Canadian and World Research on Assessment Practices for Adult Learners

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Assessment practices for adult learners in Canada and abroad are as varied and unique as the learners themselves. Assessments serve various functions for multiple stakeholders, including learners, instructors, programs, community agencies, and funders.

Assessment is the process of documenting knowledge, skills, attitudes, and beliefs (American Educational Research Association, American Psychological Association, & National Council on Measurement in Education, 1999). There are two main types of assessment: summative and formative. Summative assessments are usually completed at the end of a course or program. Formative assessments are carried out throughout a course or program in order to identify needs and inform teaching (Looney, 2008). The focus of formative assessment is on the process of learning as well as the outcomes (Looney). A common type of formative assessment is a diagnostic assessment, which measures learners' current knowledge and skills in order to identify a training plan. Performance-based assessment is similar to formative assessment as it also focuses on achievement. These types of assessment usually use standard-based scales which identify whether learners are meeting, falling below, or exceeding a performance standard (American Educational Research Association, American Psychological Association, & National Council of Measurement in Education).

Assessment can either be objective, where there is a single correct answer (such as true/false or multiple choice questions), or subjective, where there could be more than one correct answer (such as extended-response questions and essays) (American Educational Research Association, American Psychological Association, & National Council on Measurement in Education, 1999).

There are generally two ways to compare assessments: criterion referenced and norm-referenced. These are usually standardized tests. A standardized test is administered and scored according to specific instructions and has information regarding its reliability and validity (that being that the assessment consistently achieves the same results with the same cohort and it measures what it is intended to measure respectively) (Sticht, 1999). Norm-referenced tests relate the scores in reference to the scores of other people who have taken the test. The results are interpreted by comparing scores to how well the referenced group normally performs on the test (Sticht). Criterion-referenced tests establish an absolute standard of performance. Learners are scored in relation to that standard (Sticht).

Assessments can either be formal or informal. Formal assessments usually result in a written document, such as a test or paper. These assessments are given a score or grade based on performance. Informal assessments are more casual and could include observation, inventories, checklists, rubrics, portfolios, peer and self evaluation, and discussion (American Educational Research

Association, American Psychological Association, & National Council in Measurement in Education, 1999).

There are several types of adult programming available where assessment plays a key role in identifying outcomes of learning and to identify if learners have acquired certain skills and competencies (Black, 2002). These include the following types of programs: literacy upgrading; English as a Second Language (ESL); high school completion or equivalent - credits, General Educational Development (GED), or Academic and Career Entrance (ACE)/Academic Upgrading (AU); post-secondary, apprenticeship, pre-employment, and workplace-based programs.

Assessment Practices in Adult Literacy and Upgrading Classes

As defined in the International Adult Literacy Survey (IALS, Statistics Canada, 1994)/International Adult Literacy and Skills Survey (IALLS, Statistics Canada, 2003), literacy is the ability to understand and employ printed material in daily activities at home, at work, and in the community. This ability helps people achieve goals and develop knowledge and potential. Literacy is the continuum of interrelated skills, practices, and learning that contribute to an individual's ability to understand and communicate (Saskatchewan Literacy Network and Saskatchewan Advanced Education and Employment, 2006). Literacy includes: listening and speaking, reading and writing, observing,

viewing and representing, spelling, numeracy, and the use of technology.

Literacy skills influence learners' ability to think critically, make decisions, solve problems, and resolve conflicts (Saskatchewan Literacy Network and Saskatchewan Advanced Education and Employment).

Canadian Literacy Assessment Practices

There are a plethora of assessment types and models utilized for this population.

The Essential Skills (ES) is a skills framework developed as a result of the Essential Skills Research Project in the early 1990's by Human Resources and Skills Development Canada (HRSDC). Essential Skills are the skills needed to carry out a variety of everyday life and work tasks (HRSDC, 2005). Essential skills help people perform the tasks required by their occupation and other activities of daily life. They also provide people with a foundation to learn other skills and enhance a person's ability to adapt to change. There are nine essential skills: reading text, document use, writing, numeracy, oral communication, thinking skills, working with others, computer use, and continuous learning. The Essential Skills framework defines these skills using a 5-point complexity scale (or in some cases 1 to 4), in line with the IALS levels (1-4).

A number of assessments have been developed using the Essential Skills framework that could be or are being used in literacy and upgrading programs.

Those include: Prose Document Quantitative (PDQ), Common Assessment of Essential Skills (CAES) – formally Common Assessment of Basic Skills (CABS), Communications and Math Employment Readiness Assessment (CAMERA), and the Test of Workplace Essential Skills (TOWES).

PDQ was the assessment developed for use in the International Adult Literacy Survey (1994) and later the International Adult Literacy and Life Skills Survey (2003). The original assessment was composed of test questions designed to measure three sets of skills: prose (the skills needed to use information from texts), document (the skills required to locate and use information in various formats), and quantitative (the skills required to perform arithmetic operations) (Ministry of Education and Training, 1998). Assessment results were reported in 5 levels for each domain or scale. For each domain, proficiency is denoted on a scale from 0 to 500 (Statistics Canada and Organization for Economic and Community Development, 2005). Cut scores are as follows: level 1 = 1-225, level 2 = 226-275, level 3 = 276-325, level 4 = 326-375, and level 5 = 376-500 (Ministry of Education and Training, 1998). The Adult Literacy and Life Skills Survey (Statistics Canada and Organization for Economic and Community Development, 2005) employed a similar assessment but changed the quantitative scale to numeracy and added a problem solving domain which involved assessing goal-directed thinking and actions in situations where no typical solution procedure is defined. Problem solving is assessed on a scale from 1 to 4 (level 1 = 0-250, level 2 = 251-300, level 3 = 301-350, and level 4 = 351-500). In

both studies, assessments were administered in homes. Respondents first participated in an interview about their history and then asked to complete a booklet containing 6 tasks. Respondents that were able to complete at least 2 of these tasks were given a wide variety of tasks to complete for further analysis. This assessment was not timed to give respondents maximum opportunity to demonstrate their skills (Statistics Canada and Organization for Economic and Community Development, 2005).

Common Assessment of Basic Skills (CABS) was created in 1995 by Literacy Link Eastern Ontario. CABS was designed to identify learners' initial abilities and gaps, inform training plan development, facilitate appropriate referrals to literacy programs or other agencies, eliminate duplication of services, and prepare learners for educational opportunities. This assessment uses learning outcomes demonstrations (real-life activities related to learner goals) to assess Literacy and Basic Skills (LBS) levels (Lee & Strohmaier, 2001). LBS levels were created by the Ministry of Training, Colleges, and Universities in Ontario to assess adult skill levels below the high school level (approximately grades 1-9). There are 5 LBS levels for reading, writing, speaking and listening, numeracy, and computers (Lee & Strohmaier). The Common Assessment of Essential Skills (CAES) was developed to assist practitioners to tie the LBS levels to Essential Skills. Currently, in the project phase, this assessment articulates the CABS demonstration activities to the Essential Skills levels for reading, document use, and numeracy.

Communications and Math Employment Readiness Assessment (CAMERA) is part of a workforce literacy system that contains a set of standardized tests using workplace tasks to inform instructors and learners about placement level, skill gaps, areas of proficiency, and employment readiness. The purpose of CAMERA is to make programming more relevant for employment-bound learners and to better prepare learners going directly to employment. The CAMERA has 3 stages that relate both to Essential Skills levels (1-3), and also to the Literacy and Basic Skills (LBS) levels (1-5) (Preparatory Training Programs of Toronto, 2004).

Test of Workplace Essential Skills (TOWES) is a competency-based assessment tool that uses workplace documents to measure reading text, document use, and numeracy skill levels. It can be used by instructors, trainers, and literacy tutors to place learners into programs, or design programs to meet individual educational needs (Bow Valley College, 2008).

Drawing in part from the Essential Skills framework mentioned above,
The Saskatchewan Adult Literacy Benchmarks were created by the
Saskatchewan Literacy Network and Saskatchewan Advanced Education and
Employment in 2006. The Literacy Benchmarks are specific points of reference
for evaluation and comparison based on the Circle of Learning outcomes:
interpersonal, communication, numeracy, and lifelong learning. In this model,
authentic assessment techniques are used where learners are asked to perform

real-life tasks (Saskatchewan Literacy Network and Saskatchewan Advanced Education and Employment).

Other standardized tests are also employed with adult literacy learners, namely the Canadian Adult Achievement Test (CAAT) and the Canadian Adult Reading Assessment (CARA) (Campbell, 2006). The CAAT measures current functional levels in math, reading, and language. It consists of nine sub-tests. There are 4 levels of CAAT which correspond to years of education. This test is both norm-referenced and content-referenced. CAAT provides grade equivalency and stanine scores. In a study of the use of assessment tools in Canada, the CAAT was ranked as the most frequently used standardized assessment (Campbell, 2006). This test is easy to administer and cost effective because it can be administered in a group. However, due to the nature of standardized tests it could be intimidating, especially to low level learners (Campbell, 2006).

The Canadian Adult Reading Assessment (CARA) is an assessment package that results in information about how learners read. More specifically, it identifies four types of reading patterns: print based, meaning-based, integrative, and non-integrative (NWT Literacy Council, 2004). The CARA levels are correlated with the adult literacy and adult basic education programs offered through each province and territory (Campbell, 2006). In the study of the use of assessment tools in Canada it was reported that the CARA is the most frequently used diagnostic assessment across delivery agencies (Campbell, 2006).

Authentic assessments are used informally in adult basic education classrooms. The assessment tasks reflect skills that are used at home, in school, at work, and in the community. These tools are usually developed by practitioners for initial, ongoing, and exit assessments. Authentic assessments usually occur during regular programming. This allows instructors to provide the learners with immediate feedback (Campbell, 2006). Examples of authentic assessment techniques include: checklists, portfolios, journals, instructor/learner conferences, and learner contracts (NWT Literacy Council, 2004). Authentic assessments can be customized to meet the needs of specific programs or learners, and can reflect learning outcomes and/or course content. However, a concern with this type of assessment is that it is usually not recognized by other institutions and they can be quite time consuming to develop (Campbell, 2006).

Other informal assessment tools include: learner progress logs, learner self-assessments, group projects, presentations, peer evaluation, simulations, observations (NWT Literacy Council, 2004), life-skills demonstrations, exercises and workbooks, writing samples, and reflection sheets (Saskatchewan Literacy Network, 2000).

Portfolios are also used to give literacy practitioners a meaningful way to showcase student success. The portfolio process collects meaningful information to identify if learning objectives have been met (MacDonald, 2002). Portfolios could include checklists, rubrics, learner self-assessments, goal-setting charts, and samples of work to highlight the attainment of learner goals and the

benchmarks that they have achieved (Saskatchewan Literacy Network and Saskatchewan Advanced Education and Employment, 2006).

Similar to the idea of a portfolio is an Electronic Learning Record (ELR) which is a digitally stored inventory of skills and knowledge gained through either formal or informal learning (Barker, 2000). A learning record is a tool that allows learners to express their learning in a standardized and credible way to a wide variety of stakeholders for personal, economic, and education and training development (Barker, 2000).

PLAR (Prior Learning Assessment and Recognition) is also used in upgrading classes. The Canadian Association for Prior Learning Assessment defines PLAR as the systematic process that identifies, documents, assesses, and recognizes learning. This learning is acquired both through formal and informal studies, including work and life experience, training, independent study, volunteer work, travel, hobbies and family experiences (New Brunswick, 2002). There is some evidence that PLAR is being used in literacy programs. In the Circle of Learning project, prior learning is assessed and demonstrated and, based on this information; learning outcomes are selected in order to achieve a particular goal (Saskatchewan Literacy Network and Saskatchewan Advanced Education and Employment, 2006).

The international study, "Teaching, Learning, and Assessment for Adults - Improving Foundation Skills" (Looney, 2008) focused on formative assessment techniques within adult language, literacy and numeracy (LLN) classrooms. Nine countries participated including Australia, Belgium, Denmark, England, New Zealand, Norway, Scotland, Spain, and the United States. The interest in formative assessment stems from a 1998 study that described the achievement gains with formative assessment as among the largest ever reported for educational interventions (Black and William, 1998). Instructors used formative assessment as a deliberate strategy for identifying the needs of individual learners and tailoring teaching to suit them. Both formal and informal assessment methods were used including standardized diagnostic tests, checklists, portfolios, self-assessment, peer-assessment, dialogue (feedback, questioning, and scaffolding), and recognition of prior learning. Informal formative assessment practices were seen as more appropriate for learners with a history of negative school experiences. From the case studies it was reported that formative assessment procedures had improved teaching and learning, including increased learner self-efficacy, and improved rates of persistence (Looney).

In the United States, Equipped for the Future (EFF) is a standards-based system reform initiative that seeks to improve the quality and outcomes of the adult literacy and lifelong learning delivery system (Ananda, 2000). This

initiative recommends using performance-based assessment that requires the learner to complete cognitively demanding, hands-on activities (Ananda). Examples of performance-based assessment methods are written scenarios, project assessments, and portfolio assessments. A written scenario is a type of on-demand writing that requires learners to respond in writing to an assessment prompt and complete the task within a relatively short time frame. A project assessment is an in-depth, hands-on exploration of a topic, theme, idea, or activity that results in a product, performance, or event. Portfolio assessments, mentioned above, involve a structured collection of learner work that documents the application of knowledge and skill in a variety of authentic contexts. These methods - in combination - speak to a comprehensive assessment system which results in a valid picture of learner achievement related to real-world outcomes. These assessments are also valuable as they are intrinsically motivating because they emphasize the relevance of the learning content for the learner (Ananda).

The EFF, however, does advocate for a range of assessment instruments that include both standardized and performance-based tests. Examples of standardized tests used are the Adult Basic Learning Examination (ABLE), the Comprehensive Adult Student Assessment System (CASAS), and the Test of Adult Basic Education (TABE) (Ananda, 2000). The ABLE measures several basic education skills of adults including vocabulary, reading comprehension, spelling, language, number operations, and quantitative problem solving. There are 3 levels of the test that correspond with grades 1-4, 5-8, and 9-12 respectively

(Sticht, 1999). The CASAS assesses a learner's ability to apply basic listening, reading, and math skills to common, everyday situations. There are 4 levels of the test for developmentally delayed, normal beginning, intermediate, and moderately advanced learners respectively (Sticht). The TABE measures reading, writing, and math achievement. There are 7 sections that measure vocabulary, reading comprehension, language mechanics, language expression, spelling, mathematical calculation, and mathematical concepts/applications. There are 4 levels for grades 2-4, 4-6, 6-8, and 8-12 respectively (Sticht).

These tests are used to determine if adult programs are achieving certain goals or mandates. They are also used to determine if learners have met an external criterion for performance (Ananda, 2000).

England has national qualification exams that include literacy qualifications. The National Qualifications Framework (NQF) was created by the Qualifications and Curriculum Authority (QCA) to more precisely recognize levels of qualifications. Entry level examinations result in a certificate in life skills and in skills for working life. Exams are based on 'functional skills' which they define as practical skills in English, mathematics, and information technology that assist learners to get the most out of work, education, and everyday life (QCA, 2008).

Scotland and Australia have similar infrastructures. The Scottish Credit and Qualification Framework (SCQF) sets out twelve levels of qualifications, ranging from access learning (literacy level 1) to core skills (level 2), to doctorates

(level 12). Official curricula provide the frameworks for instruction and learning (Looney, 2008). In Australia, certificates are designed for adults who have left school early and need to improve their literacy, basic math, and general education skills. These courses result in a Certificate in General Education for Adults (Certificate 1 - Foundation, Certificate II or Certificate II - further study) (National Language and Literacy Institute of Australia, 1996).

Conclusion

Assessment practices in adult literacy and upgrading classes are varied and include formal standardized assessments as well as informal activity-based assessments. The research does not suggest one over the other, but rather a combination of tools to gather accurate and complete information about adult literacy learners and their progress.

Assessment Practices for Immigrants

Two issues emerge when discussing assessment practices for immigrants to Canada: English as a Second Language (ESL) assessment, and assessment of foreign credentials and accreditation.

The Centre for Canadian Language Benchmarks (CCLB) has established and maintains standards that govern a comprehensive national CLB assessment system for use in adult ESL classes (CCLB, 2007). Assessment centres are located in every province of Canada. These centres employ certified CLB assessors to administer the Canadian Language Benchmarks Assessment, the Canadian Language Benchmarks Placement Test, and the Canadian Language Benchmarks Literacy Assessment. The CLB assessors test learners' language skills and recommend placement in an ESL program that suits their needs (CCLB).

The Canadian Language Benchmarks are the national standard used for describing, measuring and recognizing the second language proficiency of adult immigrants for living and working in Canada. The CCLB contends that the Canadian Language Benchmarks are a practical, fair and reliable national standard of second language skills. The CLB cover four skill areas: reading, writing, speaking, and listening and range in complexity from level 1 to level 12. The assessment uses real-life language tasks to measure language skills (CCLB, 2007).

In England, examinations are developed by external providers. These institutions also administer and score the tests. English language learners demonstrate listening and speaking skills through structured dialogues assessed by a trained evaluator, either in person or on audio tape. These tests are criterion-referenced (Looney, 2008).

In the United States, standardized or commercially available tests such as the Basic English Skills Test (BEST), Comprehensive Adult Survey Achievement System (CASAS) (described above), English as a Second Language Oral Assessment (ESLOA), and the Basic Inventory of Natural Language (BINL) are often used in adult ESL programs to identify English language proficiency (Centre of Applied Linguistics, 1998). The BEST assesses speaking, listening, reading, and writing of low-proficiency non-native English speakers (Sticht, 1999). There are two sections: an oral interview and a literacy skills assessment. There is only one level of this test (Sticht). The ESLOA is used to effectively measure the ability of non-native English speakers to understand and speak English. The tests have 4 levels that get progressively more difficult. The learner must respond orally (Sticht). The BINL is a measure of oral proficiency in thirtytwo languages. It can be used for placement in appropriate programs. The test uses photographic posters to illicit oral responses. Testing is done individually

and takes approximately 10 minutes. Scores are related to grade levels from kindergarten to Grade 12 (ERIC, n.d.).

However, there is no generally accepted definition of proficiency of English in the United States. There are no guidelines for speaking, listening, reading, and writing for adult ESL programs for comparative purposes. Many adult ESL programs use a combination of standardized and more informal program-developed tools to assess learner progress, including portfolios, checklists, interviews, observations, and performance-based tests (Centre for Applied Linguistics, 1998).

Assessment Practices Related to Accreditation

In the paper entitled, "Government Policy on Adult Education and Continuing Education and Training" (Government of Quebec, 2002), it is stated that the situation of immigrants around education should be stressed because their social integration and job entry depends on the full recognition of their prior learning and competencies by the education system, and also from professional associations and the workplace. Too often immigrants are not recognized for their prior learning or credentials. This necessitates practicing trades well below their real competencies. This population does, however, need access to training that would address the Canadian context of their profession – laws, regulations, technologies, etc. (Government of Quebec).

Canadian employers use a wide variety of approaches to assess the credentials of foreign-trained candidates (Sangster, 2001). These differences in approaches reflect the occupation being sought (Sangster). In a study focused on employer assessment practices of foreign credentials, employers recruiting in professions which require formal certification had the clearest education recognition requirements. In other occupations, however, employer practice varied widely. Some employers took credentials at face value, where others sought out a credential assessment service (usually contained within universities or provincially mandated credential assessment agencies). Others still consulted with informal networks from specific countries to get information around the granting institutions of other countries (Sangster).

However, a number of employers used a competency-based assessment process that acknowledged that relevant experience was valued over paper credentials and regularly required an on-the-job demonstration of skills and competence (Sangster, 2001). Some employers have developed occupational standards so that all potential employees can be assessed in a transparent manner. The principles of PLAR were used in these approaches (Sangster).

In "Moving Forward: A Strategy for the Integration of Internationally Trained Workers in Ottawa" (Internationally Trained Workers Project, 2004), several recommendations were made around the issue of accreditation including the development of a easy-to-understand flowchart of the accreditation process. Also mentioned was the need for a 1-800 number that is widely known to get

information and a more widespread use of Prior Learning Assessment and Recognition. It was also recommended that Human Resources and Skills Development Canada work with accrediting bodies to improve recognition. It was suggested that competency-based tools need to be developed and work needs to be done with the provincial bodies in order to develop pathways for mutual recognition which could allow assessments to become portable across sectors (Internationally Trained Workers Project).

Assessment Practices for Secondary School Completion

In Canada, there are several ways in which to complete secondary education. Those being: complete a Grade 12 diploma, complete the GED (General Educational Development), or complete Academic and Career Entrance (ACE) or Academic Upgrading (AU) through a community college (Ontario).

Grade 12 Assessment Practices

In a study of Canadian assessment practices it was noted that creditgranting institutions (such as community colleges, school boards, and learning centres) prefer standardized tests over diagnostic tests (Campbell, 2006). Approximately 1 in 5 respondents in the study who worked in a credit-granting institution reported that they used competency-based assessments (Campbell).

In Ontario, the Ministry of Education approved the use of PLAR in May of 2003 for use with mature students. PLAR is used as the formal evaluation and credit-granting process where learners can obtain credits for prior learning. Prior learning includes the knowledge and skills that learners have acquired in both formal and informal ways (as discussed above). Learners can have their knowledge and skills evaluated against curriculum expectations to earn credits towards a secondary school diploma (Ministry of Education, 2003).

The PLAR process for mature students involves 2 components: equivalency and challenge. The equivalency process involves an individual assessment in order to grant Grade 9 and 10 credits or to assess other credentials in order to grant Grade 11 or 12 credits. The challenge process is the process where learners' prior learning is assessed in order to grant Grade 11 and 12 credits. All credits granted through the PLAR process must represent the same standards as credits granted to learners who have taken the courses (Ministry of Education, 2003).

Boeing Canada, an aviation manufacturing company in Western Canada, offers their employees courses to obtain their Mature Student Diploma. Here they use the PLAR process to assess prior learning to determine which credits are still needed in order to complete the requirement. The PLAR process includes: reviewing the learner's resume and training records, interviewing the learner

around prior knowledge and how they might satisfy course outcomes (WWestnet, 2006).

Through the Boeing Canada Mature Student Diploma, immigrant candidates are eligible to write a special language exam for Grade 12 credit. The province of Manitoba provides this opportunity to anyone who speaks 1 or more of sixty-nine different languages (WWestnet, 2006).

More informally, in Saskatchewan through a literacy-to-credit bridging program, learners can use their portfolios to earn credit for prior learning (Saskatchewan Literacy Network and Saskatchewan Advanced Education and Employment, 2006).

General Educational Development (GED) Assessment Practices

The General Educational Development (GED) is a norm-referenced, international testing program for adults who have not completed high school. GED tests are available in all Canadian provinces and territories, as well as the United States and several other countries (Independent Learning Centre - ILC, 2008). In an international study of assessment practices it was noted that the GED is increasingly being used as a stepping stone into enrollment into post-secondary studies (Looney, 2008). The GED tests measure knowledge and academic skills against traditional high school graduates (American Council on Education, 2008). The GED tests measure the level of educational maturity

gained through experience, which is often equal to (or above), the level of a high school graduate (ILC, 2008).

There are 5 tests in the GED that cover the core high school curriculum areas: reading, writing, mathematics, social studies, and science. The tests measure the ability to understand and apply information; the ability to evaluate, analyze, and draw conclusions; and the ability to express ideas and opinions in writing. Multiple choice tests are used for each of the tests, however, the writing test includes an essay component (ILC, 2008).

GED Official Practice Tests are available to help learners determine whether or not they are ready to write the test, and what areas still need improvement. The practice tests cover all areas of the GED, but are only about half as long as the actual tests. There is only one level of the practice test, but various forms are used depending on which country they are used in (Sticht, 1999).

Academic and Career Entrance (ACE)/Academic Upgrading (AU) Assessment Practices

Academic and Career Entrance (ACE)/Academic Upgrading (AU) (terms used synonymously) is an adult upgrading certificate program delivered in all community colleges in Ontario. It has been provincially developed and is a recognized credential for high school equivalency. This credential is for adults seeking admission to a college program or apprenticeship who did not receive

their OSSD (Ontario Secondary School Diploma) or have an OSSD but they are missing the courses required for admission. There is an assessment completed at intake which determines the courses required based learner goals. The time required to complete this course is dependent on participants' previous education and skills (usually 6-9 months). The outcome is a college certificate recognized as an equivalent to the OSSD by colleges (College Sector Committee for Adult Upgrading, n.d.).

Within the program there are guidelines for the assessment of ongoing assignments and demonstrations. A 4-point evaluation scale is used as an assessment tool/rubric to assess learner demonstrations. It lists performance indicators for the learner's reference (Goforth Consulting, 2005).

Secondary School Assessment Practices Abroad

Programs offering primary or secondary school certification in the international study of assessment (Looney, 2008) are much more formal than community-based programs. There is usually official curriculum and time tables. Summative assessments are employed and there are stricter requirements for accountability. Instructors in these programs often have to balance learner goals with the needs of the formal curriculum and certification requirements (Looney, 2008).

Assessment Practices in Post-Secondary Education

Aside from standard entrance criteria procedures, Prior Learning

Assessment and Recognition (PLAR) is used both in Canada and abroad in order
to identify relevant experience towards post-secondary credit. In a New

Brunswick policy statement on adult and lifelong learning it was forecasted that
PLAR will increase in post-secondary institutions and will increase the number
of recognized credit transfers among institutions (New Brunswick, 2002). This
report suggests that access to, and progress within, post-secondary education
and training programs can be enhanced by the effective use of prior learning
assessment and recognition methodologies. PLAR can facilitate program entry
for individuals who lack formal credentials but have the capabilities to succeed
in post-secondary programs. This report advocates for a centralized approach to
PLAR to facilitate seamless transitions between institutions (New Brunswick).

The Canadian Steel Trade and Employment Congress (CSTEC) use PLAR to assess prior formal education, training, work and life experience to grant credit equivalencies when enrolling in college programs (Network to New Approaches to Lifelong Learning - NALL, n.d., d). Similarly, James Madison University in the United States uses experiential learning portfolios to assess prior learning (NALL, n.d., c). Knightsbridge University in the United Kingdom also utilizes an Assessment of Prior Learning (APL) system in order to grant points towards degree requirements (NALL, n.d., b).

The use of standardized tests for college entrance has also been noted in the United States. Most community colleges test students as part of their admissions process, regardless of whether they have a Grade 12 diploma or GED. Most colleges use commercially designed tests specifically designed for post-secondary placement such as the ACCUPLACER, ASSET, and COMPASS. The ACCUPLACER assesses math, English, and reading skills to determine appropriate course selection. The ASSET is a testing and advising program for post-secondary placement and the COMPASS is a computer-adaptive college placement test that evaluates reading, writing, essay writing, math, and ESL skills for placement purposes. Results from these tests help college advisors locate where learners might make a successful start in courses offered. Learners who place below the skill level needed for entrance are referred to developmental or remedial education (Zafft, Kallenbach, & Spohn, 2006).

As mentioned earlier, a number of countries (for example, England, Scotland, and Australia) have national qualification exams at various educational levels, ranging from literacy to doctorial studies. In England, the National Qualifications Framework has 5 levels ranging from entry level (life and working skills) to professional diplomas, certificates, and awards. This system connects with the Framework for Higher Education Qualifications ranging from certificates to doctorates (Qualification and Curriculum Authority, 2008).

Assessment Practices in Apprenticeship Training

Apprenticeship training is a way to gain skills for a specific type of occupation in the skilled trades. This type of learning combines on-the-job experience with technical training. A certified journeyperson trains the apprentices. During the apprenticeship the apprentices also attend classes for theory (Community Employment Resource Centre, n.d.).

In Ontario, in order to become employed in certain skilled trades, workers must complete a Certification of Qualification. This certification states that they have passed the provincial qualification exam that assesses their knowledge in their trade. To write this test, applicants must prove that they have experience in that particular trade (i.e., completion of an apprenticeship contract, documentation showing that training time meets industry standards, or proof of sufficient experience as a skilled worker). When the Certification of Qualification has been completed, the apprentice receives a Certificate of Apprenticeship (Ministry of Training, Colleges, and Universities, 2008).

The EARAT (Evaluating Academic Readiness for Apprenticeship

Training) is an assessment that was designed to determine whether an apprentice has all of the appropriate skills (i.e., math, communications, and sciences) needed for the in-school portion of the training. This assessment can be used during an apprenticeship selection process. The staff of the Ministry of Training, Colleges, and Universities usually administers the assessments. A

person can ask for an EARAT assessment by requesting it from a training consultant at the Workplace Support Services Branch once they have decided on a specific trade. The assessment report categorizes the results of each skill area using the following scale: knowledge demonstrated, partial knowledge, and apparent difficulty. The assessment does not result in a pass or fail, but rather what – if any – skills need to be improved (Community Employment Resource Centre, 2008).

The Red Seal Program was established in 1958 in order to provide greater mobility across Canada for certified journeypersons. Once certified, qualified trades people are able to practice their trade in any province or territory in Canada without having to write additional exams. The Red Seal is noted on the Certification of Qualification and Apprenticeship. The Red Seal designation can be obtained by graduating from a recognized apprenticeship training program or obtaining a journeyperson-level certificate. A Red Seal designation can also be obtained by passing the Inter-provincial Standards Exam for a specific trade. A National Occupational Analysis (NOA) has been developed for each Red Seal trade and is used as a base document for the development of inter-provincial standard examinations (Community Employment Resource Centre, 2008).

In non-compulsory trades, employers can hire individuals without certification, although they usually require certificates of technical training.

Increasingly, PLAR-based approaches have become among the most effective practices for assessment (Sangster, 2001). In Prince Edward Island, the

apprenticeship training program is developing a PLAR strategy for trade qualifiers (4th Atlantic Region Workplace/Workforce Institute, 2003). New Brunswick is also using PLAR to help individuals gain quicker access to apprenticeship training and to potentially reduce training times (New Brunswick, 2002).

PLAR is also being utilized as an international assessment practice of trade skills. The National Office of Overseas Skills and Recognition (NOOSR) in Australia provides a trade skills assessment service to those from any country outside of Australia who are considering migration. They use a portfolio style assessment of the training, experience, and competencies of prospective migrants (NALL, n.d., a).

Pre-Employment Assessment Practices

In a study involving a workers-in-transition program it was found that portfolio development and workshops helped participants assess and identify their occupational skills, their transferable skills, their Essential Skills, and how these linked to the job market and potential occupations (The Centre for Education and Work, 2006). Participants stated that developing a portfolio was helpful in the job application and search process because it helped them to clarify job interests and define an employment focus. It was also reported that the portfolio assisted candidates to prepare for and conduct job interviews and it

also increased participants' confidence in work skills and experience levels. This process seemed to help participants create a stronger understanding of whether their skills matched employer expectations and helped them apply transferable and occupational skills to a wider range of jobs. It was noted that developing a portfolio can help overcome a lack of formal credentials for some jobs. It also can help identify the need for additional education or training (The Centre for Education and Work, 2006).

The Career Preparation Assessment (CPA), used in the United States, is another example of portfolio development. This assessment method was originally designed for high school students to be used with a number of instructors and subject areas to demonstrate mastery of both the Career Preparation Standards - a series of generic workplace readiness skills which include personal skills, interpersonal skills, thinking and problem solving, communication, employment literacy, and technology literacy - and academic standards. The portfolio includes multiple entries in order to provide learners with a variety of ways to demonstrate expected performance (Ananda, 2000). To be included in this portfolio is a personal statement of goals, a resume, a completed job application form or an application to further education, a letter of recommendation, two work samples, a writing sample, and an evaluation of interpersonal skills. Although the CPA was designed for high school students it has clear relevance for adult learners (Ananda, 2000). Career Passports are also

used that contain formal documents that identify and describe a learner's marketable skills for potential employers (Ananda, 2000).

There are also portfolios and other tools that individuals can use online – an Electronic Learning Record (Barker, 2000). ESPORT (Essential Skills Passport) is a basic skills assessment and planning tool that helps people prepare for entry level occupations. Contained within the site is an interest inventory, a self-assessment, an occupation search, a portfolio builder, and a learning plan creation tool (Essential Skills Porfolio, n.d.). Similar to this is SkillPlan's "How do you measure up?" website which gives individuals an opportunity to practice Essential Skills needed in all occupations. Assessments are offered in reading text, document use, and numeracy. This tool can be used as a study tool for the Test of Workplace Essential Skills (TOWES) assessment discussed earlier (SkillPlan, n.d.).

PLAR is also being used in this area. The government of New Brunswick supports the use of PLAR in its employment counseling agencies (New Brunswick, 2002). PLAR is seen as both time and resource efficient. By validating skills and comparing them to standards for training or jobs, PLAR can reduce the need for repeating courses or training. PLAR can provide a reliable means of matching skills to workplace needs to establish a basis for career development and planning (New Bruswick, 2002).

TOWES is also used as a pre-employment assessment, specifically through colleges. TOWES can assist college and employment preparation programs to

address Essential Skills and strive to ensure all prospective workers have the skills they need to succeed in the workforce (Glass, Kallio, & Goforth, 2007). For career counselors, TOWES can provide an accurate assessment of skills required by front line occupations (WWestnet, 2002). TOWES is also being used as a pretest in the Workplace Readiness Program (WRP) which assists transitioning workers by providing basic Essential Skills training and job exposure through work placements, as well as the Ready to Work tourist pre-employment program (WWestnet, 2006). TOWES is used to benchmark and upgrade participants' Essential Skills (WWestnet, 2005).

More formal ways of assessing pre-employment skills are found abroad. The Functional Skills assessment, offered as part of the National Qualifications Framework in England, is used with young people and adults who need to develop vital problem-solving skills in order to be well equipped for success in employment (Qualifications and Curriculum Authority, 2008). As well, in Germany, both quantitative and qualitative diagnostic tests are used. For example, DIA-TRAN measures existing competencies, potential, attitudes, and behaviours in order to give test takers a better idea of what they could do with their vocational future. KODE and KODEX, both online systems, evaluate basic competencies related to personal, activity-based, technical/ methodical, and social and communicative competencies. These assessments are widely used in employment agencies across German-speaking countries. Trainers and/or

counselors need a license to administer these tests. These tests act as tools to help users to reflect on their competencies and learning needs (Looney, 2008).

Assessment Practices in Workplace-Based Education

In a study about assessment in adult basic education it was noted that workplaces tend to develop contextualized performance-based assessments that assess the Essential Skills used in the workplace or specific occupation. This process is typically informal and may be carried out in an interview and a range of activities where learners are able to self-assess and choose activities that they are comfortable with. The assessment results are used to customize training programs for the participants (Campbell, 2006).

Competency-based assessments are also used to measure skills and knowledge as they relate to predetermined competencies (Campbell, 2006).

Types of assessments used are portfolio assessments with custom-designed activities that are work-specific as well as general activities. Questionnaires and interviews are used to gather data about skill improvements and get feedback about instructors, supervisors, union representatives, and managers (Kelly, n.d.).

The Saskatchewan Labour Force Development Board (2001) developed the Guide to Essential Workplace Skills to be used by employees to promote the use of self-assessment of the essential workplace skills needed to complete job duties.

This tool includes information about where to go for training, how to get support in the workplace, and how to use peer coaches.

Prior Learning Assessment and Recognition (PLAR) can also be used in the workplace environment. PLAR can be used to assess employees' (and potential employees') skills. PLAR is useful for individuals who lack formal credentials but who have acquired relevant knowledge and skills through informal learning and/or workplace experience. PLAR can help adults make a rapid and successful entry into the workforce (New Brunswick, 2002).

Standardized tests are also commonly used in workplace-based education programs. Among the most commonly employed are the Canadian Adult Achievement Test (CAAT), the Test of Adult Basic Education (TABE), and the Adult Basic Learning Examination (ABLE) (discussed above). These tests can be used to assess progress by comparing pre and post tests. The differences in the scores provide program evaluators with an indication of the effectiveness of the program (Kelly, n.d). Other standardized tests used in the workplace include: Work-Related Foundation Skills (WRFD), Test of Applied Literacy Skills (TALS), Basic English Skills Test (BEST) (described above), Measurement, Reading and Arithmetic, Wide Range Achievement Test 3 (WRAT3), and the Metric Skills Assessment (Taylor, 1997).

The WRFD is a series of norm-referenced tests designed to measure basic skills in reading, mathematics, and language. This assessment uses appropriate content and language to represent the workplace context and assesses skills and

individual needs required to function in the workplace. The WRFD has four forms: health, trade-technical, business-office, and general. This assessment evaluates reading, mathematical computation, applied mathematics, and language skills (Taylor, 1997). The TALS assessment measures prose, document, and quantitative literacy. Prose literacy tasks involve the knowledge and skills needed to understand and use information from texts. Document literacy tasks require knowledge and skills related to locating and using information contained in documents, and quantitative literacy focuses on arithmetic skills. Each of these tests estimate proficiency with materials encountered at work, at home, and in the community (Taylor, 1997). The Measurement, Reading, and Arithmetic assessment is a criterion-referenced test. Work-related tasks are used to assess measurement, reading, and arithmetic skills (Taylor, 1997). The WRAT3 is designed to measure the development of reading, spelling, and arithmetic skills in people ages 5-75. These tests helps to identify learning disabilities in reading, spelling, and arithmetic when used in combination with a test of general ability (Psychological Assessment Resources, Inc., 2005). The Metric Skills Assessment is a competency-based assessment designed to measure pre-developed metric learning experiences. This test can be used as a pre/post testing tool (Taylor, 1997).

Assessments have also been developed for employers. The Industrial
Workplace Reading Writing and Math Assessment was created by the Canadian
Manufacturers and Exporters. It was designed to assist employers in identifying

individuals who possess the skills required in entry level occupations. It can be used to identify applicants who possess the required Essential Skills, and those who may be suitable candidates with Essential Skills training. This assessment is targeted to the skill requirements of the manufacturing sector. The content is taken directly from the workplace. It assesses workplace skills as opposed to academic skills. Problem-solving skills are also addressed. This assessment allows employers to get a current snapshot of specific skills (WWestnet, 2002).

The Test of Workplace Essential Skills (TOWES) assessment can also be used by employers to determine training needs, to assess job applicants, and to assist with succession planning (WWestnet, 2002). For the employer, TOWES provides an objective measure of skills that relate to international standards. TOWES can be used to target the Essential Skills that should be included in training programs. It can also act as a pre and post test to measure learning gain, help employees move from one position to another by targeting the skills for advancement, assess worker abilities that do not have Canadian credentials, and help identify candidates for new positions (WWestnet, 2005).

Trends in Assessment Practices for Adults

As explored in this study, there are many ways in which to assess adult skill levels. Assessment practices are varied, and yet have several similarities across different program niches, those being literacy upgrading, English as a

Second Language (ESL); high school completion or equivalent; post-secondary, apprenticeship, pre-employment, and workplace-based programs. Throughout all of these niches there is a focus on assessing a common set of core skills, using both formal and informal assessment methods in combination, and, increasingly, Prior Learning Assessment and Recognition (PLAR) is used for assessment and accreditation purposes.

Common Assessment of Core Skills

There seems to be an assessment trend, both across Canada and abroad, that focuses assessment around a similar core set of skills. "While there is some variation in how countries define 'literacy', generally it refers to the ability to read, write, use numbers, interpret information, make decisions, and solve problems in personal, work, and community life. Several countries identify 'functional' literacies, or competencies, in each of these areas" (Looney, 2008, p. 31). The assessment frameworks have different names, for example, Essential Skills (HRSDC, 2005) in Canada, Literacy and Basic Skills (LBS) levels (Lee & Strohmaier, 2001) in Ontario, Equipped for the Future Content Standards in the United States (Ananda, 2000) or Functional Skills in England (QCA, 2008).

"Just as no single teaching strategy is effective for all learners in all situations, no single assessment instrument of process is adequate in providing quality information for all purposes" (Taylor, 1997, p. 1). The International Reading Association recommends that instructors use multiple measures of assessment (Campbell, 2006). Respondents to a study on assessment practices in adult basic education reported using a battery of both commercial and informal tools (Campbell). An international report on adult assessment practices suggests that there should be a wide range of assessment tasks that are grounded in context and are not culturally biased (Looney, 2008). The "Equipped for the Future" report (Ananda, 2000) contends that a comprehensive assessment system must include multiple assessment techniques.

In a study of workplace education programs it was reported that a combination of assessment practices be used in order to assess skill improvements of program participants (Kelly, n.d.). As well, many adult ESL programs use a combination of standardized and program-designed tools to assess learner progress (Centre for Applied Linguistics, 1998).

Current research shows that many adults do not have a full understanding of the range and depth of their skills and learning that they have acquired throughout their lives through life and work experience, as well as formal and informal education and training. PLAR is a process that would enable individuals to identify their strengths and gaps fully (New Brunswick, 2002).

In a paper entitled, "Building a Pan-Canadian Strategy on Literacy and Essential Skills" (ABC Canada, n.d.), it was recommended that Human Resources and Skills Development Canada should support and fund continued research, practice, and applications of PLAR in order to implement a model where it can be applied universally toward academic credit, training programs, or for certification. The Organization for Economic Cooperation and Development (OECD) has acknowledged PLAR as the most promising area of innovation as it is the achievement-based assessment of human capital (Barker, 2000).

Tools are being developed that centre around the PLAR process. For example, the concept of the Electronic Learning Record is imbedded in national and international work around PLAR. A learning record seems to be one logical outcome of the PLAR process as both PLAR and a learning record can be used for career planning and development purposes (Barker, 2000).

In relation to assessing foreign-credentials, specifically for uncertified occupations, PLAR-based approaches are becoming the most effective (Sanster, 2001).

General Recommendations for the Assessment of Adults

Adult learners are a unique population as they have had a wide variety of life experiences that shape who they are in the learning environment. Many have had negative past educational experiences and, therefore, it is important to discuss best practices around the assessment of adult learners. The field of adult education is also constantly changing so it is important to continue to develop appropriate and relevant assessment tools into the future.

Best Practices in Assessment

In order for learners and practitioners to get the most of out assessments and for learners to feel comfortable through the process the following assessment practices are recommended:

- Screening is embedded in conversation
- Learners are involved in designing assessment procedures and evaluate their own work
- Learners receive information on why and how they will be assessed
- Assessments are voluntary and kept confidential

- Assessments take place on intake, during the program, and on exit
- Assessments are linked to instruction and act as a guide for planning
- Assessments are flexible to adapt to different learning contexts
- Assessment tasks are clearly written in order to ensure understanding
- Assessment content revolves around the things that are important to adult roles as parents, citizens, and workers
- Assessment tasks are engaging, thought provoking, and motivating
- Assessments provide a range of tasks to accommodate learner differences
- Learners' prior learning is documented as part of the intake process
- Assessments identify any special learning needs
- Learning disabilities or other learning challenges are accommodated using any reasonable means
- Based on assessments, learner goals are reviewed and modified
- Learners receive immediate and meaningful feedback on a regular basis
- Scoring rubrics are developed to assist instructors to identify work that meets the performance expectations
- The outcomes of the assessments are clear and provide learners with copies of their progress

Assessments include information around the validity (that the
assessment measures what it is supposed to measure) and reliability
(that the assessment is consistent) of the tool

(Ananda, 2000; Looney, 2000; NWT Literacy Council, 2004; Saskatchewan Literacy Network, 2000)

Future Assessment Development

There is a need for new forms of assessment, recognition, management, and utilization of learning (Barker, 2000). Well-designed assessment tools and guidelines provide structure and help instructors to become more systematic in their teaching processes (Looney, 2008). In a review of Essential Skills within the Ontario college system it was stressed that there is a need for a more valid, reliable, and manageable approach to assessment. There is a need for a new assessment language that describes learning outcomes in terms of what learners will be able to do at the end of their training, describe learning gains in meaningful ways to key and various stakeholders, and clearly link skill levels to other models in use (Glass, Kallio, Goforth, 2007).

There is also a need for publicly available assessment tools to assist with the initial screening of learners and to measure their progress. These could be made available through libraries, health centres, etc., so that potential learners could access them confidentially. This could be one way to reduce the stigma attached to literacy upgrading programs (Ottawa, 2005). In addition, there is a need for workplace education materials that adapt workplace materials for use in essential workplace skills training (Curry, 2001).

Along with the development of new assessment tools is the need for practitioner training in order for the implementation of the tool to be successful (Ananda, 2000; Curry, 2001; Looney, 2008; MacDonald, 2002).

Adult learners are involved in diverse programs. However, current and emerging assessment practices for this group are similar and intertwined. Future research and development in this area should focus on further streamlining assessment processes in order for assessments to be portable across programs and services. The continuous study of assessment practices and assessment development is paramount to ongoing best practices in adult education in order to foster learner success.

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