Learner Skill Attainment

Framework

VALIDATION DRAFT

Prepared by: Goforth Consulting
Prepared for: College Sector Committee
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College Sector Committee
for Adult Upgrading

ACKNOWLEDGEMENTS

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[1] A list of key acronyms is provided in Appendix A

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Both assessment and accountability are evaluative activities, but whereas assessment looks at what and how much individuals learn, accountability is designed to ensure that programs are effective in supporting learning. In most practical cases it is difficult to separate assessment and accountability, since assessment of type and degree of learning provides the fundamental information used to assess the effectiveness of the system.

(St. Clair and Belzer, 2007, p. 159)

SUMMARY

January 2007 saw the beginning of an ambitious initiative for the literacy field in Ontario driven by two significant forces of change. The initiative involved the development of the Learner Skill Attainment Framework, designed in part to introduce greater consistency and transparency into current assessment approaches by incorporating the Human Resources and Social Development Canada (HRSDC) Essential Skills, but also to provide a comparable measure of accountability to three stakeholder groups including funders, service providers and learners. The forces of change were Employment Ontario, a new network model of integrated employment and training programs and services, and CIPMS, a performance management process based on a model of continuous improvement and commitment to efficient and effective use of resources.

Modest progress was made in developing the framework which is now acknowledged to be a large-scale, multi-year initiative. Several accomplishments can be attributed to the Framework Development Project Team and the many others who contributed in various ways to its development.

Accomplishments include

- identification of five distinct goal pathways
- primary research conducted for each path identifying skills and tasks required by learners for successful transition to their next steps
- an innovative assessment approach which links specific tasks to successful learner transition
- samples of "key transition tasks" for all five paths
- identification and exploration of valid, reliable instruments based on IALS/Essential Skills 500-point scale
- a long-term plan for the development of a valid assessment framework organized by learners' transition paths, incorporating Essential Skills and using valid, reliable tests

Other less tangible accomplishments include a stronger appreciation of the interconnectedness of assessment and accountability, and a greater understanding of the role of Essential Skills in the successful transition of learners to their next-step destinations.

The following report lays out why the Learner Skill Attainment Framework was needed, what the development process looked like, how well the process worked, what was accomplished and what needs to be done next. Narrative accounts are provided to capture the "flavour" of the process and highlight challenges the Project Team encountered.

BACKGROUND

The LBS Program provides literacy, numeracy and Essential Skills training to help individuals in Ontario achieve their goals. LBS provides a continuum of services to Grade 12 equivalency and ensures a choice of delivery options though colleges, school boards and community-based agencies. LBS is further committed to serving four streams of learners in Ontario: Anglophone, Francophone, Native and Deaf. New initiatives, which generally lead or accompany change, must take into account this multi-faceted and complex system, although this is not always easy to do.

The LSA initiative was funded by TCU in January 2007 to develop a framework for measuring learner skill attainment in three key areas of Essential Skills: Reading Text, Document Use and Numeracy. The framework would accommodate learners with diverse language and cultural needs, different goal destinations, and a wide range of skills and skills levels. The framework would reflect the learner-centred, goal-directed, outcome-based nature of LBS while balancing the need for valid, reliable and practical assessment practices.

The resulting framework would enable LBS and Academic Upgrading (AU) programs in Ontario to track learners' progress towards identified goals on a consistent scale in meaningful increments that relate to those goals. The framework would enable programs to more accurately demonstrate learner skill attainment and contribute to program effectiveness.

The need for an assessment framework had been established by a prior research project (Vubiz, Ltd., 2006) based on consultations with the field. The project concluded that a more transparent and consistent assessment approach was needed as LBS moves towards a broader, integrated system of employment and training services (Employment Ontario) governed by a more formal program quality assurance and accountability model (CIPMS).

EMPLOYMENT ONTARIO

In 2004, the Government of Ontario began a fundamental transformation of how TCU delivers training and employment programs in the province. The government is committed to developing a strong workforce in Ontario to ensure a competitive advantage in the knowledge economy. It will accomplish this through Employment Ontario, a comprehensive, integrated employment and training system.

Launched in January 2007, Employment Ontario was made possible by the signing of two important labour market agreements between the Ontario government and the federal government. They are the Canada-Ontario Labour Market Development Agreement

(LMDA), and the Canada-Ontario Labour Market Agreement (LMA). These agreements have resulted in more resources for skills training for the people of Ontario. The LMDA has included the transfer of federal government projects, programs and staff to the provincial government. The LMA will strengthen efforts to maintain a skilled workforce and target the rapid re-employment of unemployed Canadians and new Canadians who want to continue their careers in Ontario.

By 2009-10, both agreements will result in an investment of nearly $900 million per year in skills training in Ontario including apprenticeship, literacy and basic skills, bridge training for new Canadians, and initiatives to involve more Aboriginal people and people with disabilities in skills development programs.

> At a time when 70 percent of all new jobs require some form of postsecondary education, Employment Ontario is helping people get the skills they require and the jobs they want, and helping employers find the skilled workers they need. Employment Ontario offers job seekers, newcomers, apprentices, students, employers and communities a single point of access to Ontario's employment and training programs and services.
>
> (Employment Ontario Program Guide, 2007, p. 2)

Specifically, Employment Ontario will

- provide comprehensive employment and skills-related services to improve labour market outcomes for people in Ontario

- provide fair and convenient access to customer services in communities across Ontario including access by telephone and Internet

- provide individuals with information on the full array of services they need to achieve labour market goals

- provide flexible and innovative approaches to labour market and community needs through a broad range of services, including labour market information, job matching and employment counselling

- provide specialized assistance for individuals such as Aboriginal peoples, new immigrants, long-term unemployed, and older workers with particular barriers to training, employment and re-employment

- expand services to employers to help them find the people and skills they need and to encourage them to increase investment in skills development

- use an effective system for managing performance of the third party agencies delivering training and employment programs across Ontario

Employment Ontario includes all the programs under the Labour Market and Training Division of TCU, including the federal programs transferred to the province early in 2007.

Programs that provide services in the area of training and skills development include

- Literacy and Basic Skills
- Job Connect
- Apprenticeship
- Pre-Apprenticeship
- Ontario Youth Apprenticeship program
- Adjustment Advisory program
- Services for New Canadians

Employment Ontario includes programs related to labour market and community needs such as

- Summer Company program
- Local Training and Adjustment Boards
- Apprenticeship Training Tax Credit

Some of the new programs that were transferred to the province from HRSDC are more closely related to employment benefits, including

- Skills Development
- Targeted Wage Subsidies
- Self-Employment
- Job Creation Partnerships

Guiding Principles
Employment Ontario agencies need to ensure that their services are:

- accessible
- accountable
- client-centred
- flexible
- results-based

Finally, there are programs included under the Employment Ontario umbrella strictly through an information and referral role. For example, the Ontario Disability Support Program (ODSP) and Ontario Works, provide training and employment supports and benefits, but are funded by other ministries (Community Literacy of Ontario, 2007).

LBS within Employment Ontario

Although LBS programs are now formally part of Employment Ontario, the current policies and guidelines of the LBS program have not changed as a result. There are four main service categories with the system. These include services for apprenticeship, job seekers, employees and employers. LBS is listed under the first three categories. It is considered both an area of skills enhancement and on-the-job training/workplace skills (Community Literacy of Ontario, 2007).

The following section of the client flow chart locates LBS within Employment Ontario (Employment Ontario Information and Referral Resource Guide, 2007).

identify most appropriate category of programs based on questions			

Employment Counselling	**Skills Enhancement**	**On the Job Training Workplace Skills**	**Other (Financial Assistance)**
• Job Connect • Ontario Employee Assistance Services • Summer Jobs Service	• **Literacy and Basic Skills** • Ontario Employment Assistance Service (OSD)	• Apprenticeship • **Literacy and Basic Skills** • Ontario Employment Assistance Service (OTWS, OJCP, OSEB) • Job Connect	• Ontario Works • Ontario Disability Support Program

A framework for information provision and client referral has been developed to improve client referrals among programs and across the broader training and employment system. It is designed to support consistent access to training and employment information. The Employment and Referral Information and Referral Resource Guide was developed for ministry staff and Employment and Training Division funded service providers who deliver information and referral services. The Guide supports the ministry's vision of an integrated training and employment system.

Clearly the new role of LBS/AU within this broader education and training system provides many exciting opportunities for developing and expanding literacy provision in Ontario.

Provincial Educational Initiatives

A number of recent and current provincial educational initiatives related to Employment Ontario also have particular implications for expanding LBS/AU.

Student Success Strategy/Learning to Eighteen: This provincial government strategy targets youth (those under 18) to stay in school and has resulted in a number of joint school/college initiatives particularly aimed at those bound for an apprenticeship as well as youth-at-risk. Some of these initiatives include expansion of co-operative education programs, recognizing dual credits between high schools and postsecondary destinations, and creating a Specialist High-Skills major within the high school diploma.

Pathway to Prosperity: Ontario's twenty-four colleges through Colleges Ontario (formerly the Association of Colleges of Applied Arts and Technology of Ontario) took the lead on a province-wide consultation on the workforce challenges of the 21st century. The consultations included students, employers, businesses, industries, labour groups, educators, and political and community leaders. The consultations confirmed concerns about an impending skills shortage in Canada and the lack of a national plan to address it.

Two priorities that have implications for LBS/AU are

1. Need for relevant skills – both a higher level of skills (hard and soft skills) and a greater number of people with skills

2. Need for a flexible system – a more versatile postsecondary education and training system that can accommodate diverse needs of learners and employers

ROYL Report: In the fall of 2006, Colleges Ontario presented a report to the Committee of Presidents on the future of enrollment in postsecondary programming. It was identified that enrollment of direct entry students to colleges had stabilized, but that participation of mature students would continue to grow. This focused interest on the recruitment of adults as well as on the programs that prepare them for success in postsecondary.

Reaching Higher: This provincial government initiative encourages the movement of those traditionally under represented into postsecondary education. Specific target groups are

- First Generation Learners
- Aboriginals
- Disabled
- Francophones

CONTINUOUS IMPROVEMENT PERFORMANCE MANAGEMENT SYSTEM

The Ontario government is accountable to its stakeholders through CIPMS. CIPMS is a performance management process based on a model of continuous improvement and commitment to efficient and effective use of resources. It represents a shift to results-based measurement.

For LBS/AU, accountability includes the identification of measures for LBS agencies, especially as they relate to their core service. One of the core measures is literacy skill attainment. The visual below shows where literacy skill attainment is situated within the overall CIPMS structure for LBS.

CIPMS for Literacy and Basic Skills
3 Key Components of CIPMS for LBS

Performance Measurement Process 3 essential elements of measurement	**System for Managing Performance**	**Model of Continuous Improvement**

1. Effectiveness 50%	**2. Customer Service 30%**	**3. Efficiency 20%**

1. **Participant Profile** 2. **Employment** 3. **Further Education and Training** 4. **Foundations for Learning** 5. **Program Goal Achievement** 6. *Learner Skill Attainment/ Essential Skills Gains*	**7. Customer Satisfaction** **8. Service Coordination**	**9.** **Contract Compliance**

Nine Core Measures demonstrate three Measures of Success

For each core measure, a number of performance indicators will be identified.

The indicator for literacy skill attainment is defined as the percentage gain using the IALS/Essential Skills 500-point scale in Reading Text, Document Use and Numeracy.

The current 5-level LBS system does not capture skill attainment in a way that is consistent, meaningful and transparent to learners, practitioners and agencies. The language in the LBS Learning Outcomes document (matrix) is based on the Ontario School Curriculum and therefore does not directly relate to adults, their learning needs or goals. The success and transition markers are too numerous and don't represent significant points of learning for learners.

The field currently uses a variety of informal assessment tools to measure learners' progress. Agencies have created simple skills checklists, standardized tests and performance-based assessments that they found were more appropriate for assessing adults. The transition and success markers were synthesized as "level descriptions" to provide a more holistic alternative for teaching and assessing. This was especially helpful for instruction at the higher levels, but meant that instructors had to become familiar with another language.

Potential Benefits of CIPMS

- improved efficiency and effectiveness
- data-driven management decision-making
- consistent quality of service across the province
- good practice that can be recognized and supported (and copied/duplicated)
- a system to assess progress and respond to change
- results that can be demonstrated to stakeholders outside of LBS

The ministry therefore required a more effective, transparent approach to assessment that would result in accurate measures of skill attainment for the purposes of accountability.

ASSESSMENT AND ACCOUNTABILITY

Different stakeholders want to know different things from assessment. Learners want to know how their skills and competencies relate to other learners, or to the demands of the formal accreditation system. They want to know that they are making progress, and that they are ready to transition to their next-steps destinations.

Service providers want to know how to place new learners in the appropriate program or at the appropriate levels. They need to know if learners are progressing and achieving their goals. They need to know when learners are ready to transition to their next steps.

Funders want assurance that programs are effective in helping learners achieve their goals. They also want to know that program funding is well spent.

Given the government's needs for greater accountability to its stakeholders and given that stakeholders' needs are often in competition with one another, an examination of accountability systems in other jurisdictions was conducted to learn about different models and their impact on literacy programs.

Accountability to stakeholders has been linked to the notion of sustainability. If programs can provide evidence that students are learning, it improves their chances for sustainability. McKenna and Fitzpatrick (2004) point out that a significant impact of the International Adult Literacy Survey (IALS) was a shift in the way literacy was broadly perceived. IALS results for highly industrialized countries revealed large numbers of adults performing at low literacy levels. This meant that literacy could no longer be viewed as an issue for developing countries only. Instead, literacy began to be attributed with the capacity to build highly skilled, knowledge-based economies and was increasingly viewed in an economic context.

> Most of these countries (Australia, Canada, Republic of Ireland, New Zealand, United States and United Kingdom) have aging populations and are facing skill shortages in emerging areas of their economies. Employment in rural, mining and manufacturing industries is in decline, while employment in the service and information technology sectors is rising. All have adopted lifelong learning policies focusing on human capital development in order to address future labour market needs (p. 9).

While the focus on lifelong learning is viewed by most as a step in the right direction, the concept of "human capital" seems to be problematic for many literacy researchers and educators. The Organisation of Economic Co-operation and Development (OECD) defines human capital as "productive wealth embodied in labour, skills and knowledge" (OECD website). From a human capitalist perspective, literacy education is viewed primarily as a

means of improving the economy of a country. IALS has shown that a 1% (5-point) rise in literacy levels can result in a 1.5% increase in gross domestic product (GDP) and a 2.5 % improvement in labour productivity. In promoting a human capitalist approach, many industrial countries have focused greater efforts on literacy development for employment purposes. Many have also shown an increasing need for accountability and as a result have implemented national quality assurance mechanisms. These mechanisms are characterized as high or low prescription models. High prescription models are associated with highly developed systems of national regulation such as those that exist in United States, England and Australia. Higher prescription models are also associated with integration of literacy with broader vocational or occupational standards. Literacy, as a stand alone program, is often vulnerable to funding cuts. Some jurisdictions, therefore, view the integration of literacy in the broader education and training system as a means of ensuring sustainability.

Highly prescriptive approaches, however, run the risk of narrowing the focus of literacy provision. "Unbridled, unexamined" accountability through the National Reporting System in the United States is having a negative impact on literacy programs in America, according to David Rosen:

> Some people would argue that accountability is good for our field, that it improves program quality and learner outcomes…I believe accountability has some positive effects, but increasingly, as the rope gets ratcheted tighter, I see more negative than positive effects. The problem is that there are no limits to accountability, and no one appears to be monitoring it to see where it has gone too far, where – in the name of improving quality – it sacrifices real education quality and service to proxies for quality such as scores on standardized test or percentages of those who meet federal goals (2007).

In England, the Skills for Life strategy sets out how the government will reach its national achievement targets between 2001 and 2010 to improve the literacy skill levels of adults. Lavender (2004) notes that the key criticisms aimed at the targets is that they narrow programs by favouring courses that result in a qualification, "The accusation is that providers taper their programmes to what will be funded and cut out the rest".

In Australia, there has been action to "overhaul" the National Reporting System which was designed to report outcomes of students in the vocational, education and training system, in labour market programs and in the adult community education sector. This includes streamlining the system, taking into account new conceptual understandings of literacy and numeracy. Research has identified social outcomes that have been added to the more traditional outcomes of knowledge and skills as possible benefits of educational and training (Balatti, Black & Falk, 2006). Social capital outcomes relate to changes in learners'

connections to other individuals and groups and often result in improved self-esteem and confidence for learners. Although many current reporting systems for literacy and numeracy do not recognize or report social capital outcomes because they are difficult to measure, doing so would likely provide a more complete and accurate picture of how literacy programs contribute to learners and communities.

Perhaps there is a growing sensitivity to these tensions. A report by the Canadian Council on Learning (2008) comments on broader benefits of literacy in addition to economic ones, "We are coming to appreciate the contributions that ongoing learning makes to our health and well-being, and to the quality of life within our communities" (p. 3).

Striking the right "accountability" balance for an assessment framework is critical. Campbell (2006) would agree, "A flexible system that employs multiple assessment tools and approaches has the potential to meet the needs of diverse student populations and honour the complex nature of learning" (p. 61).

In developing the framework, the prescription model served as a useful tool for examining the government's needs for increased accountability while the human capital versus social capital model provided a balanced perspective for exploring philosophical issues related to literacy learning and assessment.

OVERVIEW OF THE LSA INITIATIVE

> If we look at the many different subpopulations in adult education…we see that not all adult learners are in programs for the same reasons, or for the same outcome, or are at the same places along the way. It is our responsibility to get them to the next step, whatever that next step is for them.
>
> (Keenan, 2003, p. 7)

The literacy field has long supported the need for a more valid, reliable and manageable approach to assessment. In particular, the field suggested the need for a new assessment language and approach that would:

- describe learning outcomes in terms of what learners will be able to do or where learners will be able to go at the completion of their training
- describe gains in skills and knowledge in a meaningful way to key stakeholders such as Apprenticeship, Job Connect, Adjustment Advisory and Ontario Works
- clearly link LBS/AU to other models in use
- enhance the role of LBS/AU as a key player in skills training in Ontario

The field supported the notion of "transition paths". Each transition path would define the core skills and performance indicators that would help learners make successful transitions to their goals. Although LBS/AU programs had traditionally focused on learning goals such as employment or further education and training, the goals had not been explicitly linked to the individual skills or level descriptions. Defining goals for learning within the broader educational/training environment of Ontario would provide a sound structure for the framework and identify specific areas of knowledge and specialized skills that are tied to those goals.

The six transition paths initially identified were

- lifelong learning basic platform
- lower skills level employment
- higher skills employment
- credit study
- postsecondary
- pre-apprenticeship and apprenticeship training

The framework would also incorporate the HRSDC Essential Skills and use valid, reliable assessments based on the IALS/Essential Skills scales which are nationally recognized and therefore capable of providing a common assessment language for all stakeholders.

Essential Skills provide the foundation for learning all other skills and enable people to evolve and adapt to change. Through extensive research, the Government of Canada and other national and international agencies have identified and validated nine Essential Skills. These non-technical skills are used in nearly every occupation and throughout daily life in different ways and at different levels of complexity. Essential Skills include

- Reading Text
- Document Use
- Writing,
- Numeracy
- Oral Communication
- Thinking Skills (Problem Solving, Decision Making, Job Task Planning and Organizing, Significant Use of Memory, Finding Information)
- Working with Others
- Computer Use
- Continuous Learning

Essential Skills are not new to the literacy field in Ontario. In fact, for the past several years many LBS agencies have been using Essential Skills and the occupational profiles to develop curriculum and performance assessments (demonstrations) for learners with employment goals. More recently, Essential Skills have been used to develop learners' training plans (Community Literacy of Ontario, 2008).

Programs and services outside of LBS also see value in using Essential Skills. The following initiatives involving Essential Skills have been undertaken in Ontario:

- Ontario Skills Passport
- Essential Skills Check-Up Tools Project
- Student Applications of Working and Learning (AWAL)
- Discovering the Workplace and Navigating the Workplace – Grade 10 and 12 courses
- Cooperative Education
- Specialist High Skills Majors

THE FRAMEWORK DEVELOPMENT TEAM

The first three months of the project were critical in determining the viability of the framework. There were two key deliverables for the CSC Project:

1. a draft assessment framework for documenting learner progress consistent across sectors and streams

2. a draft outline of "performance indicators" for skills gains critical for transition to next steps

In total, seventeen sector (college, school board and community-based) and stream (Native, Anglophone, Francophone and Deaf) projects were funded to help build the framework. While the projects could involve any of the nine Essential Skills, the focus, for accountability purposes, was on Reading Text, Document Use and Numeracy, since these three skills are considered to be the most critical to learner success and because valid, reliable instruments are available to assess them.

Five projects were responsible for the development of the transition paths. They include:

SECTOR/STREAM	TRANSITION PATH
CSC (College Sector Committee for Adult Upgrading) *project lead*	• postsecondary • pre-apprenticeship/apprenticeship
CESBA (Ontario Association of Adult and Continuing Education School Board Administrators)	credit programming
CLO (Community Literacy of Ontario)	lifelong learning
Le CAP (Centre d'apprentissage et de perfectionnement inc.)	pre-apprenticeship/apprenticeship
PTP Adult Learning and Employment Programs	• high skills employment • low skills employment

It's important to note that TCU has already made a significant, long-term investment in workforce literacy development with PTP's CAMERA-Signposts assessment and curriculum guidelines system. This system was designed for learners with the goal of entry-level employment. PTP's project, *CAMERA: Taking it to the field*, would capitalize on this investment. CAMERA and Signposts have drawn extensively on Essential Skills research, outlining workforce literacy outcomes and bridging instructional content with assessment activities and results. Although Signposts has been completed, assigning

Essential Skills complexity levels to each signpost would be an important focus of the project.

The purpose of *CAMERA: Taking it to the field* was to train a substantial number of assessors and administrators throughout Ontario's literacy field on assessment and programming for employment-bound LBS learners. PTP also investigated the feasibility of adapting their curriculum and assessment materials for other streams.

Le Cap chose not to pursue development of the pre-apprenticeship/apprenticeship path for two reasons. First of all the CSC was already exploring this pathway. Secondly, learners in Le Cap's L'alphabétisation et la Formation de Base (AFB) program are also on an employment path, and Le Cap saw greater benefit for their learners in working on the translation and adaptation of CAMERA.

The role of the remaining twelve projects was to provide direction on the development of the framework. Several projects focused on development of resources and assessment tools based on Essential Skills. Two focused on professional development for instructors. Most of the projects focused on learners' employment goals.

Organizational Model

A structure was developed for ensuring full participation of all projects and an efficient means for flowing project information into a central workgroup. See **Appendix B** for the organizational chart which shows the relationship of the established teams. Terms of reference were also developed by TCU to outline the duties, expectations and responsibilities of the teams.

Four meetings were scheduled during the first four months of 2007 to bring representatives of umbrella groups, streams and sectors to work together, collaborate on their projects and make decisions about the framework. The Project Team communicated between meetings by phone and email. The CSC recognized the importance of the ongoing involvement of the other sectors and streams from the inception of the project and tried to ensure that the framework took into consideration their advice and recommendations as much as possible.

The model did not prove effective. Although other sector and stream projects were eager to contribute to the development of the framework and pleased to participate in the initiative, the large size and cumbersome structure of the group made the process of sharing information difficult. Expectations were not always met. For their part, team members were under immense pressure to produce a draft assessment framework in very short timeframe which didn't allow for the kind of collaboration that would have made this process a more positive and cohesive experience. Furthermore, the Project Team was not comfortable sharing information about the framework without a better grasp of the validity

issues surrounding it and the possible implications for programs. While general information on the framework has been shared with the field in a variety of ways, it has not been shared consistently.

St. Clair and Belzer (2007) point out that consultation is not always realistic within the timeframes of policy generation, "One anecdotal estimate suggests that policy making moves about seven times faster than does academic research, so policy will always push beyond what is known and what is hoped for" (p. 198).

The "push" was to design a framework that incorporated a different set of skills, using a different system of "levels" and employing standardized tests that were not broadly familiar to the field. The Project Team needed time together to grapple with the conceptual and philosophical complexities of developing such a framework, but there was little opportunity for this given the timeframe and the additional activity in the field surrounding CIPMS and Employment Ontario. Nevertheless, the Project Team persisted in exploring issues related to validity, identifying hurdles and finding creative solutions for what we now know is a large-scale, multi-year assessment initiative. Since it was agreed that the framework would need to be broadly vetted or validated with the field, the term "validation draft" was added to the title to reflect its change of status.

DEVELOPING THE FRAMEWORK

At the first meeting of all 17 projects, a process for developing the framework based on recommendations from the Vubiz report was presented to the group. It identified a number of steps. Although "steps" suggests a linear approach, it was understood from the beginning that the process would not be a straightforward one. It was also understood that time constraints would control how much of the framework could be developed. Nevertheless, the steps helped "kick start" the initiative and provided direction for thinking about the tasks ahead. The steps include

- verify the six transition paths
- identify what is essential for successful transition
- identify core skills and performance indicators for each transition path
- identify levels of proficiency or mastery required for successful transition
- identify appropriate content, learning activities and resources
- develop overall learner skill attainment strategy
- identify or develop valid, reliable assessments that measure learning gains in Reading Text, Document Use and Numeracy for higher stakes and corporate reporting
- develop a method for gathering data and reporting educational gains

The framework was built on a set of fair assessment practices drafted by the Project Team. These practices were revisited many times throughout the development process

and served to both guide and ground the team. See **Appendix C**. The practices are specific to the context of the framework and to the assessments identified for measuring learner gains. A set of principles to guide the development of the framework was also developed. See **Appendix D**.

Assessment Framework Model

Perhaps the best-known, large-scale assessment framework of the past decade is the Equipped for the Future (EFF) framework developed in the United States. This framework is organized by roles that describe what adults need to know and must be able to do as citizens and community members, parents and family members, and workers. The framework is aligned with content standards for adult education which were developed with broad input from learners and practitioners in the field. (Bingman, 2000). The assessment framework phase of EFF involved developing a continuum of performance for each standard with levels that benchmark key performances.

While the notion of learner transition has been in use for some time, the concept of using transition paths as the primary organizing structure of the framework appears to be unique although similar to that of other assessment models such as EFF's. LBS is goal-directed. Comings, Parrella, & Soricone (1999) identified that goal setting and making measurable progress towards goals are two of four key supports that promote student retention. These supports had been explored with LBS learners in projects such as *Retention through Redirection* (Jonik & Goforth, 2002). Student persistence increases the likelihood of goal completion. Developing specific pathways that would further enhance goal completion seemed like a logical progression for LBS/AU.

The transition paths would
- provide a clearer understanding of learners' goals in terms of their destinations
- provide useful information about how learners apply their knowledge and skills to real-life tasks related to their paths
- be structured so that learners know where they are along the path

Like the EFF model, the LSA Framework would promote a more functional assessment approach because it would be based on the Essential Skills. The framework, however, would only assess three Essential Skills. The Project Team was concerned that this narrow accountability focus would compromise good literacy practice and pressure practitioners to "teach to the test" at the expense of other Essential Skills, other key academic skills and non-academic "skills" such as increased confidence and self-awareness.

It was important to understand the framework's accountability "function" within the framework which encouraged a range of assessment approaches and methods including

- learner self-evaluation
- peer assessment
- demonstrations
- project-based activities
- learner portfolios
- practitioners' professional judgements

The expectation is that gains in Reading Text, Document Use and Numeracy will be made along side gains in other Essential Skills and gains in other academic and non-academic skills. In real life, skills and knowledge are applied in complex and integrated ways. Because we wanted to ensure a broad, overarching framework, and because there was confusion about the role of the other Essential Skills, a model was developed to clarify the accountability function within the broader assessment framework. The model below shows the focus of instruction for each path and the assessment tools that were field-tested, but more importantly it demonstrates the importance of other Essential Skills.

LSA Framework Model

	foundations for independence	employment	secondary school credit	college postsecondary	apprenticeship
assessment tools field-tested	PDQ	PDQ/ TOWES	PDQ/ TOWES	TOWES	TOWES
core content integrating Essential Skills	To Be Determined	T.B.D.	T.B.D.	T.B.D.	T.B.D.
focus for instruction	Personal (home, community)	Workplace	Academic	Academic	Academic/ Workplace

valid, reliable assessment tools based on 500 pt scale

other Essential Skills

Numeracy
Document Use
Reading Text

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Although greater accountability is required by Employment Ontario and CIPMS to demonstrate more effective and efficient use of resources and to show learning gains in a more meaningful way, there was agreement that this must not be to the detriment of current quality programming and good assessment practice.

INCORPORATING ESSENTIAL SKILLS

The concept of more explicit goal paths was well received by streams and sectors and other representatives. Criteria had been established to demonstrate the distinctness of the goal paths including

1) learner's goal or purpose for learning
2) overall level of skills of skills required for successful transition
3) instructional focus
4) next-step expectations

Initial discussion centred on the number of paths, the language of the paths and the transparency of the language to other stakeholders. However, this discussion proved premature as the Project Team began to examine the transition paths from the perspective of Essential Skills.

Essential Skills can be applied to work, life and learning. In theory, this definition fit well with the current LBS/AU learner goal focus, i.e., employment, personal, and further education and training.

As noted, many LBS programs have been using Essential Skills or an Essential Skills approach in programming and assessment for employment-bound learners. Strong linkages also exist between Essential Skills and the apprenticeship path, which has a strong occupational focus in addition to an academic focus. The path to independence also has a very functional focus. Learners moving along this path are interested in gaining skills to function more effectively in their home and community environments. The exit point for learners with the goal of independence or employment is the real world and learners must be prepared to function in it.

It was somewhat more challenging to see how Essential Skills applied to the college postsecondary and secondary school credit paths, which have a strong academic focus. Although it could be argued that students are moving along these paths towards eventual employment, it was still difficult for team members to reconcile the academic nature of the two paths with the highly functional nature of Essential Skills. However, there was assurance that Essential Skills could be applied in different contexts. Murray, Clermont and Binkley (2006) assert that the skills demanded in an employment context are the same skills demanded in other contexts such as home and community.

New Zealand's, Learning Progressions document (Tertiary Education Commission, 2008) uses the term "competencies" to describe the skills, knowledge and attitudes needed to meet demands or carry out tasks successfully.

> Internationally, there is general agreement that language, literacy and numeracy competencies are foundation competencies which underpin the learning and performance of all other generic competencies (for example, the ability to work co-operatively) as well as of specialized skills needed in home, work, educational and social settings.

Unfortunately, there has been significantly less development of other contexts in the way of resources or examples so that the perception of Essential Skills exclusively as an occupational language was perhaps not surprising.

A numeracy report (Ginsburg, Manly & Schmitt, 2006), published by the National Center for the Study of Adult Literacy and Learning in the U.S., described a simple model that helped the team examine the relationship of academic and functional skills. Although the model focused specifically on numeracy, the team felt that it was equally applicable to literacy.

The model identifies three major components that "form and construct" numeracy (and literacy):

1) Context: The purpose and use for which an adult takes on a task
2) Content: The knowledge needed to perform the task
3) Cognitive and affective processes that enable adults to link content and context

Context and content can be positioned in LBS/AU programs according to the purpose or focus of the program. With content as the primary organizing principle, emphasis is on the development of knowledge. The ability to demonstrate knowledge and skills is a concern to programs that provide credentials or prepare students for further education and training. With context as the primary organizing principle, the development of skills is carried out within specific contexts and for specific purposes. Contextualized learning helps learners draw from their prior learning to build new knowledge and transfer knowledge to new contexts. The context should match the purpose.

Sticht says that practitioners can contextualize their programs based on an analysis of the knowledge and skills needed for the home, community, technical training, employment or the academic context for which the learner is preparing. Practitioners can use tasks, materials and procedures taken from the future situation in which the learner will be functioning. But this needs to be balanced with the large bodies of knowledge that readers need to provide a context for what they read, "This makes it possible for highly literate readers to contend with poorly designed materials or materials that are poorly contextualized" (p. 78).

Finding a good balance between content and context for each transition path depends on the learner's goal for education. LBS/AU is both learner-centred and goal-directed. The discussion surrounding context and content resulted in an additional criterion for determining the distinctness of each transition path, i.e., primary organizing principle. This

criterion proved to be useful in gaining a clearer understanding of the instructional focus for each path. Nevertheless, debate continued about the role of Essential Skills in academic programming. In the final stages of the project, Dr. Theresa Kline assisted in an advisory capacity on issues related to framework validity.

Dr. Kline was well qualified to provide the kind of direction the team needed to build a valid framework. Her previous work included psychometric evaluation of TOWES for Bow Valley College in Calgary, Alberta.

Dr. Kline was asked to develop a position paper on the similarities and differences between Essential Skills and academic skills. In her paper, Dr. Kline concludes:

> There is overlap in essential and academic skills in the areas of reading and math. These two are really very basic skills that form part of the "3Rs". Without competence in reading and math, other cognitively-based skills are difficult to learn…given the information age in which we presently exist, it is becoming harder and harder to "get by" with these basic literacy skills. With these basic skills all other skills can be acquired. The context is where the two diverge. Essential Skills are focused on life and work. Academic skills focus on attaining academic success. While there is some overlap in the skills required to effectively execute tasks in life, work and school settings, there are differences. Rather than touting one as better than the other, it is more constructive to discuss the skills required for particular contexts.

See **Appendix E** for Dr. Kline's complete paper. The notion of overlapping skills provided a simple but effective model for understanding how Essential Skills could fit with each pathway. Further discussion is needed to determine how much and in what ways academic and Essential Skills overlap.

To date, five draft transition paths have been confirmed. Please note explanations for the revisions in the chart below:

Initial Transition Paths	Revised Paths	Explanation for Revision
lifelong learning basic platform	*Foundations for Independence*	The focus changed from lifelong learning to independence.
lower skills level employment	*Employment*	The two paths were collapsed because employment had more than two exit points.
higher skills employment		
apprenticeship and pre-Apprenticeship training	*Apprenticeship*	Pre-apprenticeship was not considered a true path.
credit study	*Secondary School Credit*	The term "credit" is used in postsecondary. "Secondary school" was added to avoid confusion with postsecondary credit.
postsecondary programming	*College Postsecondary*	"College" was added to distinguish between college and university postsecondary programming.

Also, see **Appendix F** for a simple visual showing how the pathways connect to the existing LBS learners' goals and to the Essential Skills.

DEVELOPING THE TRANSITION PATHS

It was critical to identify what adult learners need to know and be able to do in order to help them make a successful transition to their next steps. The knowledge and skills they require depend on what demands are placed on them in their roles as students, workers, and family and community members. For students whose goal is further education or training, demands include meeting specific credentials or pre-requisites required for entry to credit, postsecondary or apprenticeship programming. For learners whose goal is employment, demands include developing the knowledge and strategies they need to find and maintain employment. For learners whose goal is personal independence, demands include developing skills that will help them perform tasks independently at home or in the community, i.e., skills that will help them improve the quality of their lives.

As mentioned, the notion of learner transition is not new to LBS/AU deliverers. In college Academic Upgrading programs, for example, math courses are specifically tailored to learners' most popular postsecondary destinations such as Business or Technology. Because LBS/AU programs are learner-centred and goal-directed, learners' short-term and long-term goals are always taken into account. The framework initiative, however, afforded team members a special opportunity to conduct a more intense and systematic examination of next-steps expectations to discover the core skills and tasks that were needed for successful transition.

A number of options for gathering this information were available to the team. Because of time pressure, team members developed their research approaches separately. Collaboration would have provided a more consistent approach to data collection.

Appendix G provides a brief overview of the research conducted for each transition path contributed by Project Team members. This research is critical in establishing the validity of the framework. If learners are to be tested for gains in Essential Skills, the research must demonstrate that Essential Skills are viable for each path. If they are viable, the overlap of Essential Skills must be determined. This is important for two reasons. First of all, learners cross pathways and therefore need to be familiar with Essential Skills. In this phase of the initiative, we have focused our efforts on exploring each path. During the next phase, we need to examine where the main cross points are for learners. Secondly, the degree of overlap of Essential Skills with each path impacts on skills gains, i.e., a greater overlapping should result in greater Essential Skills gains. In other words, skill gains will vary by path. This is significant and from a fair assessment perspective, it means that skills gains cannot be compared across paths. It would not be fair, for example, to compare the gains of learners in the employment path with the gains of learners in the secondary

school credit path. Determining the degree of overlap between the Essential Skills and each path is a priority for the ongoing development of the framework and one that will require intense, ongoing discussion, especially for the paths with an academic focus.

A simple template was designed to assist in recording information on the pathways. Although the template was adjusted to accommodate special features of each path, it provided a measure of consistency and a common point of reference for comparing methodology, data, terminology and level of detail. The first section of the template required team members to develop a description for their transition path that captured the "essence" or fundamental nature of the path. The description could include

- philosophy
- program features
- best combination of skills required for transition
- best balance of content and context

This was a useful exercise for the Project Team and resulted in "global" descriptions for all transition paths. As the framework continued to develop, these descriptions were revised. See **Appendix H** for the current draft descriptions of the five transition paths.

IDENTIFYING CORE SKILLS AND KEY TASKS

In Ontario, much activity has been focused on developing awareness of Essential Skills for workforce preparation. Employment learning activities and assessments based on an Essential Skills or functional approach have been developed. Most have incorporated the five LBS levels and the language of the *Working with Learning Outcomes Validation Draft,* which are linked to the Ontario Curriculum. Provincially, very little activity has been devoted to aligning LBS levels with the Essential Skills complexity levels. To develop a valid framework based on transition paths, some form of broad articulation will be required. Such an articulation between literacy skills and Essential Skills has been carried out in at least one other province. In 2000, the Pembina Valley Research and Innovation Team completed a project that involved aligning the Manitoba stages of learning with national standards. The research matched a significant number of tasks with the complexity levels within the Essential Skills occupational profiles. Manitoba uses a portfolio system that is externally evaluated to measure learners' achievements (Centre for Education and Work, 2004).

Without an articulation in place, the team was presented with the dilemma of choosing which language to use in identifying core skills for successful transition – LBS or Essential Skills. As we saw in the previous section, four pathways conducted research to determine core skills and key tasks. This involved interviews with LBS/AU practitioners. In the case of secondary school credit, college postsecondary and apprenticeship pathways, further interviews were conducted with credit teachers and college faculty to get the "next steps"

perspective on skills and task requirements. Although there was some attempt to introduce an instructive element with relation to the Essential Skills into the interviews and discussions, controlling for the interviewee's knowledge of Essential Skills was not possible.

Defining "core skills" therefore proved very challenging for the team. Many questions arose. Are the core skills a particular set of skills unique to each path or are they common to all paths? Are the Essential Skills themselves the core skills? If so, is the language for describing skills consistent for all five paths? Is there a difference between core skills and core transition skills? More discussion is required to address these kinds of questions and the complex issues surrounding them. In the meantime, the team is using the term "core skills" to describe the skills embedded in the transition tasks. As you will see later from the examples provided, LBS and Essential Skills language are both used.

Identifying key tasks associated with successful transition was somewhat more successful since interviewees didn't require an explanation of "task". In fact, tasks were readily supplied. In trying to define "tasks" in the context of Essential Skills, a new form of assessment emerged that was unique and consistent with the philosophy of the framework. A draft definition for "key transition tasks" was developed by the team and other consultants working on LSA projects. Key transition tasks have five distinct attributes:

1) they are significant, authentic learning activities, assignments and assessments
2) they demonstrate learners' ability to apply Reading Text, Document Use and Numeracy in planning and preparing for transition to the next step in their goal paths
3) they help learners demonstrate gains in Essential Skills
4) they serve as "milestones" of transition
5) they comprise one component of the overall learner assessment strategy of LBS/AU programs

The attributes are in keeping with the overarching nature of the framework and the use of a variety of assessment forms and approaches. They also ensure that the tasks students perform are real-life regardless of which pathway the learner takes. Tasks would incorporate authentic materials and be carried out in an authentic manner. Tasks must also incorporate the three Essential Skills of Reading Text, Document Use and

> **Decontextualized**: What is 9 X17?
>
> **Realistic:** You charge $9.00 an hour to baby-sit. Last week you baby-sat for 17 hours. How much money did you earn last week?
>
> **Real life:** How many hours would you have to baby-sit to buy an iPod?

Numeracy. This does not mean that other Essential Skills are excluded, but that the focus would be on the three that would be measured for accountability purposes. At the higher levels, a greater degree of skill integration would be expected, i.e., the skills would be integrated in a single task. The tasks are designed to help learners demonstrate learning gains and therefore need to be assigned a level of complexity.

The final attribute warrants explanation. Key transition tasks have a role in the overall learner assessment strategy of LBS/AU programs. The primary factor influencing this role is the degree of overlap of Essential Skills for a particular transition path. A greater degree of overlap denotes a greater role for transition tasks. Again, it is critical that each path explores how compatible it is with Essential Skills based on factors such as program philosophy and the requirements of credentials. Other considerations could include program constraints, professional development opportunities for staff and availability of relevant, contextualized learning resources.

If the integration of Essential Skills in current LBS/AU programming proves successful and the use of transition tasks is found to be effective for assessment, the role of transition tasks could be expanded.

The following diagram shows one example of the role that key transition tasks might play in the overall learner assessment strategy of an LBS program.
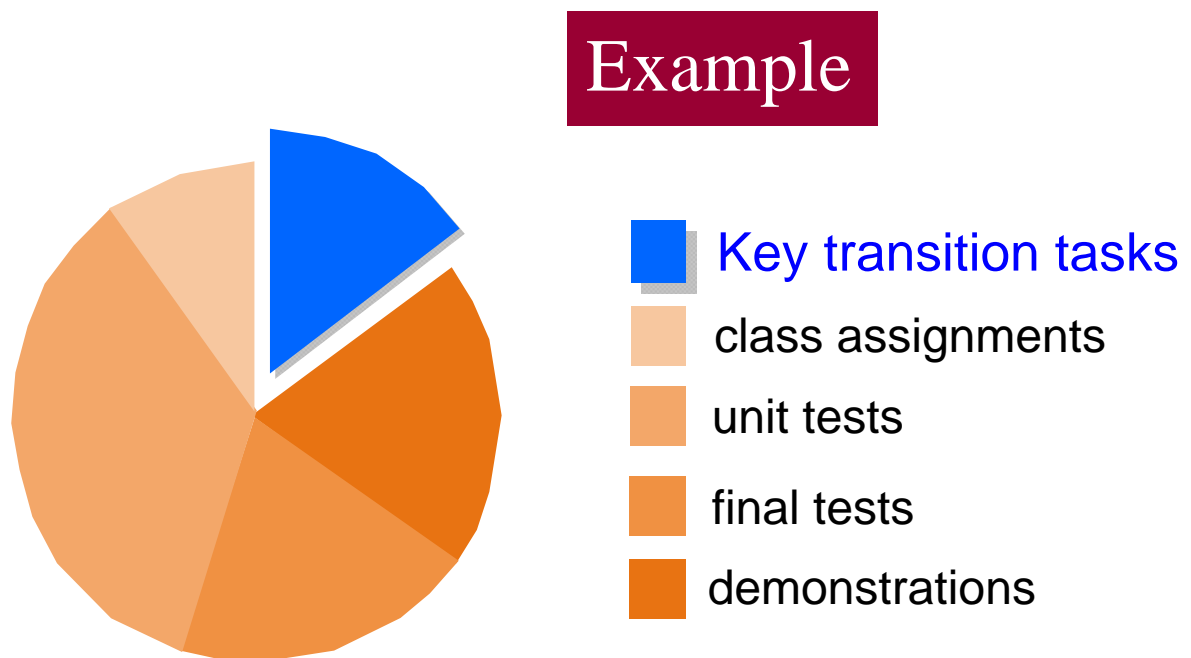
Identifying Key Transition Tasks for Each Path

The team attempted to identify key transition tasks unique to each path. This met with uneven success. The employment path was able to draw on the HRSDC's occupational profiles to identify key tasks and core skills. As mentioned, PTP had already developed curricula and assessments for this path. All that remained was to assign complexity levels to the tasks. The path to independence, which also has a highly functional focus, used the organizing structure of learners' goals based on CLO's research to identify tasks and skills.

Learners' goals include
1) manage basic needs
2) manage health
3) manage personal issues and relationships
4) participate fully as a member of the community

Both paths were able to identify key transition tasks early on in the initiative. As expected, the three paths with an academic focus had a harder time of it. Although it was easy to identify numerous tasks for these paths, it was difficult to determine which tasks were most effective in facilitating learner transition.

Fortunately, the framework initiative afforded an opportunity to investigate the transition of adult learners in some depth. The transition of high school students to postsecondary education has traditionally been an area of extensive study. Increasing attention, however, is being paid to the transition of adult basic education learners to postsecondary programming, to the extent that a national website in the United States has been established strictly to address this issue. The National College Transition Network provides information on research, policy and promising practices. It provides updates on initiatives such as the New England ABE-to-College Transition Project. There is even an on-line professional development course related to strategies and models for adult transition to postsecondary education. The abundance of literature on the topic of adult transition helped in the identification of "core components" of transition for the LSA project.

Core Components of Transition

In reviewing the information on successful student transition to postsecondary education, a number of themes or components related to successful transition emerged. These included

- identification of a realistic, achievable goal
- strong academic ability
- ability to handle a large workload and a large volume of reading
- commitment to learning goal
- proven time- and stress-management skills
- effective study skills/learning strategies/test-taking strategies
- familiarity with the college environment
- ability to use technology

The core components provided "criteria" for the academically focused paths to identify tasks that supported transition. The core components were shared with practitioners in the academic pathways through interviews and discussions. They were strongly supported, and as a result of feedback, they have been customized slightly for each pathway.

To ensure greater consistency, a simple template was developed to record information on transition tasks, including information on core skills, complexity levels and a rationale to demonstrate how the tasks support learner transition. Providing a rationale was important. Competency-based approaches to assessment have been criticized because they involved the development of very long lists of tasks without providing rationales for why the tasks were chosen (Merrifield, Coleman & McDonogh, 2001).

Following are examples of key transition tasks by pathway. These tasks will require significant development and will need to be piloted with learners. They will also need to be assigned an appropriate level of complexity once the task is developed. Most importantly, the role of key transition tasks in the overall learner assessment strategy of an LBS program must be determined through further study and dialogue with the field.

Independence Transition Path

Independence Goal Set and Sub Goal	MANAGING MY BASIC NEEDS: Have enough to eat/manage nutrition		
Key Transition Task	**Core Skills**	**Essential Skills and Task Complexity Levels**	**Rationale** *How does the task support transition?*
Read a brochure or flyer Write a list Estimate/ calculate amount of a bill	• Scan a short text to find a key piece of information • Read and write lists, sentences and short paragraphs • Estimate costs for making simple purchases	Reading Text Document Use Numeracy	Three success/transition indicators representing three Essential Skills are integrated into this *key transition task*. At least three core skills for each Essential Skill area are required for task completion.

Employment Transition Path

Key Transition Task	Core Skills	ES and Task Complexity Levels	Rationale *How does the task support transition?*
Create and review list of own skill sets associated with employment goal.	- Present text or numbers below a header - Organize information sequentially, or according to alphabetical or numerical information - Use information to inform	To be determined	Task enables learner to prepare for job search.

Secondary Credit Transition Path

Key Transition Task	Core Skills	ES and Task Complexity Levels	Rationale *How does the task support transition?*
Learners complete an application form for a PLAR assessment.	- Gather information - Complete forms - Follow written instructions	To be determined	This task is carried out by all adults registering for adult credit who want to have prior learning assessed in order to be awarded equivalency credits.

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College Postsecondary Transition Path

Key Transition Task	Core Skills	ES and Task Complexity Levels	Rationale *How does the task support transition?*
Prepare a chart to record three colleges' offerings of goal program. Include college, location, tuition, books, other fees and total cost estimate (minimum).	▪ Scan for relevant information ▪ Locate information ▪ Record information in table format ▪ Use information for decision making ▪ Use computer software	To be determined	Authentic application(s) involves requirements to prepare for or enter next stage in goal path.

ApprenticeshipTransition Path

Key Transition Task	Core Skills	ES and Task Complexity Levels	Rationale *How does the task support transition?*
Locate the Employment Ontario web site. Find the link to "Starting an Apprenticeship". In memo format, summarize the responsibilities of an apprentice in Ontario.	▪ Scan for relevant information ▪ Locate information. ▪ Record information in memo format ▪ Use information to inform ▪ Use computer software.	To be determined	Authentic task informs students of their responsibilities once they register as apprentices in the next stage of their goal path.

IDENTIFYING ASSESSMENT INSTRUMENTS

Two stipulations were made by TCU for selecting assessment instruments for the LSA Framework. The first was that the instruments had to be valid and reliable. The second was that the instruments had to be based on the IALS/Essential Skills scales. These scales are broadly recognized and therefore have potential as a common assessment language for stakeholders in Ontario. Learning gains would be reported by the percentage increase in Reading Text, Document Use and Numeracy through pre- and post-testing.

IALS/Essential Skills Scale

The complexity scales describe the level at which each Essential Skill is applied. Essential Skills are reported to be at 5 levels, with Level 1 as the lowest and Level 5, the highest. These levels are arbitrary divisions of a continuous distribution of scores ranging from 0 to 500.

The divisions are as follows:

Level 5: 375 – 500   **high**
Level 4: 326 – 375
Level 3: 276 – 325
Level 2: 226 – 275
Level 1: 0 – 225   **low**

Each level is quite wide, encompassing more than a hundred points for Levels 1 and 5, and 50 points for Levels 2, 3, and 4. A person with a score of 226 has the same level score as a person scoring 274, although the person with the 226 score is performing considerably lower. One advantage of the scales is that they can be broken down into finer categories for measuring smaller gains in learning.

An example of how a level can be broken down was provided by Dr. Kline.

Essential Skills Level 2	225 - 240	Level 2-low
	241 - 260	Level 2-medium
	261 - 274	Level 2-high

Kline points out that the level divisions are based on the standard error of measurement of the literacy scales, and therefore rest on a sound (psychometric) basis.

Using tests that are sensitive enough to detect small learning gains in Essential Skills presented an attractive option for some paths. Although it is preferable to administer tests at the beginning of a program and at program completion, it is not always viable in LBS

programming where more flexible assessment approaches are often needed. Not all learners are able to complete an LBS level, which like an Essential Skills level, is also quite wide. Learners face a variety of barriers that need to be addressed before learning can take place. Many are forced to leave their programs prematurely for a variety of personal and financial reasons. It is not likely that learners will make large gains in an abbreviated time span.

Many learners have had negative experiences in the past with schooling and with testing in particular. Caution using standardized assessments should be exercised. While standardized assessments capable of capturing small learning gains may prove useful for accountability purposes, they may not be appropriate for learners with severe test anxiety or for learners with emerging literacy skills.

Assessments Based on the 500-Point Scale

At present, only two valid, reliable tools based on the IALS/Essential Skills 500-point scale exist. They include

- TOWES – Test of Workplace Essential Skills
- PDQ – Prose, Document and Quantitative Profile Series

Both are competency-based assessments which means learners' progress is based on performance against a predetermined standard of acceptable performance rather than on how well learners perform compared to others. Competency-based assessment was developed in response to the need to assess adult literacy achievement within a functional framework (Imel, 1990).

Geraci (2007) points out that a competency-based approach to assessment requires that context, standards and their component skills be predetermined and that learning be developed and evaluated against those standards.

The team made good progress determining context through their research on the five transition paths. The work of identifying core skills, as discussed, was uneven due to time constraints, discrepancies in the field's understanding of Essential Skills, and difficulty reconciling functional and academic approaches to learning. Nevertheless, there was great interest in learning more about the tests and their suitability for the pathways.

TOWES and PDQ are comparable, test the same skills (Reading Text, Document Use and Numeracy), and are available in French and English.

Both tools are also based on Item Response Theory (IRT). This means that individuals estimated to have a particular skill level will consistently perform tasks with an 80% probability of correctly completing tasks at the same level.

PDQ is the sole property of Educational Testing Service (ETS). This instrument assesses adults' performance on real-world tasks in six contents:

- home and family
- health and safety
- community and citizenship
- consumer economics
- work
- leisure and recreation

PDQ is adaptive. Adaptive tests are customized for each test taker. Depending on the test taker's response to the first question, the computer selects a slightly more difficult question if the first question is answered correctly. Conversely, it selects a slightly less difficult question if the first question is answered incorrectly (Educational Testing Services).

TOWES is sole property of Bow Valley College located in Calgary, Alberta. TOWES is a nationally accepted, competency-based workplace assessment which is distributed through community colleges. Twenty-one colleges in Ontario are TOWES distributors. Both paper and on-line tests are available. Different versions are available to address complexity levels (Bow Valley College, 2008).

See **Appendix I** for a chart comparing features of both instruments.

Testing the Tests

Initially the Project Team was expected to make decisions about the suitability of PDQ or TOWES for pre- and post testing. No provision had been made to field-test the instruments, however, and the team was not prepared to endorse the instruments without trying them out. The ideal situation would have been to field-test TOWES and PDQ in the manner in which they might eventually be used, i.e., as pre- and post-tests. However, the paths were not at a point of development where this was feasible.

Members of the team each applied for additional funding to field-test the instruments. Delays in receiving the funding meant that the field tests had to be conducted within a few months. This short time frame allowed for exploratory approaches with relatively small samples of learners. It was understood that the results would not be conclusive and that further field testing would be required to determine the broader utility of TOWES and PDQ for measuring learning gains.

Five projects were undertaken to test approximately 300 students in different goal pathways.

The pathways include

- Independence
- Employment (Le Cap)
- Secondary School Credit
- College Postsecondary
- Apprenticeship

The team shared ideas for field-testing PDQ and TOWES. A template was developed listing categories of data that could be collected. See **Appendix J**. The team also met to share regular project updates.

While similarities among the projects exist, each project was tailored to a particular path. For three paths, only one instrument was field-tested (although for two of those paths, both on-line and paper versions of the instrument were used). One path included a very small sample of students for pre- and post-tests. Projects gathered feedback from learners in different ways, including focus groups and written questionnaires. Le Cap further explored cultural issues arising from the use of TOWES and PDQ with Francophone learners in an integrated training program. See **Appendix K**.

At the time of writing not all projects have been completed. Although it is beyond the parameters of the framework initiative to monitor or report on the projects, it is critical that the findings from all five project reports be gathered and synthesized into a single report. Such a report could provide valuable insight into how an instrument works for different pathways. It could also provide the basis for further field testing by pointing to strengths and weaknesses of the instruments. It is also critical that we hear the learner's voice as assessment becomes more formalized. We need to know how learners feel about being tested and what they think of the tests.

Using valid, reliable tools for the purposes of accountability requires a valid framework. Dr. Kline summarized the validation issues and provided guidance for conducting a rigorous assessment of the framework. The work of the Project Team and other assessment projects has contributed some of the information needed to begin the process, but much more work has to be done.

SUMMARY OF VALIDATION ISSUES

1. Acknowledge that the LSA Framework is a large-scale and long-term project. Many stakeholders will be involved, much time will be spent on building relationships with data collectors, and many data points will need to be collected. A large pool of resources will be needed.

2. Define the population to which the results must generalize. The answer to this question drives all the other decisions. It has to be made first.

3. Determine the questions about the pathways that are to be answered such as
   a. What are the Essential Skills needed by learners to effectively operate in the pathway?
   b. Are the pathways identified in the pilot work viable?
   c. What are the Essential Skills needed by learners to effectively complete the pathway?

4. Determine the improvement in Essential Skills by students as they engage in formal course training. This means that
   a. the course in which the students are enrolled must be profiled for the level of complexity they use in their curriculum
   b. the degree to which the course engages them in Essential Skills development directly should be collected
   c. variables such as the length of the course, number of scheduled student contact hours outlined in the course, number of hours of student contact actually occurring for each student, number of hours outside the course the student spends on course-related activities all have to be collected so they can be controlled for in any pre-post gain design
   d. the degree of match between the level of Essential Skills of the student and the level of Essential Skills used in course delivery should be examined
   e. the degree of match between the goals of the student and goals of the course should be collected
   f. the length of time for pre- and post-testing needs to be set

5. Determine the relationship between the Essential Skills of individuals and individual differences such as gender, age, number of years of formal schooling, ethnic background and native language. This means these data points must be collected.

6. Determine outcomes or markers that will be used to validate the predictive utility of the Essential Skills. These may be course grades, student retention, goal destinations, instructor ratings of student progress, student satisfaction with the program, etc. Many possible markers exist and the ones used should be standard across the participating institutions.

7. Conduct sampling instead of trying to capture all the data across all institutions and students in Ontario. Use a stratified sampling process to ensure enough "courses" with content representing the transition paths and the students within those courses are assessed and tracked. About 50 courses in each pathway should suffice.

8. Measure Essential Skills at the individual level. A valid and reliable measure of individual Essential Skills needs to be selected and used for the study. The PDQ and TOWES tests have been field-tested and provide information that is directly comparable to the IALS/Essential Skills levels. Because both are available and have been used in the field test, they are probably the ones that should be used in the validation study.

9. Plan the collecting and managing of the data. Although this may seem like a straightforward part of the project, it can become unmanageable quickly. Think carefully about who will extract and input the data and who has access to it. This is important from an ethical perspective.

10. Consider how the data will be analyzed and reported. Be up front about how the data will be used and who will see the data. Institutions are much more likely to be willing partners if they know they have access to the results and have a say in how it will be used.

CONCLUSION

While much work remains, the validation draft framework represents a positive beginning to an ambitious and challenging initiative. In developing the validation draft framework, the Project Team has developed a clearer sense of the next-steps requirements for learners, a better sense of the kinds of activities and tasks that will help learners achieve their goals and a better understanding of Essential Skills and their suitability for each transition path. When completed, the LSA Framework will help learners gain the combination of skills and knowledge they need to move along their goal paths more efficiently, change paths with minimal disruption and ultimately make a successful transition to their next-step destinations.

Accomplishments to date include

- identification of five transition paths which need to be validated with the field
- primary research conducted for each path identifying skills and tasks required by learners for successful transition to their next steps
- an innovative assessment approach which links specific tasks to successful learner transition
- samples of "key transition tasks" for all five paths
- identification and exploration of valid, reliable instruments based on IALS/Essential Skills 500-point scale
- a long-term plan for the development of a valid assessment framework organized by learners' transition paths, incorporating Essential Skills and using valid, reliable tests

The Learner Skill Attainment Framework is a large-scale, multi-year or multiple-phase project that must undergo a validation assessment at some point. This will involve profiling courses or programs to determine Essential Skills complexity levels for the transition paths. Information from the current projects can be used to begin the validation process but more groundwork has to be done.

More discussion is needed to determine the overlap of Essential Skills for each pathway. More direction is needed to identify appropriate content for each transition path. More time is needed to see how effective PDQ and TOWES are in determining learning gains through pre- and post testing. More professional development is needed to ensure the field has a consistent understanding of Essential Skills and complexity levels.

Above all, a viable mechanism is needed to oversee and support the ongoing development of the framework and ensure participation of streams and sectors.

NEXT STEPS

- Engage the field by sharing the work completed to date on all aspects of the LSA Framework validation draft with the field.
- Gather input and feedback from field through regional focus groups that encourage active debate and discussion.
- Develop and pilot transition tasks for all paths.

RECOMMENDATIONS

1) Acknowledge the discrepancies in the field's experience with and understanding of Essential Skills. Put more supports in place for quality professional development related to Essential Skills for learning and assessment.

2) Reconcile functional and academic learning/assessment approaches through ongoing discussion and research. Work toward a fair and cohesive approach to measuring learners' gains for accountability purposes.

3) Determine the Essential Skills needed by learners to effectively operate in and complete each transition pathway. Develop content for each path incorporating Essential Skills.

4) Continue to explore the use of valid, reliable instruments for each pathway to measure learners' gains in Essential Skills. Look for congruence with content and instructional methods.

5) Ensure that a viable mechanism is in place to oversee and support the ongoing development of the framework. Make full participation of streams and sectors a priority.

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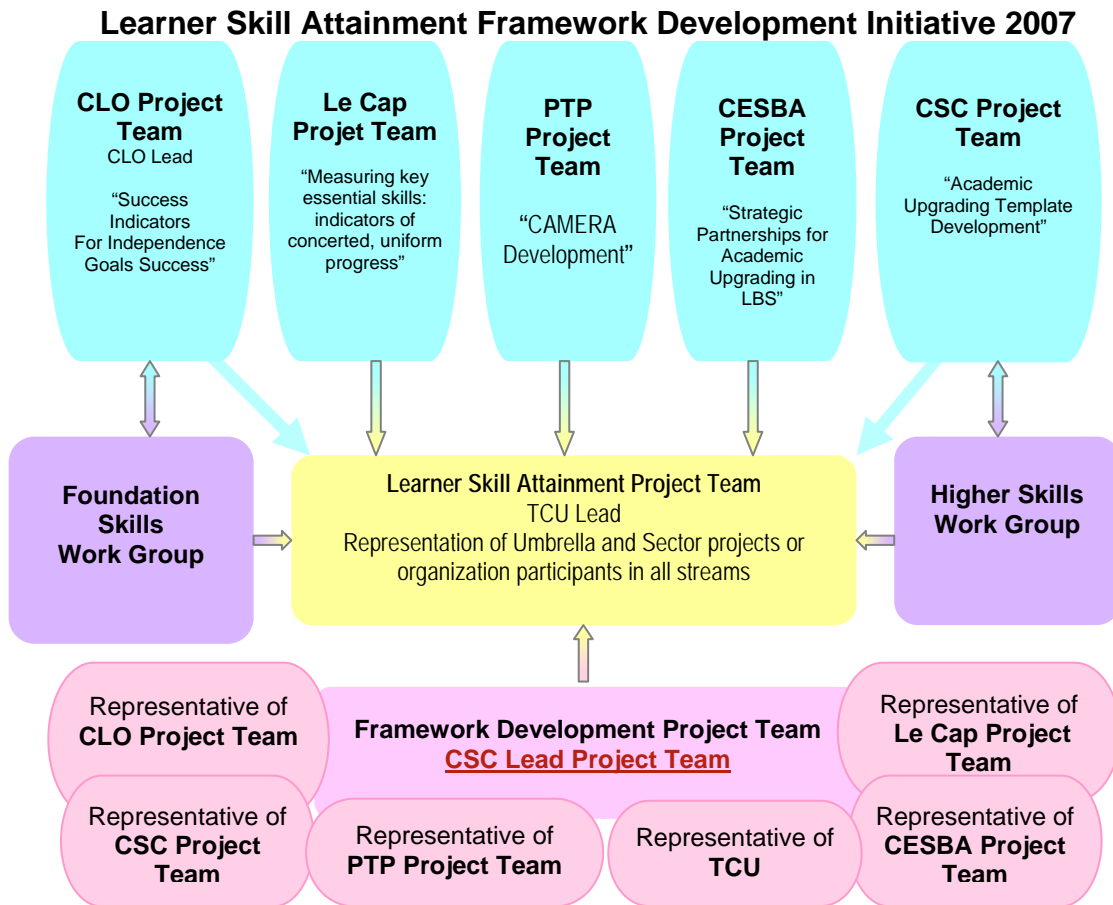
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APPENDIX A: KEY ACRONYMS

- ACP – Adult Secondary School Credit Programs

- AU – Academic Upgrading

- CESBA – Ontario Association of Adult and Continuing Education School Board Administrators

- CIPMS – Continuous Improvement Performance Management System

- CLO – Community Literacy of Ontario

- CSC – College Sector Committee for Adult Upgrading

- EDU – Ministry of Education

- ES – Essential Skills

- HRSDC – Human Resources and Social Development Canada

- IALS – International Adult Literacy Survey

- IRT – Item Response Theory

- LBS – Literacy and Basic Skills

- LSA – Learner Skill Attainment

- Le Cap – Centre d'apprentissage et de perfectionnement inc.

- PDQ – Prose, Document and Quantitative Profile Series

- PTP – PTP Adult Learning and Employment Programs

- TCU – Ministry of Training, Colleges and Universities

- TOWES – Test of Workplace Essential Skills

APPENDIX B: LSA ORGANIZATION

Learner Skill Attainment Framework Development Initiative 2007

CLO Project Team
CLO Lead

"Success Indicators For Independence Goals Success"

Le Cap Projet Team

"Measuring key essential skills: indicators of concerted, uniform progress"

PTP Project Team

"CAMERA Development"

CESBA Project Team

"Strategic Partnerships for Academic Upgrading in LBS"

CSC Project Team

"Academic Upgrading Template Development"

Foundation Skills Work Group

Learner Skill Attainment Project Team
TCU Lead
Representation of Umbrella and Sector projects or organization participants in all streams

Higher Skills Work Group

Representative of **CLO Project Team**

Framework Development Project Team
CSC Lead Project Team

Representative of **Le Cap Project Team**

Representative of **CSC Project Team**

Representative of **PTP Project Team**

Representative of **TCU**

Representative of **CESBA Project Team**

➢ *The Framework Development Project Team* (pink) contains a member of each of the core LSA projects (blue). These projects will work together to provide input to the overall framework.

➢ *The Learner Skill Attainment Workgroup* (yellow) is a forum for input where all projects and streams are represented and able to contribute to discussions at TCU-led and scheduled meetings.

➢ *The Foundation Skills Workgroup* (purple) is a forum for input where projects will discuss and identify the critical skills necessary to transition to independence or foundations for lifelong learning. They will also identify points of cross-reference between projects.

➢ *The Higher Skills Workgroup* (purple) is a forum for input where projects will discuss and identify the critical exit skills necessary to transition into pathways that involve a higher skill set. They will also identify possible connections and cross-references between funded projects.

APPENDIX C: FAIR PRACTICE

FAIR ASSESSMENT PRACTICE – *DRAFT*[2]

- assessment methods should be compatible with the purpose of assessment

- assessment tasks should be grounded in a relevant context according to learners' goal pathways

- assessments should be at appropriate levels of task complexity

- learners should be assessed with a range of tasks integrated into practice and linked to successful transition

- learners must receive sufficient practice with assessment tasks

- learners may be assessed on different tasks, but judgements about their learning and achievements should clearly reflect the same outcomes to the same expectations or standards

- assessment tasks should guard against cultural bias

- instructions for completing assessment tasks should be clear and explicit

- time to complete assessment tasks should be reasonable and clearly stated

- all measures to ensure test security should be in place before formal testing begins

- results of assessments should be shared with learners

- initial assessment should provide diagnostic information

- learners should have opportunities to evaluate the assessment instruments

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[2] Influenced by Brewer et al. 2006

APPENDIX D: GUIDING PRINCIPLES

GUIDING PRINCIPLES – *DRAFT*

The Learner Skill Attainment Framework:

- recognizes that literacy and numeracy skills underpin a variety of other skills essential for adults to fully participate in society

- reflects what adults need to know and must be able to do as learners, workers, and community and family members – a clear picture of adult goals helps identify the knowledge and skills that are critical to successful transition

- acknowledges that adults' needs for knowledge and skills change as their goals and circumstances change

- acknowledges the challenges of Canada's knowledge-based society and the kinds of skills that adults need to meet everyday information demands – demands that are increasingly shaped by changing technologies and new forms of electronic communication

- is built around the main purposes for learning because purpose is key to motivation for adults – motivation to learn and motivation to achieve

- recognizes the importance of context in enhancing learner motivation and learner performance

- continues the current LBS/AU focus on goal-directed, client-centred, outcomes-based learning

- focuses on the application of knowledge and skill through relevant, real-world tasks linked to learners' next steps

- respects different learning approaches allowing for flexibility in how knowledge and skills will be acquired by learners

- defines transition paths by the skills, knowledge and task demands of next-steps destinations

- is specific and detailed enough to guide instruction and inform assessment

- is consistent across LBS/AU program deliverers while allowing for individual program differences based on learners' specific needs

- is written clearly for all stakeholders to understand, including learners, practitioners and Employment Ontario partners

- promotes a more consistent approach to assessment

APPENDIX E: SKILLS COMPARISON

Essential and Academic Skills: Similarities and Differences

This position paper has been prepared after reviewing a number of websites and documents regarding what seem to be the similarities and differences between essential and academic skills.

<u>Essential Skills</u>

Essential skills are those skills required for everyday life, i.e., skills required to do everything from figuring out public transit, completing a job application, balancing ones chequebook, etc. There is a consistency across countries in this definition, probably due to their citations of the various IALS and ALLS projects. These projects have formed the framework for essential skills worldwide. Essential skills are described as the literacy skills required for everyday functioning in society.

Canada, too, has adopted the IALS/ALLS definition of essential skills insofar as they link directly to the literacy domains used by the IALS/ALLS project managers: Reading Text (Prose), Document Use, and Numeracy (Quantitative). However, HRSDC has gone further to identify an additional six essential skills. At the moment HRSDC defines Essential Skills as the skills needed for work, learning and life. They provide the foundation for learning all other skills and enable people to evolve with their jobs and adapt to workplace change.

People use Essential Skills to carry out a wide variety of everyday life and work tasks. They are not the technical skills required by particular occupations but rather the skills applied in all occupations. Essential Skills enable people to do their work. Essential Skills are enabling skills that help people perform the tasks required by their occupation and other activities of daily life, provide people with a foundation to learn other skills, and enhance people's ability to adapt to change.

The nine Essential Skills are
- Reading Text
- Document Use
- Writing
- Numeracy
- Oral Communication
- Thinking Skills
- Working with Others
- Computer Use
- Continuous Learning

Thus, while there is consistency about the term "essential skills" as foundational literacy skills, the additional six skills named by HRSDC are not necessarily agreed upon by others as being "essential".

I suspect (and others have proposed) there is a hierarchy of essential skills. That is, some of the essential skills such as Reading Text, Document Use and Numeracy exist at the most basic level (basic literacy). These skills must be present to add to them additional skills. These skills are also the most "portable" in that they are required for all contexts – life, workplace, social, academic contexts. They are the most "context free" skills.

Then there are some 'personal management" skills (study skills, time management, staying motivated, etc.). These come with experience and maturity. They are also relatively context-free insofar as they are required for all effective goal-seeking behaviours regardless of their context.

Next in the hierarchy would include interpersonal skills (oral speaking, working in groups, etc.). These, too, become better over time as individuals receive feedback about their interpersonal interactions. These are less transferable than the personal management skills, because their relevance to each person would be dependent on the degree to which they had to use them in their everyday lives.

Finally, would be the more specific skills oriented to careers (science, computers, writing, etc.). These skills are narrow in scope and would thus be likely to focus on workplace and academic contexts. The emphasis on each would be specific to the training/job.

This hierarchical approach to essential skills is shared by others. The specific content of each level, etc. will vary, however. It is probably most important to recognize that there is likely a hierarchy, and it will be a while before a formal and validated hierarchy is recognized.

Academic Skills

In stark contrast to the consistency about essential literacy skills, the term "academic skills" brings forward a myriad of skills, some of which overlap with essential skills, but many of which do not. The one thing they seem to have in common is the focus on academic success, i.e., the skills needed to successfully complete high school, college, technical school, university, graduate school, etc. The focus is on the academic environment.

A brief search of the Internet using the search term "academic skills" brought forth a series of sites – mostly university or colleges – that offered assistance with academic skill enhancement. A brief description of each site and a listing of academic skills for each sites are provided. Following that is a summary of the overall theme of academic skills. Finally, connections between essential and academic skills are drawn.

Academic Skills Unit (University of Portsmouth)

This unit assists students with academic skills. The list of what they cover includes

- essay writing
- note making
- time management
- critical thinking
- presentation skills
- referencing
- working in groups
- exam preparation
- reflective writing

Academic Skills Unit, Bendigo campus (La Trobe University)

This unit, too, assists students with academic skills. The ones they discuss are

- language and learning assistance
- critical and analytical thinking
- essay and report writing
- reading strategies
- oral presentations

Academic Skills (University of Southampton)

This unit provides study guides to students in the following academic skills areas:

- Being an independent learner
- Learning styles
- Reading academically
- Writing effectively
- Writing Technically – Writing the Report
- Writing Technically – an interactive grammar guide
- Referencing your work
- Getting the most from lectures
- Approaching Math Problems
- Working in groups
- Giving a talk
- Preparing effectively for examinations
- Search strategy

Prentice Hall's Student Success: Academic Skills

Prentice Hall provides tools to students to enhance their academic skills. These include

- Test taking
- Studying
- Note Taking
- Reading
- Writing
- Listening
- Math Skills

- Time Management
- Library Research Skills

University of Toronto – Academic Skills Centre

This centre also assists students with academic skills. The courses they offer are in the areas of

- Effective Reading
- Essay Writing – Research
- Essay Writing – Writing Basics
- Essay Writing – Effective Editing
- Exam Prep – Essay/Short Answer Test-Types
- Exam Prep – Multiple Choice Test-Types
- Lecture Listening & Note Taking
- Memory Techniques (Drop-in Clinic)
- Time Management

Washtenaw Community College (Ann Arbor MI)

This college provides assistance to students seeking to enhance their academic skills. The workshops and seminars they offer include

- Advanced Vocabulary
- College Study Skills
- Speed Reading
- Problem Analysis
- Critical Thinking
- Career Planning

Des Moines Area Community College

This institution puts out an Academic Skills Guide designed to help students identify entry-level skills for each diploma and degree program in the following areas

- Reading
- Language
- Math
- Computers
- Learning (study skills and critical thinking skills)

Academic Skills (College Board)

Three skills are defined by the College Board in their assessment using the PSAT/NMSQT:

- Critical Reading Skills (main ideas, tone, use of examples, recognizing purpose, making connections, distinguishing conflicting viewpoints, understanding vocabulary, understanding complex sentences, etc.)
- Mathematical Skills (using basic algebraic concepts and operations, organizing and managing information using logical reasoning, recognizing patterns and equivalent forms, etc.)
- Writing Skills (understanding structure of sentences, being precise and clear, following conventions, using verbs correctly, etc.)

The Test of Essential Academic Skills (TEAS)

This site is a test of essential academic skills. This test is used as part of the selection process to admit students into postsecondary education programs.

The TEAS consists of four content areas:

- Math (whole numbers, metric conversion, fractions and decimals, algebraic equations, percentages and ratio/proportion)
- Reading (paragraph comprehension, passage comprehension and inferences/conclusions)
- English (knowledge of punctuation, grammar, sentence structure, contextual words and spelling)
- Science (science reasoning, science knowledge, biology, chemistry, anatomy and physiology, basic physical principles and general science).

Common Themes for Academic Skills

Academic skills seem to focus mostly on essay writing, math, study and reading skills. There are others such as career choice, computer skills, special topics (e.g., science), taking notes and preparing for exams covered as well.

However, there is no clear consensus about what the basic academic skills are.

Essential and Academic Skills

There is overlap in essential and academic skills in the areas of reading and math. These two are really very basic skills that form part of the "3Rs". Without competence in reading and math, other cognitively-based skills are difficult to learn. Some psychomotor learning and learning by example are exceptions to this general rule. However, given the information age in which we exist, it is becoming harder and harder to "get by" with these basic literacy skills.

With these basic skills, all other skills can be acquired. The context is where the two diverge. Essential skills are focused on life and work. Academic skills focus on attaining academic success. While there is some overlap in the skills required to effectively execute tasks in life, work, and school settings, there are differences.

Rather than touting one as better than the other, it is more constructive to discuss the skills required for particular contexts.

APPENDIX F: LBS AND ES MODEL

Three <u>existing</u> goal pathways in LBS

Personal   Employment   Further Education & Training

<u>Five</u> proposed transition pathways for framework

Transition to Independence	Transition to Employment	Transition to Secondary Credit	Transition to Postsecondary	Transition to Apprenticeship
For adults with foundational/life long learning/ personal goals (basic needs, health management, personal issues and relationships, and community involvement)	For adults with employment goals: • get a job, • perform better on the job • get a better job	For adults with learning goals (transition into secondary credit to work [3] towards OSSD or OSSC for employment or for further education and training purposes)	For clients with learning goals (transition into postsecondary programming for investment in long-term career)	For adults with learning goals (transition into apprenticeship programming). Includes those already signed up as apprentices, but struggling with in-school work or test writing

The paths are linked to the **Essential Skills**

Essential Skills for **LIFE**	Essential Skills for **WORK**	Essential Skills for **LEARNING**

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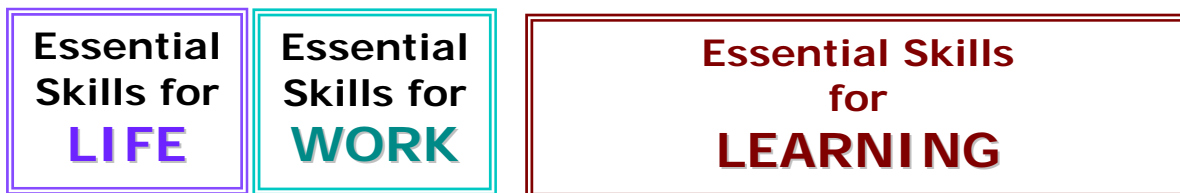
3 OSSD: Ontario Secondary School Diploma
  OSSC: Ontario Secondary School Certificate

APPENDIX G: RESEARCH METHODOLOGY

Foundations for Independence
RESEARCH METHODOLOGY

Purpose of Research:

To develop a framework to identify the success indicators and transition markers in the goal of "independence" necessary to demonstrate foundations for learning relevant to Document Use, Reading Text and Numeracy.

Process:

Interviews were conducted with key informants from fourteen community-based Literacy and Basic Skills programs across the province to determine the most common learner goals related to independence and to identify the core skills necessary to achieve those goals. Agencies were encouraged to have as many practitioners as possible provide input into the survey process. The goals in the *Foundations for Independence Framework* were identified by asking each agency to identify their top five learner goals related to independence and the core skills necessary to achieve those goals.

CLO actively participated in numerous meetings (teleconference and face-to-face) with the LSA Framework Development Team to ensure continuity between CLO's *Foundations for Independence Framework* and the work of the five other pathway projects. The *Foundations for Independence Framework* was vetted through LSA workgroups at several stages. The *Foundations for Independence Framework* was presented for discussion at a focus group of the CLO board of directors on May 31, 2007. Board members actively reviewed the framework and provided extensive feedback regarding the global descriptors and goal sets. This was the last consultation prior to the formal piloting phase.

The *Foundations for Independence Framework* was sent to four community-based pilot sites in June 2007, where twelve practitioners and twenty-one learners reviewed the framework.

On October 12, 2007, CLO's updated *Foundations for Independence Framework* was presented in a workshop format to CLO member agencies at the annual conference. Members were given a week to share the document at their respective programs and to provide any final feedback by email or telephone.

Challenges/ Constraints:

One main challenge encountered was that the "Foundations for Independence" pathway encompasses many goal areas, whereas the other transition pathways specifically describe the learner goal (for example, employment or apprenticeship). Therefore, the *Foundations for Independence Framework* contains four broad goals sets with many independence related sub goals. Each sub goal has a range of tasks identified.

The *Foundations for Independence Framework* was developed as a guideline for practitioners and students. It is meant to be inclusive and adaptable to cover a broad range of learner needs, from those that are very basic to those that are more complex. The framework was designed to be used as it applies to the goal(s) of the individual learner. A learner may already be independent in many aspects so there is no expectation that a learner will move through the entire continuum of personal focus.

The framework relates the goals to the Essential Skills but does not assign levels. At the present time, research to support profiling the tasks associated with the sub goals for Essential Skill complexity levels is not available. However, tasks with varying degrees of difficulty were incorporated for each sub goal.

Key Findings:

As CLO gathered data and conducted research to develop the *Foundations for Independence Framework*, it was apparent that achieving success in the goals of independence is integrally linked to achieving success in the other pathways. Independence is a foundational cornerstone for successful transitions to further education, training, and employment, and to help learners achieve personal goals related to their families, communities and individual needs.

Through the research process, the most common goals related to independence and the core skills needed to achieve those goals were identified. *The Foundations for Independence Framework* organizes the most common goals related to independence along a continuum of personal focus from "home to community" into four broad goal sets:

1. Manage my basic needs
2. Manage my health
3. Manage my personal issues and relationships
4. Participate fully as a member of the community

Success and transition indicators related to the goals needed to demonstrate foundations for learning relevant to the three Essential Skills (Reading Text, Document Use and Numeracy) that will be utilized by TCU for corporate reporting were identified.

The *Foundations for Independence Framework* is a guideline for students with goals that relate to independence. It is meant to be inclusive and adaptable to cover a broad range of learner needs from those that are very basic to those that are more complex. The framework should be utilized as it applies to the goal(s) of the individual learner. Only the goal sets and/or sub goals that specifically relate to a particular learner should be employed. There is not an expectation that a learner will move through the entire continuum of personal focus because a learner may already be independent in many aspects. Although the *Foundations for Independence Framework* was developed for community-based Anglophone programs, the intention is for it to be transparent and transferable to learners with independence-related goals in other sectors and streams. The consultation and subsequent integration of feedback from the Foundation Skills Workgroup supports the transferability of the *Foundations for Independence Framework.*

Contributed by: Robyn Cook-Ritchie

Employment
RESEARCH METHOLOLOGY

Excerpts from: Communications and Math Employment Readiness Assessment (CAMERA) Test Development Report (April 30, 2007)

Author/researcher: Gail Stewart

Organization: PTP *Adult Learning and Employment Programs*

Development of the Original CAMERA

The original CAMERA design was based on theoretical and content underpinnings drawn from a variety of sources, which included LBS performance indicators, authentic workplace document analysis, Essential Skills Profiles and ES complexity level descriptions. Task types for the assessment were posited according to their suitability for the intended target audience under the anticipated assessment conditions.

Essential Skills research played an important role in shaping the content and design of draft tasks, which were constructed to reflect authentic negotiation of a text or document according to the demands of a workplace setting. The items associated with each draft task were designed to target particular abilities associated with specified LBS skills and levels. All draft tasks were reviewed by an external test development consultant and refined by the test developers prior to pilot testing. The main goal of the pilot data analysis was to determine the LBS level of each task and item in the battery. Based on these results, the original assessments were constructed so that each would comprise an adequate range of tasks to ensure sufficient domain coverage and distinction across LBS levels. Tasks selected for inclusion in the assessment were those deemed most suitable for the assessment purpose – to place learners in the appropriate LBS levels and to monitor learning progress over the course of study in workforce literacy programs.

Refinement Project Methodology

The refinement project began with a literature review geared toward situating CAMERA within the broader context of adult educational assessment. This investigation of currently-held perspectives on competency-based assessment provided important information to support the enhancement of CAMERA's potential and the identification of its apparent strengths and limitations. Following the literature review, a qualitative analysis was undertaken of the original CAMERA components to determine which content areas should be retained or emphasized and which should be eliminated or modified. PTP assessors

were a valuable source of insight for this stage of the project. They provided much useful feedback both through a focus group and in subsequent written format.

The eliminations and refinements illustrated above were carried out so that the new CAMERA instruments would comprise the fewest number of high-quality tasks needed to assign levels accurately and to provide adequate diagnostic information. Tasks were eliminated based on a number of criteria that impact the technical quality and administrative efficiency of an assessment. For example, some tasks were determined to be unnecessary because the same skills and strategies were adequately addressed across other tasks in the test. Eliminating such tasks helped to ensure that issues of length and redundancy would not have a negative impact on the administration time of the refined instruments. Other tasks were determined, over a period of usage, to be less than accurate indicators of the intended target LBS levels. Eliminating these tasks helped to improve the accuracy and integrity of the test results.

Further refinements involved streamlining many of the remaining tasks, as unnecessary items were eliminated. In some cases, two tasks of the same genre were conflated. In keeping with Essential Skills descriptors and criteria, several tasks were also re-designed to place a stronger emphasis on the separation of Reading and Document Use. Finally, new tasks were created to round out each CAMERA instrument and to ensure a balanced representation across task types and Essential Skills.

Pilot Testing

Because one of the goals of pilot testing was to ensure the equivalence of parallel forms A and B, the pilot materials were configured so that each subject attempted tasks from each of the forms. Approximately half of the group attempted tasks from form A followed by tasks from form B, while the other half attempted tasks from form B followed by tasks from form A.

The pilot sample consisted predominantly of individuals whose first language was English. In cases where English was the second language, subjects had a strong enough command of the language so that this was not a barrier to accessing the tasks and items.

The analysis and interpretation of data were carried out by two test developers in collaboration with an external assessment consultant. The objectives of the analysis were to determine the following:

- Relative difficulty of tasks
- Relative difficulty of items
- Degree of equivalence across parallel forms
- Task success relative to LBS levels
- Item response success relative to LBS levels

All of the pilot forms were constructed to include more items than would be needed for the operational assessment. This was done so that any items revealed by the data analysis to be flawed, redundant or problematic could be removed from the final versions, leaving only the most informative and technically sound material for the operational test. As a result of the data analysis, a number of items were revised or relocated, and in some cases task order was changed to create a smoother progression of difficulty.

Following the data analysis, a second round of pilot testing was carried out to ensure that revised or relocated items would perform as expected. Pilot subjects wrote both forms of the test, each form written on a different day. Order of administration of forms was counterbalanced to mitigate the possibility of a practice effect. The assessments were scored by a single assessor, and task and item data were again analyzed and reviewed.

Composition of the Operational Test Forms

The second pilot procedure confirmed that the refined test forms were sufficiently equivalent and that they provided a balanced snapshot of a learner's ability in the four target skill areas. Therefore, no further changes were made to the instruments.

When the content of CAMERA Stages 1, 2, and 3 had been finalized, materials were selected for the operational version of the CAMERA Placement. The selection process began with a review of data gathered on the original placement test, which revealed that many of the original tasks and items were technically sound. Those original tasks which proved to distinguish most clearly between levels were retained and streamlined through the removal of unnecessary items. In cases where a task to be retained was among those that had been revised for inclusion in CAMERA Stage 1, 2 or 3, the revised task was used for the CAMERA Placement.

The final step in the test development process was to establish cut scores for each CAMERA instrument. The methodology used to derive the cut scores was multi-pronged, drawing on information gathered during the usage of the original CAMERA and on data

analyzed in the second pilot phase of the refinement project. For each operational test instrument, the mean, median and range of pilot scores were considered for each task, along with the average performance of groups whose LBS levels were known. The expert judgement of the test developers was also brought to bear throughout this process, which was informed by the criteria and specifications that had guided the design of tasks for the refined instruments.

Contributed by: Aleksandra Popovic

Secondary School Credit
RESEARCH METHODOLOGY

Purpose of Research:

To identify transition readiness, i.e., the core skills necessary for a successful transfer from LBS to adult secondary school credit programming (Credit, or Adult Credit) and transition tasks that incorporate Essential Skills of Reading Text, Document Use and Numeracy that can act as predictors of success in adult credit.

Process:

CESBA hired a project developer for this project and a research team of educators, including two managers from LBS programs and two department heads/assessors from adult credit programs, to carry out LBS-to-Credit research and to provide expertise in interpreting research results. Every school board in Ontario was contacted, and those offering adult secondary school credit programs, and those offering LBS programs were asked to complete a survey either electronically or by phone on policies and practices related to learners at exit (LBS) and learners at intake (Adult Credit). The team gathered considerable information, based on years of experience, including data on learner readiness for transition and success in adult credit, critical skills required at the point of transition, typical texts and tasks in academic programming, assessment practices, current practices in preparation for transition, reasons for learner success and failure, internal and external conditions that support success, and recommended best practices for seamless and successful transitions. The survey results were collated and analyzed, and conclusions were reached that represent best knowledge to date on transition from LBS to adult credit.

In addition, members of the team conducted primary research involving interviews with the developers of tools and key reports related to Essential Skills, as well as secondary research by means of a literature review to search for answers to challenging questions and issues particularly related to tools and methods for assessing Essential Skills and measuring learner gains in an academic environment.

The work accomplished by CESBA's "Pathways Team" was reported and vetted in various ways: with CESBA's Executive Director in frequent and regular face-to-face meetings and via email and telephone communications, with the CESBA Literacy Committee at two committee meetings, with Managers of School Board Literacy and Basic Skills Programs via presentations at two provincial conferences, and in a workshop of LBS Administrators and Adult Secondary School Principals and Superintendents at the CESBA Conference in

December 2007. Overall response was affirmation of research findings and reports in each case.

CESBA participated in numerous meetings with the LSA Framework Development Project Team, both face-to-face and via teleconference, to look for lines of correspondence and evidence of commonalities that would help support a Learner Skills Attainment Framework that would be relevant to all five transition pathways. Efforts were undertaken at this level to develop a common understanding of transitions within five distinct pathways and to bring together Ministry-driven priorities and expectations with respective research findings to shape a framework to satisfy all stakeholders. Written summaries and reports on the Adult Credit Pathway were submitted on a regular basis to the Project Team and a presentation was made to the larger LSA Framework initiative working group at one plenary, face-to-face meeting.

Challenges/ Constraints:

The main challenges encountered by the adult credit pathway project team included

1. constructing a transition-oriented learner skill attainment framework for the adult credit pathway that involves learner transitions between two Ministries that have, at this level, different, and not necessarily compatible, expectations and practices related to program delivery and assessment

2. competing theories and conflicting understandings related to Essential Skills and authentic assessment in an academic environment

3. difficulty in identifying appropriate assessment tools for measuring Essential Skills in Reading Text, Document Use and Numeracy that are clearly related to core transition skills and tasks for the academic pathway to Adult Credit

Key Findings:

Re: learner readiness for transition from LBS to Adult Credit

- Learning outcomes in Communications at LBS level 3-to-4 correspond to expectations (i.e., outcomes) of several entry level courses described in the Ontario Curriculum
- Learning outcomes in Numeracy at LBS level 4 correspond to the expectations of math courses at entry level described in the Ontario Curriculum.
- Demonstrated learning outcomes in Communications and Numeracy at LBS Level 3 are adequate for Adult Credit PLAR process preparation.
- Barriers to successful transitions include a range of factors related to:
  - Academics (core skills, learning strategies, capacity)
  - Emotional/social/thinking capacities (self-esteem, confidence, ability to seek help, ability to fit in, work with others, set goals, problem-solve, etc.)

- Life management (self-management and self-direction, organization, planning, prioritizing, time management, etc.)
- Getting necessary information (how to find the information you need, where to go, when to be there, what to do first, what is expected, what will happen, who does what)
- Necessary Supports (child care, transportation, financial resources, support network).
- Geographic proximity (travel distance)
- Common understanding of program delivery and assessment held by LBS and Adult Credit
- Transition strategies (planning and processes) that close the gap between LBS and Credit

Supports that make a positive impact on learner transition include:
- Co-location of LBS and Adult Credit programs
- Adequate academic preparation
- Some experience with lecture style approaches
- Explicit instruction on study skills and learning strategies
- Some experience with independent learning courses and distance learning
- Learner motivation and commitment to their goals
- Sufficient financial and emotional support
- Credit-Prep training including orientation to intake assessment procedures, forms, location, transportation and contact information, etc.
- The PLAR process
- Adequate understanding of LBS assessment data on behalf of Adult Credit staff
- Adequate understanding of the Adult Credit admissions process and of PLAR assessment on behalf of LBS staff.
- Common understanding of and respect for different approaches to adult learning on behalf of both Credit and LBS

Conclusions:
- Concurrent training of entry level credit courses (e.g., GLS10) with LBS learners approaching transition to adult credit is a strategy with proven success.
- LBS training that provides for full orientation to and preparation for the PLAR for Mature Students process produces transition success.
- Adult Education Centres, where LBS is co-located with adult credit programs, provide the optimum environment for seamless transition to adult credit.
- Learner transitions are more successful where LBS and Adult Credit have a combined transition strategy and work cooperatively together.

Re: Essential Skills

A very high percentage of LBS Managers report a good-to-very good understanding of Essential Skills and purposeful incorporation of Essential Skills into regular LBS programming.

Developers of Essential Skills and Essential Skills Reports state that Essential Skills were never intended to measure academic proficiencies and should not be used to do so. That is not to say it is impossible to identify and measure gains in the Essential Skills of Reading Text, Document Use and Numeracy in an academic environment. Essential Skills are critical to overall success in many tasks that accompany and support the academic pathway and they are embedded in some aspects of academic course work. Tasks such as these require Essential Skills:

- Preparing for and navigating the PLAR for Mature Students Assessment Process
- Goal-setting, course selection and program management
- Scheduling, organizing and implementing work plans
- Management of personal finances including budgeting
- Course work related to employment, volunteer work and participation in the community.

Conclusions:

More research on Essential Skills is needed in order to construct a proper view of Essential Skills within an academic curriculum. What we can do in the meanwhile, however, is identify the core skills and key transition tasks associated with a smooth transition from one academic environment to another and identify the Essential Skills of Reading Text, Document Use and Numeracy within those particular tasks. While that sounds very much like the original purpose of the project, we should mention here that considerable time and effort was given to attempts to align Essential Skills with components of the academic curriculum, that is to say, academic skills and tasks and texts found in LBS Learning Outcomes, the Grade 9-10 Ontario Curriculum, the Ontario Literacy Course, and the PLAR for Mature Students assessment. The results were inconclusive but they raised some important issues that will no doubt be part of the next stage of development. Aside from core academic-based skills and tasks, other key tasks for successful transition from LBS to Credit include navigating new systems, locating information, managing time, organizing information, solving numeracy-related problems involving time and money and working with technology. Providing explicit instruction in these areas and measuring the inherent Essential Skills is consistent and compatible, we believe, with the Ministry's desire to see programs' assessing the success of learners in attaining **the literacy, numeracy and essential skills** required for transitions to specific destinations.

Re: different approaches, expectations and processes regarding learner transition from LBS (the Ministry of Training, Colleges and Universities) to Adult Credit (The Ministry of Education)

TCU would like to see in place a learner skill attainment framework that is supported by an assessment approach for identifying changes in the Human Resources and Skill Development (HRSD) Essential Skills/ International Adult Literacy and Skills Survey (IALSS) levels for the skills of Reading Text, Document Use and Numeracy. This will necessitate a strong focus on Essential Skills and the practice of Essential Skills tasks in LBS programs at level 3 in particular in order for learners to demonstrate learner gains at exit in those particular areas.

At the same time, EDU has launched a mandated PLAR assessment process available upon request for all incoming learners to Adult Credit. The PLAR for Mature Students process provides for allocating up to 16 secondary school credits to qualifying learners. This amounts to full accreditation of Grade 9 and 10, essentially an OSSC. It is in the best interest of the Credit-bound learner at level 3 for LBS to provide targeted preparation for the PLAR assessment. Research suggests that at the moment, these two assessment approaches (PLAR and Essential Skills) cannot easily be merged with sufficient benefit to the learner. Both assessment approaches are demanding in terms of program planning and delivery and to attempt both concurrently, at the level required for significant progress to be made in the time available, places too great a burden on the LBS practitioner.

Conclusion:

Further research and work is needed for the development of an integrated transition strategy for the Adult Credit Pathway. It is possible to combine training and assessment of Essential Skills related to critical support tasks for Adult Credit with PLAR preparation and assessment in ways that satisfy all stakeholders. It can be done, and, with appropriate training, would be the key to success and a truly seamless transition pathway between LBS and Adult Credit.

Contributed by: Jane Barber

College Postsecondary
RESEARCH METHODOLOGY

Purpose of Research:

To identify what adults need to know and be able to do in order to successfully transition from Academic Upgrading to college postsecondary programming.

Process:

A team of consultants was contracted to develop a questionnaire for college postsecondary faculty, with additional input from the CSC Advisory Group and the CSC Executive Director. The interviewees selected for the survey represented the three main destinations of Academic Upgrading students: Health Sciences, Business and Technology. Twelve interviews were conducted in person or by phone. The consultants also conducted a literature review to supplement their own Essential Skills background, gather data for the development of the survey and identify possible issues that might arise in the interview process.

The questionnaire was "exploratory" in nature, designed to get a general overview of faculty understanding of and support for all nine Essential Skills, and to identify key tasks and core skills that help students make the successful transition to postsecondary. The questionnaire focused on Reading Text, Document Use and Numeracy since these are the Essential Skills that will be formally assessed to demonstrate skill attainment in LBS and Academic Upgrading programs. Interviewees were also asked to rank types of texts according to their importance using a 5 point scale.

Challenges/ Constraints:

Time constraints allowed for a small but sufficient sample that would provide critical insight into the role of Essential Skills in postsecondary programming. Time constraints also prevented a formal field test of the questionnaire.

Key Findings:

By shining the spotlight on the kinds of tasks students perform in postsecondary programming, the survey results clearly link student success in postsecondary to Essential Skills.

The Essential Skills for successful student transition to college postsecondary programming in order pf priority are

- Reading Text
- Writing
- Continuous Learning
- Working with Others
- Thinking Skills
- Document Use
- Numeracy
- Oral Communications
- Computer Use

The survey elicited reasons for students' poor performance as readers. In college postsecondary programming, the volume of text is a major factor. Nearly half of the postsecondary interviewees reported that students have difficulty handling the workload. According to interviewees about 75% of the students' time should be committed to Reading Text in first year.

Information was also gathered about what types of texts students interact with in their postsecondary studies. Textbooks are used extensively as are reference materials and virtual text. Lecture notes have high currency in postsecondary.

The results for Numerical Calculation were less conclusive. No common patterns emerged, except that interviewees identified "perform calculations using measurements and quantities" as the most important skill. The list of numeracy tasks that interviewees offered showed an interesting mix of math applications.

Collectively, interviewees provided a comprehensive list of reading and numeracy tasks performed by students. These examples will be instrumental in designing learning and assessment tasks for adults transitioning to postsecondary.

Typical tasks in college postsecondary programs:

- read schematic diagrams
- navigate text books to locate information, e.g., write open book exams
- read MSDS files
- review newspapers for articles on environmental issues
- read technical drawings to understand systems and components
- use maps
- make speed regulator calculations
- balance budgets, calculate tax

Survey findings were summarized in a report which was broadly distributed. The report was also posted on the CSC website.

The findings were consistent with other literature on adult transition to postsecondary education and instrumental in identifying the "core components of transition" to postsecondary programming for adults

The core components are

- identification of a realistic, achievable postsecondary goal based on research/career exploration
- strong academic skills especially in Communications and Math (required ACE subjects)
- ability to apply academic skills in carrying out goal-related tasks
- ability to handle a large volume of reading
- demonstrated commitment to goal and learning
- proven Self-Management/Self-Direction Skills, especially time and stress management skills
- proven study skills/ learning strategies/test-taking strategies
- familiarity with the college environment, next-step expectations and available supports
- facility with technology

Follow-up surveys with fourteen Academic Upgrading faculty were conducted to determine the support for the core components, and to identify key tasks that prepare students for successful transition to college postsecondary programming. Interviewees strongly supported the core components and affirmed the findings of the surveys conducted with college postsecondary faculty.

Conclusion:

Surveys with both college postsecondary and Academic Upgrading faculty on the theme of student transition yielded strikingly similar results. The degree of correspondence was very encouraging. Although more research may be required, the CSC sees considerable promise in an Essential Skills assessment approach for Academic Upgrading students transitioning to college postsecondary programming and is confident that Essential Skills can be successfully integrated into current programming.

Contributed by: Dee Goforth

Apprenticeship
RESEARCH METHODOLOGY

Purpose of Research:

To identify what adults need to know and be able to do in order to successfully transition from Academic Upgrading to apprenticeship programming.

Process:

A team of consultants was contracted to develop a questionnaire for apprenticeship faculty, with additional input from the CSC Advisory Group and the CSC Executive Director. The interviewees surveyed represented the Construction, Industrial, Motive Power and Service Sectors. Eleven interviews were conducted in person or by phone. The consultants also conducted a literature review to supplement their own Essential Skills background, gather data for the development of the survey and identify possible issues that might arise in the interview process.

The questionnaire was "exploratory" in nature designed to get a general overview of faculty's understanding of and support for all nine Essential Skills, and to identify key tasks and core skills that help students make the successful transition to apprenticeship programming. The questionnaire focused on Reading Text, Document and Numeracy since these are the Essential Skills that will be formally assessed to demonstrate skill attainment in LBS and Academic Upgrading programs. Interviewees were also asked to rank types of texts according to their importance using a 5-point scale.

Challenges/ Constraints:

Time constraints allowed for a small but sufficient sample that would provide critical insight into the role of Essential Skills in apprenticeship programming. Time constraints also prevented a formal field test of the questionnaire.

Key Findings:

By highlighting the kinds of tasks students perform in apprenticeship programming, the survey results clearly link student success in apprenticeship to Essential Skills.

> Essential Skills should be used as a tool to evaluate the preparedness for apprentices to enter in-school training once they are signed on (should not be used as a screening tool but as an advising tool). If they don't have the Essential Skills levels required, they must remediate on their own time before taking the first level in-school training.

> *Apprenticeship Faculty*

The Essential Skills for successful student transition to apprenticeship programming in order of priority are

- Reading Text
- Document Use
- Continuous Learning
- Working with Others
- Thinking Skills
- Oral Communications
- Numeracy
- Writing
- Computer Use

Information was also gathered about what types of texts students interact with in apprenticeship programming. Reference materials are used extensively as are textbooks and virtual text. Lecture notes have little currency in apprenticeship programming.

The results for Numerical Calculation were less conclusive with no common patterns emerging, except that interviewees identified "perform calculations using measurements and quantities" as the most important numeracy skill.

Interviewees provided long lists of reading and numeracy tasks performed by students.

Typical tasks performed by students in apprenticeship programs include

- read Electrical Code book
- follow instructions for operating equipment
- read safety manuals
- consult on-line repair manuals
- read schematic diagrams (especially for wiring)
- use fluid flow diagrams
- calculate compression ratios (engine components)
- estimate pipe lengths

Survey findings were summarized in a report which was broadly distributed. The report was also posted on the CSC website.

Core components of transition to apprenticeship programming were also identified.

They are

- selection of skilled trade based on aptitude, interest and work experience
- mastery of academic skills especially in Communications (Document Use and Reading Text) and Math
- ability to apply Essential Skills in performing academic and work-related tasks
- demonstrated commitment to program
- proven Self-Management/Self-Direction Skills, especially time and stress management skills
- proven study skills/ learning strategies/test-taking strategies
- familiarity with the college environment, next-step expectations and available supports
- facility with technology

Follow-up surveys with eleven Academic Upgrading faculty were conducted to determine the support for the core components, and to identify key tasks that prepare students for successful transition to apprenticeship programming. Interviewees strongly supported the core components and affirmed the findings of the surveys conducted with apprenticeship faculty.

Conclusion:

Surveys with both apprenticeship and Academic Upgrading faculty on the theme of student transition yielded very similar results. Although more research may be required, the CSC sees considerable promise in an Essential Skills assessment approach for Academic Upgrading students transitioning to programming that has both an academic and employment focus.

Contributed by: Dee Goforth

APPENDIX H: GLOBAL DESCRIPTIONS

Transition to Independence

The overall goal of the path to independence is to ensure that learners are able to improve or gain the foundational skills needed to successfully manage their home and personal life and be able to participate in the community. Goal-focused programming that links the learner-identified goals to Essential Skills allows for flexibility and transferability if the learner chooses to pursue a different path at a later stage of life.

Learners entering the path at the lower range may require a more basic content-based program initially to address identified skill gaps. However, programming generally moves towards a contextualized or applied approach with the incorporation of authentic materials and real-life learning situations that closely align to and support learner-identified goals. The use of authentic materials allows learners to move more quickly towards success. Although transition on this path does not relate directly to employment, it is unique in building the foundations for learners to be independent and later develop further skill complexities in the Essential Skills areas. Typical task or learner goals in this path can be placed on a continuum from independence in the home to independence in the community.

Transition to Employment

The goal of workforce literacy preparation is to ensure that participants who transition to the workforce are well prepared to meet the typical literacy and numeracy demands encountered at an entry-level job. Workforce literacy preparation therefore has a strong workplace focus, and

1. uses curriculum that addresses the Essential Skills defined in the HRSDC Essential Skills Profiles
2. primarily involves the use of work-related learning materials and authentic workplace documents
3. uses assessments directly related to curriculum so that participants have an opportunity to demonstrate acquired skills

Workforce literacy preparation considers context for the development of skills; the relationship between the context and purpose of skill development engages participants as the relevance to employment is made apparent.

Transition to Secondary School Credit

In order to effectively serve learners who have goals for further education and training in Adult Secondary School Credit Programs (ACP), LBS programs work to ensure that learners at the point of transition are well-prepared to be successful in the more formal academic environment of the credit system. Training for this destination pathway has a traditional academic focus in both approach and content. Authentic materials include workbooks, computers, textbooks and other formal curriculum-based materials that mirror those used in credit courses. Approaches to learning include lecture style presentations, group work and individual assignments that focus on developing and practising academic skills for various purposes at increasing levels of difficulty.

Performance assessments by way of written tests and exams, assignments, projects and class participation are used to identify success at various levels and, over time, measure gains in acquired knowledge and skill. The ACP endorses transition into adult credit at the point of readiness, and, typically, learners enter a credit program admissions process on predetermined intake dates at the beginning of each semester. LBS programs that provide training for the ACP support a holistic approach in education, so despite the strong academic focus, they also incorporate into the program materials and activities related to everyday life at work at home and in the community.

Transition to College Postsecondary

The goal of the postsecondary path is to ensure that students who transition to postsecondary programming have made appropriate program selections and are well prepared both academically and personally to succeed. Academic Upgrading therefore has a strong academic and self-management focus, and sets high standards through a mastery learning approach. It also addresses the applied, functional nature of learning at colleges by

1. integrating Essential Skills into instructional content
2. using authentic documents and learning materials
3. using competency and performance based assessments so that students have an opportunity to apply their knowledge and skills in the career path that interests them

Students transitioning to postsecondary will be able to read accurately and independently at a pace that prepares them for the kinds of texts and documents they will encounter at the postsecondary level. They will have strong math skills related to their postsecondary program of choice. Furthermore, they will be able to apply their skills in the performance of authentic tasks to prepare them for the kinds of tasks they will encounter at their next-steps destination.

Transition to Apprenticeship

The goal of the apprenticeship path is to ensure that students transitioning to apprenticeship programs are well grounded in the academic and Essential Skills that prepare them for success in their in-school training and work. Academic Upgrading therefore provides both a strong academic and workplace focus, setting high standards through a mastery learning approach. It also addresses the functional, contextualized nature of apprenticeship programming by

1. integrating the Essential Skills into instructional content
2. using workplace authentic documents and learning materials
3. using competency and performance-based assessments so that students have an opportunity to apply their knowledge and skills in an occupationally related area that interests them

Essential Skills such as Reading Text, Document Use and Numeracy are critical skills for apprentices in Ontario's rapidly changing economy. Increasingly, employers in skilled trades want employees who not only have technical knowledge but who also possess the Essential Skills required to cope in an increasingly complex workplace.

APPENDIX I: TOWES AND PDQ

CRITERIA	TOWES Test of Workplace Essential Skills	PDQ Prose, Document and Quantitative Profile Series
Skills Assessed	RT, DU, NU	RT, DU, NU
Delivery Method	Paper and on-line	On-line
Reliability/Validation	Rigorous validation process which is ongoing. Validation and reliability studies available on web site. Uses Item Response Theory (IRT)	Rigorous validation process. Validation and reliability info available on web site. Uses IRT
Test Time/Items	2 – 2 ½ hours, timed 20 problem sets, 60+ items	90 min., up to a month to complete, approx. 66 questions
Results	1 week, delivered via secure web mail box to test administrator	Immediate, on-screen print out provided to test taker. Institutional delivery available
Languages	English and French	English. Web site does not address French version (but is available)
Cost	$64.00 (approximately) (includes administrative fees)	$13.00 US (approximately)
Origin	Canada	United States
Reports	Individual and group reports available. Can be linked to NOC. Local, regional, provincial, national available. (Boeing Canada, Ontario Northland Railroad and other employers requiring TOWES report as credential.)	Score Reports. Detailed and summary statistics for examinees.
Measurement Detail	Articulated to IALS levels and 500-point scale	PDQ – point scores on 500-point scale
Test Security	Trained invigilators, strict testing protocol to maintain reliability	Completed on computer, may be invigilated
Supports	On-going training and support available provincially from distributors and BVC. Referral protocol developed and in use in Ontario.	On-line support available

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APPENDIX J: TEST EVALUATION CRITERIA

TITLE OF TEST INSTRUMENT		
	Notes	**Weighting/Score**
Purpose of Test		
Is the purpose of the test clearly stated?		
Accessibility of test		
How easy is it for learners to access the test? Is the test available in different formats, e.g., paper, online?		
Test Preparation for Learners		
Is test preparation available? If yes, how well does it prepare learners?		
Administration of Test		
What is involved in administering the test? Is a documented process/protocol in place? Is training for administering the test required? Is it provided?		
Test Security		
How secure is the test instrument? What's needed to make it more secure?		
Costs		
What does the test cost and what do you get for the cost? How does the cost generally compare with other tests?		
Duration		
What time is allowed for completing the test?		
Test Design		
Are instructions to learners clear and complete? Print, layout, graphics – are they clear?		
Language		
Is the language familiar and consistent? Is it at an appropriate level?		

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Bias		
Is the test free from bias? Is it culturally appropriate and gender balanced?		
Relevance to Learners		
Do learners see the relevance of the test? Do they seem motivated, engaged? Do the test items seem realistic or authentic to learners?		
Program Content/Instructional Strategies		
Does the instrument test what is being taught? Does it reflect current instructional strategies?		
Supports/Accommodations		
What kinds of supports are learners allowed, e.g., calculator, blank paper? How much assistance did students ask for? What kind of assistance did they ask for? What kinds of accommodations are allowed, e.g., additional time to complete the test?		
Test Results		
How are test results reported? What format is used? Who receives the results? When are the results received? What support is available for assisting in the analysis of the results?		
Other		

OVERALL EVALUATION OF THE TEST			
	High	Medium	Low
Suitability			
Observations			
Recommendations			

APPENDIX K: CULTURAL ISSUES

Cultural Issues Arising from the Use of Assessment Instruments for Measuring Essential Skills of AFB Learners

Brief Background of the Project

During the winter of 2007, Le CAP undertook a research and development project as part of the Learner Skill Attainment Framework initiative. Le CAP's project consisted of evaluating two valid, reliable assessment instruments used to measure the Essential Skills of the adult Francophone learner enrolled in the L'alphabétisation et la Formation de Base (AFB) program with the goal of employment. Within that particular project framework, Le CAP was specifically interested in a clientele with the goal of re-entering the workforce through integrated training, that is, training incorporating both a professional and a credit component with both supported by a parallel AFB component. These programs operate under the name Très Grande Vitesse (TGV), a reference to the speed at which the TGV train travels in a straight line to reach its destination. In that context, MTCU asked Le CAP to field-test the assessment instruments, TOWES and PDQ, with TGV clientele. One of the major objectives of this study was to examine the relevance of the instruments to the AFB clientele (generally less literate and less educated) already involved in integrated training. Le CAP's project targeted between 40 and 50 learners in Prescott County from four TGV training programs.

The Essential Skills Assessment Instruments and the Level of their Cultural Adaptation to Francophone AFB Programs

The two assessment instruments that were field-tested were developed in specific cultural contexts. TOWES was developed in a college environment in Alberta (Bow Valley College) and translated into French by another college in Ontario (La Cité Collégiale). PDQ, on the other hand, was developed by an American company (Educational Testing Services) specializing in developing educational tests, and translated into French by HRSDC. Considering that the two instruments were developed outside the Ontario Literacy and Basic Skills network (both LBS and AFB) and outside the Franco-Ontarian educational system, we were concerned about their adaptability to a very specific context – that of less literate learners of a Franco-Ontarian minority.

Issues Arising from Structural Adaptation to a Training Culture

We must mention first that the purpose of TOWES and PDQ is somewhat diagnostic. In that sense, they allow for a diagnosis of Essential Skills at a particular given time. That being said, they were not developed to assess Essential Skill attainment in a training

context with learners actually undergoing training. This is probably why neither system offers test follow-ups since these are generally used to measure gain or progress following a learning period offered as part of a training program. From this observation, some questions arise concerning the ability of the two instruments to adapt to the cultural and training context of the TGV clientele.

Issues Arising from Andragogical Adaptation to a Literacy Culture

As mentioned, TOWES was developed in a college environment in Alberta (Bow Valley College) and PDQ developed by an American company (Educational Testing Services) specializing in developing educational tests. These two assessment instruments were not developed specifically with a low-level literacy clientele in mind. TOWES was designed to assess workplace Essential Skills while PDQ was intended to assess the functional literacy and numeracy skills of the general population. These instruments do not seem suitable for use in an AFB environment with its very specific training culture. As an example, their use appears very difficult in situations involving the first levels of an AFB clientele (that is, AFB level 1 learners and the vast majority of AFB level 2 learners). We have not field-tested TOWES and PDQ with learners from these levels in this project, but we did note that the assessment tasks observed did not seem appropriate for the literacy level of AFB levels 1 and 2 learners. Furthermore, the protocols that regulate testing sessions do not allow the assessor to individually assist a learner with weak reading skills; yet, such an arrangement in many cases would be necessary to permit a valid assessment of Essential Skills of those learners who are very low on the 500-point scale.

Another question arises concerning the two instruments. This question concerns their ability to adapt so they can accurately assess a clientele with low levels of literacy. In that sense, it would be worthwhile to study the possibility of field testing these two assessment instruments with a clientele chosen from the first two AFB levels in order to determine their user-friendliness and their effectiveness with this segment of the AFB clientele. It would also be worthwhile to explore the possibility of developing instruments better adapted to this segment of the AFB clientele to ensure that these instruments are compatible with a framework based on Essential Skills in this specific cultural context.

Issues Arising from Linguistic Adaptation to a Francophone Culture

TOWES and PDQ were first developed in English and then translated into French for use with a Francophone population across the country. Concerning the strictly linguistic aspect, we found it difficult to evaluate the two instruments exhaustively since we were unable to actually have the tests in our hands in order to conduct an in-depth linguistic study of them. Feedback obtained from learners and instructors who were given the tests seems to indicate that the TOWES G2 test was relatively well translated from a linguistic point of view but that certain errors had been noted in the French version of PDQ.

Issues Arising from Cultural Adaptation to a Francophone Minority Culture

As mentioned previously, the two assessment instruments were developed in English, and subsequently translated into French. However, a translation in itself does not necessarily ensure that the assessment instruments are culturally relevant to a given cultural group which uses the language into which the test was translated, or that the use of this translation is appropriate to this group, particularly if this group is part of a larger minority group. Hambleton et al (2005), as quoted in PTP report (2008) makes a distinction between test adaptation and test translation.

> The term test adaptation is preferred to the more popular and frequently used test translation because the former term is broader and more reflective of what should happen in practice when preparing a test that is constructed in one language and culture for use in a second language and culture. Test adaptation includes all the activities from deciding whether or not a test could measure the same construct in a different language and culture, to selecting translators, to deciding on appropriate accommodations to be made in preparing a test for use in a second language, to adapting the test and checking its equivalence in the adapted form. Test translation is only one of the steps in the process of test adaptation, and even at this step, adaptation is often a more suitable term than translation to describe the actual process that takes place. This is because translators are trying to find concepts, words, and expressions that are culturally, psychologically, and linguistically equivalent in a second language and culture, and so clearly the task goes well beyond simply preparing a literal translation of the test content.

That said, we seem to gather that, in the case of the two assessment instruments, there has been a long process of translation and of adaptation of material for use within the Francophone culture and that a validation process has been developed to complete the desired adaptation. We still question, however, the fact that the adaptation process has not taken into account the minority context of the Franco-Ontarian population or the cultural context specific to those Franco-Ontarian adults who suffer from a low rate of literacy.

If we are to understand the nuances, we will need to continue examining issues related to the assessment of Essential Skills in an Ontarian minority context, and with a typical AFB clientele. According to the recommended approach for the assessment of Essential Skills, we consider that authentic assessment tasks should be used to evaluate the particular Essential Skill, Document Use. With that in mind, an assessment instrument should use authentic documents linked to the performance of real tasks such as found in the workplace for a clientele involved in a course of training with a view to regaining employment. Logically, it follows that authentic documents (for example, technical training textbooks) readily found in training programs should be used by a clientele involved in a

course of training leading to Apprenticeship programs. Now, if we think of the Franco-Ontarian workplace, we find that, in most cases, the documents are in English or, in a few cases, bilingual. Few Ontarian workplaces display authentic documents entirely in French. Similarly, we find that Apprenticeship programs in Ontario use mostly English-language technical textbooks.

Bearing in mind this cultural-minority reality and the fact that we need to evaluate Francophone AFB learners in Ontario who are already involved in a path of training such as preparation for employment or preparation for Apprenticeship, we ask ourselves whether the assessment tasks used with these learners to assess the particular Essential Skill, Document Use, should be based on authentic documents. If the answer is yes, then TOWES and PDQ should be further adapted to a minority Francophone culture, and certain assessment tasks in the tests should be consequently modified. More questions then arise about the ability to adapt and provide valid assessments in a specific training culture within a linguistic minority context. We should also think about the relevancy of having authentic bilingual documents available to assess the particular skill Document Use when preparing a learner for employment in Ontario, or, for that matter, when preparing the learner for an Apprenticeship program.

Conclusion

We deem it important that a careful study be made of the cultural adaptation issues as they apply both to the two assessment instruments field-tested for this project, and to any other assessment instrument or system to be evaluated in the context of the Learner Skill Attainment Framework initiative. We deem it also important to further examine the validation process of these French versions to ensure a cultural adaptation appropriate to the minority situation of AFB programs.