theories, nor is the application of formal theories an appropriate starting point for solving problems of practice. Usher (1987) believed that informal theorizing has a direct impact on the implementation of new educational strategies. It occurs when educators encounter problems in the classroom that cannot be resolved by applying existing understandings. Resolution requires new strategies that contribute to the revision and refinement of these understandings.

Alignment with PLAR

There is little evidence to suggest that formal learning theories have influenced the application of PLAR and this raises the importance of informal theorizing. Educators engage in informal theorizing when they recognize the inappropriateness of existing methods and tools for the assessment of prior learning. The individualized nature of prior learning often require PLAR practitioners to innovate in the development and delivery of assessment. PLAR methods and tools are well suited to such needs for innovation, and can be used in combination with traditional methods of assessment. The use of learning outcomes in establishing standards for student demonstrations of learning can also assist practitioners

in translating their informal theories into a variety of flexible assessment strategies that meet clearly defined expectations, while still being adaptable to the prior experiences of individual learners (Wong, 1996).

Theoretical Perspectives on the Assessment of Student Learning

The theoretical perspectives presented earlier on the role of experience in learning, the nature and value of reflection, and informal theorizing are fundamentally compatible and have the potential to positively influence the adoption of PLAR's basic beliefs. These perspectives also share approaches to assessment. Consider the work of theorists who have examined the relationship between prior learning, classroom learning, and assessment. In a study of how people learn, Bransford, Brown, and Corking (2000) identified several factors that affect assessment. They contended that paying attention to the knowledge, skills, and attitudes that each individual learner brings to the classroom helps to create powerful learning environments. They also argued that if learners' prior understandings are not engaged, they may fail to grasp new concepts and information, or they may learn them for testing purposes and later revert to their previously held beliefs. Their work suggests that teachers should draw out and work with learners' pre-existing understandings to maximize the impact of learning activities.

Pellegrino's work (2003) has since supported the findings of Bransford and his colleagues, noting that in future educational environments, "de-contextualized, drop-in-from-the-sky assessments consisting of isolated tasks and performances will have zero validity as indices of educational attainments … In essence, assessment will need to transform itself to remain relevant and useful" (p. 12). Messick's (1994) idea that educators require an understanding of both traditional and contemporary forms of assessment following a fitness for purpose principle is a useful concept for practitioners wishing to achieve a realistic mix of de-contextualized structured assessment tools and performance-based tasks that take into account learners' previously acquired learning. Theories supporting authentic assessment are particularly supportive of PLAR.

Authentic assessment refers to the measurement of an individual's ability to use previously acquired learning to perform tasks or solve problems by demonstrating meaningful application of essential knowledge and skills to real-life situations (Mueller, 2005). Wiggins (1998) expands our understanding by proposing six key characteristics of this form of evaluation and offering a helpful comparison between authentic and more traditional forms of assessment (such as standardized tests). Mueller (2005) also helps to establish authentic assessment by arguing that learners construct their own meaning of the world and must have the opportunity to demonstrate how their constructed meanings meet learning expectations.

Research has suggested that application of authentic assessment theory requires the use of standards that clearly reflect program expectations (Mueller, 2005). In authentic assessment, the following mechanisms can be used to facilitate measurement of learning achievements: (a) leaning outcomes statements that articulate what learners need to know and be able to do; and (b) taxonomies to ensure

a consistent structural framework for assessing different types of learning. Bloom's taxonomy is the most widely known and forms the basis for the knowledge, skills and attitudes structure of many post-secondary methods of learning and evaluation (Chapman, 2006).
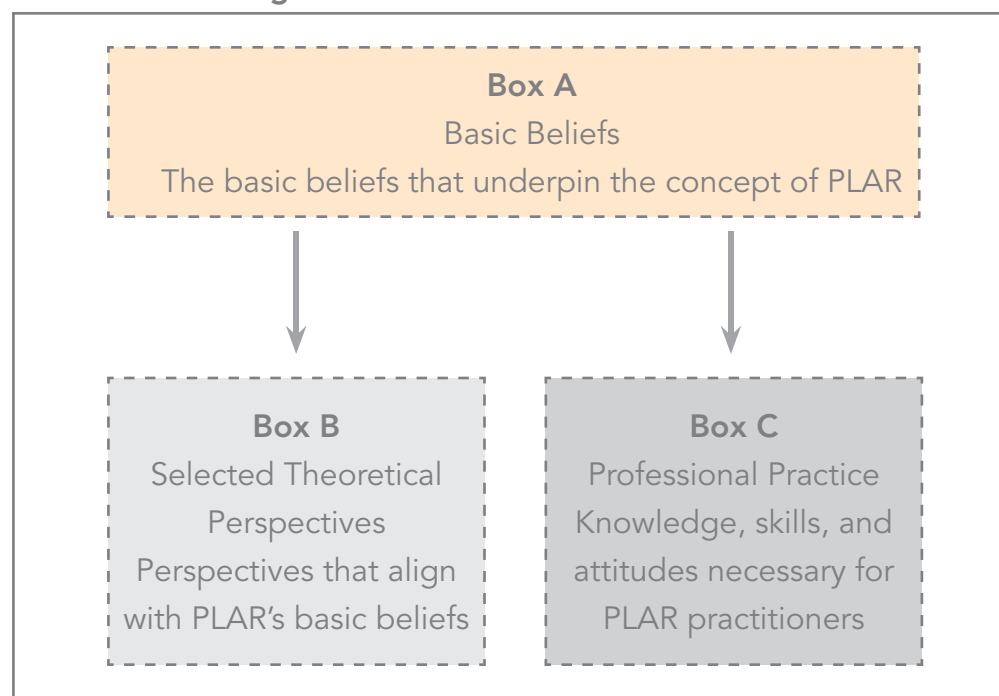
Alignment with PLAR

The theoretical perspectives on assessment discussed above reflect a valuing of prior learning that the research has shown to be a key motivator for adults returning to formal education. Meswick's (1992) concept of fitness for purpose is particularly useful for practitioners trying to decide on appropriate methods and tools to assess prior learning. Mueller's (2005) perspectives on authentic assessment are also helpful in aligning concepts of knowledge construction with educational standards expressed through learning outcomes. When these ideas come together, they create a framework that recognizes that in PLAR, real life is the curriculum and that acquired knowledge, skills, and attitudes represent authentic learning. Since PLAR is intended to assess this authentic learning, it seems appropriate to use methods of assessment that are as authentic as possible. Although the concept of authentic assessment appears to be particularly conducive to recognizing prior learning, there are likely other approaches that could play a significant role in PLAR, underscoring the need for further research in this area.

Given PLAR's suggested benefits and positive alignment with commonly accepted theories about adult learning, the question of how to increase post-secondary institutions' use and receptivity towards PLAR is raised. The answer, it would appear, depends in part on improving the credibility of PLAR through high quality professional practice.

PLAR Professional Practice

PLAR professional practice is the subject of the proposed model's Box C (see Figure 3 below). It represents the knowledge, skills and attitudes required of practitioners to fulfill their PLAR responsibilities.

Figure 3: PLAR Professional Practice

Box A
Basic Beliefs
The basic beliefs that underpin the concept of PLAR

Box B
Selected Theoretical Perspectives
Perspectives that align with PLAR's basic beliefs

Box C
Professional Practice
Knowledge, skills, and attitudes necessary for PLAR practitioners

PLAR practice has mainly taken three major forms in educational institutions: (a) preparing, conducting, and providing feedback on assessments of prior learning, (b) facilitating portfolio development, and (c) supporting learners through the PLAR process (Centre for Curriculum Transfer and Technology, 2000b).

One way to identify and categorize the knowledge, skills, and attitudes required of PLAR practitioners is to use the domains of Bloom-based taxonomies. This section focusses on two categories of PLAR practitioner in education, namely the assessor, and the portfolio development facilitator. It examines the knowledge, skills and attitudes they should possess to facilitate the adoption and high quality of PLAR practice.

Essential Knowledge, Skills and Attitudes of PLAR Practitioners in Education

PLAR assessors are required to provide information on PLAR to potential candidates, select and design PLAR assessment methods and tools, conduct assessments, and positively interact with PLAR candidates before, during, and following assessment. To accomplish these tasks, they require expert knowledge of the subject matter being assessed and a solid understanding of the learning outcomes expected of the candidates (Centre for Curriculum, Transfer and Technology, 2000a). Assessors also need the ability to evaluate how candidates' knowledge, skills, and attitudes meet learning outcome expectations, even if those knowledge, skills, and attitudes are not identical to course content. Assessors must be able to use assessment methods and tools that will evaluate the authenticity, currency, breadth, and depth of an individual's prior learning (Simosko, 1997).

Attitudes form an important component of PLAR practitioner qualifications, particularly an acceptance of the basic beliefs that underpin PLAR (Wong, 1996). Developing these attitudes often requires educators to expand their conceptions of what constitutes important knowledge, or to revise their basic beliefs regarding the kind of knowledge that "counts" (Andersson, 2006; Thomas, 2000). Assessors also need to be aware of the subjectivity of assessment (Cranton, 1998) and to be able to communicate with PLAR candidates in a manner that is both empathetic and authoritative. They must be able to deliver information in a clear and constructive manner and help learners identify and plan to address learning gaps (Wong, 2001).

Portfolio development facilitators, for their part, also require specialized content knowledge in PLAR and portfolio development in particular. They require subject matter expertise and an understanding of the learning outcomes expected of PLAR candidates, in order to assist them in the development of their portfolios. Portfolio development facilitators must also be familiar with other assessment tools, given the possible use of these instruments to supplement the assessment of learning presented in portfolios.

Portfolio development facilitators' skills in the affective domain are particularly important because adult learners often exhibit a lack of awareness of their prior knowledge, skills, and attitudes and a lack of confidence in themselves as learners. Although portfolio development facilitators are usually drawn from teaching faculty, their primary role is to coach rather than teach adult learners to recognize their

prior learning, to understand how their prior learning meets course and program expectations, and to build their capacity to learn.
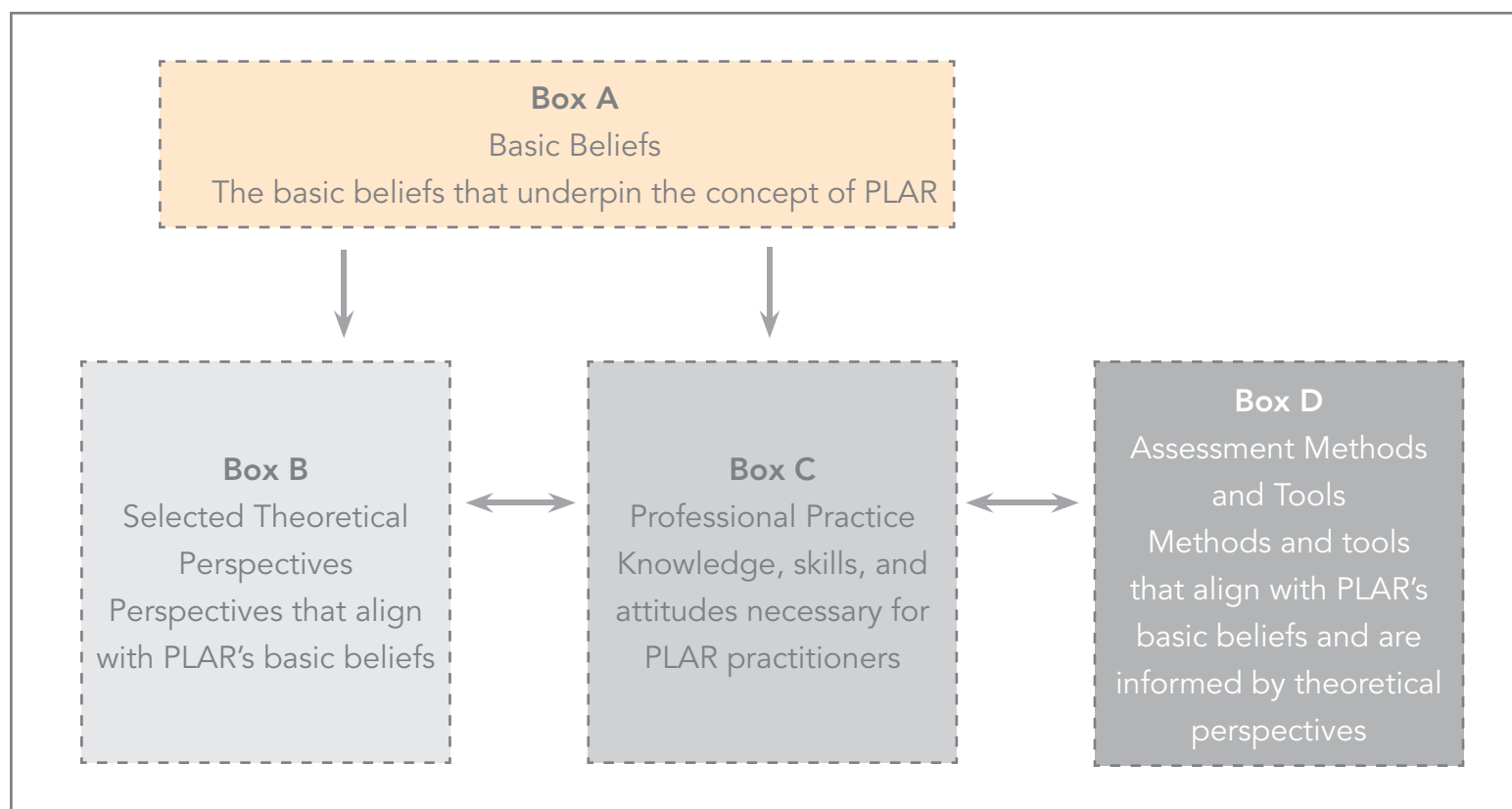
The affective skills required of PLAR assessors and portfolio development facilitators are similar to the skills emphasized by theorists of self-directed learning. Brockett and Hiemstra (1985) describe this requirement as follows:

> it is crucial for the successful teacher in self-directed learning situations to use facilitation techniques and to serve primarily as a manager of the teaching-learning transaction, not as an information provider. This implies that a facilitator must be able to tap a wide range of interpersonal helping skills, such as empathy, respect, and genuineness. (p. 9)

PLAR Assessment Methods and Tools

The purpose of this element of the conceptual model for PLAR in education (see Box D in Figure 4 next) is not to prescribe specific assessment tools to be used in PLAR, but rather to lay a foundation for method and tool selection that stems from a combination of the model's belief statements i(Box A) and selected theoretical perspectives related to adult learning (Box B).

Figure 4: Assessment Methods and Tools

Box A
Basic Beliefs
The basic beliefs that underpin the concept of PLAR

Box B
Selected Theoretical Perspectives
Perspectives that align with PLAR's basic beliefs

Box C
Professional Practice
Knowledge, skills, and attitudes necessary for PLAR practitioners

Box D
Assessment Methods and Tools
Methods and tools that align with PLAR's basic beliefs and are informed by theoretical perspectives

Prior learning assessments are often conducted using traditional, classroom-focussed assessment methods and tools, namely written and often standardized tests. Post-secondary educators, by and large, have not expanded their assessment practices to reflect a fuller understanding of the prior knowledge that adult learners bring to the classroom. There are, however, a range of contemporary and traditional assessment methods and tools that can be appropriately used or adapted to elicit prior learning. Mueller (2005), for example, advocates the use of a combination of traditional and authentic assessments.

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He also promotes the idea that authentic assessment can be used as a single measure to demonstrate multiple skills or areas of knowledge. This is illustrated by the example of an essay that is read the first time for content knowledge, a second time for writing and communication skills, and a third time for critical thinking skills. In this way, assessments can be integrated and multidimensional and can also become a source of meaningful learning as a tool for reflection—an approach to assessment also proposed by Gardner (1987) and supported by Kulieke et al. (1990).

Using the proposed conceptual model for PLAR in education, the selection of appropriate assessment methods and tools takes into account at least five considerations, all of which are aligned with the basic beliefs and theoretical perspectives reviewed earlier and encapsulated in boxes A and B. First, adults' real life responsibilities and situations include a broad social context that affects their learning (Merriam, 1993; Merriam & Caffarella, 1991). Prior learning is therefore embedded in the experiences that learners bring to the assessment process. Authentic assessment techniques such as reflective journaling, case studies, critical incident reflection, role playing, and self-reflective portfolios are powerful learning and assessment tools that give learners an opportunity to gain new meaning from their own experiences (Brookfield, 1986; Galbraith, 1990). Similarly, Cranton (2004) emphasizes the value of learner self-evaluation through guidance, critical reflection, and discussion, particularly when emancipatory learning is the goal.

Second, adults tend to be more reflective and dialectical in their thinking than younger persons. They engage more often in problem finding and problem solving (Caffarella & Barnett, 1994). They are also more tolerant of contradictions and ambiguities. To quote from Caffarella and Barnett : "These characteristics fit well with the notion that the assessment procedures for experiential learning, and more specifically developing portfolios, should have a reflective component built into the process" (p. 42).

Third, because of the variety of contexts in which prior learning occurs, and the challenge of translating experience into evidence of learning, the use of clear standards or criteria against which prior learning will be evaluated is critical. An appropriate strategy for setting clear expectations is the use of learning outcomes. In the future, the primary criteria in PLAR assessments may not be individual course learning outcomes, but rather clusters of outcomes, program learning outcomes, or outcomes that cross programs and disciplines. Additional research and experimentation are required for these advances to be made.

Fourth, the design or selection of appropriate assessment methods and tools needs to take into account Messick's (1992) principle of fitness for purpose (Dietel, Herman, & Knuth, 1991). Traditional tools may well be available and efficient, but if they are designed on the basis of classroom experience alone and do not acknowledge other learning experiences that might still achieve expected learning outcomes, they are probably not appropriate for assessing prior learning. Alternative methods such as demonstrations, oral presentations, structured interviews, simulations, and short answer written tests are also worthy assessment strategies.
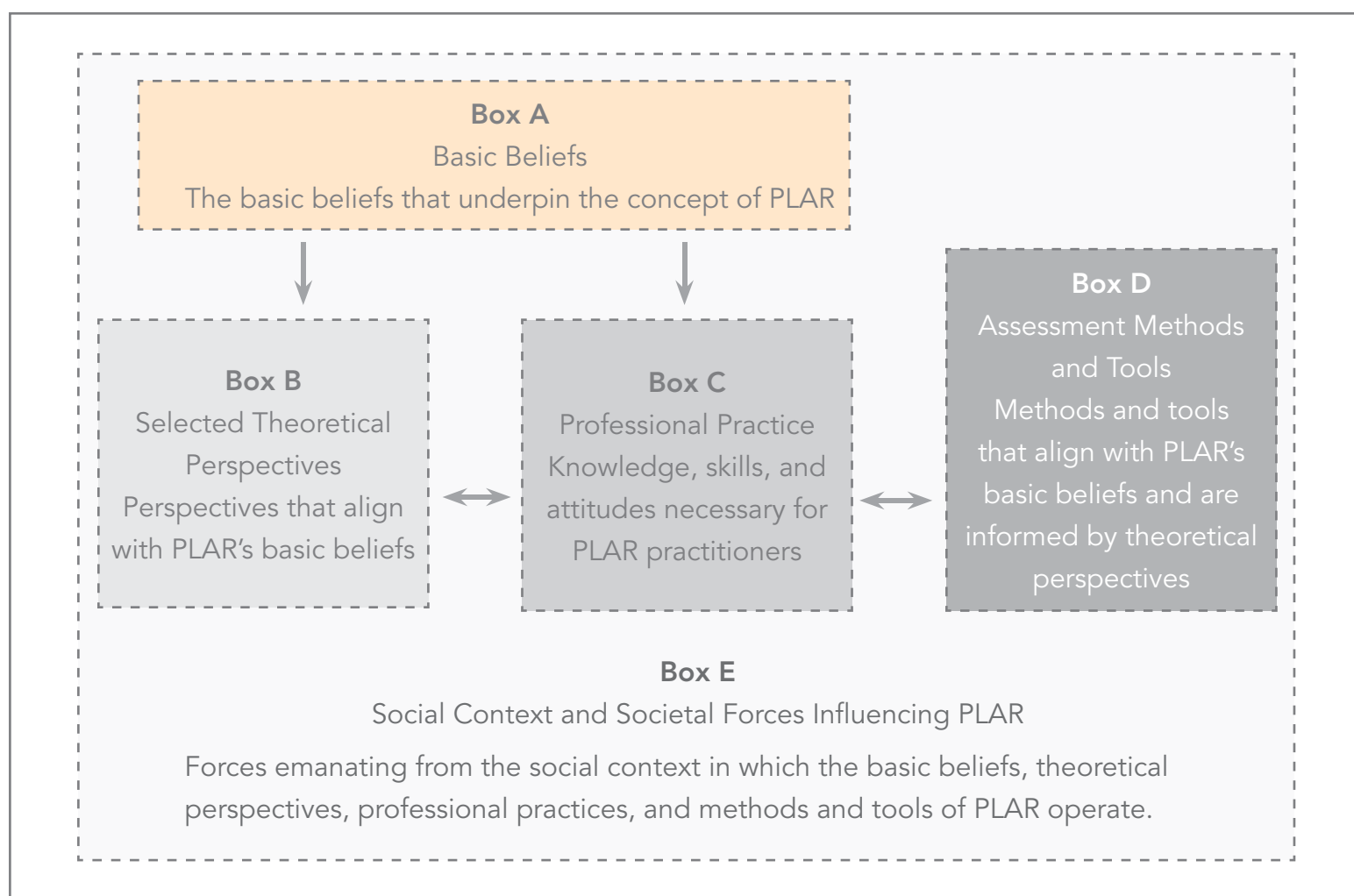
A fifth important consideration in the preparation of prior learning assessments is an understanding by assessors and their institutions that unsuccessful assessments do not necessarily indicate that a learner has failed or that legitimate learning has not taken place; rather they more often indicate that candidates' prior learning does not match the learning that is expected before academic credit can be granted. This perspective reflects respect for prior learning and, in turn, respect for the adult learner.

Finally, the selection of assessment methods is influenced by specific pedagogical factors such as the domain and level of learning, learner perspectives, and the experience and expertise of assessors, as well as practical considerations such as cost and institutional capacity.

Social Context and Societal Forces

Theorists like Brockett and Hiemstra (1985) consider an individual's world view to be the product of all of the things one has seen, read, heard, and experienced. Applied to the proposed model, their perspective suggests that educators need to acknowledge the broader context that impacts PLAR. Box E (see Figure 5 below) represents the social context in which education takes place and identifies societal forces at work that support, promote, limit, or prevent the offering of PLAR services by post-secondary institutions. Box E, therefore, pertains to the contextual backdrop for boxes A to D.

Figure 5: Social Context and Societal Forces Influencing PLAR

Box A
Basic Beliefs
The basic beliefs that underpin the concept of PLAR

Box B
Selected Theoretical Perspectives
Perspectives that align with PLAR's basic beliefs

Box C
Professional Practice
Knowledge, skills, and attitudes necessary for PLAR practitioners

Box D
Assessment Methods and Tools
Methods and tools that align with PLAR's basic beliefs and are informed by theoretical perspectives

Box E
Social Context and Societal Forces Influencing PLAR
Forces emanating from the social context in which the basic beliefs, theoretical perspectives, professional practices, and methods and tools of PLAR operate.

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Societal forces are social forces. They are political, demographic, economic, pedagogical, institutional, situational, and dispositional. They can work independently and in combination.

Political forces include public policy and its impact on education and the assessment of learning. Educational practices such as PLAR are attractive to policy makers for their ability to maximize the existing knowledge and skills of the workforce. Political forces have been powerful drivers behind the implementation of PLAR in Canada.

Demographic forces (e.g. population growth rates, age and gender distribution, levels of immigration) create pressures on the educational system to respond to changes in demand. As Canada's population grows older and more diverse, its capacity for and interest in learning also grow, creating opportunities for recognition of learning acquired through experience.

Economic forces that influence post-secondary program development include labour and skill supply, employment levels, worker mobility, international competition, trade liberalization, industry restructuring and rationalization, low wage levels, low worker education levels, and the growing use of new technologies. These forces push post-secondary institutions to respond to public policy pressure to link program offerings to economic prosperity and provide services such as PLAR to increase the size and quality of the workforce.

Pedagogical forces that can support, promote, limit, or prevent the offering of PLAR services relate to an institution's philosophical stances on the education of adults. Faculty beliefs and attitudes impact PLAR and include conceptual confusion surrounding the definition and purpose of PLAR (Smith, 2004; Topping, 1996; Wheelehan, Miller & Newton, 2002); doubts that learning which occurs outside the sponsorship of an institution can be translated into academic credit (Harriger, 1991; Topping, 1996; Wolfson, 1996); and the belief that PLAR is only appropriate at the undergraduate level (Swiczewicz, 1990; Tate, 1996). Related to this are concerns that the quality of PLAR cannot be assured, will lower standards, and places institutional credibility at risk (Butler, 1993; Halberstadt, 1986, Harriger, 1991, Merriam & Brockett, 1997; Preston, 1981; Wheelehan, 2003); and the belief that adult learners are no different from youth and require no special teaching and learning strategies (Topping, 1996). Some faculty also consider PLAR to be a threat to professorial autonomy (Harriger, 1991). Others are concerned that additional faculty and staff training may be required (Halberstadt, 1986). Still others believe that only classroom experience can be considered essential to post-secondary learning (Harriger, 1991; Swiczewicz, 1990; Topping, 1996). Wong (2001) notes that for faculty to prepare for PLAR, they need to reconsider existing curriculum content, structure, and processes to realign them with the intent and spirit of PLAR, if PLAR is to achieve its potential in the long term. She also points out that the integration of PLAR into post-secondary teaching-learning systems requires the support of faculty, staff, and senior administrators.

Many impediments are created by *institutional forces*, organizational arrangements that structurally frame service delivery. These include the capacity of institutions to provide non-traditional program

schedules and non-traditional assessment (Smith, 2004), transparency of academic policies and procedures (Aarts et al., 1999; Harriger, 1991; Kent, 1996; Raulf, 1992; Thomas, 2000; Topping, 1996). Such forces may also include the degree of integration of PLAR into institutional budget processes, including the costs of assessment development and delivery (Harriger, 1991; MacTaggart & Knapp, 1981; Meyer, 1975; Wheelehan et al., 2002), and availability of faculty professional development. Research suggests, in fact, that there is an ample supply of negative institutional forces challenging PLAR implementation.

Situational forces are external, circumstantial forces that affect adult learners. Learners who are considering or engaging in PLAR are in a similar situation to those returning to formal post-secondary education. Cross (1981), for example, wrote extensively on situational barriers to learning and PLAR, pointing to such factors as lack of financial resources to attend post-secondary education. While some adult learners are affected by lack of time and money to undertake PLAR, many others must also deal with the pressures of work and home responsibilities (Aarts et al., 2003; Smith, 2002), fatigue, and the lack of child care, transportation, a place to study, and family emotional support (Cross, 1981; Smith, 2002).

Building on the work of Cross (1981), *dispositional forces* are personal forces that affect learner perceptions of PLAR and their ability to undertake PLAR. Such forces include low learner self-confidence (Topping, 1996), learners' concerns about their age and their ability to perform in a classroom environment, perceptions that PLAR is too difficult and time-consuming (Kent, 1996), the attitudes of institutions and employers that undervalue PLAR (Fisher, 1991), as well as, in some cases, lack of learner interest (Organization for Economic Cooperation and Development, 2003).

CONCLUSIONS

Lewin (1952) claimed, "There is nothing as practical as a good theory" (p. 169) and pointed out that the process of theorizing is one that involves mutual exchange of ideas between theorists and practitioners. The analysis and synthesis of the literature on adult learning and PLAR reviewed for this paper points to several conclusions of considerable relevance for the application of PLAR.

First, there is a lack of cohesion in educators' conceptual understandings and use of PLAR. Greater conceptual cohesion can be achieved by constructing a relationship between the basic beliefs that ground PLAR and the assessment processes (methods, tools, practitioner attributes) that support those beliefs. The quality of this relationship is enriched by aligning supportive theoretical perspectives and by developing an understanding of the societal forces that are at work in translating those beliefs into action. The proposed conceptual model for PLAR in education begins the process of building a cohesive representation of PLAR's place in education in a way that could improve PLAR's credibility and validity as an educational activity.

Second, theoretical perspectives on adult learning that are aligned with PLAR's basic beliefs can be used to inform professional practice. Such perspectives embrace the notions that learning is contextually situated and occurs through experience, and that reflection is an important component of higher learning.

Third, many current PLAR assessment methods and tools are either those already used in traditional classroom learning or the product of informal theorizing and experimentation without reference to formal adult learning theories. The selection of PLAR assessments would be enriched if educators were to use methods and tools that are aligned with PLAR's basic beliefs and the theoretical perspectives that support those beliefs. Assessment methods and tools that use learning outcomes and are performance-based using authentic assessment methodologies can enhance adult learners' opportunities to demonstrate their prior learning. Assessment methods that replicate as closely as possible the context in which prior learning is subsequently applied also help assessors to identify learning and learning gaps.

Fourth, PLAR practitioners who have assessment expertise in the subject matter being assessed, a solid knowledge base in PLAR, and an open attitude toward alternative forms of assessment, can bring wider acceptance of prior learning assessment.

Fifth, societal forces have had both positive and negative impacts on the development of PLAR. For example, political forces such as legislation and public policy have been positive influences that have encouraged implementation, financed pilot projects, and facilitated information sharing and networking opportunities. At the same time, pedagogical forces have been dominated by negative considerations around quality assurance, lack of information and research, and a myriad of negative institutional forces that have limited institutional capacity, learner opportunity, and assessment innovation. These forces have been instrumental in limiting the growth of PLAR. The current imbalance suggests that strong positive pedagogical and institutional forces are necessary for the implementation of PLAR professional practice.

Implications for Practice

The conceptual model for PLAR in education described in this paper has several applications. Researchers can use it as a framework for further research into theoretical perspectives and professional practice; educators can use the model to assess their own positioning in the practice of PLAR; and institutions can use it as resource for design and delivery. The following implications relate primarily to the latter two applications and to PLAR practitioners in post-secondary institutions in particular. These implications are multi-dimensional and stem from each element of the proposed model.

Basic Beliefs

It is important that educators who provide PLAR services at the post-secondary level have a supportive perspective on prior learning and an understanding that post-secondary level learning occurs in a variety of contexts outside the sponsorship of institutions. Moreover, an understanding that PLAR can be assessed against course and program learning expectations without jeopardizing the integrity

of credentials or the credibility of institutions helps to alleviate concerns about the consequences of assessment. Post-secondary institutions wishing to undertake PLAR need to foster these beliefs and demonstrate their support by embedding them in their organizational infrastructure including policy, program planning, budgeting, professional development, student counselling, and outreach.

Theoretical Perspectives

In writing on adult education and training, Foley (1995) argued that educators need to "become more aware of and systematically develop our theoretical frameworks, the ways in which we understand and explain our work" (p. 7). They must "seek out and use concepts and theories that strengthen our practice" (p. 8). PLAR practitioners need to examine and understand their own theoretical perspectives on adult learning and PLAR, use their own informal theorizing, and inform it by reflecting on formal theoretical perspectives that deepen their understandings and improve their practice (Foley, 1995). Practitioners also need to take into account contemporary theories and arguments that learning involves the active construction of meaning—meaning that is context influenced, socially mediated, and situated in the real world of the learner—in addition to being deliberate in using their theoretical perspectives in their practice (Chappell, Soloman, Tennant, & Yates, 2002).

Professional Practice

The research on affective barriers to effective PLAR suggests that educators in post-secondary institutions need to have an open attitude toward alternatives to traditional, behaviourist-based assessment, a willingness to learn about PLAR, and the knowledge, skills, and attitudes necessary to provide a positive, effective environment for assessment (Cross, 1981). Assessors require expertise in the subject matter being assessed and a solid knowledge base in PLAR. Educators also need to contribute to research on PLAR to find ways to address implementation challenges, resolve quality assurance concerns, improve their own professional practice, and contribute to the professional practice of educating adults.

Assessment Methods and Tools

The adoption of the basic beliefs and theoretical perspectives presented in this article leads to the use of assessment methods and tools that maximize learners' opportunity to demonstrate their knowledge, skills, and attitudes in relation to clearly stated learning expectations. This may require institutional investments and professional development for faculty assessors. It may also require an analysis of current assessment inventories and an infusion of flexibility into assessment practices. It may require a combination of traditional testing and more contemporary methods that use real-life situations as the context for assessments. A key to selecting or developing assessment methods and tools for PLAR is ensuring that they are reliable and valid – identifying and measuring what is intended with reason for confidence in the results. Cranton (1998) points to the possibility and value of good subjective evaluation methods and tools, and acknowledges that inevitably, assessments are the products of human judgment. If qualified assessors are provided with full information from informed individuals and well-

constructed tools to measure learning against clearly stated and meaningful standards, the results will meet the highest possible standards of quality.

Social Context and Societal Forces

Ultimately, addressing the above-noted implications for professional practice will not, in and of itself, guarantee the growth of PLAR in Canada or elsewhere. Forces beyond the control of individual educators and their post-secondary institutions will play an important role in determining PLAR's success. Expansion is likely to require a strengthening of the positive influences of the pedagogical and institutional forces presented in this article.

A FINAL NOTE

The proposed conceptual model for PLAR in education captures the essence of an argument made by Foley (1995) about the value of seeing practice and theory as a relationship:

> Conceptualizing the relationship of practice, informal theory and formal theory helps us to see that theorizing is not just an abstract, impractical activity engaged in by intellectuals in academia, but rather something we do all the time. This perspective enables us to make the process of theorizing more explicit. Formal theory then ceases to be seen as something external to us that we have to master and apply and becomes something we can take into our existing understanding and which can illuminate both our implicit, informal knowledge and our practice. (p. 14)

The aim of this paper was to promote understanding of PLAR, its relationship to adult learning theory, and its implications for professional practice in post-secondary education. I invite other researchers to consider how the conceptual model for PLAR in education could be improved and expanded to encompass PLAR in other contexts such as occupational licensing and for other purposes, such as personal development. I also encourage other educators to explore the theoretical perspectives presented and to reflect on how PLAR might be used to enhance their professional practice.

Author's note

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