



Literacy &
Essential
Skills
in Ontario
2013/14



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Introduction

About Essential Skills Ontario

Essential Skills Ontario works to find the most innovative, efficient and effective training solutions to provide low-skilled adults with the skills they need to thrive in a rapidly-changing world. By conducting focused research and demonstration projects to inform policy and programming, we deliver meaningful results to those who need it most. We strive for high-quality, timely, relevant and reliable research in order to find systematic and sustainable responses to Ontario's skills challenges. These solutions will help to inform policy and programming in Employment Ontario (EO) and other employment and training systems.

About Literacy & Essential Skills in Ontario 2013

The goal of Employment Ontario is for the province to “have the most educated people and highly skilled workforce in North America in order to build the province's competitive advantage.” As literacy and essential skills are the foundation upon which such a workforce will rest, EO's Literacy and Basic Skills/ Academic Upgrading programs are helping to build that foundation.

In 2012-2013, Ontario's Literacy and Basic Skills (LBS) Programs served over 33,000 people pursue their employment, further education and training or independence goals.ⁱ Basic skills programs across Ontario make every effort to be responsive to the needs of their individual communities as well as the unique needs of their participants.

Literacy and Essential Skills in Ontario 2013 updates the 2012 version, incorporating the most recent data available on literacy and essential skills programming in Ontario. Our reason for this is simple: as our lives, communities and workplaces change in response to evolving technology and a knowledge-based economy, the skills adults need are different and wider-ranging today than they were 30, 20, even 10 years ago. The information collected in **Literacy and Essential Skills in Ontario 2013** allows us to better address the essential skills adult Ontarians need to thrive in today's world.

Our hope is that **Literacy and Essential Skills in Ontario 2013** will provide a better understanding of literacy and essential skills in Ontario and the system for EO Service Providers (literacy, training and employment providers), MTCU staff, other levels of government and those with an interest in literacy and essential skills.

1. What are Literacy & Essential Skills?

1.1 Literacy

Literacy can be defined in many different ways. The United Nations Educational, Scientific, and Cultural Organization (UNESCO) states that literacy is “a human right, a tool of personal empowerment and a means for social and human development.”ⁱⁱⁱ

The Programme for the International Assessment of Adult Competencies (PIAAC) defines literacy as: “understanding, evaluating, using and engaging with written texts to participate in society, to achieve one’s goals, and to develop one’s knowledge and potential.”ⁱⁱⁱ

The International Adult Literacy and Skills Survey (IALSS), a seven-country initiative conducted in 2003, examined three types of literacy – prose, document, and numeracy. Each of these domains was divided among five levels. The definition of each level, using the prose literacy domain as an example, is provided in Table 1.

Level 1	Read relatively short text, locate, and enter a piece of information into that text, and complete simple, one-step tasks such as counting, sorting dates, or performing simple arithmetic. (However, it should be noted that only 3.8% of Canadians have extremely limited word reading ability, what the public might consider “illiterate”) ^v
Level 2	The ability to sort through “distracters” (plausible, but incorrect pieces of information), to integrate two or more pieces of information, to compare and contrast information and to interpret simple graphs.
Level 3	Demonstrate the ability to integrate information from dense or lengthy text, to integrate multiple pieces of information and to demonstrate an understanding of mathematical information in a range of different forms. Level 3 tasks typically involve a number of steps or processes in order to solve problems.
Level 4	Tasks involve multiple steps to find solutions to abstract problems. Tasks require the ability to integrate and synthesize multiple pieces of information from lengthy or complex passages, and to make inferences from the information.
Level 5	Requires the ability to search for information in dense text that has a number of distracters, to make high-level inferences or use specialized background knowledge and to understand complex representations of abstract formal and informal mathematical ideas.

Building on IALSS, the Organisation for Economic Co-operation and Development (OECD) launched PIAAC across partner countries in 2011. As the most comprehensive international survey of adult skills ever undertaken, PIAAC measures the skills and competencies needed for individuals to participate in society and for economies to prosper. More information on PIAAC can be found in Section 5.

After analyzing the results of the original International Adult Literacy Survey (IALS) administered by the OECD in 1994, the Government of Canada determined nine skills that make up the collection of literacy and essential skills. IALS initially assessed prose, document and qualitative literacy in seven countries. Building on these results, the Canadian government invested in the examination of the skills needed to function in the workplace by interviewing workers to determine the type of skills they used and the complexity of those skills to perform everyday tasks. Out of this research, nine 'Essential Skills' emerged - and can be rated on a scale of one to either four or five based on the complexity of the task.

Table 2: Nine Essential Skills ^{vi}	
Skill	Definition
Reading	Reading refers to the skills needed to understand and apply information found in sentences and paragraphs.
Document Use	Document use refers to the skills needed to find, enter and use letters, numbers, symbols and images in electronic and paper formats.
Numeracy	Numeracy refers to the skills needed to make sense of and apply mathematical concepts and information. .
Writing	Writing refers to the skills needed to compose handwritten or typed text to communicate information and ideas.
Thinking	Thinking refers to the skills needed to solve problems, make decisions, think critically, plan, remember details, and find information.
Oral Communications	Oral communication refers to the skills needed to exchange thoughts and information with other people by speaking, listening and using non-verbal cues, such as body language.
Working with Others	Working with others refers to the skills needed to interact with other people (one or more).
Continuous Learning	Continuous learning refers to the skills needed to continually develop and improve one's skills and knowledge in order to work effectively and adapt to changes.
Digital Technology (Skills) [Formerly Computer Use]	Digital technology refers to the skills needed to understand and use digital systems, tools and applications, and to process digital information.

2. Literacy & Essential Skills System in Ontario

The Government of Ontario has been funding literacy training since 1981. The resulting programming is currently the Literacy and Basic Skills (LBS) Program which is part of the overall Employment Ontario (EO) network. This chapter provides an overview of the EO network in general and the LBS Program.

2.1 Employment Ontario (EO)

Employment Ontario (EO) is the Ontario government's one-stop training and employment service. The goal is to increase access to training and employment services while reducing duplication and inefficiencies.

At the heart of EO is the notion of Integrated Service Delivery (ISD). All Ontario government-funded training and employment services are currently in the process of amalgamating under one roof linked by various means - including a single client information service network, a unifying brand (Employment Ontario) and performance expectations that include collaboration with other EO agencies. The EO network is client centric: it is based on identifying what services need to be brought together to support an individual's pathway.

LBS agencies have both a responsibility and a mandate to refer adults to the most appropriate program to help them meet their personal, training and employment goals. Literacy agencies do inter-agency referrals as well as refer to other services in the broader EO community. For example, an adult student in an EO program might have need for other support services, such as employment counselling, housing services, childcare services and income support. The LBS agencies will help the learner access those services by directing them to the program most suited to their needs.

2.2 Employment Ontario's Literacy and Basic Skills (LBS) Program

The objectives of the LBS Program are to:

- Provide instruction to adults who lack the required literacy and basic skills to prepare them for successful transition to goals related to employment, further education and training and independence.
- Provide adults with appropriate referrals to access additional supports they may need to achieve their goals.
- Coordinate literacy and other services to help Ontario toward a seamless adult education and training system that supports an adult's lifelong learning.
- Provide adults with quality literacy services that meet their needs.
- Focus literacy and basic skill services on those adults most in need of them.
- Ensure accountability to government, to the public and to adults in the provision of literacy and basic skill services that are effective, efficient and satisfy customers.

In addition to the key principles that apply to all EO services, the LBS Program achieves these objectives by being: learner-centered, based on adult education principles, transition-oriented, and linked to the broader education and training system as well as the labour force.

The Ontario Adult Literacy Curriculum Framework (OALCF) uses the common language of goal paths to describe the scope of the LBS Program delivered by colleges, school boards and community-based organizations. The OALCF is a competency-based framework coordinated by the Ministry of Training, Colleges and Universities (MTCU) that supports the development of adult literacy programming delivered through the LBS Program by:

- Supporting the development of task-based programming helps practitioners focus on strengthening the learner’s ability to integrate skills, knowledge and behaviours to perform authentic, goal-related tasks
- Supporting the development of contextualized programming that reflects the learner’s culture, language and other features specific to the learner and her or his goal builds on current literacy practice and
- Strengthening the links between the LBS Program and Ontario’s employment, education and training system^{vii}

Note: For the purposes of describing learner outcomes for community literacy services planning and coordination, learner plan development and the Ministry of Training, Colleges and Universities business planning process, goal paths replace the terms LBS Levels 1 – 5 and Academic and Career Entrance (ACE) for all learners.

2.3 Literacy and Basic Skills (LBS) Service Delivery

The LBS Program currently provides funding support to service delivery agencies in Ontario across four cultural service streams (Anglophone, Francophone, Native, and Deaf). Program sites are based in community, school and college settings across the province.

In 2012 – 2013, more than 33,000 people received LBS training. Through the LBS program, learners access five services that contribute to the development of a learner plan. Service providers may focus on preparing learners for different goal paths as outlined in the OALCF, but each learner, regardless of the focus of the service provider’s programming, receives the same five services, as outlined in Figure 1.

Table 3: Activity Summary 2012-13 ^{viii}	
Number of In-Person Learners	28,617
Number of e-Channel (online) Learners	4,531
Total Number of Learners (In-Person & e-Channel)	33,148

Figure 1: LBS Service Programs in the OALCF^x



**The following information is taken directly from OALCF website^x*

1. Information and Referral

The information and referral service ensures that information about the LBS Program Service Provider's literacy training opportunities, approaches and targeted clients is available to learners, potential learners, volunteers, other interested individuals and referring organizations. It is often at the stage of information and referral that a service provider conducts a very general literacy screening for a client to determine if referral to the LBS Program would be appropriate.

2. Assessment

In the LBS Performance Management Framework there are three effectiveness measures that relate to learner assessment: i) learner progress, ii) completion of goal path and iii) learner gains. The indicators of the measures will be required to be reported by LBS service providers to the Ministry of Training, Colleges and Universities (MTCU).

Learner progress is indicated by the successful demonstration of the number of goal-related milestones identified in the learner plan.

3. Learner Plan Development

The learner plan describes the goal path: the learning or program elements that prepare learners for their next steps beyond the LBS Program. It includes the learner's goal, assessment results, milestone tasks, culminating task, learning activities, estimated program duration, additional supports required by the learner and referral results.

The learner plan should reflect the balance of skills, knowledge and behaviours a learner needs for their goal path and provides clear ways for learners to understand their progress toward completing their goal path. By using the language of the OALCF competencies and levels for the milestone tasks and for culminating tasks, the learner plan will provide other LBS agencies with easy-to-understand ways of understanding what a learner has achieved at the LBS Program.

The goal path refers to the preparation required to exit LBS and transition to their goal and is delivered by an LBS service provider.

- The employment goal path primarily prepares the learner for an activity for which an individual earns a wage or salary. Preparation for activities that model work, such as volunteering at a workplace, internships and community placements, are also included in the employment goal path.
- The apprenticeship goal path prepares learners for on-the-job, workplace-based training programs towards a career in the skilled trades. Preparation for specific vocational skills training is also included in the apprenticeship goal path.
- The secondary school credit goal path prepares learners for Ontario Ministry of Education secondary school credit courses leading to an Ontario Secondary School Diploma (OSSD).
- The postsecondary goal path prepares learners for formal education opportunities at a college or university for which high school completion or its equivalency is the normal entrance requirement.
- The independence goal path prepares learners for the literacy and basic skills required in four functions that contribute to personal independence (managing basic needs, managing personal health, managing personal issues and relationships as well as participating in the community).

4. Training

The focus of the LBS Program is the literacy instruction that LBS service providers deliver to adult learners in order to enable them to acquire the skills and competencies necessary to transitioning to their goal. All other LBS services support the training service. Learners not only acquire the skills and competencies, but also demonstrate the ability to use the newly acquired competencies for authentic and meaningful tasks.

The OALCF is made up of competencies - broad generic categories of learners' abilities - to organize the full range of learning addressed in the LBS Program. The competencies are as follows:

- Find and use information
- Communicate ideas and information
- Understand and use numbers
- Use digital technology
- Manage learning
- Engage with others

Taken together, the six competencies cover a wide range of ways in which learners will need to use their abilities once they reach their goals.

The LBS Program's curriculum framework describes learner proficiency at three levels of performance and helps practitioners and learners clarify the connections between literacy development and the tasks learners perform in work, learning and community settings. The curriculum framework extends literacy instruction beyond discrete skill building and focuses on the interaction of skills, knowledge and behaviours that reflect learners' needs, goals and interests.

Instructional Approaches

Learners in Ontario have a range of literacy instructional approaches available to them along with a variety of venues in which to take their training. For this reason, Ontario's Literacy and Basic Skills (LBS) Program provides four basic approaches to instruction:

a. Tutoring

- One tutor and one learner
- Tutor is responsible to one learner (not a group of learners at the same time)
- Individualized programming
- Often suitable for learners with basic literacy levels requiring a highly supportive learning environment

b. Small Group

- Two to eight learners work in a group
- One instructor/tutor responsible to all of the learners in the group
- Peer, cooperative and self-directed learning is included
- Individualized programming and instruction, as well as group learning
- Often suited for learners who enjoy working with other people
- Can act as a bridge of transition to classroom training (whether literacy or other)

c. Large Group or Classroom

- Nine to 35+ learners
- One instructor or teacher responsible to many learners
- Individualized programming and instruction as well as teacher-led learning
- May include many strategies: working in small groups, self-directed learning, blended delivery which combines various distance learning methods with face-to-face classroom instruction, workbooks, e-learning classes or self-paced approaches
- Often suited for learners with intermediate and advanced skills who do not require individualized instruction, and who wish to continue to further education or training, such as entrance to a College program or high school credits.

d. Online and Distance Learning

- An asynchronous course management system: Learners can essentially tackle course material at their own pace, with support from the practitioner as needed.
- A synchronous “virtual class” approach: Learners come to class at a specific time and they benefit from the dynamic nature of an online classroom including peer-to-peer discussions. They can get immediate support from their instructor if they have a computer problem or a question about class content.
- **e-Channel:** The Ministry of Training, Colleges and Universities (MTCU) has also created the e-Channel Partnership. The partners deliver online literacy and essential skills and Academic Career Entrance (ACE).
 - o **e-Channel** is an online classroom and meeting space for students, teachers, coaches, trainers and leaders of adult literacy. There is a wide range of courses/classes including: Math, Reading, Science, Writing, Spelling, Algebra, Using Computers, How to use Facebook, etc.
 - o **The LearningHUB** is the Anglophone partner managed by the Centres for Employment & Learning of the Avon Maitland District School Board.
 - o **The College Sector Committee (CSC)** delivers the Academic and Career Entrance (ACE) programming.
 - o **The Deaf Literacy Initiative** has developed a resource for that community.
 - o **e-Channel** is supported by Contact North/Contact Nord which hosts the Centra and Plato Learning platforms.

5. Follow-Up

LBS service providers contact learners at exit and at three, six and twelve months after they leave the LBS Program in order to document their outcomes to determine the effectiveness of the intervention.

2.4 Employment Ontario Information System (EOIS)

As a part of the transformation of Employment Ontario, MTCU has developed the Employment Ontario Information System (EOIS) Project. EOIS is a comprehensive integrated data/case management system that supports all EO services including the work of literacy practitioners in their administration of LBS programming across Ontario.

EOIS captures various data from LBS programs in order to better report outcomes of programming and assist with continuous improvement of the programs. A selection of reports that are available is listed below:

Table 4: LBS Reports 2012-13 ^{xi}		
Report #	Report Name	Description
61	Literacy & Basic Skills Case Activity (Client Level)	Shows LBS case status and profile outcomes for individual learners. It also includes a summary of case statuses by Case Owner
64	Literacy & Basic Skills Detailed Quality Service Report (SDS Level)	Shows performance indicators for LBS performance commitments and actual results for each service delivery site, each region and the entire province.
60A	Literacy & Basic Skills All Data – IR (SDS Level)	Summarizes monthly IR data collected for each service delivery site, each region and the entire province.
62	Literacy & Basic Skills Service Delivery Site Data Files (Client Level)	Data files are files with depersonalized learner data that will be made available to LBS service providers who have the capacity to run their own queries for research and evaluation purposes. The use of data files is not mandatory. The following data files are provided for each service delivery site: LBS Service plan (62C), LBS sub-goals & plan items (62D), IR Participation (62F), IR Information Session (62H).
60B	Literacy & Basic Skills All Data Service Plan/Profile (SDS Level)	Summarizes all LBS participant profile based on service plan start date for each service delivery site, each region and the entire province.
60C	Literacy & Basic Skills All Data – Outcomes (SDS Level)	Summarizes LBS exit and 3, 6, 12 month follow-up outcomes for each service delivery site, each region and the entire province.
63	Literacy & Basic Skills Performance Report (SDS Level)	Summarizes LBS performance commitments and actual results for each service delivery site, each region and the entire province.

3. Literacy and Basic Skills Service Development

In addition to LBS training, MTCU provides funding to organizations for activities that support the delivery system.

3.1 Provincial Literacy and Essential Skills Organizations

In order to respond to distinct learner needs, Literacy and Basic Skills funding distinguishes among four cultural streams: Anglophone, Francophone, Native as well as Deaf and Deaf-Blind learners. Provincial organizations for each stream provide support through research, advocacy and coordination.

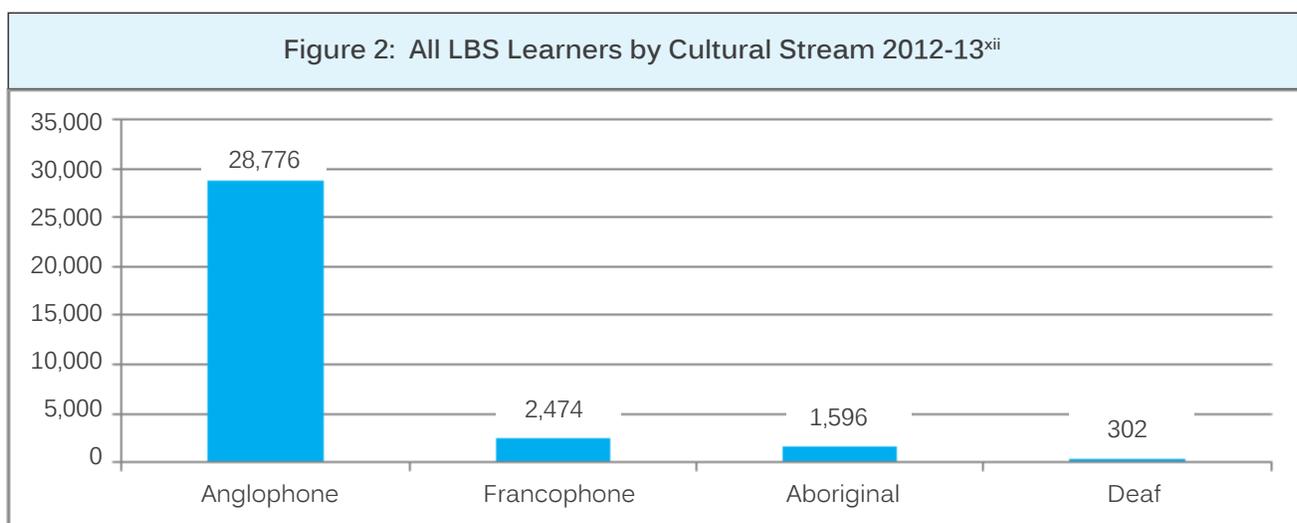
- **Essential Skills Ontario** is a non-profit organization that works to find the most innovative, efficient and effective solutions that provide adults with the skills they need to thrive in a rapidly-changing world. Essential Skills Ontario inspires and leads the development of literacy and essential skills solutions through excellence in collaboration, research and innovation. www.essentialskillsontario.ca

- **La Coalition ontarienne de formation des adultes (COFA)** offers support services to providers of French language LBS programs working in the community, school board and college sectors. It provides information, support and training to its members. COFA also heightens public awareness with promotional campaigns aimed at the Francophone population in Ontario. www.coalition.on.ca

- **Ontario Native Literacy Coalition (ONLC)** is a provincial networking and field development organization supporting and serving Native literacy practitioners and learners in Ontario. The ONLC provides information, support and training to Native literacy practitioners to enhance ability and awareness of literacy issues. www.onlc.ca

- **Deaf Literacy Initiative** is a provincial umbrella organization that provides accessible and culturally relevant training, research, networking and resources to the Deaf and Deaf-Blind literacy community in Ontario. www.deafliteracy.ca

The numbers of LBS learners in each stream are listed below:



3.2 Sector Literacy and Essential Skills Groups

Four provincial sectoral groups are also part of the literacy infrastructure. These four sectoral networks represent the methodologies of each of the four delivery sectors: colleges, school boards, community agencies and the Laubach system. Provincial sectoral networks enable programs in each of these sectors to discuss issues specific to their delivery systems. Sectoral networks deliver practitioner training that meets the specific needs of a sector. They conduct sector-specific research, develop and deliver staff training, create materials and support innovative delivery approaches. They facilitate communication between programs and governments, link literacy programming with the broader educational delivery system and represent the needs and concerns of their streams and sectors. They also raise public awareness of literacy issues and the need for literacy services.

Table 5: Service Provider Sector Designation ^{xiii}		
	In-Person Learner	e-Channel Learner
Community Agency	9,358	2,006
School Board	8,302	2,346
College	10,957	179

- **The College Sector Committee for Adult Upgrading (CSC)** is guided by a provincial working group with representatives of the 22 Anglophone and two Francophone colleges. It links to the broader delivery of college programming through the college consortium Colleges Ontario. www.collegeupgradingon.ca
- **CESBA** represents the broad spectrum of programs offered in Ontario schools to promote and advance adult and continuing education. www.cesba.com
- Community-based organizations fall under the **Community Literacy of Ontario (CLO)** network. CLO is a provincial literacy network of over 100 community literacy agencies across Ontario. www.nald.ca/clo
- **Laubach Literacy Ontario (LLO)** is a provincial network of some 50 community-based literacy and basic skills programs that use the services of volunteer tutors and trainers. www.laubach-on.ca

3.3 Other Literacy Service Agencies

AlphaPlus actively supports research and promotes best practices in adult education for practitioners and programs that work with adult learners in the Deaf and Deaf-Blind, Aboriginal, Francophone, and Anglophone communities through innovative use of technology and research as well as the design, development and dissemination of information and resources. www.alphaplus.ca

Ningwakwe Learning Press is an Aboriginal company which has successfully produced quality printed materials and publications of books for the past 15 years. www.ningwakwe.on.ca

Centre FORA is a publisher and distributor specializing in literacy and numeracy that produces educational materials for practitioners in adult education in French Canada. www.centrefora.on.ca

3.4 Regional Literacy Networks

The 16 Regional Literacy Networks are the doorway to literacy services, advice and information. These networks bring together literacy programs, literacy and essential skills stakeholders and other community resources to talk about literacy issues and facilitate community planning.

The Literacy Service Planning (LSP) is an annual process, funded by the Ontario government and coordinated by the regional literacy networks. The LSP process includes participation and input from all LBS agencies (Anglophone, Francophone, Native, and Deaf and Deaf-Blind agencies) and a wide range of other key community stakeholders. LSP analyzes the local demographics and then examines local programs within each community to see if there are gaps or duplications in services. The outcome of the process is a regional detailed LSP report that includes an environmental scan, an outline of the services offered by each agency, and an assessment of gaps. The LSP process includes active participation in the annual development of a report that forecasts Trends, Opportunities and Priorities (TOPS Report) led by the local workforce planning boards. Regional Literacy Networks work to ensure that the LBS Program is recognized as an essential component of action items proposed to address each region's skills development needs and, as such, is reflected in the annual TOPS report. The TOPS report is also utilized in the LSP processing and delivery. www.workforceplanningontario.ca

Regional Literacy Networks help literacy agencies determine what services should be offered as well as help them determine the effectiveness of their programming. The LSP process allows the community to set targets and then monitor results. The LSP process also outlines the annual plan for meetings, professional development, literacy promotional activities, information sharing and project activities. Throughout the year, the Regional Literacy Networks support their member agencies, represent literacy issues and concerns on a regional level and act as liaisons with provincial organizations.

Regional Literacy Networks can be located on Essential Skills Ontario's map: www.essentialskillsontario.ca/program-map

4. Who is Entering Programs?

Literacy and Basic Skills (LBS) agencies provide data regularly to the Ministry of Training, Colleges and Universities' (MTCU) via EOIS-CaMS. The statistical information that follows is based on the most recent fiscal year information.^{xiv}

Figure 3: All LBS Learners by Age 2012-13

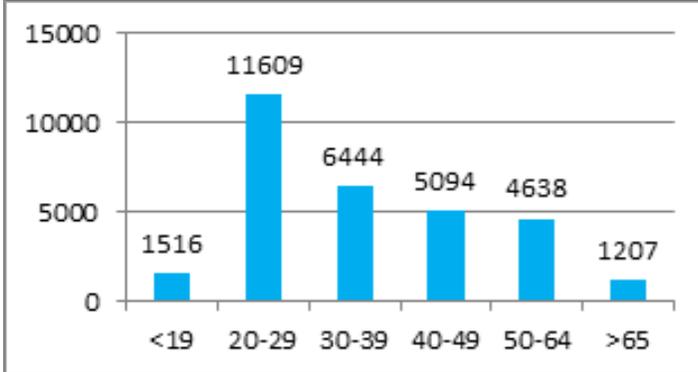


Table 6: LBS Learners by Gender 2012-13

Male	12,333
Female	18,003
Undisclosed	97

Figure 4: Sources of Income for all LBS Learners 2012-13

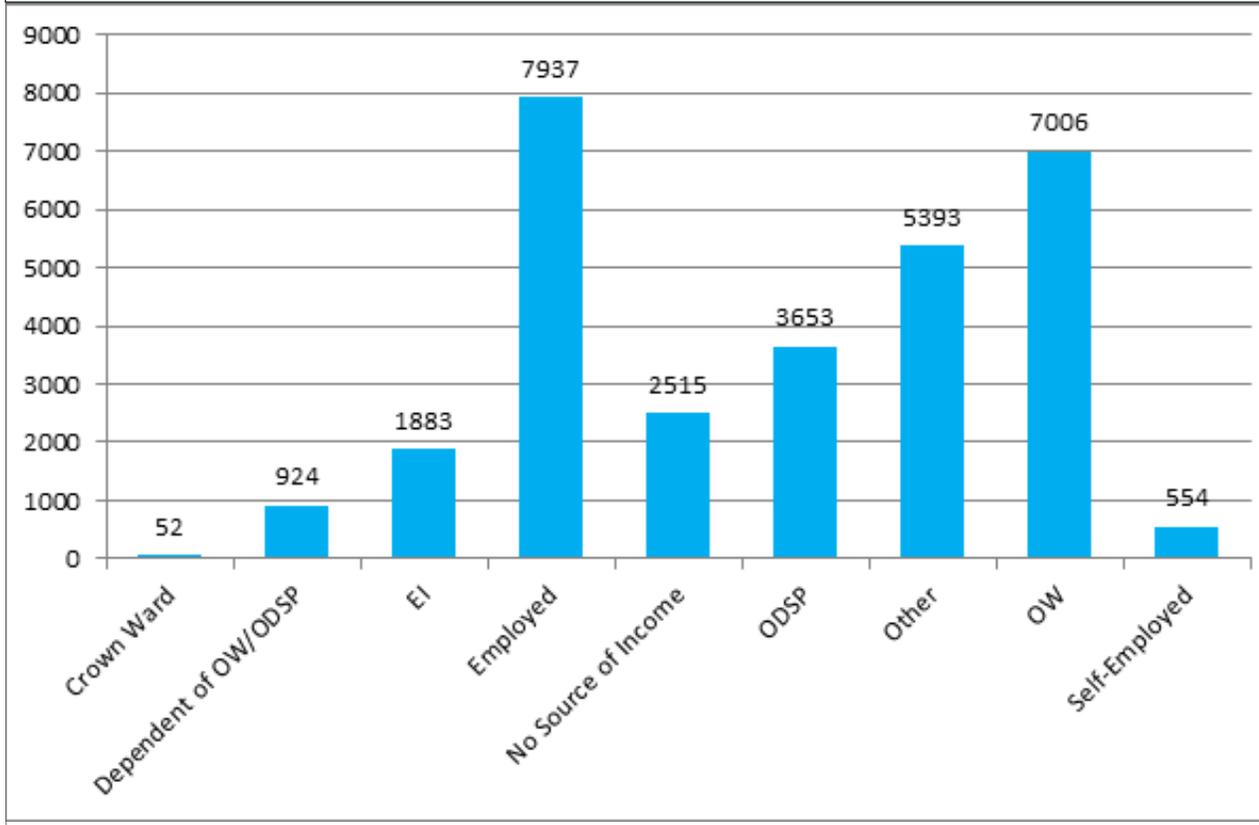
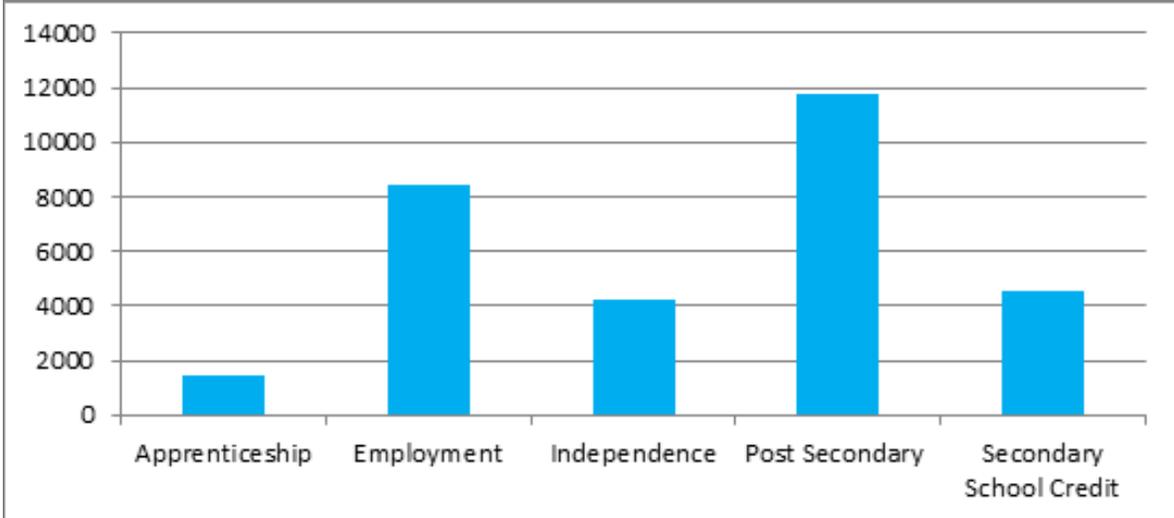


Figure 5: All LBS Learners by Goal Path - Number of Learners by 2012-13



5. Programme for the International Assessment of Adult Competencies (PIAAC)

On October 8th, 2013, the Organization for Economic Cooperation and Development (OECD) released results from its First Survey of Adult Skills or Programme for the International Assessment of Adult Competencies (PIAAC). Conducted in 2011-12, PIAAC sampled 166,000 adults aged 16-65 in 24 countries, including over 27,000 adult Canadians.

The primary purpose of PIAAC is to assess proficiency in literacy, numeracy and problem solving in technology-rich environments (PS-TRE) - three key information processing competencies which are considered essential for adults in various social and work-related contexts.^{xv} All three domains are designed to evaluate a respondent's ability to understand and use written texts, mathematical information, and digital technology and communication tools to solve "real world" problems.^{xvi}

PIAAC differs from the two previous OECD international surveys of adult competencies (the International Adult Literacy Survey and the Adult Literacy and Life Skills survey) in several regards: first, PIAAC combines both prose and document literacy in its literacy domain as opposed to assessing these separately. PIAAC also includes a PS-TRE assessment which was not included in previous surveys. The skills measured in PIAAC evolved to reflect the changing nature of the workplace. The skills are outlined in Table 7 below.

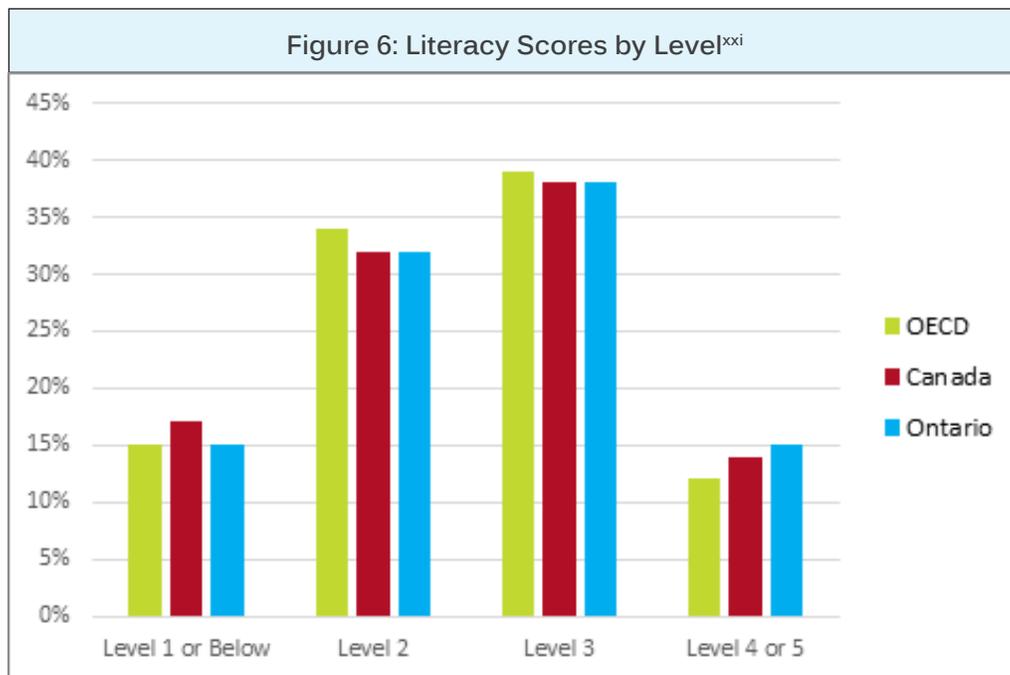
Skill	Definition
Literacy	Understanding, evaluating, using and engaging with written texts to participate in society, to achieve one's goals, and to develop one's knowledge and potential.
Numeracy	The ability to access, use, interpret and communicate mathematical information and ideas, in order to engage in and manage the mathematical demands of a range of situations in adult life.
Problem solving in technology-rich environments (PS-TRE)	The ability to use digital technology, communication tools and networks to acquire and evaluate information, communicate with others and perform practical tasks.

Literacy, numeracy and PS-TRE were measured on a 500-point scale. More information on the scales used in PIAAC can be found in the Statistics Canada document, **Skills in Canada: First Results from the Programme for the International Assessment of Adult competencies (PIAAC)**.^{xvii}

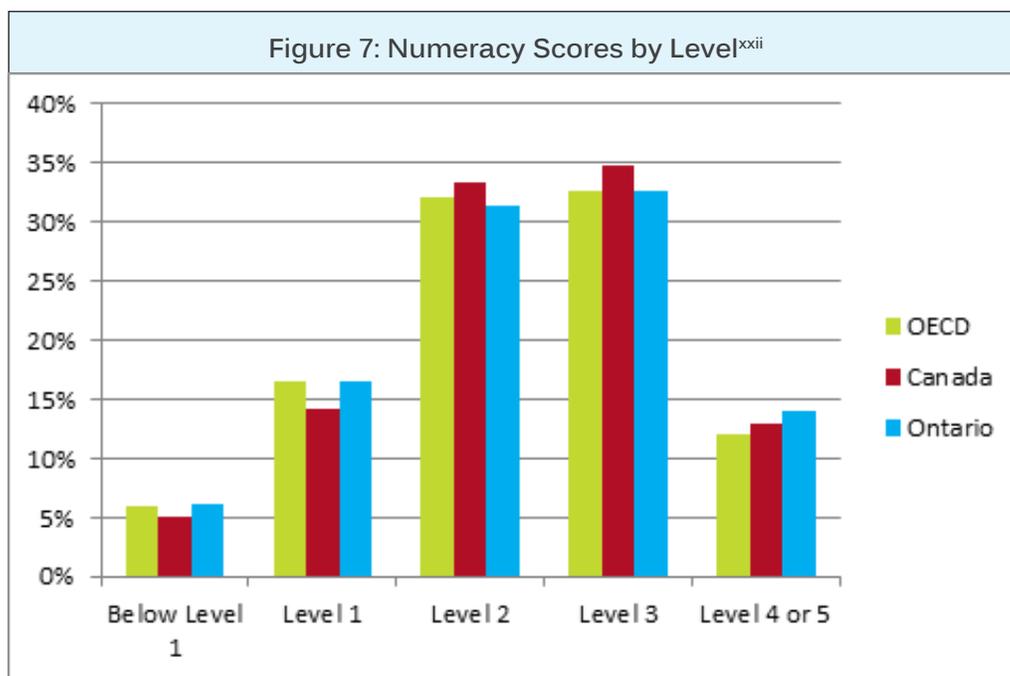
5.1 Findings from PIAAC

- **There are strong correlations between skill levels and quality of life:** Evidence from the PIAAC data suggests that higher PIAAC scores are associated with a host of positive social and economic outcomes that impact various facets of an individual's life. For example, the OECD reports that scoring at high levels of proficiency in literacy increases the likelihood of an individual reporting good to excellent health, being employed, high levels of trust, participating in volunteer activities and higher wages.
- More specifically, the OECD estimates that a 46 point increase in literacy (one standard deviation) is associated with an 8% increase in hourly wages, 20% increase in the probability of participating in the labour market and a 10% increase in the probability of being employed.^{xviii} The same results holds true for numeracy: a separate but recent study found that a one standard deviation increase in numeracy score (54 points across the OECD and 58 points in Canada) is associated with an 18% increase in wages across OECD countries and 19% in Canada.^{xix} Conversely, those with low literacy skills are more than twice as likely to be unemployed than those with higher levels of proficiency in literacy.^{xx} Thus, in many ways, skill levels are related to an individual's general quality of life.

Overall, adults in Ontario performed well on the literacy domain. The average score in Ontario is 276 which is slightly above the OECD and Canadian average of 273. Ontario also has a high proportion of the population performing at the highest proficiency levels in literacy, with 15% of the population performing at levels 4 or 5 compared to 14% across Canada and 12% in the OECD. These stats are illustrated in Figure 6 below.



- Ontario may have a numeracy challenge:** Ontario adults performed below the OECD average in the numeracy domain: the average score is three points below the OECD average. Furthermore, while a large portion of the population finished at the highest proficiency levels in numeracy, 22% of the population performed at or below level one. This is especially disconcerting given that the results from PISA (the Programme for International Student Assessment - a survey which aims to evaluate education systems worldwide by testing the skills and knowledge of 15-year-old students) show that numeracy skills among Ontario 15 year-olds have been declining over the past nine years.



This seeming trend is problematic considering the large impact that numeracy skills have on labour market outcomes. For instance, as mentioned earlier, the wage returns of numeracy skills on wages is much larger than those of literacy skills. Hanushek et al found that a standard deviation increase in numeracy scores is associated with a 19% increase in hourly wages in Canada. This is more than twice the impact of one standard deviation increase in literacy scores on hourly wages, which the OECD estimates is around 9%.

- Education and training clearly matters:** The PIAAC data confirms the long-standing notion that 'education matters.' From the PIAAC data, the OECD estimates that a one year increase in schooling is associated with a seven score point increase in literacy scores.^{xxiii} This highlights the need to engage low skilled individuals in meaningful education and training; however, the PIAAC data also reveals that those with lower levels of proficiency are less likely to participate in education and training.^{xxiv} Though the OECD has demonstrated this result internationally, analysis of the Ontario data shows that the lack of engagement in education and training among lower skilled adults is also prevalent in Ontario.

- Inequality and bifurcation of skills:** Another theme to emerge from the Canadian and Ontario results is the high degree of inequality between high and low performing individuals. In each domain there are large proportions of the population at the lowest and highest levels, and there are large score point differences between the lowest and highest performing respondents in the literacy and numeracy domains. The results show a sharp divide between those performing at the highest proficiency levels and those struggling to demonstrate basic levels of proficiency, with large segments of the population at each end. The PIAAC data could be used to understand the challenges faced by lower-skilled individuals in order to design effective and meaningful interventions which help individuals succeed in an increasingly competitive and technologically complex world.

5.2 State of Skills in Ontario

When compared to the other OECD nations who participated in PIAAC, Ontario scores slightly higher in literacy and problem-solving in technology rich environments (PS-TRE) but lower in numeracy. The figure below highlights Canada's, Ontario's and the OECD average scores for PIAAC, literacy, numeracy and PS-TREs.

Ontario performed well in the problem solving in technology rich environments domain, with an average score of 285, three percentage points higher than the OECD average. Ontario also has a higher proportion of people in the higher proficiency levels than the OECD average. There were also less PS-TRE "non-respondents" than the OECD average.

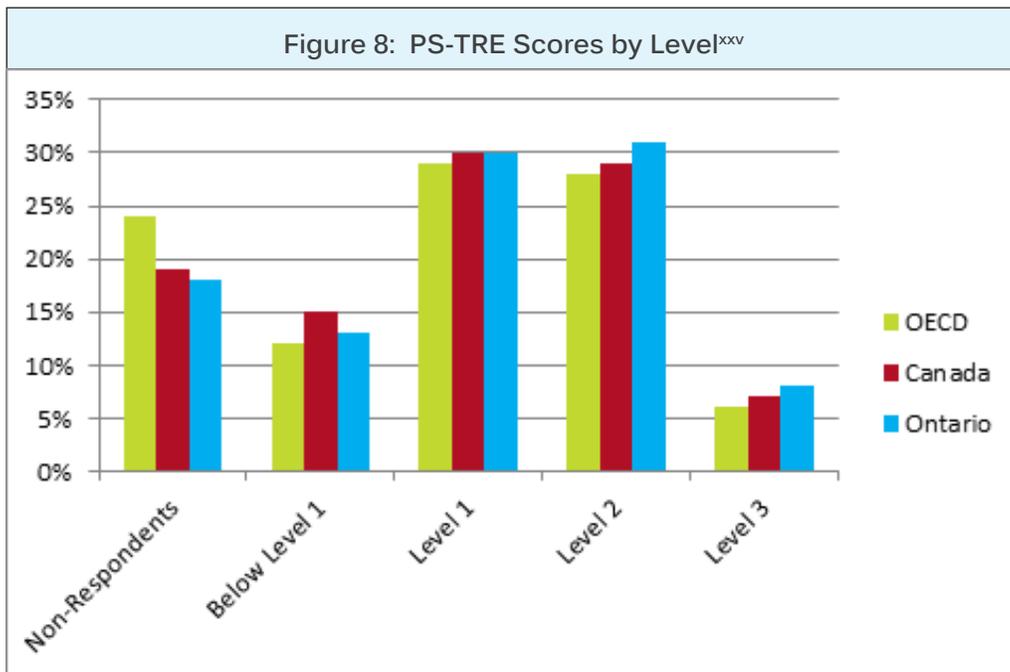
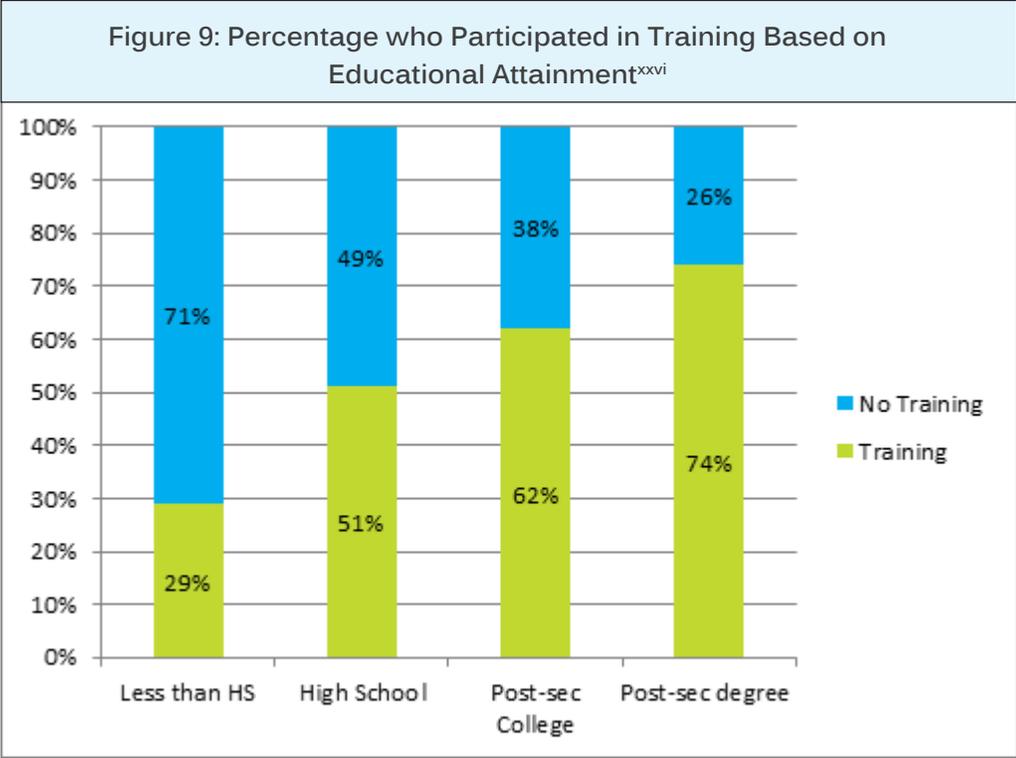
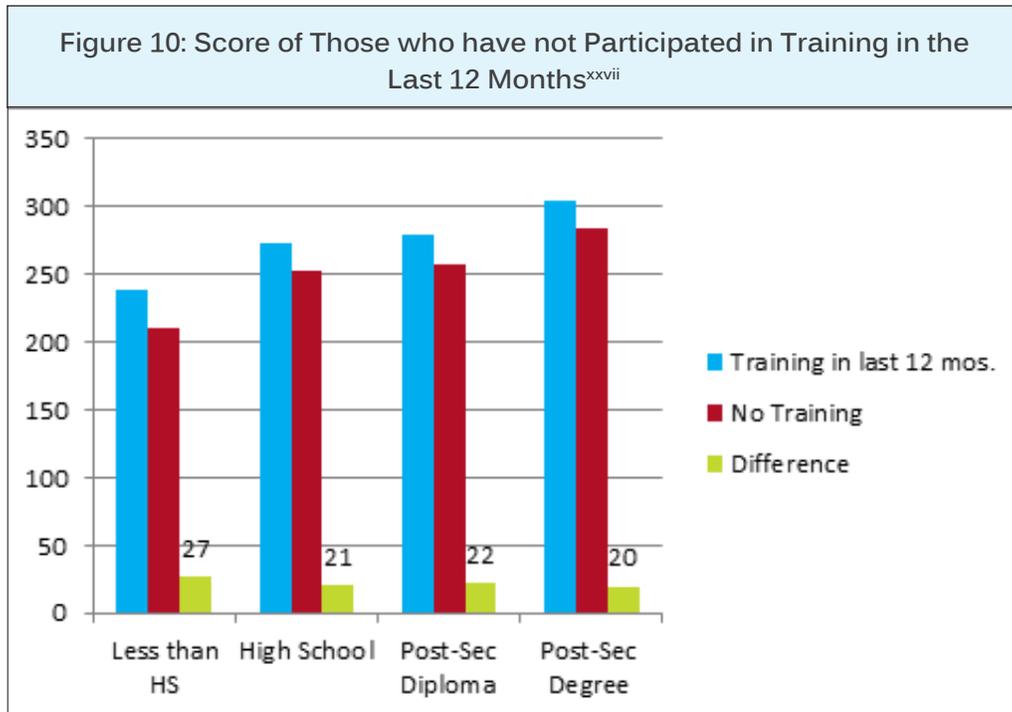


Figure 9 illustrates the PIAAC scores of those who have participated in training over the past 12 months compared to those who have not. There is an average of 22.5 points difference between those people who have participated in training versus those who have not.



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Figure 10 below shows the percentage of people who have participated in training over the past twelve months, based on educational attainment.



Further analysis of the PIAAC data will shed light on the socioeconomic characteristics of those with lower levels of proficiency skills with the hope that these insights will be used to inform meaningful dialogue on future LBS policy and programming.

For more information on PIAAC please visit www.essentialskillsontario.ca/research/analyzing-piaac

6. Possible Future Trends in Programming

Integrated Training Models: Unlike traditional educational approaches, integrated training manages to contextualize essential skills within job specific skills with the aim of securing more immediate employment. Knowing that training will prepare adults for employment provides assurance that it will require less time to get the right mix of literacy and essential skills, hands-on skills and gain employment. Evidence and data from the United States, United Kingdom and New Zealand studies indicate that integrated programs (such as I-BEST) that have hands-on activities combined with basic skills show that students have significantly higher rates of program completion, immediate participant employment and future earnings when compared with more traditional approaches.

In order to explore how integrated literacy and essential skills (LES) and skills training may benefit low skilled job seekers and employers alike, Essential Skills Ontario is conducting a complex research initiative, Elevate Canada, for Employment and Social Development Canada, under the Adult Learning, Literacy and Essential Skills Program, that is testing the concept of integrated training in the food processing sector in Ontario. For more information please visit elevate.essentialskillsontario.ca/content/elevate-canada-raising-grade-food-processing

Social Finance: Social finance refers to methods of financing the delivery of employment or social services that promote both social goals and financial returns for investors and entrepreneurs. It can apply to well-established enterprises like Goodwill Industries, or more recent innovations like social impact bonds whose returns are based on the achievement of program goals.

The ultimate goal for any social finance model is to scale up proven local innovations to efficiently improve outcomes for disadvantaged groups in society. There is an additional benefit specific to basic skills programs – social finance models by their very nature intensify engagement with employers – something that most commentators agree has been lacking in these programs. The federal government has already funded a number of literacy and essential skills pilots with social finance mechanisms.

Career Ladders or Pathways: Service coordination has been a top priority of all levels of government for a significant period of time. There is now a growing consensus among policy analysts, government, and service providers that our employment and training system is not achieving optimal results for lower-skilled and low-wage adults. For the most part, the challenge has resided in a need to develop an overarching framework that balances the needs of job seekers and employers alike.

The most promising emergent framework for service coordination is Career Ladders (also known as Career Pathways or Stackable Learning). Career Ladders focus on institutional alignment and coordination activities in tandem with local industry – orchestrating existing programs and resources while identifying and addressing missing pieces in the career ladder. These ladders focus on progressive skills development among under-skilled adults and out-of-school youth by offering a streamlined sequence of education and training services that enable students (often while they are working) to advance over time to successively higher levels of education and employment in a specific industry or occupational sector. Each of these services align non-credential (such as literacy and basic skills or English as a Second Language [ESL]) and credential learning, while helping adults without high school attainment bypass traditional education routes and earn stackable credentials as they progress. Essential Skills Ontario is currently testing the feasibility of Career Ladder models in three communities in Ontario. For more information please visit www.essentialskillsontario.ca/career-ladders

PIAAC Data: In October of last year the Organisation for Economic Cooperation and Development (OECD) released its initial findings from the Programme for the International Assessment of Adult Competencies (PIAAC) – the most comprehensive and ambitious survey of adult (16-65) skills ever undertaken amongst OECD countries. The survey provided Canada and Ontario with a unique opportunity to not only measure skill levels, but examine how skills are used at work and the relationships between skills and socioeconomic outcomes. The survey results also allow for an examination of how well education and training systems are succeeding in generating the skills measured in the survey and how public policy might improve their effectiveness.

The PIAAC survey provides a rich source of data which will be used to gain valuable insights into key adult competencies for years to come. Over the next year the OECD and other organizations (including Essential Skills Ontario) will be releasing additional reports based on PIAAC data that should further inform policy and practice in Ontario. For more information please visit essentialskillsontario.ca/research/analyzing-piaac

Understanding the Domain of Problem Solving in Technology-Rich Environments (PS-TREs): PS-TRE's is an emerging concept and domain in PIAAC that is increasingly being utilized to capture the essential skills that are necessary to participate in our technologically advanced societies. While this concept is relatively new, it is apparent that the literacy and basic skills (LBS) network needs to understand how to integrate these elements into curriculum development, training and how to measure learner skills gains with respect to PS-TRE. Further work will need to identify how PS-TRE levels in PIAAC correspond to OALCF levels, how PS-TRE skill gains can be assessed, and how PS-TRE can be integrated into an LBS classroom. For more information please visit www.essentialskillsontario.ca/resources/bulletins

Acronyms

ACE	Academic and Career Entrance/Access Carrières Études Certificate
AdLKC	Adult Learning Knowledge Centre
ACE	Academic Career Entrance
CESBA	Ontario Association of Adult & Continuing Education School Board Administrators
CLO	Community Literacy of Ontario
COFA	La Coalition ontarienne de formation des adultes
CSC	College Sector Committee for Adult Upgrading
EAL	English as an Additional Language
EO	Employment Ontario
EOIS	Employment Ontario Information System
EOIS-CaMS	Employment Ontario Information System – Case Management System
FAL	French as an Additional Language
HRSDC	Human Resources and Skills Development Canada
IALS	International Adult Literacy Survey
IALSS	International Adult Literacy and Skills Survey
LBS	Literacy and Basic Skills Program
LBS Levels	Literacy and Basic Skills Levels (Five levels of literacy and basic skills proficiency)
LLO	Laubach Literacy Ontario
LSP	Literacy Services Plan or Literacy Services Planning
MTCU	Ministry of Training, Colleges and Universities
OALCF	Ontario Adult Literacy Curriculum Framework
OECD	Organisation for Economic Cooperation and Development
OLES	Office of Literacy and Essential Skills
ONLC	Ontario Native Literacy Coalition
OSSD	Ontario Secondary School Diploma
OW	Ontario Works
PIAAC	Programme for the International Assessment for Adult Competencies
TOP	Trends, Opportunities and Priorities

Endnotes

ⁱ Employment Ontario Partners' Gateway. *Literacy and basic skills (LBS) report, fiscal year 2012-2013*. http://www.tcu.gov.on.ca/eng/eopg/publications/lbsreports/provincial_lbs_rnr.pdf

ⁱⁱ United Nations Educational, Scientific and Cultural Organization. <http://www.unesco.org/en/education-ar/themes/learning-throughout-life/literacy/literacy-important/>

ⁱⁱⁱ OECD (2013). *OECD skills outlook 2013: First results from the survey of adult skills*. OECD Publishing. <http://dx.doi.org/10.1787/9789264204256-en>

^{iv} Canadian Council on Learning (2008). *Reading the future: planning to meet Canada's future literacy need*. Ottawa.

^v Learner, Student and Client are terms used throughout this report. Typically, "learner" refers to people in literacy programs; "students" refers to people in Academic Career Entrance (ACE) courses and those seeking an academic credential; and "client" is used when speaking about Employment Ontario (EO) clients or literacy learners as they relate to EO.

^{vi} Employment and Social Development Canada. *Guide to essential skills profiles*. <http://www.esdc.gc.ca/eng/jobs/les/profiles/guide.shtml>

^{vii} Employment Ontario Partners' Gateway. *The OALCF overview*. http://www.tcu.gov.on.ca/eng/eopg/programs/lbs_oalcf_overview.html

^{viii} Employment Ontario Partners' Gateway. *Literacy and basic skills (LBS) report, fiscal year 2012-2013*. http://www.tcu.gov.on.ca/eng/eopg/publications/lbsreports/provincial_lbs_rnr.pdf

^{ix} Employment Ontario Partners' Gateway. *Navigating OALCF Tools and Resources*. http://www.tcu.gov.on.ca/eng/eopg/publications/OALCF_Tools_and_Resources_Diagram_Oct_11.pdf

^x Employment Ontario Partners' Gateway. *The OALCF overview*. Retrieved from http://www.tcu.gov.on.ca/eng/eopg/programs/lbs_oalcf_overview.html

^{xi} *Adapted from: http://www.tcu.gov.on.ca/eng/eopg/publications/cams_lbs_2012-4_bulletin.pdf*

^{xii} Employment Ontario Partners' Gateway (2013). *Literacy and basic skills (LBS) report, fiscal year 2012-2013*. http://www.tcu.gov.on.ca/eng/eopg/publications/lbsreports/provincial_lbs_rnr.pdf

^{xiii} Ibid

^{xiv} Ibid

^{xv} OECD (2013). *OECD skills outlook 2013: First results from the survey of adult skills*. OECD Publishing. <http://dx.doi.org/10.1787/9789264204256-en>

^{xvi} Ibid

^{xvii} Statistics Canada (2013). *Skills in Canada: First results from the programme for the international assessment of adult competencies (PIAAC)*. Catalogue no. 89-555-X

^{xviii} OECD (2013). *OECD skills outlook 2013: First results from the survey of adult skills*. OECD Publishing. <http://dx.doi.org/10.1787/9789264204256-en>

^{xix} Hanushek, Eric A. Guido, Schwerdt. Wiederhold, Simon. Woesssman, Ludger (2013). *Returns to skills around the world: Evidence from PIAAC*. OECD Education Working Papers, No. 101, OECD Publishing. <http://dx.doi.org/10.1787/5k3tsjqmvtq2-en>

^{xx} OECD (2013). *OECD skills outlook 2013: First results from the survey of adult skills*. OECD Publishing. <http://dx.doi.org/10.1787/9789264204256-en>

^{xxi} Ibid

^{xxii} Ibid

^{xxiii} Ibid

^{xxiv} Ibid

^{xxv} Ibid

^{xxvi} Ibid

^{xxvii} Ibid

www.essentialskillsontario.ca

