STATE OF THE FIELD REVIEW:

PRIOR LEARNING ASSESSMENT AND RECOGNITION (PLAR)

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EXECUTIVE SUMMARY

PLAR (Prior Learning Assessment & Recognition) is the practice of reviewing, evaluating, and acknowledging the information, skills, and understanding that adult learners' have gained through experiential or self-directed (informal) and/or non-credit courses and workshops (nonformal) learning, rather than through formal education (Thomas, 2000). The Canadian Council on Learning (CCL) commissioned this State of the Field Review to answer these questions:

- What generalizations may be reliably drawn from the empirical evidence concerning PLAR?

- What are the major gaps in knowledge about PLAR?

- What are the most profitable lines of inquiry with regard to PLAR?

The review is based on over 175 sources from the years 2000-2005, supplemented by interviews with known Canadian experts in the PLAR field. The report structure is derived from that of an earlier annotated bibliography, which compiled PLAR literature up to and including 1999 (http://fcis.oise.utoronto.ca/~plar/database/toc.html).

Generalizations from the Empirical Literature

PLAR Policy

Prior learning assessment and recognition is present within the education and training systems of many countries world-wide. Common policy themes are the need to link PLAR to broader adult learning policy and programme initiatives created in response to demographic and labour mobility challenges, non-acceptance of PLAR within universities, transferability of PLAR credits across jurisdictions, definitional confusion, quality assurance concerns, and the continuing problem of low uptake by learners.

PLAR in Formal Education

 PLAR policies and implementation. In Canada, formal PLAR policies and supports are much more widespread at the community college level than at the university level or secondary level. The existence of formal policies, however, is not necessarily linked to effective implementation. Even at institutions most committed to PLAR, uptake by learners remains low across the country. Low uptake and/or lack of institutional involvement in PLAR is consistently attributed to a variety of factors, including costs for learners and institutions; lack of learner and faculty awareness of PLAR; faculty resistance to PLAR; quality assurance concerns; and lack of incentives for faculty and institutions to engage in PLAR

 At Canadian and international post-secondary institutions, PLAR implementation and uptake by learners appears to be concentrated in certain disciplinary areas, notably Health Sciences disciplines (Dietetics, Nursing, Pharmacy, Optometry), Human Services disciplines (Early Childhood Education, Social Work), and Business Education. Outside of Canada, PLAR activity is also notable in Teacher Education and Law & Justice Studies. In Canada, PLAR appears to be primarily available at the undergraduate level, rather than for graduate level studies.

 A variety of methods are routinely used for preparing learners to petition for post-secondary PLAR credits and for assessing their learning. The literature contains several descriptions of generic PLAR procedures and processes at individual institutions.

 PLAR and learning. The achievement of PLAR credits appears to have predictive validity for ability to engage successfully in and persist with post-secondary learning. PLAR can itself be a powerful learning tool, especially the process of portfolio

development. Some studies, however, suggest that while experiential learning may fit smoothly with some disciplines, a mismatch may exist between learners' construction of knowledge and the knowledge structure of other disciplines.

PLAR and learners. Research with post-secondary learners who have used PLAR uniformly reports benefits in terms of time and costs savings, as well as growth in self-awareness, self-esteem, and confidence.

Assessor and Facilitator Training

Training is valued by those who receive it, and used in their professional practice.

PLAR and Work

Canadians have much unrecognized learning acquired through work, but few Canadian workers are aware of the existence of PLAR and how it might benefit them. PLAR and labour education has been thoroughly documented, as has PLAR and the military. A variety of regulatory bodies, professional associations and occupational associations, as well as some employers, are involved with PLAR to some degree. Although PLAR is widely used in the apprenticeship field, the quality of assessments has emerged as an issue.

PLAR and Diversity

Immigrants potentially have much to gain from PLAR but are largely unaware of the process or how to access it. Aboriginal students are underrepresented among PLAR users in mainstream community colleges, although Aboriginal educational institutions and organizations are active in PLAR. Evidence from Australia demonstrates that Aboriginal learners benefit from culturally appropriate approaches to PLAR.

Major Gaps in Knowledge

PLAR Policy

Available international evidence needs to be synthesized to identify factors in PLAR implementation which transcend issues of local institutional and legislative arrangements, as well as local factors which contribute to unique PLAR developments in each jurisdiction. Of particular importance are the place of PLAR within comprehensive policy frameworks for adult and lifelong learning; factors that lead to higher uptake of PLAR; approaches to quality assurance; relationship of PLAR to International Credentials Evaluation; and institutional and legislative provisions that enhance cross-jurisdictional transportability of learning recognized through a PLAR process.

PLAR in Formal Education

PLAR in community colleges and universities. We have little direct information on why uptake is so low. Hard data on actual costs and savings from PLAR is missing, including an analysis of the effects of institutional funding formulas. Recent research directly with faculty members concerning awareness of and attitudes to PLAR is lacking as is evidence on how training affects either faculty attitudes to PLAR or their actual practice. We have no research comparing the effectiveness and efficiency of different methods used in conducting PLAR assessments. In addition, no research exists that links PLAR with research and training efforts being conducted at university teaching and learning centres, which focus on increasing doctoral students' and new professors' understanding of the learning and assessment process.

PLAR and learners. We have no large scale longitudinal studies following learners through the PLAR process. We are also lacking sufficient research on what

changes in individuals' cognition and epistemology result from participation in PLAR, particularly in portfolio development, and how such changes relate to changes in cognition and epistemology experienced through a typical undergraduate education.

Disciplinary perspectives on PLAR. Research that explores disciplinary PLAR practices and how experiential learning can be articulated into the knowledge structure of specific disciplines is lacking.

PLAR in secondary education. We have no readily available information on how secondary level PLAR policies have been implemented, on uptake levels, or on the experience of adult learners involved in this process.

PLAR and distance education. We have no research concerning learners' or institutional experience with this form of PLAR.

Assessor and Facilitator Training

We have little information on the numbers of PLAR practitioners across their country, on their demographic characteristics (location, years of experience, other qualifications, type of organization, etc.), or on their level of activity in conducting assessments. Evidence is lacking concerning the most effective and efficient approaches to Assessor and Facilitator training, and how training impacts quality assurance. The impact of facilitator and assessor training on actual practice on learners' experiences and outcomes has not been thoroughly investigated.

PLAR and Work

We are lacking follow-up studies of the effect of PLAR with individuals with a longer-term pattern of unemployment, such as social assistance recipients, parents returning to the workforce after lengthy breaks for child-rearing and/or prisoners.

We lack information on the scope of employers' and professional organizations' involvement in PLAR on a nation-wide basis. We do not have solid research on what approaches to PLAR have been adopted, the nature of assessment methods being used, quality assurance practices, articulation arrangements with colleges and universities, real costs of workplace PLAR, and outcomes for both workers and employers.

PLAR and Diversity

We do not know why diverse learners are not accessing PLAR. We know almost nothing about PLAR services available to diverse learners at post-secondary institutions.

Most Profitable Lines of Inquiry

PLAR Policy

A comprehensive analysis of international PLAR policy and program initiatives would be highly useful for developing policy and programmatic alternatives for PLAR and its position within the adult learning policy framework in Canadian jurisdictions.

PLAR in Formal Education

We need longitudinal research on the experiences of both faculty members and post-secondary learners with PLAR, and particularly research that reflects both the disciplinary nature of post-secondary learning and assessment methods and quality assurance concerns. Exploring disciplinary communities of practice in PLAR would be useful. Comparative research with disciplines that already make extensive use of PLAR (e.g. nursing) and those that do not (e.g. architecture) would be informative in terms of how best to encourage more widespread adoption of PLAR. Research that identifies true monetary costs and benefits of PLAR in post-secondary education would be beneficial.

Because so little information exists on both PLAR and secondary education and the use of distance education for PLAR, research on any aspect of these two areas is necessary.

Assessor and Facilitator Training

A census of PLAR practitioners in Canada would contribute to a better understanding of the existing community of practice. In addition, evaluative studies of the effectiveness and efficiency of different training approaches with different types of trainers would assist in the development of more rigourous and focused efforts, with follow-up studies of the effect of training on client services and outcomes.

PLAR and Work

Research on PLAR and work should focus on a survey of workplace PLAR activity levels in different occupational fields, possibly working through sector councils, and a survey of Human Resource professionals to determine their awareness of and involvement in PLAR. We also need solid case study research to provide exemplars on the process and costs/benefits of workplace PLAR. Research on labour-management-formal education partnerships for workplace PLAR would be of particular interest.

PLAR and Diversity: Research Directions

A much-needed line of inquiry is the experience of diverse learners with PLAR at Canadian post-secondary institutions.

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LIST OF INTERNATIONAL ACRONYMS FOR PLAR

APEL   Assessment of Prior Experiential Learning

APL   Assessment of Prior Learning

PLA   Prior Learning Assessment

PLAR   Prior Learning Assessment & Recognition

RPL   Recognition of Prior Learning

VAP   *Validation des Acquis Professionals*

INTRODUCTION

The Canadian Council on Learning (CCL) commissioned this State of the Field Review for PLAR (Prior Learning Assessment & Recognition) through a competitive proposal call. PLAR is the practice of reviewing, evaluating, and acknowledging the information, skills, and understanding that adult learners' have gained through experiential or self-directed (informal) and/or non-credit courses and workshops (nonformal) learning, rather than through formal education (Thomas, 2000). Canadian adults have "very substantial continuing engagement in such learning activities…" (Livingstone, 2005, p.3), much of which occurs on the job (Aarts et al., 2003).

The case for PLAR is strong, clear, and compelling (Aarts et al., 2003; Bloom & Grant, 2001; Kennedy, 2003; Thomas, 2000). During a time of rapid and continuing change, PLAR has a vital contribution to make in supporting lifelong learning. The process of PLAR translates personal and workplace learning into a transportable format, a common coin suitable for public recognition in many different venues. The Canadian economy as a whole can benefit enormously from greater use of PLAR. In a report for the Conference Board of Canada, Bloom and Grant (2001) estimated that increased recognition of learning would generate an additional $4.1 billion to $5.9 billion in annual income. These authors proposed that increased use of PLAR would generate a "brain gain" to offset the on-going "brain drain" to the USA. Beyond building confidence and self-esteem, PLAR offers direct benefits to adult learners:

- Demonstrating competence for jobs, especially important for youth, workers-in-transition, and social assistance recipients;

- Gaining access to educational opportunities when formal credentials needed for entry are lacking, especially important for immigrants and Aboriginal people;

- Qualifying for membership in trade or professional associations;

- Receiving formal academic credit towards diplomas or degrees, important for any adult learner trying to obtain or upgrade credentials;

- Building a portfolio for career advancement.

Despite the potential for PLAR to make a significant contribution to prosperity for individual Canadians and the country as a whole, the process continues to be underutilized by learners (Aarts et al., 2003) and unappreciated by credentialing authorities, especially universities and professional associations (Kennedy, 2003). A critical analysis of empirical literature related to PLAR is essential to pinpoint both possible causes of continuing indifference to, ignorance about, or resistance to PLAR and to identify potential remedies in terms of needed research and/or information dissemination strategies. Given the potential benefits of PLAR, a current and comprehensive *State of the Field* review of PLAR is vital for both the Adult Learning and Work & Learning Knowledge Centres of the Canadian Council on Learning.

The purpose of the review is to provide guidance to CCL in commissioning further research in the area of Work and Learning. Specifically, the review is intended to answer three questions:

1. What generalizations may be reliably drawn from the empirical evidence concerning PLAR?

2. What are the major gaps in knowledge about PLAR?

3. What are the most profitable lines of inquiry with regard to PLAR?

METHOD

Literature Search and Annotated Bibliography

The proposal to CCL to prepare this review indicated that the literature review would build on the work of the NALL (New Approaches to Lifelong Learning) project, a major research initiative based at OISE (Ontario Institute for Studies in Education). With funding from SSHRC (Social Sciences & Humanities Research Council), NALL operated from 1996-2001. Among many other outstanding research reports, NALL produced an Annotated Bibliography for PLAR (http://fcis.oise.utoronto.ca/~plar/database/toc.html), citing literature up to and including 1999. The stated intention with the current State of the Field review was first to extend the annotated bibliography from 2000 up to the present date, with a specific focus on empirical literature, and then to analyze the literature to answer CCL's three questions. This report, therefore, follows closely the structure of the NALL bibliography, with reflections on contemporary findings discussed in terms of that work's major categories.

As outlined in the proposal to CCL, the search strategy made use primarily of electronic research databases available through the University of Calgary library. To begin, the research team compiled a list of all authors cited in the NALL bibliography, reasoning that these authors were most likely to have published on the topic of PLAR in subsequent years. The authors' names were entered into the search engines of *Academic Search Premier, CBCA,* and *ERIC*, combined with the date restriction 2000-2005. This produced initial lists of titles and abstracts. Following this, the same research databases were used to investigate these initial search terms, all of which are used in the international literature: PLAR, PLA, APEL, APL, RPL, and VAP. Across each of the

above basic search terms, the following terms were also used alone or in some combination: Assessment, recognition, accreditation, experiential learning, learning experience, and prior learning

To ensure that no relevant articles were missed, we also searched journals that had been cited in the NALL bibliography, reviewing each issue for the years (2000-2005) to find any articles on PLAR. Journals searched included:

Adult Education Quarterly

Adults Learning

International Journal of Lifelong Education

Journal of Education and Work

Journal of Further and Higher Education

Journal of Workplace Learning

Research in the Sociology of Work

Studies in Continuing Education

The search strategy was supplemented by web-based research, following links that were discovered in connection to previously identified resources. To identify possible sources, we also made use of the *Canada's Portfolio* section (http://www.canadasportfolio.ca/) of the CAPLA (Canadian Association for Prior Learning Assessment) website. In addition, a web-based search was conducted specifically to identify PLAR activity connected with Aboriginal educational organizations, since these efforts are rarely reported in scholarly journals. Similarly, a French-speaking research assistant searched sites of the Government of Quebec, although we found that the relevant documents were also published in English.

Our initial search netted over 400 articles, reports and books that met our criteria. We further screened the available sources for those were empirical reports, rather than theoretical pieces or "how to" resources. In this, we interpreted empirical to mean "based on experience", and thus retained many sources that would not ordinarily meet scholarly standards.

We had tremendous co-operation from the Document Delivery Service at the University of Calgary library and were able to obtain print documents from British, South African, and Australian sources that were not available in electronic form. Nevertheless, given the short time frame for the study (two months from contract signing to final report), we were not able to obtain copies of all possibly relevant documents. Hence, the literature review may contain some gaps.

An Annotated Bibliography was created using *EndNote 9* software. For many of the sources, we imported information directly from the electronic research databases, in which case author or journal abstracts appear verbatim in the Annotated Bibliography, and are identified as such. We also took advantage of author summaries when available in web-based documents. In addition, Ms. Joy Van Kleef, a noted PLAR consultant, volunteered the use of annotations she had completed previously; these are identified as "JVK annotation". Because of lack of time and research assistance, commentary on many of the articles appears in the review document at this point and will be gradually added to the Annotated Bibliography in the future.

Expert Interviews

As outlined in the proposal, open-ended interviews were conducted with recognized Canadian experts on PLAR concerning their insights into the three questions

posed by CCL. Although the interviews were not analyzed in a formal way, the expressed opinions were used to inform the original analysis emerging from the literature review. The following individuals gave generously of their time:

- Dr. Jane Arscott, Athabasca University (Pan-Canadian Pathways project, Gateways project)

- Dr. Dianne Conrad, Athabasca University, Director, Centre for Learning Attestation

- Dr. Ingrid Crowther, Athabasca University (Pan-Canadian Pathways project, Gateways project)

- Ms. Bonnie Kennedy, Executive Director, CAPLA

- Mr. Doug Myers, Executive Director, Halifax PLA Centre

- Dr. Alan Thomas, professor emeritus at OISE and co-director of the NALL project that created the PLAR bibliography

- Ms. Joy Van Kleef, PLAR consultant

- Dr. Angie Wong, University of Saskatchewan

- Mr. Paul Zakos, First Nations Technical Institute

Analysis

To maintain continuity with the earlier NALL bibliography, the analysis was structured according to its major categories. When justified by the volume of literature, sub-categories were then introduced to allow a more detailed analysis of available evidence and gaps in the evidence. For example, while the NALL bibliography has only one heading for *PLAR in Formal Education*, we created sub-headings in the analysis concerned with post-secondary education, secondary education and distance education.

Under post-secondary education, we further subdivided this category to look at the literature on PLAR in universities, in community colleges, disciplinary perspectives, PLAR and post-secondary learning, and learner experiences. Such sub-division made it much easier to identify defendable generalizations and necessary directions for future research. The answers to each of CCL's three questions are provided in terms of major categories, with findings from analysis of sub-categories summarized and subsumed under major headings. The report concludes with a reprise of these summaries, followed by recommendations for three top research priorities.

PLAR POLICY

Historical Perspectives on PLAR

The formal use of PLAR can trace its origins to French legislation enacted in 1934 concerning the use *validation des acquis professionels* to grant recognition to learning that engineers had acquired experientially. In the English-speaking world, PLAR emerged as an educational practice in the United States after World War II. What started as an experimental pilot project at the Educational Testing Service in Princeton, New Jersey has matured into an established movement, complete with well-founded theory, communities of practice, and practice standards. Driven by demographic factors, concern for diversity and equity, technological changes in the workplaces, and increasing globalization, PLAR has blossomed internationally (Keeton, 2000). The emergence of the field is documented in a number of review articles and books that describe the field's history.

Wong (1999) provided a brief overview of PLAR history, describing its roots in the field of experiential learning and outlining how prior learning assessment has been applied in several different countries. Blinkhorn's (1999) doctoral dissertation provided a review of Canadian PLAR literature up to that point. The review looked at the PLAR experience in the United States, Canada, and Ontario, focusing primarily on the theoretical foundations of PLAR within broader conceptualizations of experiential learning.

In a review article for the prestigious *Handbook of Adult and Continuing Education*, Thomas (2000) depicted the PLA movement as a "quiet revolution" (p. 508).

In addition to reviewing procedural developments in the assessment of prior learning, this author discussed the social, economic and political forces that operated to create the groundswell of support for PLA in the United States and Canada, as well as other countries. Thomas pointed out that countries involved in large-scale PLA implementation tend to be countries that have experienced considerable immigration and/or value diversity. A significant portion of Thomas' article focused on the ideological aspects of PLA, discussing how the recognition of learner-directed learning challenges the institutional status quo. At the same time, Thomas highlighted the seductive aspect of PLA, in that it potentially appropriates private learning for public use. In that process, some of the knowledge and meaning from private learning may be lost, and with it, some of the impetus to a change in social values.

A book edited by Evans (2000d) provided more detailed historical information on the development of PLAR around the world. In separate chapters, PLAR pioneers described developments in their own countries: the United States (Keeton, 2000), England (Evans, 2000c), Canada (Blower, 2000), France (Feutrie, 2000), Scotland (Sharp, Reeve, & Whittaker, 2000), Republic of Ireland (McGrath, 2000), Australia (Flowers & Hawke, 2000), New Zealand (Ker, Melrose, & Reid, 2000) and South Africa (Ballim, Omar, & Ralphs, 2000). The individual chapters on PLAR developments in different countries highlighted the close relationship that has emerged in most of them between assessment of prior learning and the wider policy sphere of adult education and training. In a concluding essay, Evans (Evans, 2000a) speculated on PLAR's role in the changing post-secondary scene. He discussed the possible contribution of PLAR in a world where lifelong learning and globalization are pervasive trends, linking it to

economic policy and equity issues. He pointed out the relationship and possible contribution of PLAR to "convenience learning" (p.209), which is becoming increasingly important as the distinction between part-time and full time studies blurs, technology dissolves barriers of time and space, and corporations become increasingly involved in educational delivery.

PLAR Policy in Canada

Blower's (2000) article provided information on early provincial government initiatives with regard to PLAR. She outlined how Quebec was the first Canadian jurisdiction to implement PLAR on a province-wide basis at the community college level, followed sequentially by initiatives in British Columbia, Ontario, New Brunswick, Nova Scotia and Newfoundland. According to Blower, BC has adopted the most extensive PLAR system, establishing the Centre for Curriculum, Transfer and Technology to support its PLAR initiatives, which represents "a model of best practices for all of Canada." (p. 87) In addition, B.C., Ontario and Quebec have adopted policies with regard to PLAR for adult learners in secondary schools.

Kennedy's (2003) report, prepared for the CMEC (Council of Ministers of Education, Canada) updated Blower's work by providing a snapshot overview of public policies and programs with regard to PLAR for each of Canada's provinces, as well as information on PLAR implementation at colleges and universities. (Note that developments up to the date of that report are not reviewed here.) By 2003, Manitoba and Saskatchewan had joined the list of provinces with developed PLAR policies. Although Kennedy does not identify a specific policy in PEI, the province was described as supporting PLAR "in principle". Similarly, Alberta had no official policy but did

"encourage" PLAR through a variety of measures, including challenge for credit for senior high school students. Territorial governments also lacked PLAR policies.

Since Kennedy's review, the Saskatchewan government has issued a provincial policy framework for PLAR (Government of Saskatchewan, 2005). The Quebec government (Government of Quebec, 2004) has published a report on lifelong learning prepared by a Committee of Experts. This report placed PLAR in the context of an overall policy on adult learning and specifically recommended the development of a regulatory framework for PLAR, including a funding policy involving contributions from individuals, employers and the government. Also in Quebec, the report of the Task Force on Access to Regulated Trades and Professions (Government of Quebec, 2005) specifically addressed the role that prior learning assessment could play in recognizing immigrants' competencies. ACAT (Alberta Council on Admission and Transfer), an agency of the Alberta provincial government, has issued a business plan that identifies PLAR as a priority, and published the results of a provincial survey of PLAR best practices (Barrington Research Group, 2005). Governments of the NWT and Nunavut are co-operating on a PLAR Gateways project with Athabasca University (2005).

Because education is a provincial responsibility in Canada, the role of the Federal Government with regard to PLAR has been restricted (Blower, 2000). Given its responsibility for employment insurance and immigration, however, the Federal Government became interested in the potential of PLAR to assist with re-skilling of displaced workers and the integration of immigrants into the labour force. Through initiatives from the now defunct Canadian Labour Force Development Board and Human Resources & Skills Development Canada (HRSDC), the Federal level has actively

promoted PLAR and supported demonstration and research projects

(www.hrsdc.gc.ca/asp/gateway.asp?hr=/en/hip/lld/lssd/lip/lipprojects.shtml&hs=lxi),

including major follow-up surveys of learners (Aarts et al., 1999; Aarts et al., 2003),

policy think pieces (Bloom & Grant, 2001)) and demonstration projects concerning

different applications of PLAR (Anonymous, 2004).

HRDSC has recently funded the Council of Ministers of Education to conduct a

review of Adult Learning literature, policies and best practices. The intention is to

develop an adult education framework to assist in development of more effective policies

and programs. Given international work on adult learning policy in the Australia, South

Africa, the United Kingdom, and in many EU countries, we can expect that PLAR would

be an important aspect of an integrated framework for serving adult learners. Since the

report is not yet published, the extent to which PLAR policies have been analyzed in

particular is not known.

International Perspectives on PLAR

As described in Evans (Evans, 2000b), PLAR has developed differently in

different jurisdictions, depending on policy responses to prevailing economic and social

conditions. Osborne (2003) provided a useful analysis of PLAR policy and practice in six

countries including Canada, demonstrating how case studies from other jurisdictions can

be used to improve local approaches to PLAR. This author saw PLAR as central to

educational policy concerning access to higher education. On a much larger scale, the

OECD (Organisation for Economic Co-operation and Development, 2005b) has recently

published a major policy report on adult learning, based on studies in 17 OECD countries

(including Canada) conducted between 1999 and 2004. Summarizing policies, practices,

and available data in all countries contributing to the report, OECD emphasized the substantial benefits that could result from the recognition of prior learning (RPL), particularly in terms of stimulating adult learners' motivation to participate in education and training. The report concluded, however, that structural barriers to acceptance of RPL in the labour market and formal education systems need to be addressed for its potential to be realized.

Policy and program developments around the globe are briefly reviewed in succeeding sections. (Please note that international studies of particular disciplinary areas, assessment methods and/or learner groups are discussed in the relevant sections later in this report.)

United States

Keeton (2000) reprised the pedigree of the PLAR movement in the United States. A coalition of 27 institutions, led by the prestigious Educational Testing Service, participated in a large-scale validation project, with funding from notable foundations such as Carnegie, Ford, and Lilly. The intention of the project, which ran from 1974-1977, was to establish that "valid, reliable and affordable assessment of non-school learning was feasible." (p. 33). What resulted was the development of principles for assessing experiential learning. The Council for Adult and Experiential Education (CAEL), formed in 1977, undertook energetic marketing and dissemination efforts that led to PLAR ideas being widely adopted at postsecondary institutions in the country and exported around the globe. CAEL has continued to be active in promoting PLAR to policy makers in the United States (Council for Adult and Experiential Learning, 2002; Uhalde, Seltzer, Tate, & Klein-Collins, 2003; Vorhees & Lingenfelter, 2003)

United Kingdom

As described in Evans (Evans, 2000c) the UK (United Kingdom) was an early adopter of the assessment of prior experiential learning, or APEL, as it is termed in that country, with significant government intervention to promote it. Developments in that country have been closely linked with, and continue to be influenced by, the establishment of a Credit Accumulation and Transfer (CATS) Registry and the establishment of a framework for National Vocational Qualifications (NVQ).

As APEL has become more widespread in the UK, criticisms have emerged (Baty, 2003). In response, the Quality Assurance Agency for Higher Education (2004) recently issued *Guidelines on the Accreditation of Prior Learning*. The guidelines were intended to be "neither prescriptive nor exhaustive" (p. 4) but rather to "to provide prompts to HE providers, as they develop and reflect upon their policies and procedures, and seek to assure themselves that their practices promote the maintenance and enhancement of quality and standards." (p. 4) Divided into two parts, the guidelines provide both general principles with regard to quality and standards in higher education and principles specifically focused on the accreditation of prior learning. The guidelines speak to issues of transparency and rigour, transcripting, information provision to learners on policies and procedures, evidence requirements, monitoring, authorities, definition of role responsibilities, staff training, and guidance to applicants. The document made clear, however, that it was not recommending any specific approach to APEL. Although it has been over a year since these guidelines were issued, our literature and web search did not produce any published responses to the initiative.

Scotland, although part of the United Kingdom, has developed its own policies and practices with regard to APEL (Sharp, Reeve, & Whittaker, 2000). The introduction of the Scottish Credit and Qualifications framework specifically allowed any kind of learning to be assessed towards a credential. Nonetheless, APEL uptake in Scotland remains low, and is likely to remain so unless major changes to educational funding are undertaken.

Ireland

McGrath (2000) has described Ireland's history of prior learning assessment, termed APL in that country, over a 20 year period. Although higher education authorities in the country created APL policies in the 1980s, uptake was minimal until the early 1990s. At that time, educational efforts were undertaken with HE senior administrators, as well as with industry representatives. These educational efforts resulted in the production of a national policy. According to McGrath, "this was the single most important development in the promotion of the assessment of prior experiential learning in Ireland." (p. 141) The policy was widely promoted both to the public and to academics. Further, registrars from Irish HE institutions received training in how to assess prior learning from American and British academics. The government then supported several pilot projects, which resulted in the publication of a manual on best practices. Follow-up occurred in the form of training courses throughout Ireland for academics involved in APL. These efforts have resulted in "wide take-up". (p. 144) The Irish Training and Employment Authority also promoted the use of APL for certification in a variety of occupations. In 1999, APL received statutory recognition in the Qualifications (Education and Training) Act.

An OECD (Organisation for Economic Co-operation and Development, 2003) report on the National Qualifications system in Ireland provided further information on APL in that country. As of that time, Ireland had no national standards on the recognition of prior learning. Variations on procedures existed even within institutions, with different faculties using different approaches. According to this report, "Accreditation of prior learning processes, where it exists, generally facilitates pure entry; it is much less common that it enables exemption from course requirements or direct eligibility for an award or part of an award." (p. 15)

France

According to Charraud (2005) "France has one of the most advanced systems for the validation of prior learning in Europe." (p. 117) The history of prior learning recognition in France up until 1999 is recounted in Feurtie (2000) and Barkatoolah (2000). In France, the term used is *validation des acquis professionals* or VAP. Minesterial decrees in the mid-80s launched VAP officially, leading to a 1992 law that applied to all educational institutions depending on funding from the Ministries of Education and Agriculture. This allowed awarding of a wide range of technical and university diplomas modules, units or credits to any person with five years of professional experience[1], with the exception of medical or engineering students. Under this policy, an adviser helps the applicant develop a portfolio of experience, which is then submitted to an Accreditation Jury consisting of both academics and industry representatives. The jury focuses on finding "approximate, not exact, similarities" (p.108) between the candidate's experience and the course of studies. The assessment focuses on

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[1] For a list of all eligible credentials, see Dif (2002).

problem-solving abilities, rather than the "stock of formal knowledge" (p.108). The universities, however, had not agreed on how the process should be carried out, but tended to adapt procedures and criteria for each candidate. To accelerate university buy-in, the Department of Higher Education organized VAP Days, included VAP in development contracts with the universities, provided training for administrators and academics, and created a VAP network for university presidents.

Because universities are allowed flexibility in how they implement VAP, practices vary. Feutrie (2000), however, described three main models: centralization (Adult Education department responsibility), decentralization (departments make own rules), and management by university administration (Student Services). Data on uptake showed an increasing trend from 1992 to 1998.

Dif, Alsace and Strasbourg (2002) reported that France has now legislatively extended assessment of prior learning to include experience gained through social and cultural activities. The 2002 Social Modernisation Law introduced the new acronym *Validation des Acquis de l'Experience* or VAE to reflect this broader acceptance. (For detailed information on the legislative intricacies of this new regime, see Charraud, 2005). Dif et al. pointed out that even with this modification, non-qualified workers and employees (i.e. lacking any initial qualification) or qualified people without enough experience are still excluded from the system. Nevertheless, as Pouget and Osborn (Pouget & Osborne, 2004) have discussed, the VAE system in France has gained much more acceptance among universities than the APEL system in England, despite its challenges to traditional academic knowledge and power.

Other EU Countries

Inspired by concerns about maintaining competitive skills for a globalizing economy and enhancing labour market mobility, EU (European Union) countries have launched into a flurry of activity around lifelong learning which is having a major impact on policy reform in adult, vocational and higher education(Adam, 2002). Accreditation of Prior Experiential Learning (APEL) is a key element in such reform.

Between 1987-1995, 29 EU countries co-operated in the development of a European Credit Transfer System (ECTS) to enhance student mobility. ECTS became well-established as a "common currency for measuring the volume of learning based on student workload rather than contact time…" (TRANSFINE, 2002, p. 10) with over 1200 HE institutions participating. The interest in ECTS has since extended into developing its capacity "to evolve into a credit accumulation framework rather than just a limited credit transfer device" (Adam, 2002, p. 2). APEL has a natural role to play in any such development.

OECD Studies. Between 1999 and 2004, OECD carried out country studies on adult learning in several EU nations, including Austria, Denmark, Finland, Ireland, Germany, Hungary, Netherlands, Norway, Poland, Portugal, Spain, Sweden, Switzerland, and the UK. A final summary report (OECD, 2005) discussed the contribution of RPL (Recognition of Prior Learning) to lifelong learning for adults. According to the OECD, RPL:

> has the potential of reducing total learning periods considerably and may provide
>
> an incentive for workers to participate in learning while on the job. By shortening

or adapting learning to the individual's requirements, it may also lead to more efficient training expenditure. (pp. 39-40).

A table in the 2005 OECD report (pp 41-42) provides both qualitative and quantitative information on RPL schemes. Using Norway as an example, the report pointed out that "half of the adults involved in obtaining upper secondary education in 2003 went through RPL-type assessment to reduce their total learning time." (p.41) Concerning assessment of prior experiential learning, the report concludes: "RPL systems, both formal or informal, are thus a key feature to stimulate motivation and participation in adult learning, even if access and structure problems still need to be addressed." (p. 44)

TRANSFINE Project. Another major European initiative involving the ETCS prior learning assessment was the *TRANSfer between Formal, Informal and NonFormal Education* (TRANSFINE) project (TRANSFINE, 2002). A key objective of the project was to develop common understandings of how the concept of "credit" for learning is used in formal, non-formal and informal learning. The ultimate goal of the project was to develop acceptable and integrated principles and methods for the transfer and accumulation of credits, regardless of the method of learning. The project was initiated by EUCEN (European Universities Continuing Education Network) whose membership includes 170 universities from 35 European countries. The steering group for the project included representatives from partnering organizations: EAEA (European Association for the Education of Adults), the AEFP (Association Europeenne pour la formation professionelle) which represents 15 major European vocational training organizations), and SEFI (Societe Europeenne pour la Formation des Ingenieurs). A review of existing

APEL practices in EU countries formed one of the four main activities of the overall project.

The interim TRANSFINE report (2002) noted preliminary findings from the project in regard to integrating the existing ETCS with assessment of prior learning. Firstly, since an individual learner does not have a cohort for comparison, APEL procedures need to be criterion-referenced while ETCS is based on the norm-referencing typical of HE assessment. Secondly, a more refined method for differentiating levels of learning in ETCS would be needed to reflect prior learning adequately. The report also highlighted difficulties of terminology when comparing approaches used in different countries, calling this area "something of a minefield" (p. 25).

Based on information gathered from projects and organizations across Europe, the final TRANSFINE report (TRANSFINE, 2003) provided an overview of APEL activities and a preliminary analysis of issues and concerns. The final report included summaries of country reports on APEL (available at www.transfine.net) from Estonia, France, Italy, Germany, Norway, Switzerland, and the UK. Based on the experiences of those countries, and other information collected during the project, the report concluded that no common European tools as yet existed for recognizing informal and non-formal learning. Reiterating the inappropriateness of the existing ETCS for APEL purposes, the report suggests that:

> it is inappropriate to try to assign marks to a candidate in terms of a precise percentage or numerical score; what is possible however, at least in higher education, is an assessment in around 4 or 5 broad bands although as yet there has been no attempt to obtain any consensus on what they might be. (p. 46)

The final TRANSFINE report (2003) also succinctly stated objections to APEL voiced from within the university sector:

The criticism is based on the idea that such accumulation represents a fragmentation of learning and a lack of coherence – the 'cafeteria model' - but there is also an objection of a more philosophical kind, that it represents a market rather than a social model of learning. This is linked to wider issues around education and society….it is important to note that this is not merely a practical problem but one that touches deeper cultural and philosophical traditions. In terms of the recognition of prior learning it is also opposed because it forces the fragmentation and categorising of experience in ways that may not be appropriate to the individual and does not allow for a holistic approach to a candidate's learning. (p. 47).

The report also noted that outside of universities, objections to PLAR-based credits come from a different direction. People are concerned that attaching credits to PLAR links the process too firmly to the traditional institutional curriculum, making it inappropriate for use in vocational training or adult education. Within the university sector, credits measure learning in terms of "the amount of time the average learner would take to achieve learning outcomes at a particular level given specified starting points." (TRANSFINE, 2003, p. 48) For example, a 3 credit university course in Canada would typically involve 36-40 hours of instructional contact. Critics of attaching credits to experiential learning point out that time is irrelevant, because such learning can "occur at different speeds, to a different depth, in different places, at different points in time, even for an individual and more so for different people." (p. 48)

On completion of the TRANSFINE project, EAEA undertook a new phase of research. Called the *REFINE* (Recognising Formal, Informal and Non-formal Education) project, the aim is to develop and test tools for a European framework to recognize prior learning. With 17 formal partners in 12 different countries, the project involves 60 organizations acting as laboratory sites for testing APEL tools. The project will be completed in 2006.

Leonardo Programme. Duvekot, Schuur and Paulusse (2005) have provided an edited volume of reports from VPL (valuation of prior learning) projects associated with the European Commission's *Leonardo Programme*. Duvekot (2005) outlined an interesting 10-step model for the VPL process, while Schuur, Feenstra and Dovekot (2005) presented an helpful analysis of different European learning cultures (e.g. Anglo-Saxon, Mediterranean) and how cultural differences relate to different countries' experiences of the implementation of VPL. In addition, the volume contains country reports from Norway (Mohn, 2005), the Netherlands (R. Duvekot & Eggert, 2005) and Switzerland (Gerster, 2005). Despite all of the European activity around prior learning, in a concluding essay Deij (2005) contends "it is still only a minor link in the development of strategies for lifelong learning." (p. 187). The author outlines the major challenges the EU is facing in meeting its goal "to become the world's most competitive knowledge economy…with the highest level of employment by 2010…" (p. 192) Stressing the importance of lifelong learning in reaching this goal, Deij regards VPL as an aid to continuous learning. To establish its usefulness firmly, however, a larger number of models and successful VPL candidates are going to be needed.

CEDEFOP report. CEDEFOP (French acronym of the organisation's official title Centre Européen pour le Développement de la Formation Professionnelle) is the reference centre for vocational tanning and education in the EU. On behalf of CEDEFOP, Bjornavold (2001) summarized information on identification, assessment and non-formal learning practices in the EU during the 1997-99 period, based on reports from 14 countries combined with information gleaned from other sources. This initiative was followed by a major project on validation of experiential learning undertaken by EU Ministers of Education in 2002 (Colardyn & Bjornavold, 2004).The project involved 14 countries in exchanges of experiences and practices in validation of formal, informal and non-formal learning. The term "validation" is defined to encompass both assessment and recognition of learning.

Colardyn and Bjornavold (2004) provided a useful analysis of three overlapping stages of implementation of policy and programs related to validation. Identifying countries in each stage, they proposed that implementation began with *Experimentation and uncertainties* (Austria, Belgium, Denmark, Italy, Germany, Sweden), followed by *National systems emerge* (France, Ireland, Netherlands, Norway, Portugal, Spain), and finally *Permanent systems already exist* (Finland, UK). Attempts to develop a common framework need to recognize the differing developmental levels of different countries and "the urgent need for exchange of experiences and practice to reduce the negative effects of a trial and error approach." (p. 72)

Colardyn and Bjornavold (2004) next discussed the need for the existence of occupational and assessment standards for validation to be effective, and briefly describe the situation with regard to standards in the 14 participating countries. Their information

makes clear that most EU states already have or are developing national occupational standards in one form or another. The authors made the important point that validation of non-formal learning should be done "according to 'common standards' that are not based exclusively on the school standards." (p. 74) Otherwise, important competencies developed informally could be dismissed as irrelevant because they do not match formal curriculum.

Colardyn and Bjornavold (2004) used the term "module" in discussing units used to measure experiential learning in the EU states. Depending on the country, a module may be termed "credit", "unit" or "exemption". The organization and definition of modules has significant implications for making formal education and training more or less flexible. The authors provided brief summaries of how modules are defined in used in the different EU countries.

After reviewing different approaches used to assessing and documenting experiential learning, with illustrative examples from different countries, Colardyn and Bjornavold (2004) discussed the importance of assessment standards being robust. As they pointed out, "To reasonably consider that the learning, skills and competences assessed are transfer able over time and locations, it is necessary to ensure that the assessment method is both 'reliable' and 'valid'." (p. 85-86) Reliability refers to obtaining closely similar results when the same evidence is assessed at different times and/or by different assessors. Validity means that the assessment measures what it claims to be measuring. The authors concluded that for lifelong learning to become more than merely a theoretical possibility, each EU country needs a comprehensive national system for validation of experiential learning. The task facing the EU nations is to develop a set

of common principles that will support the development of national approaches to validation that nonetheless ensure comparability between different countries. At a minimum, these principles must ensure confidence in the process (through transparency of procedures and assessment criteria), impartiality, and credibility.

Individual EU country reports. In addition to the summary reports discussed above, the various projects (OECD, TRANSFINE, Leonardo, and CEDEFOP) have produced numerous reports on how individual EU countries approach assessment of prior experiential learning. While collecting and reviewing each individual report was beyond the capacity of this project, we did encounter a number of documents that PLAR practitioners may find of interest. These include:

- OECD country reports for Denmark(Organisation for Economic Co-operation and Development, 2004a); Netherlands (Organisation for Economic Co-operation and Development, 2005a, , 2005b); Portugal (Organisation for Economic Co-operation and Development, 2004b); and Slovenia (Ignjatović, Ivančič, & Svetlik, 2003).

- TRANSFINE reports from Estonia (Valk, Saluveer, Kesli, & al, 2003), Italy (Perulli), Germany (Preisser), and Switzerland (Auroi-Jaggi, No date).

- *Nuffic* (Netherlands organization for international co-operation in higher education) reports on PLAR policies and implementation based on document reviews and/or studies conducted in Austria (Becker-Dittrich, 2002), Belgium (Cox, 2002a), Czech Republic (Skuhrova, 2005), France (Cox, 2002b), Germany (Becker-Dittrich, 2005), Latvia (Rauhvargers, 2005), the Netherlands (Scholten & Teuwsen, 2002), Poland (Skukrova, 2005), and Sweden (Ragnarsson, 2002).

Australia

Australia's experience with prior learning assessment, termed RPL in that country, is characterized by ambivalence (Flowers & Hawke, 2000). Although RPL was promoted widely in the late 80s and early 90s, it had had little impact on improving access for disadvantaged learners by the turn of the century. Nevertheless, RPL provision continued to expand, possibly driven by private provider's efforts to attract fee-paying clients. Within the university sector, RPL was adopted to serve Aboriginal students and to participate in a program of national training reform. Despite early enthusiasm for RPL, traditional academic knowledge remained dominant, with credit being granted more often for practical courses rather than theoretical ones.

Australian universities receive 99% of their funding from the Commonwealth government. Although the Australian states have responsibility for primary and secondary education, the federal level of government has been responsible for Vocational Education and Training (VET) since the late 1980s when technical institutions were consolidated into a university system and a national competency-based system, the Australian Qualification Framework (AQF) was established (Keating, 2003). RPL was "enshrined in the National Framework for the Recognition of Training" (Flowers & Hawke, 2000, p. 154). Despite government support, RPL uptake remained low in the VET Sector. While uptake varied from state to state, the "percentage of all module enrolments in which students were granted RPL" (Flowers & Hawke, 2000, pl 156) in 1997 ranged from a low of .31% in the Northern Territory to a high of 6.4% in South Australia, with an overall average of 2.1% for the country as a whole. Although comparable data was not available for the country's 38 universities, the fact that as of

1996 only 40% of the institutions provided RPL for all courses and less than half provided information on RPL to students, suggests activity was also low.

The Australian Qualifications Framework Advisory Board commissioned researchers at Southern Cross University (Wheelahan et al., 2002) to carry out a large scale project on RPL policy and practice. The project included a review of international RPL literature; in-depth case studies of RPL implementation in the UK, South Africa, and British Columbia; extensive, multi-sector stakeholder interviews and review of written stakeholder submissions; 24 case studies with a variety of institutions and individuals; sampling HE institutional websites to assess availability of RPL information; and on-line questionnaires for "academics, assessors, administrative staff, researchers and students" (p. 170). Analyses of this multiplicity of data resulted in a number of key findings. Two models were prevalent, one focusing on RPL as a learning process and the other on RPL as a credentialing method. RPL in Australia has focused on the outcome and not the process of RPL, which has obscured needed student supports for effective RPL implementation. Funding disincentives were a major barrier to RPL implementation. Quality and rigour of RPL assessment processes and identified outcomes were a serious concern. This research effort led to the formulation of a series of recommendations that were then made available for public consultations. A final report was to be prepared following the consultations, but was not available for inclusion in this review.

Bateman and Knight (2003) conducted research on effective implementation of RPL on behalf of the Australian National Training Authority (ANTA). Using nationally available statistics, the researchers found uptake of RPL was greater at the higher levels of the Australian Qualifications Framework level, with almost 10% of diploma and

higher level students having RPL credits. Not surprisingly, uptake was also higher with older rather than younger students. Among recognized minority groups, Indigenous students were far less likely to engage in RPL, while disabled and ESL students' rates compared to that of the mainstream population. This review concluded that further research on the benefits of and barriers to effective RPL was needed, as well as qualitative research on the whether private service providers, a feature of the Australian system, were aware of the extent to which their clients might be entitled to RPL.

A companion report (Bowman et al., 2003) identified factors that support or obstruct effective RPL implementation. Although the report concluded that no one barrier was significantly affecting uptake of RPL, several factors could be contributing. The reports pointed out that some students eligible for RPL credits prefer "the experience of learning through interacting with fellow students." (p. 8). Other factors influencing RPL implementation included the complexity of the processes, potential students' and employers' awareness and understanding of RPL, perceived relevance, resource levels for RPL and definitional confusion. Lack of expertise in RPL assessment in training institutions was also singled out as a problem. The report recommended modification to the Australian Quality Training Framework and provision of greater support for RPL service providers (professional development) and students (an RPL module to provide close support).

New Zealand

The introduction of the recognition of prior learning (RPL) to New Zealand was closely associated with that country's development of national vocational standards (Ker, Melrose, & Reid, 2000). The New Zealand Qualifications Authority (NZQA)

assessments all permit flexible assessment (Organisation for Economic Co-operation and Development, 2004c). In practice, however, NZQA establishes course requirements prescriptively, making it difficult for learners to make exact matches between their experiential learning and required course outcomes. Further, since university level credentials are excluded from the NZQA authority, little RPL activity occurs in that sector.

South Africa

The recognition of prior learning (RPL) in South Africa is intimately related to post-apartheid efforts to transform the country's socio-economic reality (Ballim, Omar, & Ralphs, 2000). In 2002, the South African Qualifications Authority (SAQA) issued a policy document that specifically related RPL to the National Qualifications Framework. The policy was intended to provide "direction and support for an evolving system of RPL that will be able to set the required standards to meet the challenges of social, economic and human development." (SAQA, 2002, p. 8). The policy established criteria to ensure overall quality and integrity of assessments, addressing issues of institutional policy and environment, services and support to learners, training and registration of assessors and key personnel, methods and processes of assessment, quality management systems, fees for RPL assessments, and the relationship between curriculum development and RPL. In addition, the policy provided a strategic framework for RPL implementation.

In 2003, SAQA issued a follow-up document concerning implementation guidelines for RPL. Recognizing that structural barriers still existed to full implementation, notably higher education statutory requirements concerning admissions and awards and lack of a funding structure, SAQA explicitly expected that the

"guidelines would become a 'living document' to allow for continuous engagement" (SAQA, 2003, p. 5). SAQA also intended to elicit responses from stakeholders such as employers, professional bodies, and educational umbrella bodies. The guidelines addressed five areas: auditing current practice, developing specific plans for different sectors and contexts, building staff and resource capacity, designing assessments, and quality management.

PLAR Policy: Research Directions

What generalizations may be reliably drawn from the empirical evidence in the area?

From the available literature on PLAR (or its local variant) policy implementation around the globe, we can see that prior learning assessment and recognition is present within the education and training systems of many countries world-wide. In the brief review above, common themes can be seen emerging, such as the need to link PLAR to broader adult learning policy and programme initiatives created in response to demographic and labour mobility challenges, non-acceptance of PLAR within universities, transferability of PLAR credits across jurisdictions, definitional confusion, quality assurance concerns, and the continuing problem of low uptake by learners. While a detailed analysis of the literature is beyond the scope of this report, these issues appear to be similar to those affecting PLAR in Canada.

What are the major gaps in knowledge about the area?

The major gap is a synthesis of the available international evidence that identifies factors in effective PLAR implementation which transcend issues of local institutional and legislative arrangements, as well as local factors which contribute to unique PLAR developments in each jurisdiction. Of particular importance are:

- The place of PLAR within comprehensive policy frameworks for adult and lifelong learning;

- Factors that lead to higher uptake of PLAR;

- Approaches to quality assurance;

- The relationship of PLAR to International Credentials Evaluation;

- Institutional and legislative provisions that enhance cross-jurisdictional transportability of learning recognized through a PLAR process.

What are the most profitable lines of inquiry in the area?

A comprehensive analysis of international PLAR policy and program initiatives as outlined above would be highly useful for developing policy and programmatic alternatives for PLAR and its position within the adult learning policy framework in Canadian jurisdictions.

PLAR IN FORMAL EDUCATION

PLAR in Post-secondary Education

The *Spring 2003 Snapshot* report that Kennedy (2003) prepared for CMEC included the results of an electronic survey of Registrars of Canada's public post-secondary institutions. This survey still represents the best available information on PLAR implementation in colleges, university colleges and universities. Because of time and resource constraints to the survey method, responses were received from only 81 of 251 institutions, so the results cannot be considered a complete portrait of PLAR in Canadian higher education. Nevertheless, the results give some indication of the extent to which PLAR has been adopted in Canada's post-secondary sector

The available figures showed that the majority of community colleges (73%) and university colleges (63%) responding to the survey had PLAR policies, while this is the case for only a minority of universities (31%) that responded (Kennedy, 2003). Similarly, community colleges and university colleges were more likely to have infrastructure support (e.g. PLAR office, academic counsellor) for PLAR than the universities. Perhaps the most significant finding of the study was the low uptake of PLAR assessments by students, with almost 75% of responding institutions that had data available indicating that fewer than 50 assessments were conducted in 2002. Rates were, however, generally much higher at community colleges than at universities.

Athabasca University's Gateways Project (2005) has also collected some data on PLAR policies in the Canadian post-secondary sector, with limited coverage on Quebec. Starting from association listings of community colleges and university colleges and

universities, a document was then compiled which identified information on those

colleges and universities that have a PLAR policy available on their institutional websites

(Dr. J. Arscott, personal communication, Oct. 31, 2005). As in the Kennedy (2003)

report, this document shows that formal PLAR initiatives are much more prevalent in

community colleges than in universities.

Community Colleges

In Canada, community colleges were the PLAR pioneers: Red River College,

First Nations Technical Institute and Mohawk College (Blower, 2000). Later, PLAR was

introduced to the community college level by provincial governments. Several major

surveys involving PLAR activity in Canadian community colleges have been conducted.

National picture. Aarts et al. (1999) and Aarts et al. (2003) involved seven

partnering institutions from across the country in massive follow-up surveys of a sample

of learners who had used PLAR. Analyzing five years' worth of data (1993/94-1997/98),

the earlier report compared the academic success of PLAR learners to traditional students

and found they had equal or better outcomes. Using PLAR benefited the students by

reducing the workload and completion time for their programs; this was of particular

assistance to part-time students. Despite these positive outcomes, the authors of the report

noted the disturbingly low uptake of PLAR and the erosion of policy and funding support

for PLAR at participating institutions.

The later report (Aarts et al., 2003) analyzed an additional three years of data (i.e.

eight years in all) from the seven partner institutions, representing "over 7, 200 PLAR

learners and 14, 000 assessments" (p. xi). As with the earlier report, the number of

assessments conducted annually at each institution showed little growth. Overall, uptake

remained low, with considerable fluctuation on a year-to-year basis. The report noted that

PLAR "tends to be centred on programs in a small number of disciplines, in programs

delivered on a part-time or continuing education basis." (p. xiii) A graph of the

percentage of assessment by different disciplines (Chart L-5, p. 101) highlighted the fact

that most assessments occur in Health Sciences (28% of all assessments), Human

Services (22%) and Business (17%). This disciplinary question in relation to PLAR

activity will be discussed further below.

Kennedy (2003) conducted a survey of Canadian higher education institutions

concerning PLAR policies and practices, with a focus on issues of institutional support,

learner support and faculty/staff support. The response rate from representatives of

community colleges, however, was low; only 42 responses were received while ACCC

(Association of Canadian Community Colleges) lists over 125 member institutions.

These results therefore need to be interpreted with caution.

Of the 42 community colleges that did respond, 31 already had PLAR policies in

place (Kennedy, 2003). Over half of the responding colleges had a designated PLAR

office or PLAR co-coordinator, while two thirds of the respondents had academic

counsellors to assist with PLAR; three-quarters of the institutions had program/course

faculty advisors to offer PLAR assistance.

Data collection on PLAR services is variable (Kennedy, 2003). Three quarters of

the 42 responding community colleges recorded assessment outcomes and half of them

recorded completion rates. In terms of number of assessments, the data showed that

"institutions tend to either administer a low or higher number of assessments." (p.48)

Twenty four of the responding colleges conducted 1-50 assessments/year, while only 6 reported conducting over 300.

Learners at over two-thirds of the responding colleges can access information from a variety of sources, including a website, a print-based brochure, an institutional calendar, and/or a PLAR advisor (Kennedy, 2003). Only nine of the institutions surveyed offer PLAR orientation sessions. In terms of the assessment process, the majority of the 42 responding institutions have outcome-based course and program documents that are available to students petitioning for PLAR. Less than a third of the institutions, however, offer courses on portfolio development.

Faculty at the majority of institutions appeared to use a variety of PLAR assessment methods, including portfolios, demonstrations, presentations, and challenge exams (Kennedy, 2003). Faculty and staff preparation to advise students and assess PLAR applications are critical to successful implementation, yet only half of the 42 responding community colleges indicated this was provided. Nor were faculty and staff at over two thirds of the institutions offered incentives in terms of release time or financial compensation for undertaking PLAR assessments.

Kennedy (2003) also collected qualitative responses to open-ended questions concerning incentives and disincentives for PLAR implementation from the perspective of the institution, the learners and the faculty. According to the community college respondents, the primary institutional incentive was an increase in student recruitment levels, which in turn would increase funding levels. From the learners' perspective, the community college respondents felt the primary incentive was the reduction in time needed to obtain a diploma or degree, while for faculty, respondents felt that PLAR

policies improved assessment practices overall. In terms of institutional disincentives, respondents identified cost as the primary factor. For learners, respondents singled out preparation time as the main disincentive, which also was the case for faculty disincentives. When asked what would have the most impact on ensuring the integration of PLAR into their institutions, over three-quarters of the respondents indicated that "targeted government funding" (p. 58) would be most effective.

To move PLAR at community colleges forward, the ACCC (Association of Canadian Community Colleges) and CAPLA (Canadian Association of Prior Learning Assessment) are collaborating on developing an on-line community of practice for PLAR (www.recognitionforlearning.ca). The Recognition of Learning Affinity Group, which formed in 2004, is intended to be a national network of college PLAR advocates and practitioners.

British Columbia. Although not comparable in size to the two Aarts et al. (1999, 2003) reports, additional data on PLAR activity at Canadian community colleges is available. A report from British Columbia (Carrie et al., 2001) summarized survey responses from key informants at 13 out of 20 community colleges and university colleges in the province. The survey asked respondents to rate their degree of agreement or disagreement with regard to 18 statements in 3 theme areas: Quality Assurance, Awareness and Buy-in, and Access. In addition, respondents were asked to identify their top three issues and best practices in relation to the three themes. The results indicated that these institutions felt they were successful in becoming learner-centred. They agreed with the provincial definition of PLA and further, expressed willingness to participate in inter-institutional collaboration on the provision of PLAR services. The results also

showed that many respondents felt resources within their institutions allocated to PLAR were not sufficient. Respondents further indicated that PLA was not available in all program areas, which echoes the findings of the Aarts et al. (2003) report concerning disciplinary differences in levels of PLAR activity.

Sustainability of PLAR in BC's post-secondary institutions was identified as an issue in a government-commissioned report based on key informant interviews, as well as a literature review (Barker, 2001). Barriers to effective PLAR implementation were identified as inadequate resources, faculty resistance to the philosophical basis of PLAR combined with administrative indifference, and lack of awareness of PLAR among potential applicants, employers and industry. The report recommended increased marketing efforts, efforts to decrease costs through initiatives such as group assessments and outsourced services, and most importantly, a fundamental redesign of post-secondary learning to improve access for diverse learners, which would include education of faculty concerning learning and assessment practices and reform of funding mechanisms.

Alberta. ACAT (Alberta Council on Admissions and Transfer) commissioned a survey concerning PLAR at the province's post-secondary institutions (Barrington Research Group, 2005) which used telephone interviews with key informants to gather data, supplemented by information gathered from the Internet. The report aggregated data from community colleges and universities but as only one university (Athabasca) reported having a PLAR policy, the responses can be interpreted as primarily representing community colleges and university colleges. The majority of institutions had PLAR policies in place, including all of the larger community colleges. Nonetheless, a large majority of respondents felt PLAR was not "a widely accepted practice" (p.5) at

their institutions. Many respondents (15 of 29) reported that the institutional attitude to PLAR was to consider it "a drain on resources" (p. 5), one that "lowered academic standards." (p. 5).

Saskatchewan. (Saskatchewan Institute of Applied Science and Technology, 2000) revised their PLAR policy to reduce barriers for learners, increasing the proportion of credits students could claim towards a program to 100% from 50%. Using data from the student registration system, SIAST compared uptake rates before and after the policy change. The data showed "PLAR activities…increased dramatically…" (p. 2). Five hundred and fifty-nine PLAR course requests were received, an increase of 133% over the previous year. Of these requests, most (97%) were successful. A large proportion of new requests came from the Extension Division of the Woodland Campus, which serves communities in Northern Saskatchewan with large Aboriginal populations. This increased response may have been initiated by promotional activity around PLAR carried out by SLFDB (Saskatchewan Labour Force Development Board, 2002), and if so, is a telling demonstration of the importance of public education on PLAR. The program with by far the greatest number of requests was Community Services, a finding similar to that found in data from the national survey of community college PLAR (Aarts et al., 2003) and the survey BC post-secondary institutions (Carrie et al., 2001). Unfortunately, the report did not indicate how PLAR course requests compared to overall registrations at SIAST. Therefore, although the policy changes appeared to increase PLAR activity, we cannot gauge whether PLAR activity should be considered high or low in absolute terms.

SIAST (2003b) has also published data showing trends in PLAR requests from 1999/2000 until 2002/03. This data showed that the number of courses requested has

remained high since the introduction of the new policy, with most requests being successful. Most applicants requested PLAR for more than one course. Community Services programs continued to represent the largest number of PLAR requests.

Nova Scotia. The Nova Scotia Community College, working in partnership with the PLA Centre in Halifax, committed itself to PLAR implementation. NSCC faculty members participated in focus groups as part of the evaluation of the Halifax PLA Centre (Praxis, 2002), providing direct information on faculty attitudes, a scarce commodity in PLAR research. The NSCC focus group members were generally supportive of PLAR, and expressed the opinion that while training in PLAR methods is important, participation in such training needs to be voluntary.

Other Provinces. Data from other provinces concerning PLAR implementation in community colleges was not readily available on publicly accessible websites. No doubt, such data exists and could be a rich source of information if aggregated and analyzed. Niagara College in Ontario, for example, routinely collects information on PLAR applications and assessments for performance monitoring purposes (Dr. A. Davis, VP Academics, Niagara College, personal communication, Nov. 6, 2005).

Universities

Canadian universities. Compared to PLAR in community colleges, university level PLAR in Canada is relatively unstudied. Kennedy's (2003) survey of Canadian higher education institutions concerning their PLAR policies and practices included universities and university colleges in addition to community colleges. Thirty-seven institutions (29 universities and 8 university colleges) responded a response rate that was sufficiently high that the results can be taken as indicative of the situation at the time. The

number of responses from university colleges was too small, however, to be meaningfully analyzed as a separate category of institutions

Of the 29 universities who replied to the e-mail questionnaire, only 9 had a formal PLAR policy, although a further 6 indicated an intention to develop one (Kennedy, 2003). Informal PLAR practices were, however, present at over half of the universities, which Kennedy described as the "underground PLAR phenomenon" (p. 74). The lack of PLAR policies at universities was naturally reflected in responses to subsequent questions in the survey, which showed low assessment rates and minimal learner support. Only one of the responding universities indicated that over 300 PLAR assessments had been performed in the survey year (2002), while a second university reported performing between 101-150 assessments, and a third indicated that between 51-100 had been performed. The remaining 26 universities all reported performing fewer than 50 assessments, which indicated a low level of commitment to PLAR, even when formal policies existed.

University respondents' replies to qualitative questions (Kennedy, 2003) indicated similar response patterns to those of the community college respondents, with one notable exception. From the faculty perspective, lack of credibility of PLAR assessments was identified as a significant disincentive. Kenney astutely notes that "universities are more likely to question the credibility of assessment practices, yet are also less likely to have policies in place that could ensure consistent application and validity of practices." (p. 57)

Kennedy's (2003) report also contained an annotated bibliography that listed several unpublished studies carried out on university PLAR between 1999 and 2003.

Although we attempted to obtain these studies through the university interlibrary loan service, we were generally not successful. Dr. Angie Wong kindly provided a copy of her 2000 report on the Saskatchewan Universities PLAR project, one of the few large scale and systematic attempts to implement PLAR at the university level to date.

The Saskatchewan Universities project (A. Wong, 2000) involved nine pilot projects (www.extension.usask.ca/PLAR?home.html). At the University of Saskatchewan, six projects were carried out in the College of Agricultural, College of Commerce, College of Pharmacy and Nutrition, College of Nursing, College of Education, and St. Thomas More College, while an additional three projects were conducted at the University of Regina's Faculties of Education and Administration and the Language Institute's English as a Second Language Program.

Wong (A. Wong, 2000) identified four types of benefits from the pilot projects. First, participating academics learned about the potential of PLAR and how to apply it. Second, four academic units adopted a PLAR portfolio approach as a tool for current undergraduates to engage in reflective practice. Third, the Faculties of Administration and Social Work at University of Regina decided to use PLAR both for admission and advanced standing purposes. Fourth, several academic units were going to identify opportunities for appropriate PLAR applications by auditing their admission policies. Despite these benefits, Wong concluded "the cost involved in introducing, developing, and implementing PLAR services at the university level will remain a major concern." (p.8) Wong stressed the need of developing a critical mass of faculty members who were knowledgeable about and committed to PLAR. In addition, Wong recommended that four types of activities to build universities' institutional capacity to implement PLAR:

learning from other universities with PLAR experience (e.g. Athabasca University); offering faculty development workshops on PLAR; developing partnerships with community organizations, employers and professional associations; and ensuring a shared vision of PLAR amongst "deans and other senior administrators who are workload and resource gatekeepers…" (p. 14) as well as the Registrar's Office.

In another university study, the Office of Open Learning at the University of Guelph undertook a survey (Castle, 2001) to develop a profile of the type of nontraditional student that might be interested in enrolling in a new Criminal Justice and Public Policy Bachelor of Arts program within the College of Social and Applied Human Sciences. At the time, the University policy acknowledged only the *"concept* [italics in original]" (p. 20) of prior learning assessment. Before PLAR could be readily available to potential students in the new program, a process needed to be in place to involve faculty members and administration in developing PLAR procedures and sound assessment practices. To demonstrate how PLAR would be beneficial to the program, a non-random survey of existing professional networks and contacts was conducted to collect qualitative and demographic information. Study findings were used to profile non-traditional students and their potential interest in PLAR. This report provided an excellent example of how to combine data from a special purpose survey with existing information on adult education and lifelong learning to build a convincing case to support PLAR implementation within a university setting.

Dunlop and Burtch (2003) published a case study concerning the use of PLAR in an Integrated Studies degree completion program (ISP) that leads to a Bachelor of General Studies (BGS) degree at Simon Fraser University (SFU). Candidates for the ISP

program were generally expected to have at least eight years of leadership experience and support from their employers. A flexible admissions processes allowed students' to use PLAR to identify up to 60 credits, which represented the first two years of the BGS degree; these credits were only applicable to the BGS, not to any other SFU degree. Taught on a cohort basis, the program had 150 graduates as of 2002, with another 203 students enrolled. The report presented information on the background of the students, and their academic accomplishments in the program but unfortunately, did not provide statistical information relating the number of PLAR credits granted to student success.

At present, Athabasca University is conducting the Gateways project (http://gateways.athabascau.ca/about.htm) with funding from HRDSC. The project is intended both to develop tools and techniques and to promote PLAR for use in post-secondary Human Services programs. Although the project is intending to publish the results of the research, to date the only publicly available information are lists of post-secondary institutions in Canada and the United States that have PLAR policies, (http://gateways.athabascau.ca/research.htm), compiled from searching institutional web pages.

International universities. Universities in Canada share a common heritage with universities in other Commonwealth countries, as well as a PLAR heritage from the United States. We have therefore included readily available information concerning the state of prior learning assessment in universities in the UK, Australia and the United States.

In the UK, the Learning from Experience Trust (Merrifield, McIntyre, & Osaigbovvo, 2000) surveyed 107 higher education institutions concerning APEL policy

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and administration, with a more detailed survey of PLAR procedures in 42 institutions and in-depth case studies in 10 institutions with "well-developed" practices. Based on survey findings, the authors concluded that "APEL is now mainstream" (p.2). The mainstream nature of APEL was also reflected in the fact that primary growth has been in higher uptake by students in professional development and managerial courses, rather than in broadened participation for marginalized learners. Nevertheless, they noted a "gap between policy and practice" (p.2) in that relatively few students make use of the available policies to gain credits. In addition, the survey found that both academics and professional bodies try to limit APEL availability and perhaps more significantly, neither potential students nor employers are widely aware of the practice or its potential.

SEEC (Southern England Consortium for Credit Accumulation and Transfer) also surveyed their 37 member institutions, with 27 institutions responding (Johnson, 2002). Despite the fact that APEL was introduced into the UK in the early 1980s (Evans, 2000c), the majority of these institutions reported that APEL policy was made at a departmental or faculty level, rather than being part of an overall institutional policy framework. Significantly, the pattern of APEL use appeared in disciplinary "hot spots" (p. 15), particularly health, teacher education, business and management, and continuing professional development. While the figures in the report were unclear, it appeared that uptake of APEL is fairly low, with the majority of respondents not anticipating significant future growth.

Another report from the UK (Atkins, Murphy, & Turner, 2000) described the process of implementing a university-wide, generic course to assist students in developing a portfolio to apply for APEL at Oxford Brookes University. The non-credit

course attracted participants from Law, Computing, Health Care, Social Work and Business Studies. In designing the course, the intention was to make it more cost-effective than providing individual assistance to students. In-class time consisted of 5 two-hour sessions, with the participants' spending considerable additional time to prepare their portfolio. The majority of participants gained the credit they aimed to achieve, including some lacking undergraduate qualifications who gained entry to postgraduate programmes. Later, the course structure was adapted into a two session workshop format. The authors recommended that while such courses have proved to be effective, the course instructors needed to maintain a close liaison with the students' disciplinary area.

To find out if APEL was in fact giving non-traditional students better access to universities, Butterworth and McKelvey (2000) conducted surveys with staff and students who had used APEL at four institutions in the vicinity of Greater London. The survey was also intended to determine the benefits and costs of APEL, and to explore different models that might have developed. Their findings showed that APEL was most used when it was integrated into the introductory portion of vocational programs, such as nursing and business, and used with part-time students. Costs for APEL varied widely, as did assessment practices, which ranged from portfolios to mini-essays to interviews.

Vickers (2000) described his experience in developing and implementing an APEL course at another UK university. When he began, his institution lacked "firm guidelines or rigourous procedures." (p. 86) While networking with academic staff, he found that very few were familiar with APEL and its implications. About half had heard "just enough to make them at best cynical or at worst blatantly obstructive" (p. 86), and the rest had no information about APEL. He began by developing a module on portfolio

development that could be credited towards a degree. A network of academics in a variety of disciplines gradually developed as he consulted with them concerning portfolio assessment, and their understanding of and support for the process increased. He was able to obtain external funding to support an APEL position within the university. Working with senior administration, he developed an organizational structure for APEL that served three main purposes. It gave APEL academic credibility "in terms of peer review, quality and equality of activity, annual review and reporting" (p. 89); it ensured an efficient and effective process for assessing applications for APEL; and it drew more faculty into the process. The system further distinguished between APEL for admissions and APEL for credit. Like Wong (2000),Vickers pointed out the need to develop a "critical mass of enthusiastic practitioners" (p. 90) for APEL to be implemented effectively in a university setting.

In a major review of RPL in Australia, Wheelahan et al (2002) found that 26 of 38 universities had a formal policy, of which 2 were only for the post-graduate level. Policies generally allowed RPL both for admission and gaining credit, and delegated decision-making authority to faculties, departments and schools to establish which courses or programs would have an RPL process, what type of evidence would be needed to gain RPL, what assessment process would be used, and the application process for RPL. Only four of the universities, therefore, provided detailed information on the how the RPL policy was implemented in practice. In universities lacking an RPL policy, individual faculties and schools might nevertheless allow RPL. RPL credits can be awarded in the form of a match with a particular course, unspecified credit points or exemption from an elective, block credit, exempting students from having to take

particular courses but requiring them to take substitute subjects, or less commonly, exemptions from attending lectures, participating in fieldwork, etc. Portfolio assessment was the most common method used to assign RPL credits, although university policies usually allowed other assessment approaches, such as interviews, challenge exams, essays, oral presentations, demonstrations, work-based assessment or projects. Respondents in this study indicated quality assurance concerns (e.g. double-dipping). The study also found that RPL was more often available for post-graduate programs than undergraduate, primarily because graduate programs often have a vocational orientation, frequently require work experience for admission, and applicants can be ranked for admission on the basis of previously achieved credentials. The authors also noted that "graduate coursework programs are more likely to be fee-paying, and RPL is used to establish markets in professional areas." (p. 84) The Wheelahan et al. (2002) report also provided data on RPL uptake amongst students enrolled in universities. Based on information of varying quality compiled from the different Australian states, the researchers estimated that "approximately 5% of those enrolled in higher education qualifications" (p.11) had received some form of RPL.

In the United States, prior learning assessment has long been a feature of adult degree programs at special purpose institutions such as Empire State College (A Wong, 2000). With the growth in adult learning, however, many traditional institutions have developed adult degree programs that feature PLAR. This increased activity led higher education associations to develop guidelines for good practice in adult degree programs, including specific guidelines for PLAR (J. A. Taylor, 2000).

PLAR and Post-secondary Learning

A major concern about PLAR for post-secondary institutions, particularly universities, is the question of acceptable levels of learning (Wong, 1999). Academics have reportedly expressed concerns that the quality of experiential learning may not be equivalent to formal academic training (Kennedy, 2003). Several recent research studies have explored the learning process that post-secondary students experience while preparing PLAR petitions. The results of these studies indicate that the process of articulating experiential learning is itself a powerful learning experience.

LeGrow (2000) conducted a quantitative study of the impact of portfolio development on problem-solving skills and knowledge organization. She used measures of tacit business management knowledge and knowledge organization to assess problem-solving abilities. The study compared the performance of 27 students who had completed portfolios and received PRL credits with the performance of students who had received credit by taking comparable classes. Although the two groups did not differ significantly in terms of tacit knowledge, PLA students showed superior knowledge organization and generated more complete problem solutions. The superior performance of the PLA students held even when level of business management experience was accounted for statistically. The author concluded that definite educational benefits accrued from the reflecting on and articulating of learning required by the portfolio process.

Pearson (2000) looked at the relationship between involvement in PLAR and adult students' persistence towards degree completion. The research used existing administrative data for part-time students, all of whom were eligible for PLA credits, at a small (2,000 student) four year college in the United States. Information from a sample of

623 students included gender, age, high school academic achievement (represented by

academic rank), prior transfer credits, GPA, and PLA portfolio participation.

Approximately 14% of the sampled students had been involved with PLA portfolio

development. Statistical analysis of the data using Chi-square followed by logistic

regression showed that the persistence rate for the overall sample of part-time students

was lower than the average for full-time students at the college. Participation in PLA,

however, was significantly related to persistence, even after the positive effects of other

related variables (GPA, prior college credits) were taken into account. For this sample,

completion of a PLA portfolio doubled the odds of persistence over those for a non-PLA

completer. From these results, the researcher concluded that "PLA completion is a

powerful predictor of persistence" (p. 128). Since relatively few students take advantage

of existing PLA opportunities, the author recommended efforts to expand its prestige in

colleges and universities, so more adult learners could benefit from participation. The

author argued that increasing adult learners' persistence would benefit colleges

financially through increased tuition revenue accruing from prolonging enrollment until

degree completion.

Brown (2002) used a qualitative case study design to investigate in-depth the

experience of six adult learners in developing a portfolio. The participants were students

at an adult undergraduate institution in the United States, where the majority of students

develop a portfolio through a required seminar. The grounded theory analysis of

interview transcripts revealed three major findings: Participants had markedly increased

their self-knowledge; they had a greater appreciation of the value of work-related

learning and the role of workplace mentors; and they had improved their communication

and organizational skills, especially in the area of written communication. While the participants' described learning did not relate directly to the disciplinary knowledge valued in universities, it was highly reflective of employability skills identified by the Conference Board of Canada (2000).

In a another qualitative study, Geerling (2003) looked at the learning of six adult learners in an Adult Studies Program. To develop a PLAR portfolio, the students were enrolled in a course called "Critical Analysis and Research Writing" (p. 31). In assisting students to articulate their learning, the course made use of topic guidelines prepared by disciplinary departments within the college. Geerling conducted interviews with the participants and analyzed the transcripts. In addition to findings concerning the participants' affective changes during the portfolio process, Geerling's report highlighted the difficulty students had in learning to use a "foreign construction for learning to write" (p.55) and in connecting their personal experiences to abstract concepts. In this process, sharing stories with other participants helped to develop the some of the learners' confidence; other felt interaction with peers was not helpful. Most participants felt their ability to write academically had increased from the portfolio development process, which would support them in the future studies.

An Australian study (Cantwell & Scevak, 2004) looked at the level of cognition of students who had been admitted to a shortened teacher training program on the basis of previous training and experience in industrial trades. The study questioned the assumptions of prior learning assessment with regard to preparation for university study, namely that people reflect on their experience and that reflection produces knowledge equivalent to that required for university-level learning. The researchers tested the

hypothesis that mature learners would have a naïve metacognitive understanding of knowledge, which would in turn impact their adjustment in the university setting and their academic achievements. They administered three questionnaires concerning different aspects of cognition and epistemology, followed by 10 open-ended questions, to 33 men admitted under RPL provisions. They found the RPL students reported "a deep approach to learning, an understanding that the processes of acquiring knowledge involve effortful and strategic behaviours, and an understanding that such learning may be facilitated by the flexible use of cognitive strategies." (p. 140). In contrast to non-RPL mature students, however, they had "less developed understandings about the complex structure of knowledge, and the capacity to strategically orchestrate complex information." (p. 141) While the small size of their sample precluded statistically relating responses on the knowledge questionnaires to academic achievement, the authors expressed concern that simple beliefs about knowledge would interfere with academic achievement. They recommended that RPL students be offered support to assist them to bridge their experiential learning to the university knowledge structure.

Disciplinary Perspectives

Within the universities, learning and assessment is strongly disciplinary (Donald, 2002; Huber & Morreale, 2002; A. Wong, 2000). Given the highly disciplinary nature of post-secondary education attention to practices within different fields is important to further development and dissemination of PLAR. Reports discussed above (Aarts et al., 2003; Johnson, 2002; Kennedy, 2003; Merrifield, McIntyre, & Osaigbovvo, 2000) noted the tendency for PLAR to be adopted more frequently in some disciplines than others. In

the following section, we briefly introduce literature pertaining to different fields of practice within the post-secondary sector.

Business Education. Taylor (2000) reported on the use of an APEL process for mid-career managers in a UK graduate level business program. While the assessment process is too intimately tied to England's National Vocational Qualifications scheme to be directly applicable in Canada, the results of the pilot project indicated that prior learning assessment can place a role in business education.

Brennan and Dobbyn (2000) reported on a pilot project to streamline APEL for senior managers in a Masters level Management program at Anglia Polytechnic University. The institution had a well-developed APEL system at both the undergraduate and graduate level, which relied primarily on a portfolio process. Employed graduate students, however, found the process so time-consuming that it was seen as a barrier to further education. The pilot project involved three major revisions to the standard Portfolio model. First, a resume was used which gave an overview of work-related learning rather than a detailed mapping of learning to course-specific outcomes. Second, documentation requirements were reduced so that participants were only required to provide detailed evidence with regard to two modules, with an oral assessment being used for remaining modules. Third, the oral assessment questioned participants about their learning on the basis of their extended CV, a reflective report, and their commentary about the contents of the undocumented modules. While this process maintained quality assurance, the participants found the workload involved to be much more manageable. Assessors, in turn, found the oral assessment to be "an ideal tool to explore the depth of underpinning knowledge and its application." (p. 211)

In an American study, Lee-Story (2001)carried out a mail survey of professors in accredited postsecondary educational programs of hospitality and general management, randomly sampling from a list provided by the International Council on Hotel, Restaurant and Institutional Education and the International Association for Management Education. While a majority of her respondents indicated support for prior learning assessment, they also indicated a preference for traditional testing methods and little acceptance for individually-based methods. When asked why they offered portfolio-based PLAR, the major institutional reason was to increase enrollment of mature learners, recognizing that they should not be asked to re-learn material. Major obstacles to PLAR adoption included applicants' difficulties with documenting learning, difficulty in assessing learning outcomes, and lack of trained faculty to carry out assessment. In addition, professors in general management programs preferred students to learn theory before having practical experience, indicating that a traditional university approach still prevailed.

Dietetics. Lordly (2003) conducted a survey of directors of dietetic internship programs in Canada concerning the implementation of PLAR. PLAR was of interest as a method to expedite training because the country is lacking professional dieticians. Based on replies from 29 respondents, she found that 45% of programs offered some form of PLAR, while in the remainder, it was either not offered or only available in theory. Request rates from interns were, however, only 2-4 per year at the most. The author called for the development of policies and procedures to support PLAR, as well as education on PLAR for internship directors.

Early Childhood Education. Morrice (1999) provided a case study of the implementation of PLAR in the Early Childhood Education program at Red River

College in Manitoba. The decision to implement PLAR came in response to provincial legislation requiring child care staff to have ECE training. The PLAR initiative was aimed at workers who already had at least two years' of full-time child care experience. When the ECE program piloted a competency-based curriculum, the opportunities for PLAR became even more flexible. Based on fifteen years' experience, the author concluded that PLAR has been very effective in this context.

In Saskatchewan, SIAST (Saskatchewan Institute of Applied Science and Technology, 2003a) surveyed already employed early childhood educators to determine the gap between their existing level of competence and the training needed to meet recently introduced provincial legislation. The findings were used to develop PLAR assessment tools and processes, which were then piloted. The research gathered feedback on the PLAR processes from both assessors and students, with a view to making recommended changes. The marketing strategy for introducing the PLAR process included distribution through Child Daycare Branch personnel, information tables at ECE conferences in the province, and presentation to interested groups. The SIAST PLAR department also developed a video to promote and explain the process.

Human Services. Athabasca University's *Gateways* project has been working with community college and community organization partners to carry out wide-scale PLAR for workers in Human Services (Arscott, November, 2005). The project assists learners to petition for program-based PLAR credits towards a university degree. Mid-point project statistics indicated that the learners are primarily women, many of whom are over 40 years of age.

Nursing. The number of articles concerning PLAR for nursing programs indicates how enthusiastically the field has embraced assessment of experiential learning. Some of the pieces focus on discussions of principles (Saxton & Vickers, 2000). Many of these studies are descriptions of how assessments are conducted, but lack a research perspective (Davidson Dick, 2002; King, 2000; McHale, 2000; OVDB, 2004; Searle, 2005). Mount Royal College in Calgary is currently carrying out a pilot project to use PLAR in fast-tracking internationally trained nurses and licensed practical nurses into the nursing profession in Canada (Fletcher, 2003), but results from the project are not yet available. Several reports, however, from Canada and elsewhere contain empirical evidence concerning PLAR in the nursing field.

Saskatchewan reported on a needs assessment undertaken to determine whether PLAR would be of benefit to the province's nursing programs (Calibre, 2003). A survey of students enrolled in the provincial Nursing Education Program showed that more than half of the students had recent previous work experience, largely as Home Care/Special Care Aides. Students felt their prior learning could meet most of the first and second year course requirements. A follow-up focus group with students confirmed the findings of the survey, further indicating that students' were concerned that any PLAR process be transparent in terms of assessment criteria. They also wanted the process to be more time efficient and less costly than enrolling in course work.

Graham (2003) conducted a qualitative study that used focus groups of practicing professionals to identify necessary knowledge, skills, and attitudes for northern nurse practitioners in the Northwest Territories. As with many initiatives of this kind, the motivation for interest in PLAR stemmed from a shortage of qualified nurse practitioners

in the jurisdiction. Research findings were applied in the development of strategies for a PLAR process and a PLAR applicant manual.

In a UK study, Clarke (2000) described the development of an APEL process at the School of Nursing and Midwifery at the University of Southampton, as well as presenting information from an evaluative study. The portfolio-based process required attendance at a workshop. Four types of credit were used in making awards: specific (learning matches a course unit); modified specific (learning matches parts of several units); general credit; and alternative credit (transfer credit from another HE institution). The evaluation study involved in-depth interviews with 6 applicants and their advisors, followed by a survey of 60 applicants and 36 advisors. The results showed that applicants and advisors both found the workshops an effective way to prepare and the different types of credits an effective way "to capture all their learning…" (p. 132) Applicants and advisors, however, differed in the type of support considered appropriate for developing the application for prior learning assessment. Advisors tended to be facilitative, encouraging and supportive while applicants would have preferred more direction.

An Australian report (Donoghue, Pelletier, Adams, & Duffield, 2002) concerning a post-graduate nursing program compared the academic achievements of students admitted with an undergraduate qualification and those with a hospital-based, experiential certification. Based on data from 310 students in five cohorts, the study found no differences in weighted average marks. The authors discussed their findings in terms of implications for entrance requirements and necessary student supports.

Law and Justice Studies. An empirical study from South Africa (Breier, 2005) provided an unusual analysis of the fit between disciplinary learning of Labour Law and

common theoretical understanding of prior learning assessment. The researcher recorded and analyzed actual interactions between lecturers and mature students, using the transcripts effectively to demonstrate the friction between the knowledge structure in the field of Labour Law and knowledge gained through experience. The author recommended the development of discipline-specific approaches to RPL, as well as changes to pedagogy in courses serving adult learners with extensive experiential learning but little formal training.

Optometry. In the United Kingdom, Whitaker and Elliott (2004) described how prior learning was being used in a career progression program that allowed opticians registered to dispense contact lenses to upgrade to a BSc in Optometry. The upgrading process took only one calendar year, as compared to the typical three years to obtain the degree. Both the admission process and the program design itself recognized prior experiential learning. After two semesters, the first cohort of students had performed well; half of them obtained first class honours in exams.

Pharmacy. Fjortoft and Zgarrick (2001) reported on a survey of PLAR practices in non-traditional doctoral programs at American schools of pharmacy. These non-traditional programs enable pharmacists with a bachelor's degree to upgrade to a doctorate through part-time study. The survey found that 84% of programs used PLAR for both admissions and awarding of advanced standing. While transcript review was the primary method used, challenge exams were also frequently used for giving advanced standing for didactic courses and portfolios were used to give credit for experiential courses.

Austin, Galli and Diamantouros (2003) reported on the use of PLA for licensing foreign-trained pharmacists in Canada. In Ontario, more than 50% of new pharmacists were trained outside of North America, an unprecedented situation. A pilot project was undertaken to determine whether a competency-based PLA process would be more appropriate for assessing foreign training than existing paper-based techniques. A summary list of competencies was developed from existing professional standards. Because of the importance of competent communication in English to professional practice in Canada, "communicative competency forced an overarching, superordinate category for assessment." (90) The rigourous assessment, which took a full day to complete, was structured as a series of stations, designed to give the candidate the opportunity to demonstrate required competencies, based on methods "previously developed and validated for the Ontario College of Pharmacists' Quality Assurance and Peer Review process…" (p. 93). The assessment procedure was piloted with 30 foreign-trained pharmacists, after which the authors concluded that PLAR is "an important component of pharmacy education and training, particularly when dealing with a diverse learner population." (p. 95) Prior learning assessment was later incorporated into the International Pharmacy Graduate Program at the University of Toronto, a program which also features individualized learning plans based on results of prior learning assessment (Austin & Dean, 2004).

Teacher Education. Taylor and Clemans (2000) conducted research on RPL in Australian Faculties of Education. The four stage process involved a general mail survey to all Education Faculties in the country determine the current state of RPL policy at each institution, followed by telephone interviews with three traditional and three new

universities to gain more details on the RPL policies. Then, in-depth interviews were conducted at six Faculties with staff and students concerning the workings of the RPL process. This information was supplemented by interviews with selected RPL applicants to compare their experiences with stated policies. Survey responses from 22 of the 34 faculties contacted indicated that 19 had an RPL policy in place. Faculties varied widely in terms of guidelines provided for RPL, ranging from a single statement to detailed booklets and application forms. Most of the faculties had introduced their policies in the mid-1990s. According to key informants, faculty members at many institutions were unaware of RPL procedures, although few institutions reported overt staff hostility to the process. Most faculties reported low number of applicants, ranging from 5 per year at the low end to 100 per year at the high end. A few institutions had introduced user-friendly RPL processes but at other faculties, the experience of applicants varied "from the satisfactory to a horror story." (p. 276) The authors concluded that Australian Faculties of Education have work to do in developing "accessible RPL procedures which simultaneously meet student needs and appease academic staff sensibilities." (p. 277)

Shalem and Steinberg (2002) described their experience in offering a portfolio development course in a teacher education program in post-apartheid South Africa, analyzing it in terms of the "invisible pedagogy" (p. 441) of the RPL process. The authors pointed out that when assessing prior learning, two aspects of competence are being diagnosed: "the candidate's capacity to demonstrate competence already acquired and the candidate's readiness to join a qualification or to learn at an appropriate level in a particular learning programme…" (p. 428), which they characterised as retrospective and prospective assessment. To have his or her competence assessed, the candidate must

express knowledge in terms that the assessor knows. This task is easier for retrospective assessment, since the knowledge does not necessarily have to "resemble the traditional paradigm of university knowledge." (p. 431) while in prospective assessment, the assessor must be mindful of the requirements of the academic specialization and the applicant's socialization into the field. The authors illustrated this theoretical analysis with their own experience with mature students applying to a postgraduate Bachelor of Education program. Their rich description demonstrated the difficult and complex process of assisting learners to re-frame their articulated experiences within the knowledge structure of the discipline, without undermining or denigrating the authentic nature of that experience. The authors concluded that a problem with current prior learning research is that "advocacy positions…tend to lean toward one pole only (the retrospective action of assessment) and in this way deprive the process of recognition of experiential learning of its real academic complexity." (p.444)

In another South African case study, Harris (2004) explored the process of RPL in a post-graduate program for adult educators. She found that learners were expected to think and write in particular ways, with RPL success being dependent on being able to analyze in a hierarchical way, being experienced with self-reflection, and having a clear identity as both a learner and an educator. These requirements impeded access to higher education for nontraditional learners. The author also recommended that additional research at the micro-level of prior learning practices in academia is needed.

Surveys of Learners

 Canadian post-secondary institutions. A profile of PLAR learners in Canadian

post-secondary institutions has emerged from several surveys carried out between 1999

and 2003.

 Douglas College (2000) conducted a survey of learners who had earned PLAR

credits between 1997 and 1999 at 13 BC community colleges. The majority of the

approximately 260 respondents in the study sample were satisfied overall with their

PLAR experience. Demographically, the PLAR respondents were predominantly women

in the 35-49 age range. The largest proportion of learners sought PLAR credit in service

disciplines such as Human Services, Social Work, Early Childhood Education and

Administration. Most respondents had sought credit for only a small number of courses,

rather than a whole semester or program. The majority described the PLA process as

helpful in achieving their work, educational and personal goals. They also felt the

participating in PLAR had helped them with their subsequent studies.

 Another BC study concerned the academic success of PLAR learners in BC

(Centre for Education Information, 2002). The research used existing administrative data

to assess academic outcomes (Grade Point Average and rate of progress) for students

who had entered five post-secondary institutions in the province (1 community college, 1

university, 3 university colleges) during 1998/99 and received at least one credit through

PLAR. These students were matched in terms of demographic factors (age, gender,

program of study) with students who had not received PLA credits. The study found that

the sample of PLAR students did not differ significantly from the non-PLAR students on

any of the outcome measures. "These results do suggest that receiving PLA credits does

not put students at an academic disadvantage compared to students who earn all their credits via the traditional route." (p. 8) Although the report warned that the results needed to be interpreted with caution because of small, non-random samples involved, the findings are suggestive about the benefits of PLAR.

The major 1999 survey of PLAR in Canadian community colleges (Aarts et al., 1999) included focus groups with learners that provided limited information concerning their perspectives on benefits and barriers on PLAR. Based on these findings, a large scale survey of learners at participating institutions (College, Ahuntsic, Conestoga College Institute of Technology and Advanced Learning, Douglas College, Fanshawe College, Mohawk College, and Red River College) was conducted (Aarts et al., 2003). Individual surveys were mailed to learners who had used PLAR (termed *PLAR learners*) and to those who had inquired about PLAR but not used it (termed *non-PLAR learners*). While limitations to the data arising from response rate concerns must be kept in mind, the study nevertheless provides the best data available in Canada, and perhaps the world, on PLAR from the learner's perspective. Responses from 1034 PLAR learners indicated that demographically, the majority of PLAR learners were employed women in their thirties who had previously attended or completed a program at a community college or university. Work experience and on-the-job training were the most important prior learning experiences. The demographic profile of the 395 non-PLAR learners was similar.

The majority of PLAR learners were already registered students when they started the PLAR process (Aarts et al., 2003). Word-of-mouth in one form or another (college employee; employer or co-workers) was the way the majority of them heard about PLAR.

College publications were also an important source of information, especially for the non-PLAR learners.

The survey results indicated that 93% of PLAR learners were satisfied with their PLAR experience, and 96% would recommend it to others (Aarts et al., 2003). Motives related to employment were the primary reason the majority of these learners had returned to school, and the availability of PLAR contributed to that decision. The majority felt that PLAR helped them to save time and money, and to stay with their program until graduation. Nevertheless, many PLAR learners did express concerns with assessment fees and length of the assessment process, indicating that colleges need to review these aspects of the PLAR process.

Non-PLAR learners had similar reasons for thinking about returning to school and investigating PLAR (Aarts et al., 2003). The data on Non-PLAR learners, however, indicated that the majority decided not to return to school and hence did not pursue the possibilities of PLAR. According to one of the study authors (J. Van Kleef, personal communication, Nov. 1, 2005), the reasons why non-PLAR learners did not pursue either PLAR or further education is a question that merits further investigation.

[Note that information from this study concerning PLAR and the military are discussed in the section on PLAR and Work, below.]

A smaller study conducted in Ontario (Thomas, Collins, & Plett, 2002) extended our knowledge of PLAR learners to the university sector. This study focused on understanding what the respondents learned about the learning process itself and their own learning from participating in PLAR. The sample of 17 learners was recruited through PLAR officers at universities across Canada, with the exception of Quebec.

Because of the small and non-random nature of the sample, quantitative information in

the report should be generalized with caution. The report, nonetheless, provided valuable

insights into university-level PLAR. For these learners, the time-saving aspect of PLAR

was as important, if not more important, than saving money. Several of the participants

would not have continued with their studies without the opportunity for PLAR. Although

the learners reported a variety of administrative problems with the PLAR process, an

important finding was "the absence of easily available, and clearly stated, course

objectives." (p. 9) Participants were also disappointed by the lack of faculty response to

their portfolios. Although they were informed about the number of PLAR credits

obtained, they were not informed about the basis of the decision. Nevertheless, the

learners found the process of creating a portfolio "demanding, time consuming, and,

eventually, highly rewarding." (p. 9)

International post-secondary learners. A comparative study with EU universities

looked at learners' experience in five countries: England, Finland, France, Scotland, and

Spain (Carette et al., 2004; P. Cleary et al., 2002). Based on document reviews and

interviews with 110 learners, the research found that APEL uptake was quite limited.

Learners who used APEL reported overall satisfaction with the process, despite problems

they had encountered. Although concerned with the potential of APEL to promote

broader social inclusion in universities, the researchers found that the majority of APEL

learners are white and middle class, hold citizenship in the country where studying, and

often already held academic qualifications.

From student interviews at four greater London universities, Butterworth and

McKelvey (2000) discovered that only nursing students were aware of the availability of

APEL before enrolling. The interviewed students were mature learners, but all had qualifications to obtain university entrance through regular routes, indicating that PLAR was not reaching non-traditional students. Students expressed having had initial reservations about the self-reflection required for APEL but ultimately felt it was of great benefit.

PLAR in Secondary Education

As discussed above, provincial governments have established policies that allow adult students to petition for credits towards high school completion. The PLA Centre in Halifax reported on an Adult Learning initiative to assist individuals to gain high school qualification and entrance to a local community college (PLA Centre, 2001; Praxis, 2002). An evaluation of the PLA Centre (Praxis, 2002), however, lacked substantial follow-up information on learner perspectives and outcomes from this initiative. No other empirical research specifically pertaining to this topic emerged in our search, indicating that this area is under-investigated. In addition, portfolios are more and more being used both as a teaching and assessment tool at all levels of education. Since our major focus in this review was on PLAR in the context of work and learning, however, we excluded this literature from our consideration.

PLAR and Distance Education

Despite the exponential growth in the use of the web for learning, we located few publications relating to PLAR and Distance Education.

Wong (2000) reported on the use of PLAR in the UK's Open University training program for associate lecturers, who tutor students enrolled in distance-delivered courses. The program allowed participants to gain a post-graduate award and professional

recognition. Experienced teachers are offered an APEL route to complete the program, which itself is taught by distance. Wong's report also briefly described the online features for portfolio development and learner support services used at Empire State College in New York state and Vermont State Colleges, both recognized leaders in the PLAR field.

Athabasca University introduced a portfolio development course (Sargent, 2003) designed to prepare students to petition for credits in the university's certificates, diplomas and degrees (http://www.athabascau.ca/html/syllabi/psyc/psyc205.htm). Other than two conference presentations (Collier & Wihak, 2003; Peruniak & Wihak, 2003), no material concerning this course or its effectiveness has been made publicly available.

The Halifax PLA Centre offers an on-line portfolio development course (http://www.placentre.ns.ca/PDFS/PLA_Distance.pdf). While open to mid-career professionals for career development purposes, the course is also used for admission to the Masters of Public Administration program at Dalhousie University. The course involves both individual and group on-line sessions. An evaluation of the PLA Centre's programs (Praxis, 2002) alluded to the on-line course, but did not examine participants' experiences or learning outcomes from it specifically.

Campus Canada (http://campuscanada.ca/new/index.php?t=7) is a national consortium of colleges, polytechnical institutions and universities designed to assist adult learners to complete their post-secondary education through distance education. Although the Campus Canada website does feature PLAR, interested learners are directed to work through one of the partnering institutions to petition for credits. In addition, the Campus Canada website offers learners an e-portfolio tool, to assist them to accumulate evidence of both formal and experiential learning. Barker (2005) has briefly discussed the

relationship of e-portfolios to PLAR. (Note that a study concerning use of e-portfolios for immigrants is discussed under the section titled PLAR and Diversity.)

As part of a recent UNESCO report on distance learning in higher education, Divis, Scholten and Mak (2005) briefly described the use of digital portfolios in the Netherlands in assessing credentials and experience of foreign-trained immigrants. The authors encouraged the development of other forms of assessment for this purpose.

An Australian study (Childs, Ingham, & Wagner, 2002) carried out web-based research concerning the accessibility of information on prior learning assessment posted on the websites of Australian universities. Limiting the time spent to on each website to fifteen minutes, they found that the quality and availability of information varied widely. First, they found little consistency in terminology. Only 13 of 38 universities mentioned Recognition of Prior Learning (RPL, the Australian term for PLAR) by name. Ranking the information available in terms of quality on a number of dimensions, they found that only four sites provided clear, good quality information that was linked to a *Prospective Student* button. An additional five sites provided only a paragraph of RPL information to the prospective student, while two universities provided good information if the *Search* function was used. Seven of the universities did not use the term RPL but provided a strategy for prior learning assessment. In addition, only one university had a fast path to the RPL information. The authors conclude that from "the perspective of a prospective student, the online information provided about RPL…was typically hard to find, unclear or confused…" (p. 50)

PLAR in Formal Education: Research Directions

What generalizations may be reliably drawn from the empirical evidence in the area?

  PLAR policies and implementation. Formal PLAR policies and supports are much more widespread at the community college level than at the university level or secondary level, although considerable unrecognized PLAR may be taking place in universities. The existence of formal policies, however, is not necessarily linked to effective implementation. Even at institutions most committed to PLAR, uptake by learners remains low across the country. Low uptake and/or lack of institutional involvement in PLAR is consistently attributed to a variety of factors, including:

- Costs for learners and institutions;

- Lack of learner and faculty awareness of PLAR;

- Faculty resistance to PLAR, which is more pronounced at the university level, but also exists in community college;

- Quality assurance concerns;

- Lack of incentives for faculty and institutions to engage in PLAR.

  At Canadian and international post-secondary institutions, PLAR implementation and uptake by learners appears to be concentrated in certain disciplinary areas, notably Health Sciences disciplines (e.g. Dietetics, Nursing, Pharmacy, Optometry), Human Services disciplines (e.g. Early Childhood Education, Social Work), and Business Education. Outside of Canada, PLAR activity is also notable in Teacher Education and Law & Justice Studies. In Canada, PLAR appears to be primarily available at the undergraduate level, rather than for graduate level studies.

A variety of methods (interviews, challenge exams, demonstrations, portfolios) are routinely used for preparing learners to petition for PLAR credits and for assessing their learning. The literature contains several descriptions of generic PLAR procedures at individual institutions.

Although policies exist for mature learners to access PLAR in secondary education, we found no published information on implementation, assessment methods, or learners' experiences.

PLAR and learning. The achievement of PLAR credits appears to have predictive validity for ability to engage successfully in and persist with post-secondary learning, The awarding of PLAR credits appears to have no negative impact on learners' future academic success. The research evidence also demonstrates that PLAR can itself be a powerful learning tool, especially the process of portfolio development. Some studies, however, suggest that while experiential learning may fit smoothly with some disciplines, a mismatch may exist between learners' construction of knowledge and the knowledge structure of other disciplines.

PLAR and learners. Research with post-secondary learners who have used PLAR uniformly reports benefits in terms of time and costs savings, as well as growth in self-awareness, self-esteem, and confidence. The learner profile, however, suggests that PLAR has not fulfilled its promise in serving non-traditional students. Available evidence indicates that the majority of PLAR learners are not affiliated with a minority group, and further, many have previous post-secondary education of some kind.

What are the major gaps in knowledge about the area?

PLAR in community colleges and universities. Although research with institutional respondents has given some indication of barriers to successful implementation of PLAR, we have little direct information on why uptake is so low. Although cost is identified as a deterrent to PLAR utilization both to institutions and to learners, we have no hard data on actual costs and savings from PLAR, and how these interact with institutional funding formulas. Faculty attitudes to PLAR have been pinpointed as a barrier to PLAR implementation in universities, yet the majority of recent evidence on this point comes from key informants, not direct research with faculty members. Similarly, faculty training in PLAR assessment methods is identified in the literature as important, but we have little evidence concerning how such training affects either faculty attitudes to PLAR or their actual practice. We have no research comparing the effectiveness and efficiency of the different methods used in conducting PLAR assessments, nor do we have much empirical research concerning how Canadian post-secondary institutions address quality assurance concerns.

PLAR and learners. Although we have retrospective research with PLAR learners, we have no large scale longitudinal studies following learners through the whole process and after graduation. We are also lacking sufficient research on what changes in individuals' cognition and epistemology result from participation in PLAR, particularly in portfolio development, and how such changes relate to changes in cognition and epistemology experienced through a typical undergraduate education. To address the issue of social inclusion, we need research on non-traditional learners in post-secondary education and why they do not access PLAR.

Disciplinary perspectives on PLAR. Discipline specific research concerning PLAR is sorely lacking. While some disciplinary studies have been conducted, how PLAR is implemented in many other disciplines has not been explored. Two types of studies are lacking: Research that explores PLAR practices in different disciplines and research that investigates how experiential learning can be articulated into the knowledge structure of different disciplines.

In addition, we have no research that links PLAR with the emerging field of the Scholarship of Teaching and Learning, or with research and training efforts being conducted at university teaching and learning centres, which focus on increasing professors' and graduate students' understanding of the learning and assessment processes.

PLAR in secondary education. Although PLAR policies exist in some provinces for adult learners to use PLAR to complete their secondary education, we have no readily available information on how these policies have been implemented, on uptake levels, or on the experience of adult learners involved in this process.

PLAR and distance education. While e-portfolio initiatives are being developed by governmental and non-governmental organizations, we have no research concerning learners' or institutional experience with this form of PLAR.

What are the most profitable lines of inquiry in the area?

Much of the existing research on post-secondary PLAR in Canada has been on the macroscopic level in the form of large scale surveys of institutions and learners. The most profitable lines of inquiry would be longitudinal research that looks more intensively and directly at the experiences of both faculty members and post-secondary learners with

PLAR, and particularly research that reflects both the disciplinary nature of post-secondary learning and assessment methods and quality assurance concerns. Exploring disciplinary communities of practice in PLAR would be especially useful. Comparative research with disciplines that already make extensive use of PLAR (e.g. nursing) and those that do not (e.g. architecture) would be informative in terms of how best to encourage more widespread adoption of PLAR. In addition, we need a better understanding what keeps non-traditional post-secondary students, especially immigrant and Aboriginal learners, from making use of PLAR. Beyond that, research that identifies true monetary costs and benefits of PLAR in post-secondary education would be beneficial.

Because so little information exists on both PLAR and secondary education and the use of distance education for PLAR, research on any and all aspects of these two areas is necessary.

ASSESSOR AND FACILITATOR TRAINING

As described in Wong (1999; A. Wong, 2000), assessment methods for PLAR typically include standardized or challenge examinations, course or program equivalencies and/or portfolio assessment of documented accomplishments, possibly supplemented by interviews or demonstrations. While general categories of assessment processes are well-established, innovations in assessment methods are occurring within different disciplines, as described above. A different kind of innovation, however, has occurred in the professionalization of PLAR practice. A number of major Canadian efforts relate to this development.

The Canadian Association for Prior Learning Assessment undertook a major project to develop National Benchmarks for Canadian PLAR practitioners (Day, 2001; Zakos, 2002). The intention of the project was to develop a consensus of good PLAR assessment practice and explore how feasible it would be to use national benchmarks to certify PLA practitioners' competence. The benchmarks were developed through reviewing literature on assessment practices both in Canada and internationally (Australia, United States). Then, through a series of focus groups, PLAR practitioners from across Canada were asked to compare their own practice against standards developed by the Training and Development Lead Body in England for NVQ assessors. The benchmarks developed from the Canadian process were intended to guide practitioners in both major roles of preparing candidates for assessment and assessing the individual's prior learning. The benchmarks provided performance indicators for activities related to both of these roles.

The PLA Centre in Halifax has been delivering PLAR practitioner training to employees of the Nova Scotia Department of Community Services and to faculty and staff of the Nova Scotia Community College. The course prepares practitioners to deliver a portfolio development course for clients. Satisfaction surveys conducted as part of a major five-year evaluation project (Praxis, 2002) indicated that learners were very satisfied with their training and had put it to use in delivering courses to a range of client groups including companies, social service recipients and First Nations clients. According to a brief report posted on CAPLA's *Canada's Portfolio* website (Blower, 2001), Red River College in Manitoba has also developed two levels of training for PLAR practitioners, which are offered through blended learning.

As part of a major provincial PLAR initiative, the SLDB (Saskatchewan Labour Force Development Board, 2002) offered Advisor Orientation sessions for employees of Canada-Saskatchewan Career and Employment Services Centre, regional colleges, NGOs, and community-based organizations. They also provided sessions with an assessment focus for post-secondary institutions in the province. In addition, a ToolKit of advising, assessing and portfolio development resources was developed. Follow-up with participants in the orientation sessions indicated that while the sessions were useful, the majority "they required more support to become competent in order to effectively practice the advising techniques…" (p. iv) The majority of participants also reported using what they had learned with a wide variety of clients including EI recipients, social assistance recipients, immigrants, farm families, and employed workers considering a change in career direction. The research, however, did not include any direct assessment of the participants' skill in professional practice.

A recent Australian study (Smith, 2004) speaks to quality assurance issues in prior learning assessment practice. This study involved personal interviews with private training providers concerning RPL implementation. The eight case studies in the report illustrated different processes used in RPL. The report concluded that experienced and professional assessors are needed for effective RPL.

Assessor and Facilitator Training: Research Directions

What generalizations may be reliably drawn from the empirical evidence in the area?

We have too little empirical evidence in the area of Assessor and Facilitator training to draw any reliable generalizations, other than that training is valued by those who receive it and they attest that they make use of it in professional practice with clients.

What are the major gaps in knowledge about the area?

We have little information on the numbers of PLAR practitioners across their country, on their demographic characteristics (location, years of experience, other qualifications, type of organization, etc.), or on their level of activity in conducting assessments. Evidence is lacking concerning the most effective and efficient approaches to Assessor and Facilitator training, and how training impacts quality assurance. The impact of facilitator and assessor training on actual practice on learners' experiences and outcomes has not been thoroughly investigated. Such studies could also explore the question of PLAR for practitioners' themselves, identifying what types of previous training and experience (e.g. career counsellor, Human Resource specialist, adult educator, etc.) can be used towards recognition as a PLAR practitioner.

What are the most profitable lines of inquiry in the area?

A census of PLAR practitioners in Canada would contribute to a better understanding of the existing community of practice. In addition, evaluative studies of the effectiveness and efficiency of different training approaches would assist in the development of more rigourous and focused efforts, with follow-up studies of the effect of training on client services and outcomes. Of special interest would be a study of PLAR practitioner training for particular groups, such as university professors, HR specialists, student and career counsellors, etc.

PLAR AND WORK

The Conference Board of Canada estimated that recognition of experiential learning could generate an additional $4.1 to 5.9 billion in annual income for Canadians (Bloom & Grant, 2001). This estimate was based on three surveys, including a survey of Canadian educational and professional institutions that issue credentials, a national telephone survey of a random sample of almost 12,000 households, and individual interviews with 487 people who had difficulty having their learning recognized. The data collected was used to create economic models that calculated the enormous costs involved in failing to recognize the learning of almost a quarter of a million Canadians. The study also identified barriers in the Canadian post-secondary sector to recognizing learning gained through other means than formal study in the Canadian system. The implications of barriers to the credentialing of experiential learning were discussed in terms of employers' preferences to hire people whose credentials are familiar ones and the attendant economic consequences. The report concluded with an ambitious proposal to establish a "*national learning recognition system*" (p. 33), with involvement from both levels of government, educational institutions, and organization-based training systems. The Conference Board also called for a wide-scale communications initiative to promote the concept of learning recognition to the public, thus stimulating demand for service.

For many adults, much of their informal and nonformal learning comes through their work experiences. A small proportion of the general public, however, is aware of PLAR, according to research findings. The SLFDB (Saskatchewan Labour Force Development Board, 2002) conducted a poll in the province and found that only 8% of Saskatchewan residents had heard of PLAR. Livingstone, Raykov and Turner (2005)

recently explored Canadian adults' interest in having their work-related (broadly defined) learning formally recognized. Their report is based on data from the Canada-wide Work and Lifelong Learning survey (www.wallnetwork.ca). Survey participants were asked: "Would you be more likely to enroll in an educational program if you could get formal acknowledgement for your past learning experiences so that it would require fewer courses to finish the program?" (p. 2) While the authors recognized that this question would only reflect the answers of those interested in taking further formal training, and exclude those only interested in having prior learning certified for other purposes, the data did provide an estimate of popular interest in PLAR. The results showed:

> more than a half of all Canadian adults and over 60% of employed workers would be more interested in enrolling in further education with recognition of prior learning. In terms of population, this translates into over 12 million people who would like their informal learning achievements to be applied as credits toward a wide range of academic courses and other training programs. (p. 2)

A further analysis of the survey findings (Livingstone, Raykov, & Turner, 2005) showed that of those adults already enrolled in educational programs (representing 45% of the total population), 64% were interested in PLAR. Looking at demographic factors and PLAR, the analysis revealed that interest in PLAR was higher in younger age groups, but remained high even in the age 45-54 age group. Interest in PLAR was highest among those with incomplete community college or university education. Nevertheless, over half of respondents with undergraduate degrees and almost half of respondents with graduate degree were also interested in PLAR. Interest was least among older respondents (over 45 years of age) with incomplete high school matriculation. Respondents who self-identified

as members of a visible minority showed greater interest in PLAR than non-minority respondents. Interest is particularly high among immigrants who arrived in Canada between 1991 and 2001.

As described in the earlier section on government policy, a major attraction of workplace PLAR is labour force adjustment and development through re-skilling of unemployed workers. The Government of Manitoba commissioned a scan of workplace PLAR, a process that involved a literature review, a web search and interviews (written and oral) with people involved in PLAR (OARS Training, 2002). According to the resulting report, although interest in PLAR as a workforce development tool is growing, the practical aspects were not yet developed. The researchers identified the need for PLAR experts in technical workplace activities and occupations and for close co-operation with formal education institutions as essential to develop workplace PLAR in Manitoba. A follow-up report (OARS Training, 2004) described research aimed at developing "a comprehensive model for defining and developing workplace PLAR" (p.1). The research involved a consultation forum with 33 representatives from government, education, industry and labour, pilot testing the workplace PLAR model with unemployed workers, and a survey of service providers concerning perceived barriers and needed supports to implement the model on a wide scale. The *TOBY Model* developed in this project is a client-centred process that begins with self-assessment and leads through assessment and goal-setting to recognition of previous learning and/or further training. In the pilot test, the model was used successfully to identify and provide short-term focused training that allowed four unemployed workers to use a challenge exam to obtain student welder certification. A second pilot test was done with seven laid-

off workers who field-tested self-assessment tools and found them useful. The consultation forum and the follow-up survey with service providers identified a need for assessment services and gap training for technical and essentials skills, plus greater overall co-ordination amongst those involved in workplace PLAR.

The Centre for Education and Work in Manitoba is also conducting research on the use of portfolios for workers who are making career transitions because of economic downturns in the forestry and wood products industry (Dassinger, 2005) The research is being carried out in four regions of Canada. Formal reports of project findings have yet to be published.

In Nova Scotia, the PLA Centre has worked with government partners to provide PLA for social assistance and EI recipients, with a view to enhancing their employability. An evaluation of the PLA Centre (Praxis, 2002) involved a survey of individuals who had taken a portfolio development course but the sample included only a small number of social assistance and EI recipients. Consequently, little quantitative information was obtained concerning how the portfolio process affected their employment prospects. Qualitative results from a focus group with social assistance recipients indicated they had experienced increases in self-esteem and confidence, as well as having had some success in obtaining jobs and/or more education.

Research in Australia has focused on the use of PLAR with older job seekers (Cameron, 2004)This study involved interviews with 17 agencies in Queensland providing employment services to mature job seekers. Overall, the survey results showed that recognition of prior learning (RPL) activity was "generally very low" (p. 7). The bureaucratic, print-based processes used for RPL were determined by national standards

and was seen as irrelevant to the needs of older workers. The author concluded that this clientele needs more assistance in "personal development, peer support, self esteem and self confidence and job search assistance" (p. 8), rather than with recognizing skills and seeking further training. The report also provided case study examples of more appropriate approaches to RPL for use with this type of worker.

Regulatory Bodies, Professional Associations and Occupational Associations

As outlined in Blower (2000), several Canadian organizations have been involved with PLAR since the early 1990s, including "the Ontario College of Midwives, Ontario College of Nurses, Certified General Accountants Association of Ontario and the Credit Union of Canada." (p.93) Although detailed information has not been readily available in the form of published reports, there is evidence that a wide variety of professional organizations are beginning to use PLAR. For example, Nielsen (2005) recently presented on how the Canadian Society for Medical Laboratory Science is using PLAR, while Seipp (2005) outlined the role of PLAR in the development of a college-based program for Occupational Health and Safety Officers in Saskatchewan. Kirby (2005) described a PLAR project undertaken by the Canadian Aviation Maintenance Council to accelerate Canadian certification of foreign-trained workers. The Canadian Tourism Human Resource Council is conducting research on how PLAR can be used to assist immigrants to meet Canadian industry service standards (Mondor, 2005). The Canadian Child Care Association is currently gathering feedback from learners who have used PLAR through an on-line questionnaire on the organization's website (http://www.cccf-fcsge.ca/home_en.html).

In a published report, Saskatchewan Outfitters Association (2001) described the need to establish service standards for the tourism industry in the province to remain competitive internationally. In co-operation with the Saskatchewan government department of Environment and Resource Management, the association defined and described professional outfitting standards and recommended a certification process. The outfitters saw PLAR as vital to the success of the certification program, and therefore carried out a project to establish an appropriate model, including outcomes for eight skill areas, define key indicators for the outcomes, and design tools to assess individual performance against these indicators.

The Saskatchewan Paramedic Association recognized the need for continuing education efforts (Thauberger, Hopkins, & Campbell, 2005) to ensure its membership could meet National Occupational Competency Profiles established by the Canadian Paramedic Association. The association undertook a general training needs assessment survey, which found that both employers and employees felt that on-the-job training was not adequately recognized. The report recommended implementation of a PLAR process for certification, with an information program aimed at both employers and employees.

PLAR and Employers

Although the workplace is a prime site for individuals to acquire new skills and knowledge, relatively little research has been done on PLAR within industrial settings.

The SLFDB (Saskatchewan Labour Force Development Board, 2002) carried out a project with the forestry sector to develop an occupational PLAR assessment model. The developmental process resulted in a draft PLAR Assessment Tool for Sawmill Operators, which reflected key performance factors and associated questions for

assessment. Beyond that, the pilot project demonstrated what factors are necessary for successful industry engagement with PLAR. These factors included industry commitment, time to provide information needed to get industry buy-in, clear communication and review of expectations, and a "simple, flexible, practical, individualized and achievable" (p. 14) approach to PLAR.

Another interesting Canadian initiative is *Envision U*, the country's first corporate university (Hama, 2005). Developed by the Human Resources Department of the B.C.-based credit union Envision Financial, the model articulated internally delivered staff training with a number of universities. PLAR was a key element in the program design.

An Australian study (Blom, Clayton, Bateman, Bedggood, & Hughes, 2004) involved semi-structured interviews with key informants (primarily management but also some employees) at six organizations that employed large workforces and delivered work-related training. The study found that training in such organizations is driven both by business and legislated needs, with a primary focus being "improved productivity and enhanced business practice." (p. 5) Recognition for prior learning tended to be embedded in training processes, with the employer supporting application preparation through providing advisors and time during work hours. Many had on-line resources to support PLAR and subsequent training. Evidence requirements varied from organization to organization, with most providing examples to assist employees. The extent to which recognition activity was an organization-wide or individually initiated process varied with the organization's business philosophy. Further, the intensity of recognition activity in each organization fluctuated with need. The employees interviewed indicated that benefits of PLAR accrued both to themselves and to the organization; these included

certification of acquired skills and identification of training needs. Some, however, had negative comments about the process, finding it time-consuming and "humiliating" (p. 9). They also found that having their skills certified did not guarantee a pay increase or promotion if no appropriate vacancies existed.

A second Australian study (M. Cleary & Down, 2005) reported on case studies of RPL at seven Australian enterprises. The poor uptake of RPL was the impetus for the project, which was sponsored by the Australian National Training Authority. Participating organizations were nominated for participation by their own management, labour unions or both. The project established an RPL process at each organization and reported on benefits and barriers, including statistical information on numbers of employees involved and Units of Competency obtained. Costing figures were also provided. According to the final report, all of the organizations had a positive experience with RPL and expected to continue with it or even expand their activity. The study authors recommended that organizations work closely with vocational education and training providers to establish workplace RPL programs. In turn, the service providers need to customize delivery processes for each enterprise.

PLAR and Apprenticeships

A recent study (Riffell, 2004) has looked at the relationship between PLAR and the apprenticeship system in Canada. The training system for designated trades has a "stringent, accountable work performance evaluation system" (p. 3) that allows successful learners to gain the Inter-provincial Red Seal qualification, which qualifies them to work anywhere in Canada. As an alternative route, employees can gain journey person status by providing evidence of sufficient work in the trade and writing a

challenge exam. A study of the Pipe Trade apprenticeship system (Prism Economics and Analysis, 2004) had noted that recognition of work-related learning is integral to the apprenticeship system but current assessment methods were weak and subjective. That report recommended national co-ordination of PLAR practices in the trades.

The trend in Canada recently has been the increase in the average age of apprentices to thirty years. Riffell (2004) reasoned that older apprentices have probably acquired significant informal and nonformal learning since leaving public school and entering an apprenticeship. Such learning needs to be recognized in order to assign individuals to an appropriate level of apprenticeship. Riffell conducted a mail survey of all Inter-provincial Standards Examination Committees to explore PLAR implementation. The results indicated that although most jurisdictions have some kind of PLAR process, weaknesses such as inflexibility in processes and tools remained. Lack of national PLAR standards for trades was seen as a major barrier to full implementation.

Provincially, PEI has explored the use of PLAR in apprenticeships (MacAulay, 2002). An organizational needs assessment first identified the need for a provincial apprenticeship strategy. This was followed by development of an operational model that integrated both Essential Skills training and PLAR into the provincial apprenticeship model. The planned follow up was to develop PLAR assessment criteria for the 20 most common trades.

A report from Australia (Australian Chamber of Commerce and Industry, 2005) provided statistical documentation of the traditional (two year, full-time contract) and non-traditional apprenticeship rates (part-time) in that country. Overall, apprenticeships had risen after the introduction of a New Apprenticeship program in 1996. Traditional

apprentices tended to be young men, while non-traditional apprentices tended to be older, female workers. Given the increase in non-traditional apprenticeships, the report authors recommended establishment of mandatory RPL policies within the apprenticeship system. Such a system would be particularly beneficial for Australia's many migrant workers, whose qualifications and experience from abroad are not recognized.

PLAR and Labour

The importance of labour education within the whole area of adult learning in Canada has increasingly been recognized (Gereluk, Spencer, & Briton, 2000). Spencer, Briton and Gereluk (2001) argued that "much of what workers learn in the workplace…and labour education courses is worthy of formal recognition— college/university credits." (p. 4). In this empirical study, the researchers sampled a representative selection of 50 union-sponsored labour education courses, gathering course and program materials and data, supplemented by interviews of union educators and leaders for 30 of the cases. The findings showed considerable variation in how completely the various courses and programs were developed and articulated. Based on a review of packaged materials, the most developed courses tended to be those aimed at training union stewards. The program of the Canadian Union of Public Employees (CUPE) was singled out as "an example of an elaborate program…" (p. 6), while the *Labour College of Canada Residential Program* provided by the Canadian Labour Congress (CLC) was described as the "most intensive and advanced labour education experience…" (p. 6). The authors concluded that the material gathered supported the contention that "much labour education and the learning associated with union activity is deserving of recognition within the formal system". (p. 9)

Sawchuk (2001) reported on the *Learning Capacities in the Community and Workplace* (LCCW) project, which focused on developing PLAR approaches suitable for working people. The research was intended to challenge the academic mainstream nature of PLAR. Participants in the project were 12 members of the Communication, Energy and Paperworkers Union of Canada employed as chemical workers. Selected to reflect demographic factors in their workplace, they were primarily English-speaking males. Qualitative data was collected through relatively unstructured in-depth interviews. The assessment tool emerging from the research was called the *Skills Knowledge Profile* (SKP). The instrument required workers' to reflect on their workplace learning and write it down, which engaged them in alternative ways of thinking about their own skills, knowledge, and learning approaches. In this process, the workers found collective reflection in a focus-group format was particularly helpful. The author concluded with several recommendations concerning PLAR in the labour movement.

Frankel (2004) described a CUPE project designed to assist Water and Wastewater Workers meet Saskatchewan legislation that mandated certification by 2005. The project used the Test of Workplace Essential Skills to assess the training needs of a representative sample of workers in terms of their literacy and numeracy in relation to required standards. Concluding that significant training needs existed, the report recommended the use of a PLAR process as part of an overall training strategy for workers facing certification exams.

PLAR and the Military

As described in Thomas (2000), the military "precipitated the large-scale utilization of PLA" (p. 516) in the United States. Large numbers of ex-servicemen had

acquired extensive knowledge, skills and experience but needed to acquire formal credentials to succeed in civilian life. Perhaps because the military has such a long-established relationship with PLAR, we found little current literature on the topic.

The PLA Centre in Halifax (PLA Centre, 2001) has offered services to both Department of National Defense civilian and military personnel. The evaluation of the PLA Centre (Praxis, 2002), included focus groups with DND participants. Opinions voiced in the focus group demonstrated that the participants felt the portfolio program had been worthwhile. The evaluation did not, however, document any specific outcomes in terms of career or life changes.

The major survey of PLAR learners discussed earlier in the current report (Aarts et al., 2003) included a special survey of military learners. College Ahuntsic, one of the research partners, has had a long relationship with military personnel through the Canadian Forces Community College Program. The program establishes equivalences between Quebec college programs and military training programs, a process termed *program review*. That is, PLAR is granted on the basis of a learner's successfully completing a reviewed program, rather on the basis of evaluating an individual's specific learning. In presenting survey results, the researchers were frank about flaws in the method and urged that the findings be interpreted with caution. Demographically, the military PLAR learners reflected the general military profile, with the exception of over-representation of those who have a first language other than English. (The report noted that the Department of National Defense has invested significant effort in assisting francophone personnel to transfer their training to civilian contexts, but did not comment on the corollary that a similar effort has not been devoted to assisting non-francophones

to make the same kind of transfer.) A majority of the military respondents had undertaken PLAR to prepare for civilian employment. The availability of PLAR was a strong incentive for them to undertake college level training. Because the armed services cover the costs of further education for military personnel, the primary benefits these learners reported from PLAR were increased confidence and career direction from having military training and learning validated. This contrasted with non-military learners who valued cost and time savings associated with PLAR. Given the flaws in the study design, the authors recommended that further investigation of PLAR and the military be conducted.

PLAR and Work: Research Directions

What generalizations may be reliably drawn from the empirical evidence in the area?

The two most important generalizations from the empirical literature are first, that Canadians have much unrecognized learning acquired through work, and second, that few Canadian workers are aware of the existence of PLAR and how it might be of benefit to them. Beyond that, the potential of labour education for PLAR has been thoroughly documented. PLAR and the military is well-documented compared to other occupations. In addition, we know that a variety of regulatory bodies, professional associations and occupational associations, as well as some employers, are involved with PLAR to some degree. Finally, we know that although some form of PLAR is widely used in the apprenticeship field, the quality of assessments has emerged as an issue.

What are the major gaps in knowledge about the area?

We lack evidence at this point concerning how workers in transition benefit from PLAR, although the research being done now by the Centre for Education and Work should remedy this in the near future. We also are lacking follow-up studies of the effect

of PLAR with individuals with a longer-term pattern of unemployment, such as social assistance recipients, parents returning to the workforce after lengthy breaks for child-rearing and/or prisoners.

Although we know that Canadian organizations and employers are investigating or already involved in PLAR, we lack information on the scope of their involvement on a nation-wide basis. Further, much of the available research is concerned with establishing a need for PLAR in a particular occupational area. Therefore, we do not have solid research that demonstrates what approaches to PLAR have been adopted, the nature of assessment methods being used, quality assurance practices, articulation arrangements with colleges and universities, real costs of workplace PLAR, and outcomes for both workers and employers.

What are the most profitable lines of inquiry in the area?

Research on PLAR and work should focus on two areas. First, we need solid case study research to provide examplars of the process and costs/benefits of workplace PLAR. Of particular interest would be research on labour-management partnerships for implementing workplace PLAR. Second, a survey of workplace PLAR activity levels in different occupational fields, possibly working through sector councils, would be very informative. A survey of Human Resource professionals to determine their awareness of and involvement in PLAR would also be beneficial.

PLAR AND DIVERSITY

Historically, one of PLAR's claims has been that it is a vehicle to promote access to postsecondary education for disadvantaged learners, including immigrants and Aboriginal people (Thomas, 2000; Wong, 1999). The major survey of Canadian PLAR learners discussed above (Aarts et al., 2003), however, found that "the majority of PLAR and Non-PLAR learners did not identify with any of these designated demographic groups…" (p. 24). Several recent studies have focused specifically on PLAR and how it serves these learner groups.

Immigrants and PLAR

Given the growing importance of immigrants to the Canadian economy, the difficulty of giving Canadian recognition for foreign training and experience is a pressing problem, one that PLAR has the capability to address (Alboim, 2002; Bloom & Grant, 2001; Young, 1999). Human Resources & Skills Development Canada (Kennedy, Cotton & Burke, 2004) recently completed a project to develop the conceptual framework for an e-portfolio for potential immigrants to Canada. The model was based on web-research, an electronic survey of organizations involved with PLAR and/or immigrants, and consultation with an advisory group. The project report recommended adoption of a facilitated on-line model embedded within the larger immigration process. The report also addressed issues of quality assurance, technology, and sustainability. Learning Innovations Forum has recently received HRSDC funding to design an e-portfolio system (http://www.futured.com/documents/LIfIAProjectAnnouncementAugust05.pdf) for skilled immigrants. In addition, the Work and Learning research network (http://www.wln.ualberta.ca/research.htm) is conducting several studies on immigrants'

informal learning, and are planning to explore PLAR in relation to this (S. Guo, personal communication, Nov. 3, 2005). In addition, as discussed earlier in this report, several Health-related professions have undertaken initiatives concerning the use of PLAR to fast-track foreign-trained immigrants' obtaining Canadian certification.

Data from the cross-Canada survey of PLAR users (Aarts et al., 2003) indicated that immigrants are probably not accessing PLAR in proportion to the size of the immigrant population. ACCC (Association of Canadian Community Colleges, 2004) conducted a "diagnostic survey" of how well its 150 member colleges were meeting immigrants' needs. Responses from 46 institutions indicated that the colleges use PLAR as a vehicle for recognition of foreign credentials. The data also indicated, however, that the cost of PLAR is a major barrier in using this vehicle to assist immigrant students, although funding mechanisms for PLAR services vary from province to province. ACCC (2005b) has recently presented a brief to the House of Commons Standing Committee on Citizenship and Immigration on recognizing immigrants' learning which called for the creation of a "Pan-Canadian Network of Immigrant Knowledge, Skills and Credential Assessment and Recognition Centres" (p. 8) linking Canadian post-secondary institutions. A recently funded Ontario initiative, the *Colleges Integrating Immigrants to Employment (CIITE) Project* (Radford, 2005) is intended to improve such services at community colleges.

A Saskatchewan study (Shmyr, 2003) reported on findings from a telephone survey on PLAR needs conducted with 60 immigrants in the province's major population centres (Regina, Saskatoon, Moose Jaw, Prince Albert). All the interviewees were pre-screened to ensure that they had non-Canadian educational qualifications and experience

combined with an adequate command of English, as indicated by attainment of a LINC (Language Instruction for Newcomers to Canada) 3 language level. The study questions looked at the respondents' foreign credentials and their experience with having them assessed for recognition in Canada, as well as their employment and volunteer experience outside Canada. Although 70% of the sample had non-Canadian post-secondary education, 60% of the sample was taking further education "in order to achieve acceptable employment in Canada." (p. 4) While 43% of the sample were employed at the time of the interview, they were primarily "working in entry-level jobs and in areas not related to their past education or experience." (p. 5) An important study finding was that none of the interviewees had heard of PLAR or any related term, and had no knowledge of the process. The report recommended that immigrants be provided with an orientation to prior learning assessment through existing settlement agencies. Further, it recommended that information about prior learning assessment and associated documentation requirements be posted on websites for potential immigrants.

The relationship between PLAR and the integration of immigrants' into the labour force is also a concern in other countries. Peters (2000) described an APEL programme at the University of North London specifically designed for highly skilled refugees. Aimed at development of a professional portfolio, it included courses on the education system, the labour market, and equal opportunities, as well as personal development and communication; completion resulted in the award of a university credential in the form of Certificate of Professional Development. Completion rates have been high, and participants reported an increase in self-confidence about their future employability.

Aldridge and Waddington (2001) reported on a survey of immigrant refugees in Leicester, England. The survey was conducted to first, identify the skills and qualifications of the participants, and second, offer them referrals so their skills could be recognized. Of 103 respondents, 85% already had significant educational qualifications, including higher education degrees. The majority (80%) also had previous occupational experience gained through paid employment. Once the survey was completed, a sub-set of the sample attended a seminar on portfolio development, during which they discussed barriers to having their education and employment recognized, and then later participated in individual interviews. The final report, which included case study profiles of immigrants, recommended that career guidance workers serving refugees should provide information to assist refugees with how to gain recognition for foreign experience and training.

Aboriginal Learners and PLAR

In Canada, First Nations Technical Institute was an early adopted of PLAR and has continued to be active within the movement on a national level (Blower, 2000). Nevertheless, the major survey of Canadian PLAR learners (Aarts et al., 2003) found that only 2% were of Aboriginal heritage. In part, this could be because of possible deep incompatibilities between knowledge in Aboriginal traditions and the Canadian formal education system (Miller, 2005; Newhouse, 2005).

Despite these cultural considerations, however, organizations serving Aboriginal learners have actively adopted PLAR. In an example from Saskatchewan, the Gabriel Dumont Institute, Saskatchewan Indian Federated College (now First Nations University of Canada), and the Saskatchewan Indian Institute of Technology co-sponsored

information sessions for their professional staff that provided an Aboriginal perspective on PLAR (Saskatchewan Labour Force Development Board, 2002). CANDO (Council for the Advancement of Native Development Officers) has a PLAR process (http://www.edo.ca/certification/index.htm) for certifying individuals; the process is linked with formal education programs at colleges and universities across Canada. The Gateways project at Athabasca University (http://gateways.athabascau.ca/) has been exploring PLAR use with colleges in the Northwest Territories, Nunavut, and Yukon Territory, all of which serve predominantly Aboriginal populations, and with the B.C. Aboriginal Child Care Society.

ACCC (Association of Canadian Community Colleges, 2005a) carried out a study of Aboriginal programs and services at its member institutions across Canada. The research involved an on-line survey and interviews with Aboriginal and northern program representatives. With regard to PLAR, the findings noted the importance of using culturally appropriate methods, although no further elaboration was provided.

Australian reports have also discussed PLAR and Indigenous learners. A statistical profile (Saunders, Jones, Bowman, Loveder, & Brooks, 2003) based on administrative data managed by NCVER (National Centre for Vocational Education Research) found that while Indigenous learners participated in vocational education at a rate twice that of non-Indigenous learners, their achievement of modules through RPL is only half that of other learners. Although that report offered no comments or recommendations concerning this situation, a different study by Eagles and Woodhouse (2005) explored the potential of using on-line RPL delivery in a culturally appropriate way to reach Indigenous learners. In this fascinating pilot study, online voice technology

was used to allow Indigenous learners in isolated communities to express their knowledge in an oral format. Offered as an alternative assessment method to written expression, the oral format was the option chosen by all Indigenous learners in this study. The report of the project also discussed issues such as the importance of having web resources that speak visually of respect for Indigenous culture, while recognizing variations among Indigenous groups and learners.

An unusual study from New Zealand reported on the career development experience of Maori and Pasifika (Pacific Island people) employed at the McDonald's chain of restaurants (Reid & Melrose, 2004). McDonald's in New Zealand had a pre-existing agreement with Auckland University of Technology to allow individuals who had taken McDonald's internal management training to transfer credits to the New Zealand Diploma of Business. The survey of employees found that Maori employees had more complete management training than either the Pakeha (non-Maori) or Pasifika employees. While the authors acknowledge the problematic nature of an American multinational employer, they concluded that McDonalds allowed Maori employees the opportunity to acquire experience and training that could be applied to obtaining post-secondary credentials.

PLAR and Diversity: Research Directions

What generalizations may be reliably drawn from the empirical evidence in the area?

Empirical evidence has demonstrated that immigrants have much to gain from PLAR but are largely unaware of the process or how to access it. We also know that Aboriginal students are underrepresented among PLAR users in mainstream community colleges. We know that Aboriginal educational institutions and organizations are active in

PLAR, but we do not have details of the volume of that activity or its effect. We also have empirical evidence from Australia, but not from Canada, that Aboriginal learners benefit from culturally appropriate approaches to PLAR.

What are the major gaps in knowledge about the area?

We know almost nothing about PLAR services available to diverse learners at universities, or how aware personnel in service centres for diverse students in universities are about PLAR.

Other major gaps in our knowledge are being addressed by on-going projects, such as the Gateways project at Athabasca University, which will provide information on Aboriginal in the Human Services field, and the *Colleges Integrating Immigrants to Employment (CIITE) Project* in Ontario, which may similarly expand our knowledge base about immigrants and community colleges in that province. Various e-portfolio projects currently in progress may also give us further information about PLAR and immigrants.

What are the most profitable lines of inquiry in the area?

A much-needed line of inquiry is the experience of diverse learners with PLAR at Canadian universities. Because of the research activity currently occurring in this area, it would otherwise be profitable to wait until these results are available before initiating new research.

SUMMARY

This section of the report first reprises the research directions identified for each

of the major categories of PLAR research: PLAR policy, PLAR and Formal Education,

Assessor and Facilitator Training, PLAR and work, and PLAR and diversity. For each

major category of research, the three questions posed by CCL are discussed:

- What generalizations may be reliably drawn from the empirical evidence in

  the area?

- What are the major gaps in knowledge about the area?

- What are the most profitable lines of inquiry in the area?

Recognizing that the PLAR review is only one portion of the broader State of the

Field review for Work and Learning and that CCL has finite resources to support

research, the section concludes with a recommendation concerning the top three research

priorities in the PLAR area.

PLAR Policy: Research Directions

What generalizations may be reliably drawn from the empirical evidence in the area?

From the available literature on PLAR (or its local variant) policy implementation

around the globe, we can see that prior learning assessment and recognition is present

within the education and training systems of many countries world-wide. From our

necessarily brief review, common themes can be seen emerging, such as the need to link

PLAR to broader adult learning policy and programme initiatives created in response to

demographic and labour mobility challenges, non-acceptance of PLAR within

universities, transferability of PLAR credits across jurisdictions, definitional confusion,

quality assurance concerns, and the continuing problem of low uptake by learners. While

a detailed analysis of the literature is beyond the scope of this report, these issues appear to be similar to those affecting PLAR in Canada.

What are the major gaps in knowledge about the area?

The major gap is a synthesis of the available international evidence that identifies factors in PLAR implementation which transcend issues of local institutional and legislative arrangements, as well as local factors which contribute to unique PLAR developments in each jurisdiction. Of particular importance are:

- The place of PLAR within comprehensive policy frameworks for adult and lifelong learning;

- Factors that lead to higher uptake of PLAR;

- Approaches to quality assurance;

- The relationship of PLAR to International Credentials Evaluation;

- Institutional and legislative provisions that enhance cross-jurisdictional transportability of learning recognized through a PLAR process.

What are the most profitable lines of inquiry in the area?

A comprehensive analysis of international PLAR policy and program initiatives as outlined above would be highly useful for developing policy and programmatic alternatives for PLAR and its position within the adult learning policy framework in Canadian jurisdictions.

PLAR in Formal Education: Research Directions

What generalizations may be reliably drawn from the empirical evidence in the area?

PLAR policies and implementation. Formal PLAR policies and supports are much more widespread at the community college level than at the university level or secondary

level, although considerable unrecognized PLAR may be taking place in universities. The existence of formal policies, however, is not necessarily linked to effective implementation. Even at institutions most committed to PLAR, uptake by learners remains low across the country. Low uptake and/or lack of institutional involvement in PLAR is consistently attributed to a variety of factors, including:

- Costs for learners and institutions

- Lack of learner and faculty awareness of PLAR

- Faculty resistance to PLAR, which is more pronounced at the university level, but also exists in community college

- Quality assurance concerns

- Lack of incentives for faculty and institutions to engage in PLAR

At Canadian and international post-secondary institutions, PLAR implementation and uptake by learners appears to be concentrated in certain disciplinary areas, notably Health Sciences disciplines (Dietetics, Nursing, Pharmacy, Optometry), Human Services disciplines (Early Childhood Education, Social Work), and Business Education. Outside of Canada, PLAR activity is also notable in Teacher Education and Law & Justice Studies. In Canada, PLAR appears to be primarily available at the undergraduate level, rather than for graduate level studies.

A variety of methods are routinely used for preparing learners to petition for post-secondary PLAR credits and for assessing their learning. The literature contains several descriptions of generic PLAR procedures and processes at individual institutions.

Although policies exist for mature learners to access PLAR in secondary education, we found no published information on implementation.

PLAR and learning. The achievement of PLAR credits appears to have predictive validity for ability to engage successfully in and persist with post-secondary learning, The awarding of PLAR credits appears to have no negative impact on learners' future academic success. The research evidence also demonstrates that PLAR can itself be a powerful learning tool, especially the process of portfolio development. Some studies, however, suggest that while experiential learning may fit smoothly with some disciplines, a mismatch may exist between learners' construction of knowledge and the knowledge structure of other disciplines.

PLAR and learners. Research with post-secondary learners who have used PLAR uniformly reports benefits in terms of time and costs savings, as well as growth in self-awareness, self-esteem, and confidence. The learner profile, however, suggests that PLAR has not fulfilled its promise in serving non-traditional students. Available evidence indicates that the majority of PLAR learners are not affiliated with a minority group, and further, many have previous post-secondary education of some kind.

What are the major gaps in knowledge about the area?

PLAR in community colleges and universities. Although research with institutional respondents has given some indication of barriers to successful implementation of PLAR, we have little direct information on why uptake is so low. We do not know how readily available information concerning PLAR is for a typical adult learner considering enrolling in a community college or university when the learner is not already aware of PLAR. Although cost is identified as a deterrent to PLAR utilization both to institutions and to learners, we have no hard data on actual costs and savings from PLAR, and how these interact with institutional funding formulas. Faculty attitudes to

PLAR have been pinpointed as a barrier to PLAR implementation in universities, yet the much of the recent evidence on this point comes from key informants, not direct research with faculty members. Similarly, faculty training in PLAR assessment methods is identified in the literature as important, but we have little evidence concerning how such training affects either faculty attitudes to PLAR or their actual practice. We have no research comparing the effectiveness and efficiency of the different methods used in conducting PLAR assessments, nor do we have empirical information concerning how post-secondary institutions address quality assurance concerns.

PLAR and learners. Although we have retrospective research with PLAR learners, we have no longitudinal studies following learners through the whole process and after graduation. We are also lacking sufficient research on what changes in individuals' cognition and epistemology result from participation in PLAR, particularly in portfolio development, and how such changes relate to changes in cognition and epistemology experienced through a typical undergraduate education. To address the issue of social inclusion, we need research on non-traditional learners in post-secondary education and why they do not access PLAR.

Disciplinary perspectives on PLAR. Discipline specific research concerning PLAR is sorely lacking. While some disciplinary studies have been conducted, how PLAR is implemented in many other disciplines has not been explored. Two types of studies are lacking: Research that explores PLAR practices in different disciplines and research that investigates how experiential learning can be articulated into the knowledge structure of different disciplines.

In addition, we have no research that links PLAR with the emerging field of the Scholarship of Teaching and Learning, or with research and training efforts being conducted at university teaching and learning centres, which focus on increasing doctoral students' and new professors' understanding of the learning and assessment process.

PLAR in secondary education. Although PLAR policies exist in some provinces for adult learners to use PLAR to complete their secondary education, we have no readily available information on how these policies have been implemented, on uptake levels, or on the experience of adult learners involved in this process.

PLAR and distance education. While e-portfolio initiatives are being developed by governmental and non-governmental organizations, we have no research concerning learners' or institutional experience with this form of PLAR.

What are the most profitable lines of inquiry in the area?

Much of the existing research on post-secondary PLAR in Canada has been on the macroscopic level in the form of large scale surveys of institutions and learners. The most profitable lines of inquiry would be longitudinal research that looks more intensively and directly at the experiences of both faculty members and post-secondary learners with PLAR, and particularly research that reflects both the disciplinary nature of post-secondary learning and assessment methods and quality assurance concerns. Exploring disciplinary communities of practice in PLAR would be especially useful. Comparative research with disciplines that already make extensive use of PLAR (e.g. nursing) and those that do not (e.g. architecture) would be informative in terms of how best to encourage more widespread adoption of PLAR. In addition, we need a better understanding what keeps non-traditional post-secondary students, especially immigrant

and Aboriginal learners, from making use of PLAR. Beyond that, research that identifies true monetary costs and benefits of PLAR in post-secondary education would be beneficial.

Because so little information exists on both PLAR and secondary education and the use of distance education for PLAR, research on any and all aspects of these two areas is necessary.

Assessor and Facilitator Training: Research Directions

What generalizations may be reliably drawn from the empirical evidence in the area?

We have too little empirical evidence in the area of Assessor and Facilitator training to draw any reliable generalizations, other than that training is valued by those who receive it and they attest that they make use of it in professional practice with clients.

What are the major gaps in knowledge about the area?

We have little information on the numbers of PLAR practitioners across their country, on their demographic characteristics (location, years of experience, other qualifications, type of organization, etc.), or on their level of activity in conducting assessments. Evidence is lacking concerning the most effective and efficient approaches to Assessor and Facilitator training, and how training impacts quality assurance. The impact of facilitator and assessor training on actual practice on learners' experiences and outcomes has not been thoroughly investigated. Such studies could also explore the question of PLAR for practitioners' themselves, identifying what types of previous training and experience (e.g. career counsellor, Human Resource specialist, adult educator, etc.) can be used towards recognition as a PLAR practitioner.

What are the most profitable lines of inquiry in the area?

A census of PLAR practitioners in Canada would contribute to a better understanding of the existing community of practice. In addition, evaluative studies of the effectiveness and efficiency of different training approaches would assist in the development of more rigourous and focused efforts, with follow-up studies of the effect of training on client services and outcomes. Of special interest would be a study of PLAR practitioner training for particular groups, such as university professors, HR specialists, student and career counsellors, etc.

PLAR and Work: Research Directions

What generalizations may be reliably drawn from the empirical evidence in the area?

The two most important generalizations from the empirical literature are first, that Canadians have much unrecognized learning acquired through work, and second, that few Canadian workers are aware of the existence of PLAR and how it might be of benefit to them. Beyond that, the potential of labour education for PLAR has been thoroughly documented, as has PLAR and the military. In addition, we know that a variety of regulatory bodies, professional associations and occupational associations, as well as some employers, are involved with PLAR to some degree. Finally, we know that although some form of PLAR is widely used in the apprenticeship field, the quality of assessments has emerged as an issue.

What are the major gaps in knowledge about the area?

We lack evidence at this point concerning how workers in transition benefit from PLAR, although the research being done now by the Centre for Education and Work should remedy this in the near future. We also are lacking follow-up studies of the effect

of PLAR with individuals with a longer-term pattern of unemployment, such as social assistance recipients, parents returning to the workforce after lengthy breaks for child-rearing and/or prisoners.

Although we know that Canadian organizations and employers are investigating or already involved in PLAR, we lack information on the scope of their involvement on a nation-wide basis. Further, much of the available research is concerned with establishing a need for PLAR in a particular occupational area. Therefore, we do not have solid research that demonstrates what approaches to PLAR have been adopted, the nature of assessment methods being used, quality assurance practices, articulation arrangements with colleges and universities, real costs of workplace PLAR, and outcomes for both workers and employers.

What are the most profitable lines of inquiry in the area?

Research on PLAR and work should focus on two areas. First, a survey of workplace PLAR activity levels in different occupational fields, possibly working through sector councils, would be very informative. A survey of Human Resource professionals to determine their awareness of and involvement in PLAR would also be beneficial. Second, we need solid case study research to provide exemplars on the process and costs/benefits of workplace PLAR. Research on labour-management partnerships for implementing workplace PLAR would be of particular interest.

PLAR and Diversity: Research Directions

What generalizations may be reliably drawn from the empirical evidence in the area?

Empirical evidence has demonstrated that immigrants have much to gain from PLAR but are largely unaware of the process or how to access it. We also know that

Aboriginal students are underrepresented among PLAR users in mainstream community colleges. We know that Aboriginal educational institutions and organizations are active in PLAR, but we do not have details of the volume of that activity or its effect. We also have empirical evidence from Australia, but not from Canada, that Aboriginal learners benefit from culturally appropriate approaches to PLAR.

What are the major gaps in knowledge about the area?

We know almost nothing about PLAR services available to diverse learners at universities, or how aware personnel in service centres for diverse students in universities are about PLAR.

Other major gaps in our knowledge are being addressed by on-going projects, such as the Gateways project at Athabasca University, which will provide information on Aboriginal learners and university-level PLAR in the Human Services field, and the *Colleges Integrating Immigrants to Employment (CIITE) Project* in Ontario, which may similarly expand our knowledge base about immigrants and community colleges in that province. Various e-portfolio projects currently in progress may also give us further information about PLAR and immigrants.

What are the most profitable lines of inquiry in the area?

A much-needed line of inquiry is the experience of diverse learners with PLAR at Canadian universities. Because of the research activity currently occurring in the area of PLAR and diversity, it would otherwise be profitable to wait until these results are available before initiating new research.

Recommended Research Priorities

All of the lines of inquiry outlined above would be profitable ones for advancing our knowledge of PLAR and its' relation to adult and workplace learning. If resource constraints, however, preclude offering support for all of the needed research, CCL's top would need to establish priorities for research. After considering research already conducted and/or currently being conducted in Canada, a number of areas with little or no recent research were identified. These include:

1. PLAR and Work: Focus on sound case study research that involves collaborations between employers, labour, and post-secondary institutions.

2. PLAR in universities: Focus on studies that explore learner experience with PLAR and academic outcomes, particularly those of diverse learners; studies that look at discipline-based communities of practice, including assessor training, assessment methods, and quality assurance concerns; and studies that investigate PLAR in relation to the broader field of the Scholarship of Teaching and Learning.

3. PLAR in secondary education: Focus on quality assurance issues (assessment methods, criteria) and occupational/educational outcomes for mature learners.

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