



Supporting Apprenticeship Completions: A Model of Service Provision

CONSULTATION REPORT

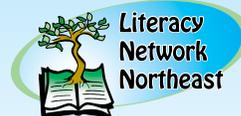


The Mid North Network
for the Coordination and
Development of Adult Learning

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Developed by:
Stewart Kallio



Regional Literacy & Basic Skills Network

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Sudbury, ON
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Acknowledgments

This project would not have been completed without the skills and support of a large number of people.

Special acknowledgments go out to two key individuals who played a very significant role in getting this project developed and approved. Although both *Lorel-Ann Martel*, past Executive Director, Mid North Network and *Audrey Anderson*, Consultant/MTCU for LBS (retired), Sudbury are no longer involved with the project, their persistence and hard work in seeing it funded are appreciated.

Project Advisory Committee

The Advisory Committee members represented many of the important stakeholders linked to this project, including literacy network Executive Directors, Training Consultants, Literacy and Basic Skills (LBS) practitioners, Employment Service providers, Aboriginal Skills Employment and Training Agreement (ASETA) holders, Aboriginal Apprenticeship Board of Ontario, Workforce Training Boards, Labour Councils, employers and private sector practitioners. Their input, particularly in the early stages, was extremely helpful in guiding this very complex project.

Northern Literacy Networks Executive Committee

The Mid North Network in Sudbury and its Executive Director, *Marsha Bell*, provided the project leadership in partnership with its two Northern Ontario networks, Literacy Network Northwest and Literacy Network Northeast. As an executive team, they ably helped shape the project's day-to-day progress.

The project appreciates the work of *Tamara Kaattari* who provided overall copy editing.

Stephen Knowles – owner of The Right Type – is responsible for the desktop publishing.

The term **Essential Skills** is used repeatedly throughout this document, both to describe the learning that happens related to apprenticeship and in the names of actual resources, newsletters, and websites. Often, the term is capitalized, but sometimes it is not. For the sake of consistency, we have decided to capitalize it everywhere it may refer to the nine Essential Skills as they are defined by Human Resources and Skills Development Canada (HRSDC).

For the sake of brevity, the data summaries developed for the survey of EO service providers and the practitioner/agency consultations are not appended to this report. They have been retained by the author who may be contacted at info@kallioconsulting.ca

All contact information, emails and website links were accurate as of the time this document was published.

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Table of Contents

Introduction	1
Context	2
Employment Ontario Transformation	3
Demographics	3
Capacity for Delivery in Northern Ontario	7
Apprenticeship	8
Apprenticeship Completions	11
Challenges to Apprenticeship Completion	12
Apprentices in Northern Ontario	14
Research	15
Methodology	15
Needs Assessment/Survey of Service Providers	16
Models of Service Provision	22
Information and Referral	22
<i>Information and Referral Models</i>	23
Assessment	25
<i>Assessment and Essential Skills</i>	26
Program and Service Delivery	29
<i>e-learning in Northern Ontario</i>	30
<i>Capacity to Work Online</i>	31
Concluding Thoughts	34
Research Reviewed	37

CONSULTATION REPORT

Supporting Apprenticeship Completions: A Model of Service Provision

Introduction

Supporting Apprenticeship Completions – a Model of Service Provision is a research and development project funded by the Ministry of Training, Colleges and Universities in Ontario. The lead organization for the project is the Mid North Network located in Sudbury.

The purpose of the project is to identify and pilot delivery and referral models for helping apprentices¹ living in rural or remote locations in Northern Ontario to complete their Certificate of Qualification (C of Q), achieve their Red Seal designation, or complete a Grade 12 or equivalent credential.

This Report provides an information framework for the project, *Supporting Apprenticeship Completions: Model of Service Provision*. It describes the project's context, the Employment Ontario transition, Northern Ontario's demographic profile, and LBS service providers' capacity to deliver e-learning. It then looks at apprenticeship and the issue of apprenticeship completions. A review of the literature and best practices related to information and referral, assessment, and program service and delivery concludes the Report. The report provides examples of existing information and referral practices. It sets out clear information about apprenticeship and systemic issues related to apprenticeship completion, including barriers to passing the C of Q. The Report is a reference against which the activities at the pilot sites can be assessed.

In its study of apprenticeship completions, the Canadian Apprenticeship Forum (2011) describes two non-completion scenarios: (1) completers, noncertified (individuals who finished workplace and technical training, but do not have a Certificate of Qualification or journeyperson certificate) and (2) discontinuers (individuals who had been registered apprentices at some point in the past and had discontinued their apprenticeship programs between 2002 and 2004).

¹ A person who works in a trade, occupation or craft under an agreement or contract and is registered with the Apprenticeship Authority. The apprentice learns the knowledge, skills, tools and materials of the trade, occupation or craft through on-the-job training and technical instruction under the supervision of a certified journeyperson. (Source: Statistics Canada – Glossary of Terms for Apprenticeship Training and Certification)

The apprentices in the Mid North project:

- are challenging the Certificate of Qualification and need technical math skills and support to write a multiple-choice test and/or study material related to the standards covered by the Red Seal test
- need to attain a high school diploma or equivalency in order to maintain their employment and apprenticeship status

The project serves apprentices using the mechanisms of blended learning (online credential and/or learning module, face-to-face, computer training, tutoring/mentoring/coaching etc.). It builds upon the integrated Employment Ontario (EO) system of service provision which includes Apprenticeship, Employment Services, Literacy and Basic Skills, and Workforce Planning Boards.

Additionally, the project proposes to work with MTCU's apprenticeship offices to link with First Nations communities offering apprenticeship programs.

Context

The economic environment in Northern Ontario is rapidly changing. A critical gap is developing between the supply of skilled workers and the demand for skilled workers. Jobs are being created through workforce retirement and industry growth, particularly in the construction, industrial and service trades. The value of the un-mined metals in 9 Northwestern Ontario mining projects, for example, is projected at \$136 billion; employment growth in Ontario as a result of mining is projected at 23,588 new positions. The highest occupational demand is in trades and production such as underground miners, millwrights, mineral processors, heavy equipment operators and electricians (Dadgostar, D., Garofalo, S., Gradojevic, N., Lento, C., & Peterson, K., 2012).

Work in the skilled trades provides good and well-paying jobs. Yet, literacy skills and/or educational gaps too often contribute to candidates not completing their apprenticeship qualifications. Cowan (2012) notes some barriers to workforce participation:

- Work in the trades increasingly requires Grade 12 and/or higher trades certification
- Cultural differences
- Separation from home and community to work at remote job sites
- Managing personal/family budgets

TCU apprenticeship Employment and Training Consultants (ETCs) observe that many apprentices do not complete their apprenticeships because they are unable to pass the Certificate of Qualification (C of Q) exam. Furthermore, in larger

urban centres, unsuccessful C of Q challengers or apprentices who need a Grade 12 credential have easier access to literacy/skills programs and services to help them prepare and succeed. The same easy access, however, to literacy/skills programs and services is not always available in rural or remote areas of Northern Ontario.

Employment Ontario Transformation

The Employment Ontario (EO) transformation emphasizes customer-focused services and delivery needs – improving access to programs and services, eliminating duplication to improve efficiencies, and implementing an effective service and delivery framework. Under the Employment Ontario transformation, training and employment services are full suite services. This means that clients have a single branded point of access to the employment and training programs and services needed to succeed in today's job market. The Employment Ontario service delivery framework is based on six principles: service delivery should be accessible, customer-centered, integrated, cost-effective, accountable and of quality.

With the introduction of the Ontario Adult Literacy Curriculum Framework (OALCF), Literacy and Basic Skills (LBS) went from 3 outcomes (employment, further education, and independence) to 5 outcomes (employment, postsecondary, secondary school credit, apprenticeship, and independence). Learner planning is focused on developing comprehensive learner profiles (work/life history, assessment of skills, vocational interests, etc.) and transition-oriented action plans (learning plans, referrals to services within the EO network, access to employment services, community resources, etc.). In essence, LBS service providers meet learners who present with unique life/work histories and help them develop a plan to achieve their training and transition goals.

Demographics

Miner (2012) makes a strong case for developing a training policy to anticipate and respond to emerging workforce realities. An aging workforce will retire in great numbers. Fewer well-skilled younger workers will be available to replace them. The number of people needed for work will far exceed the number of people with the capacity to fill those jobs. Demand will outstrip supply. Every person able to work will be needed to work.

The numbers are staggering. Forecasts show that by 2016, the total labour force shortage could be 914,400 (assuming a medium population growth). This total is derived from a projected skill shortage of 1,464,100 and an unskilled surplus of 549,700 (Miner, 2012).

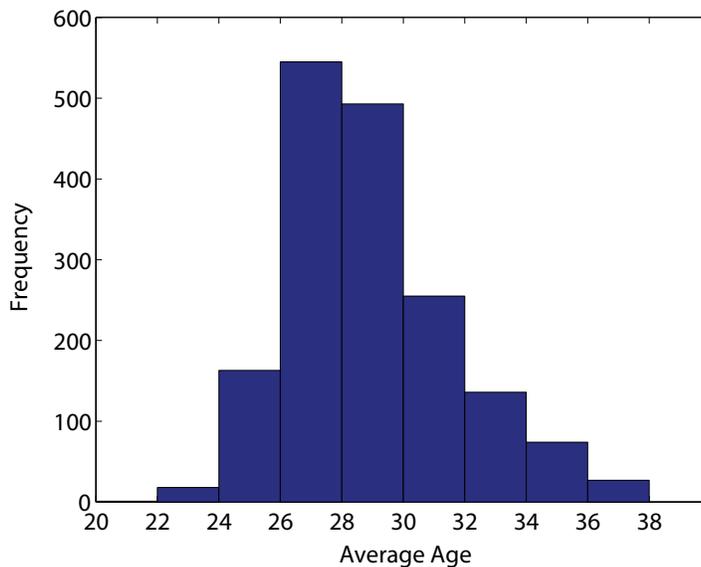
The skilled trades workforce is aging more rapidly than the overall workforce (Canadian Council on Learning, 2006). Table 1 below shows the increasing age

of the apprenticeship population (Coe, 2011).² Given the impending retirement of large numbers of ‘boomers,’ the resulting loss of their workplace skills and experience, and a shift to a smaller, less skilled and younger workforce, the profile becomes skewed to middle and older age groups.

The Canadian Council on Learning adds that young people, immigrants and women are disinclined to participate. Young people neither understand nor do they seem to appreciate the value of a career in the trades; further, their peer groups, and especially their high school counselors, don’t necessarily promote the trades as a career. Immigration is no longer the primary driver for growing the Canadian workforce. Immigration policy increasingly favours highly educated persons yet fewer and fewer of them represent skilled tradespersons. Women in the workforce tend to be younger and less likely to be approaching retirement. They make up approximately half the workforce but show the greatest labour force growth. Despite this, their participation in the skilled trades accounted for just 9.7% of registered apprentices and 10.6% of completed apprenticeships (p. 10-11).

Immigration is not a strong solution to growing the skilled trades. McDonald & Worswick (2011) note that recent immigrants to Canada have less apprenticeship experience than previous cohorts, but they also observe a positive intergenerational influence – native-born Canadians of immigrants who completed an apprenticeship are more likely to consider and complete an apprenticeship. The influence is most pronounced with men. Literacy and employment service providers need to understand who is and who is not participating in apprenticeship as they recruit and support learners on the apprenticeship path.

Table 1:
Average Apprenticeship Age: Sample Trades and Provinces 1991–2007



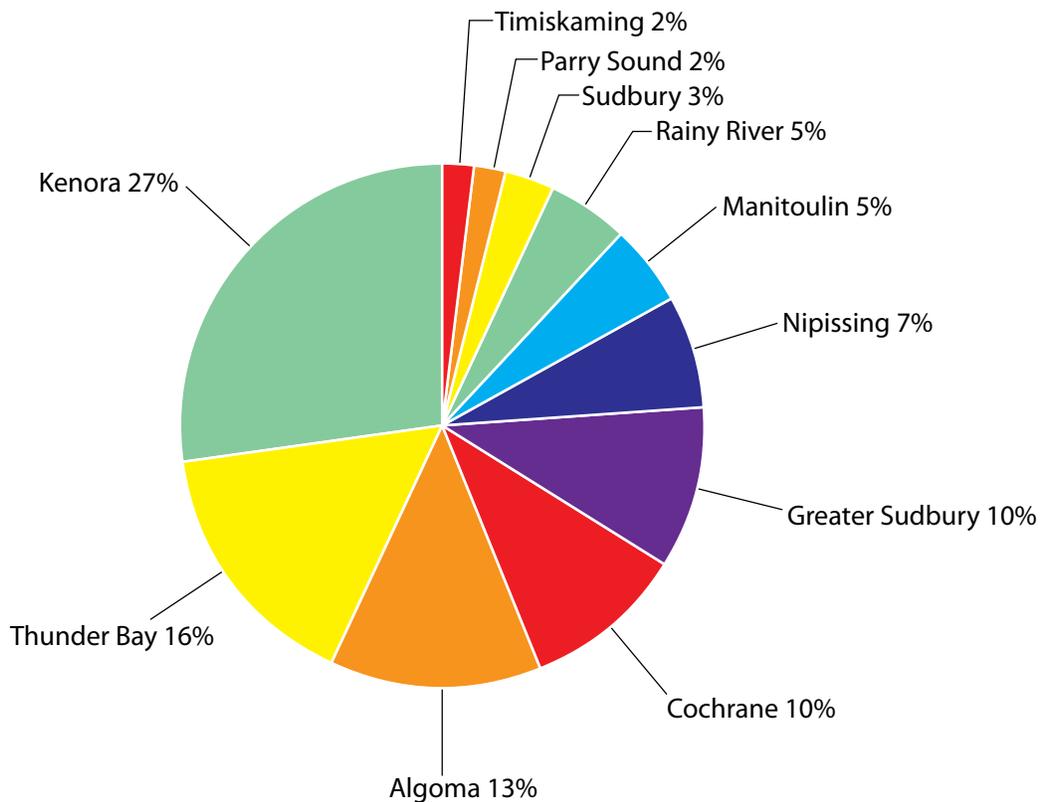
² This profile shows 2007 data. The trend will shift to an older average age for 2013.

The Ontario Chamber of Commerce (2012) points out that Canada’s changing demographic is led, in part, by a 29% annual growth in the Aboriginal population and a very high rate of immigration. The jobless rate for recent immigrants is 13.6%; it is 15.2% for off-reserve Aboriginals.

Suggestions to engage skilled immigrants to fill Northern Ontario jobs in the trades ignore the reality of large numbers of Aboriginal people already living in the North. Aboriginal people – the First People – have lived on the land for thousands of years. Aboriginal communities are geographically located near the employment opportunities. They offer a workforce ready to participate and benefit from future economic activity.³

According to 2006 census data, 40% (97,935) of the enumerated Aboriginal population in Ontario lives in Northern Ontario. Northwestern Ontario has the highest percentage of the population.

Aboriginal Population in Northern Ontario⁴

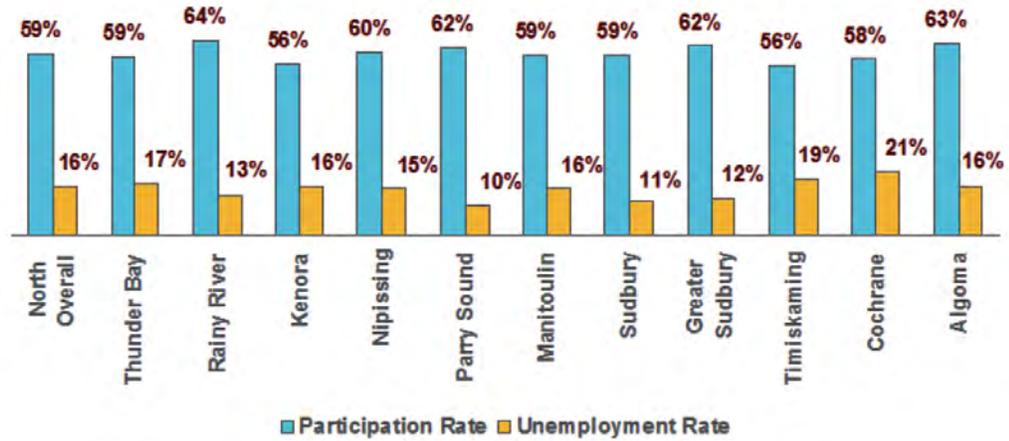


³ The current average income for on- and off-reserve Aboriginal people in Northern Ontario is \$24,000.

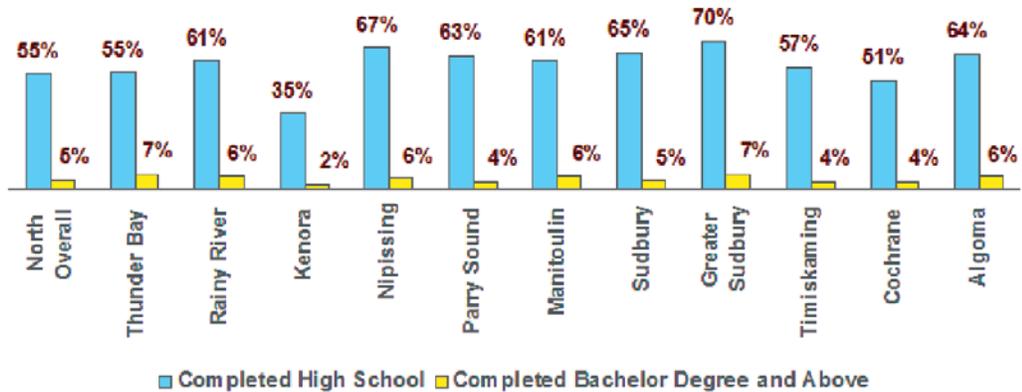
⁴ Source: Ministry of Aboriginal Affairs <http://www.aboriginalaffairs.gov.on.ca/english/services/datasheets/northern.asp>

Aboriginal people encounter challenges to participation in the workforce. Participation rates (59%) are 8% lower than the non-Aboriginal population; unemployment is double (16%) the rate for the non-Aboriginal population. And, educational attainment at the high school level (55%) remains far behind the rate for non-Aboriginal people in Northern Ontario (71%).

Participation Rates/Unemployment⁵



Educational Attainment⁶



5 Source: Ministry of Aboriginal Affairs <http://www.aboriginalaffairs.gov.on.ca/english/services/datasheets/northern.asp>

6 Source: Ministry of Aboriginal Affairs <http://www.aboriginalaffairs.gov.on.ca/english/services/datasheets/northern.asp>

Capacity for Delivery in Northern Ontario

Northern Ontario has capacity to deliver literacy programs and services to apprentices in rural or remote communities.

The North has 61 LBS service providers (more if satellite operations are taken into account), a wide array of additional Employment Ontario services, and locally available employment and training services that fall outside the MTCU umbrella (e.g., ASETA holders, Aboriginal Education and Training Institutes, secondary schools, community mentors/volunteers, and private trainers). The three Northern Literacy Networks and their extensive network of service providers know their communities well based on a long history of literacy service planning and coordination.

A survey⁷ that was conducted for the Building Sustainable Network Services in the EO North Region project shows that LBS service providers and regional literacy networks have experience with using e-services. Moodle, Centra and Skype are platforms cited most often by respondents. Facebook and Twitter are cited as examples of social media. Only two of the 36 respondents said lack of technology was a challenge or barrier to accessing services.

A follow-up survey sought to get a sense of how comfortable, familiar and open providers were with using digital technology to access Literacy Network services. Sixty-five percent (65%) of the delivery agencies had their own websites, 69% had broadband/DSL internet service, and over half the respondents use social media, Facebook in particular. Almost all respondents indicated they personally use social media, have access to technology to participate online, and use common platforms like Skype. The Northern Ontario Literacy Networks are also investigating the use of online meeting applications (e.g., GoTo Meeting, AdobeConnect, Skype, and Centra).

Internet service is widely available. Provincially funded infrastructure (e.g., Contact North) and free online programs and services (e.g., e-Channel, AlphaPlus) are well-established. Communication through social media is a given.

7 This is a 2012/2013 MTCU project. The lead organization is Literacy Northwest.

Apprenticeship

An excellent inventory of apprenticeship programs in Canada is available in the Ellis Chart.⁸

The Ontario Adult Literacy Curriculum Framework (OALCF) apprenticeship goal path describes apprenticeship:

Apprenticeship is on-the-job workplace training for those who want to pursue a career in the skilled trades.

Apprenticeship training has often been termed “earning while learning.” An apprenticeship is a legal contract between the apprentice and the employer that is registered with the apprenticeship authority, namely the Ministry of Training, Colleges and Universities (MTCU) in Ontario. Once the apprentice has signed an apprenticeship training agreement, they will receive on-the-job training from the employer or sponsor and also participate in classroom-based, trade-related theoretical and practical training (usually referred to as “in-school” training).

Apprenticeship training can range from two to five years in length, and generally requires three levels of in-school training during this period of time. Each level of in-school training is generally 8 weeks in length if taken full-time, but in-school training is also offered on a part-time, evening or one day per week basis. When the apprentice completes the required in-school and on-the-job training, they may be required to write an examination for the trade. Once the apprentice has completed the full program requirements for the trade, they receive a Certificate of Apprenticeship (C of A) and a Certificate of Qualification (C of Q). Once the apprentice receives the C of Q, they are known as a “journeyperson.”

A certified journeyperson is recognized as a qualified and skilled person in a trade and is entitled to the wages and benefits associated with that trade. Apprentices earn wages during their apprenticeship.

Apprenticeship training and trade certification are legislated in Ontario. The Trades Qualification and Apprenticeship Act (TQAA) applies to 34 construction trades in Ontario. The Apprenticeship and Certification Act (ACA) applies primarily to the service, motive power and industrial sectors representing 123 trades. The two different legislative acts have resulted in two different models. The TQAA is time-based; the ACA is a competency-based model. It is anticipated that in 2012, the Ontario College of Trades and Apprenticeship Act, 2009, will replace both acts.

⁸ The Ellis Chart is a comparative chart of apprentice training programs across Canada, produced by Human Resources and Skills Development Canada (HRSDC) in partnership with the Canadian Council of Directors of Apprenticeship (CCDA). It is the only document of its kind in Canada that allows an interprovincial overview of the 13 Canadian apprenticeship systems. It represents a key product that provides governments, industry and educational institutions with data on more than 300 designated trades, more specifically on training, certification, education/entrance requirements and prior learning assessment and accreditation processes.

Compulsory Trades

Under the TQAA, 11 of the 34 construction trades are designated as compulsory; only registered apprentices or holders of a Certificate of Qualification (commonly referred to as a license) may practice in that trade. Compulsory trades under the TQAA include: construction maintenance electrician, hoisting engineer, plumber, refrigeration and air-conditioning systems mechanic, sheet metal worker and steamfitter.

Restricted Trades

For 11 trades regulated under the ACA, only registered apprentices or holders of a Certificate of Qualification may practice in that trade. Examples of restricted trades under the ACA include automotive service technician, auto body repairer, truck & coach technician and hairstylist.

Voluntary (TQAA) or Unrestricted (ACA) Trades

Under both Acts, individuals can legally work in the trade without being registered or licensed. Examples include: tool & die maker, general machinist, baker, horticulturist, brick & stone mason and drywall finisher & plasterer.

Certificates are issued at the completion of the full apprenticeship training requirements for all trades. They are:

Certificate of Apprenticeship (C of A) – proves that an apprentice has successfully completed the in-school and on-the-job requirements (time and/or competencies signed off dependent on which Trade/Act). When the C of A is issued depends on the Act. Under the TQAA, the C of A is issued at the same time as the C of Q. Under the ACA, the C of A is issued upon completion of training (before the exam).

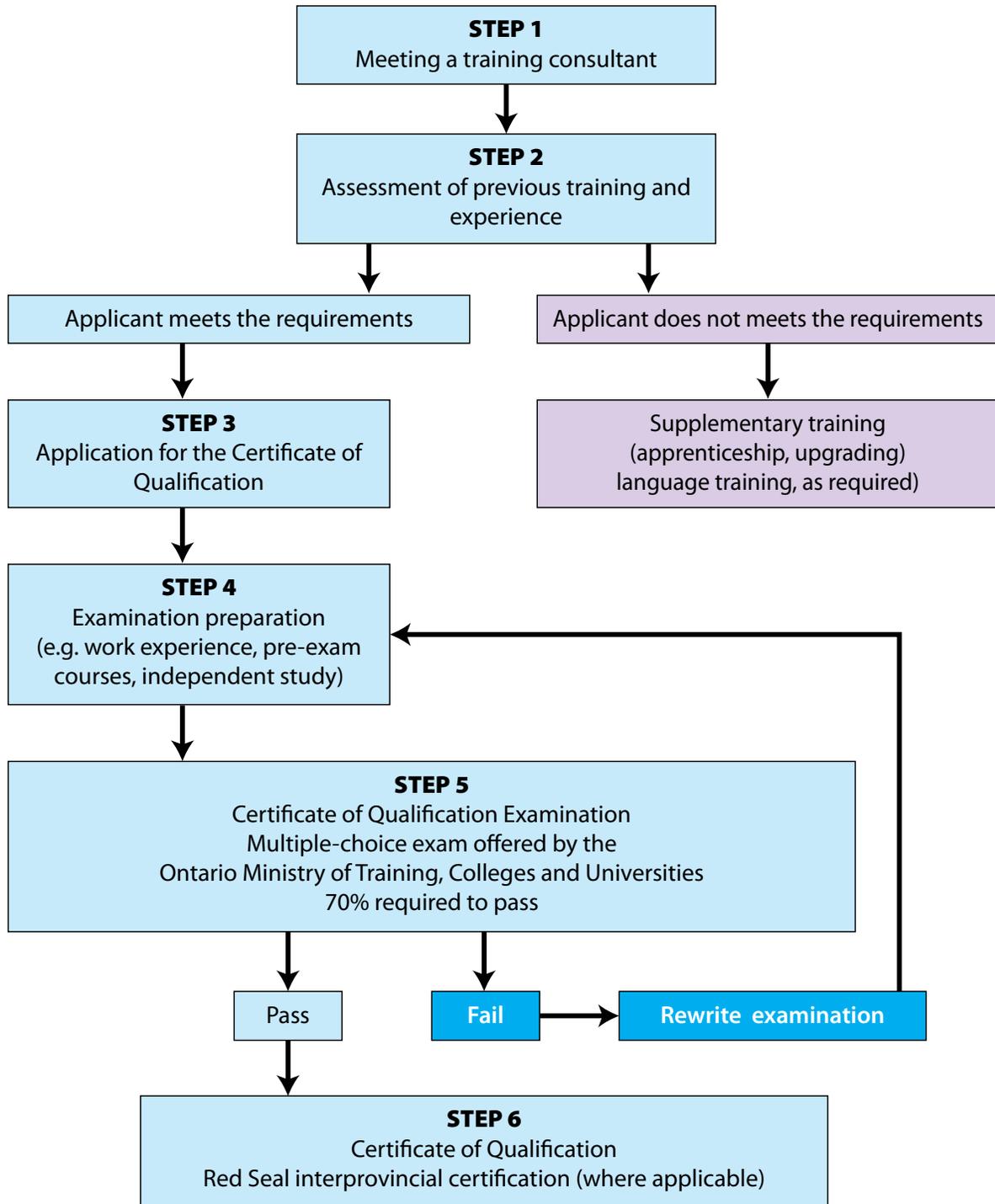
Certificate of Qualification (C of Q) – shows that an apprentice has passed the trade certification exam (where applicable). The certificate is issued once the exam is passed for both ACA and TQAA trades.

Red Seal Endorsement – where available, the Interprovincial Red Seal examination is the certification examination. Apprentices and skilled tradespersons who successfully pass the Red Seal certification examination are issued a Certificate of Qualification with a Red Seal endorsement. The Interprovincial Standards Red Seal Program acknowledges their competence and ensures recognition of their certification throughout Canada without further examination. The Red Seal endorsement represents a standard of excellence for industry.

The following chart is a visual representation of the typical steps to becoming certified in a trade in Ontario.⁹

⁹ Source: Ontario immigration website http://www.ontarioimmigration.ca/en/working/OI_HOW_WORK_CON_ELEC_CM.html

Certification Process



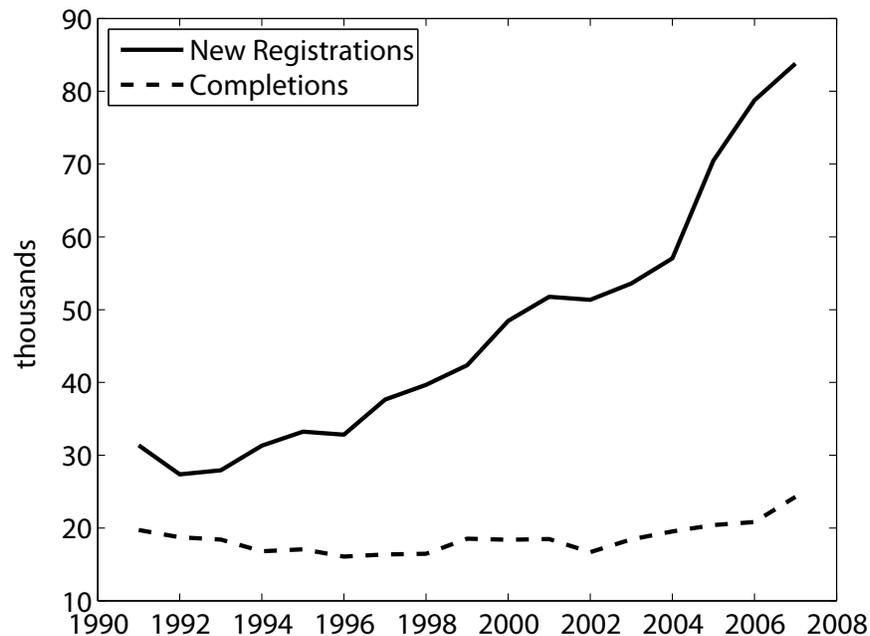
Apprenticeship Completions

The number of people enrolled in the apprenticed trades continues to grow. During the period 1995 to 2007, the number of registered apprentices more than doubled from 163,370 to 358,555 (Laporte & Mueller, 2011; Statistics Canada; Desjardins & Paquin, 2010).

However, the same data show that the number of successful completions only increased by one third.

The following chart shows the current trend lines (Coe, 2011). It's a blunt picture of the growing gap between registrations and completions.

New Apprenticeship Registrations and Completions in Canada: All Trades



Source: Registered Apprenticeship Information System.

Most who complete their apprenticeship training receive their C of Q (90%). On the other hand, most who discontinue do not complete their C of Q (90%). Both completers and those who discontinue find work, but the average hourly rate is 20% higher for those who complete compared to those who discontinue (\$28.07 compared to \$23.30). The Canadian Apprenticeship Forum (2011) adds that people who complete an apprenticeship program and a Certificate of Qualification are the highest earners (\$61,900). Individuals who pursue and complete an apprenticeship

are more immediately employable, have better earning potential in the short and long term, and report higher levels of job satisfaction and job security.

Increasingly, postsecondary level training is necessary for full participation in the workforce. Over the period 1990 to 2012, the employment rate for high school completers, indeed even for those with some postsecondary education, continued to decline (Essential Skills Ontario, 2012).

Table 2:

Employment Rate for those 15 Years and Over
by Level of Educational Attainment: Ontario 1990 and 2012¹⁰

Educational attainment	1990	2012	% Change
Some high school	55.7%	35.3%	-20.4%
High school graduate	69.4%	58.4%	-11.0%
Some postsecondary	70.3%	59.0%	-11.3%
Postsecondary certificate or diploma	76.3%	70.5%	-5.8%
University degree	83.2%	75.4%	-7.8%

Dostie (2010) found that younger people who complete high school are more likely to complete an apprenticeship. Those over the age of 28 and people with disabilities, immigrants and Aboriginals under the age of 18 with children are less likely to complete an apprenticeship. The construction trades experience the highest rate of non-completion.

There is good reason to promote skills preparation and/or higher education. People require education and training at higher levels to participate in work. Industry needs the skilled workforce; the economy of Northern Ontario benefits.

Challenges to Apprenticeship Completion

The challenges to completing an apprenticeship are well documented¹¹.

- Multiple-choice exam format
- Lack of senior level mathematics and communications

¹⁰ Source: Statistics Canada. 2012. *Labour Force Survey Estimates (LFS), by Educational Attainment, Sex and Age Group*. <http://www5.statcan.gc.ca/cansim/>

¹¹ This is a summary of challenges identified through consultations and in the literature, i.e., CAAR (Nelson, Morrisseau, Louis, & Pilato, 2010), PTP (2008), Folinsbee (2008), Canadian Apprenticeship Forum (2011).

- Essential Skills (Document Use, Reading Text, Numeracy) below level 3 on the IALS 500-point scale
- Ill-focused/ineffective study skills
- Test anxiety
- Gaps in trade knowledge resulting from work experience that is too specialized
- English is not the first language – difficulty with specialized trade language, definitions, process descriptions
- Cultural differences – ways of thinking/doing things in non-English-language cultures

Apprentices tell ETCs and LBS practitioners about their difficulties with the multiple-choice exam format. Multiple-choice exams must be well-designed to be effective. Good test questions will assess understanding at all levels of the learning taxonomy (i.e., remembering→ understanding→ applying→ analyzing→ evaluating→ creating). Designed poorly, the questions do nothing but muddle the intended purpose which is to discriminate between test-takers who clearly know the content and those who do not. The language of multiple-choice test items must be carefully crafted to present the question unambiguously and point the test taker to one and only one correct answer. Anecdotal information suggests that apprentices feel poor test design impacts negatively on their success.¹²

Unsuccessful C of Q challenges may be related to a weak Essential Skills foundation. Apprentices learn a trade by doing; as a result, transferrable reading and math skills learned on the job may not align well with the math and communication skills required to read and solve math problems on the exam. Indeed, Fownes & Evetts (2001) note that multiple-choice test items can present as complex reading tasks (i.e., Essential Skill level 3/4), thus presenting apprentices with difficult-to-read text and very real challenges to retrieving the information they need to solve the question.¹³

The quality of in-school training and work experience can impact on the apprentice's ability to answer exam questions. Twenty-four weeks of in-school training provide apprentices with well-rounded knowledge of a trade. But, if a trade is changing to respond to new products, procedures, services, or technology and the curriculum development is slow to integrate the necessary changes, apprentices will experience inconsistencies between what they learn and what they must demonstrate on an exam.

12 This point was expressed to me several times during my consultations – too often to ignore. Further investigation into the claim is warranted.

13 Fownes and Evetts present a very good example of two ways to construct a test item. One is text-based; the other is a diagram. One poses real challenges for low-skilled readers; the other presents the information visually. There is also some evidence that apprenticeship exams in Britain and Germany include trades scenarios in which the exam-taker solves multi-dimensional, integrated tasks.

Too often, C of Q challengers' work experience is narrowly focused on a particular dimension of the trade (i.e., only residential construction). This is a common scenario in Northern Ontario where apprentices often find work with small employers who simply can't afford to create a work experience that exposes apprentices to the full scope of trade practice. Employers may only require or be able to provide apprentices with a restricted range of operations (e.g., in the automotive sector, a specialization in brakes). As a result, the C of Q challenger will again experience inconsistencies between what they learn and what they must demonstrate on an exam.¹⁴

Apprentices may also fail the exam because of difficulty with specialized language and terminology, especially if English is not their first language. Foreign-trained tradespersons who attempt the qualifying exam have difficulty with specialized English-language terms and concepts. Apprentices whose first language is not English assume an additional cognitive load. Test questions read in English are interpreted and understood in the reader's first language, then solved in that language, then re-expressed in English. The thinking process simply takes longer – a problem if the exam has a time limit.

Apprentices in Northern Ontario

Apprentices meet with a training consultant to review their eligibility to register to challenge the C of Q. They provide evidence of hours worked in the trade, typically total hours equivalent to those required to complete the in-school and work placement. Evidence of Grade 12 is required if the apprentice claims that status; otherwise, apprentices may not be asked about prior education. The exam is administered at the TCU offices by trained invigilators. It is machine-scored. The results are shared with the ETC and the exam writer but only as an overall score on each exam section or block.

Apprentices who are successful with the exam receive certification. Apprentices who fail the exam after several attempts can be provided with an interpreter/reader who assists the test taker with the language of the test. The apprentice's referral to a literacy provider for test preparation/skill building is at the discretion of the training consultant. At some point in the process of rewriting exams and/or being referred to community trainers, the apprentice may simply give up and leave.

TCU Employment and Training Consultants (ETCs) describe apprentices who may struggle with the Certificate of Qualification:

14 This was evident from my discussions with ACCESS TRADES in British Columbia, the CAAR project in Sioux Lookout, personal communication with the Program Manager, Dryden Literacy, and findings from the Canadian Apprenticeship Forum literature.

- The Certificate of Qualification exam writer who is licensed from another country
- The individual who has been working in the trades for many years, but has never written their exam [challenger]
- The individual who was laid-off and needs additional certification to find or retain employment
- The older worker
- The individual who speaks English as a second language
- The individual who has been out of school or training for many years
- The exam writer with weak technical math skills

Research

Methodology

This is a research and development project. The methodology used a form of snowball research. Obvious sources were explored before turning to other sources or lines of inquiry that emerged. The research started with an exploration of the literature. More recent literature was collected (post 2005), although older reports were considered, if relevant. Two primary databases were reviewed. VOCED is a free research database for tertiary education based in Adelaide, Australia, related to workforce needs, skills development, and social inclusion. The other database was the National Adult Literacy Database (NALD), which is based in Canada.

The project was guided by a simple question:

How can LBS programs leverage the EO network to support apprentices who need to pass the C of Q or complete Grade 12 or its equivalent to improve their employability?

This question opened secondary questions:

- *How do literacy service providers recruit apprentices in rural or remote Northern Ontario communities who need to complete the C of Q or Grade 12?*
- *What models of service provision can literacy service providers deliver/align with the OALCF apprenticeship framework to improve apprenticeship completion in Northern Ontario?*
- *What lessons can be learned from the pilots about improving apprenticeship completions in Northern Ontario, and how can those lessons be communicated to the field more broadly?*

The research explored apprenticeship, apprenticeship completions, access to apprenticeship in rural or remote communities, the capacity of EO service providers to support apprentices, and best practices/models of assessment and delivery to support apprenticeship completions. However, there was not a lot of literature that spoke specifically to these themes. Related literature described broad national and provincial initiatives related to improving rates of apprenticeship completion and to the social and economic implications of having more apprentices in the workforce. Consultations with individual practitioners and literacy organizations resulted in good knowledge about current practices in Northern Ontario. Forty-two (42) personal or telephone interviews were conducted.

Needs Assessment/Survey of Service Providers

The project needed data about Northern Ontario Literacy and Employment service providers’ experience with apprentices. Data was collected using Survey Monkey. The three Northern Literacy Networks agreed to distribute the survey to literacy and employment service providers in their network area. The ASETA holders were contacted through Shooniya Wa-Biitong.

The survey was designed to reach a broad population of service providers. It asked about the extent to which providers are in contact or work with C of Q challengers and/or apprentices wishing to complete Grade 12. One hundred and thirty-eight (138) agencies were contacted. Fifty (50) responded for a response rate of 36%. The survey had eight (8) questions. The distribution of responses from LBS, ESP, and ASETA was similar across all three Networks.

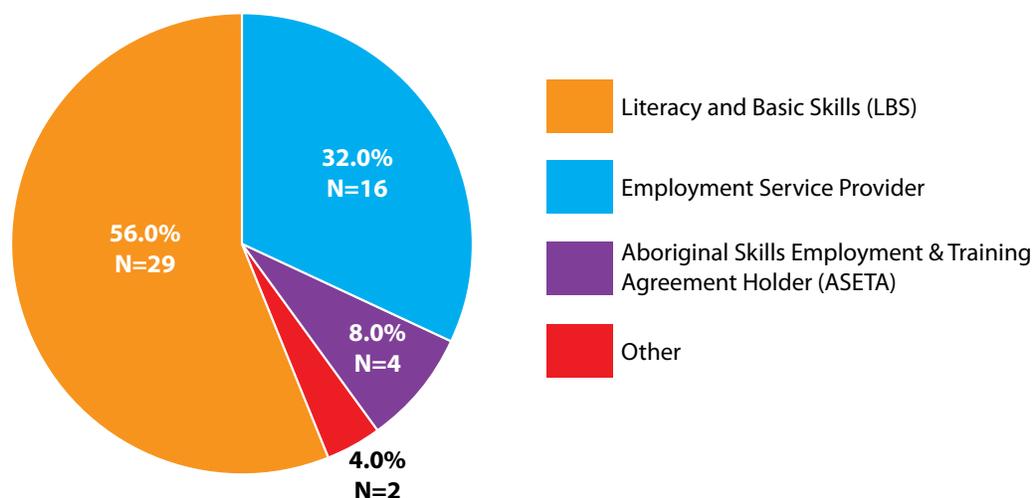
Table 3:
Survey Responses

	LNW	MNN	LNE	Total		%
	sent	sent	sent	sent	response	
LBS	15	32	30	77	27	35%
ESP	12	15	4	31	16	52%
ASETA				30	4	13%
Others					3	
				138	50	36%

Questions 1 to 7 are presented and discussed in the following circle charts. Question 8 asked respondents if they were interested in exploring piloting opportunities and/or leaving contact information for follow-up discussion.

Question 1

Your organization is best described as:



Fifty (50) responses were collected representing service providers from three Northern Ontario literacy networks. Twenty (20) respondents came from larger urban centres (Sudbury, Timmins, North Bay, Thunder Bay). Nine (9) respondents identified as Employment Service providers, nine (9) as LBS and two (2) as ASETA holders.

The Mid North Network geographic area had twenty-seven (27) service providers who responded *yes* or *no* to providing one or both services – C of Q preparation and/or Grade 12 completion.

One of the satellite campuses of Collège Boréal is located in Kapuskasing where 68% of the population identifies French as its first language. Collège Boréal offers both LBS and Employment Services, serves 10–30 Certificate of Qualification challengers annually, and notes a strong need to support apprenticeship completion.

Three Aboriginal service providers (Treaty 3, Timmins, Wikwemikong) expressed interest in participating in a pilot.

A small LBS service provider in Blind River provides learners with employment readiness skills such as computer skills, the ability to read WHIMS manuals, and skills to get a driver's licence. It indicated interest in the pilot but does not see a lot of apprentices.

The organizations described as 'other' included a secondary school and a labour council.

Question 2

This question asked where the organization was located. The locations are identified in Table 4: Certificate of Qualification Challengers by Service Provider, Activity Level and Geographic Location and Table 5: Apprentices Needing Grade 12 by Service Provider, Activity Level and Geographic Region

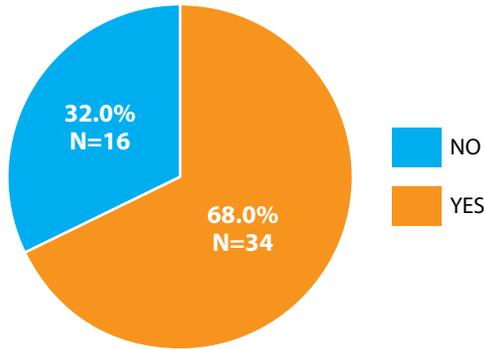
Question 3

Does your organization meet/serve people who are challenging the Certificate of Qualification (i.e., people who may need technical math skills and support to write a multiple-choice test and/or study material related to the standards covered by the Red Seal)?

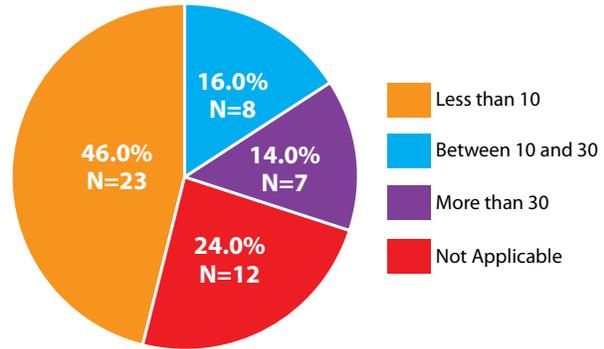
Question 4

How many people described in question three (3) does your organization meet/serve annually?

Does your organization meet/serve people who are challenging the Certificate of Qualification (i.e., people who may need technical math skills and support to write a multiple choice test and/or study material related to the standards covered by the Red Seal)?



How many people described in question three (3) does your organization meet/serve annually?



Sixty-eight percent (68%, n=34) indicated yes. Of the total number of providers who serve people who are challenging the Certificate of Qualification, twenty-three (23) indicated they served less than 10 people, eight (8) indicated they served between 10 and 30 people, and seven (7) indicated they served more than 30 people.

Table 4 shows higher service activity in larger urban centres. Cambrian College and the main campus of Collège Boréal are in Sudbury. The Sudbury and Timmins ASETAs also note service to C of Q challengers. A Thunder Bay respondent noted that, “the MTCU’s Apprenticeship branch has been referring unsuccessful candidates to our program for 5 years.”

Table 4:

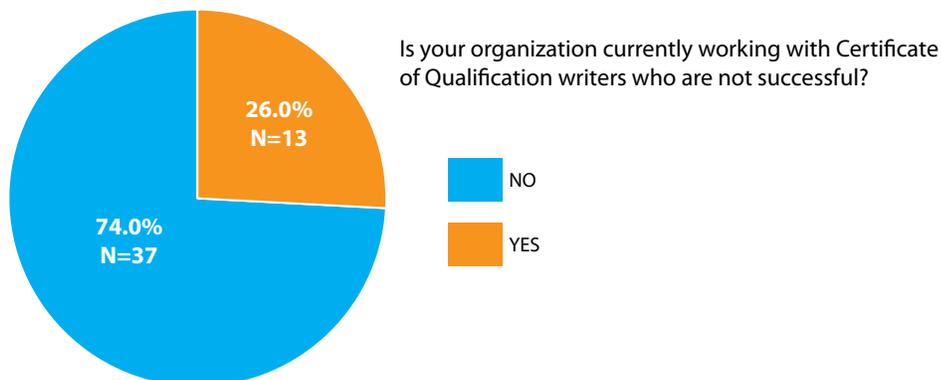
Certificate of Qualification Challengers
by Service Provider, Activity Level and Geographic Location¹⁵

	Employment Service	LBS	ASETA
> 30 (n=6)	Sudbury (2)	Collège Boréal in Sudbury (1) and South Porcupine (1), Thunder Bay (1)	Sudbury (1)
10-30 (n=8)	Fort Frances (1), Sudbury (1) , Thunder Bay (1)	Northern College in Moosonee (1), North Bay (1) , Kapuskasing (1)	Treaty 3 (1), METS and WTES office in Timmins, (1)
< 10 (n=20)	Fort Frances (1), Kapuskasing (1), Kenora (1), Marathon (1), Sudbury (4)	Blind River (1), Dryden (1), Greenstone (1), North Bay (1), Parry Sound (1), Schreiber (1), Temiskaming Shores (1), Sudbury (1), Timmins (1) , Others (2)	Wikwemikong (1)
Total (n=34)	13	17	4

Sixteen (16) of the 50 service providers indicated they did **not** meet/serve people who are challenging the Certificate of Qualification. One agency serves Deaf and hard of hearing learners who face other challenges finding work. *“We have met individuals with long-term goals of obtaining an apprenticeship; however, with hearing loss many employers show much apprehension in working with individuals with a hearing disability.”*

Question 5

Is your organization currently working with Certificate of Qualification writers who are not successful?



¹⁵ Larger urban centres are highlighted in a different font.

Only thirteen (13) providers surveyed work with C of Q challengers. A Thunder Bay provider is *“providing help to apprentices for approximately 5 years. We have a Trades Exam Support Class that runs on Tuesday and Thursday evenings, and many individuals also work with volunteer tutors on a one-to-one basis preparing for their exams. Our volunteers and instructors have also, on occasion, acted as readers for exams.”*

An LBS provider in Kenora describes the clients they see. *“I have not yet served a client who is without their diploma. For the most part our experience is with those that have completed the postsecondary requirements, are employed and just cannot pass the test. Most have attempted the exam several times and now their employment and apprenticeship status is at risk. Scores are commonly 67, 68 or 69% ... If an adult is interested in a trade and comes into the program, and Grade 12 is required, we would serve them until they are able to transition to the next step, e.g., work with an Apprenticeship Consultant, help with forms, sign with an employer.”*

However, other smaller communities add, *“we have never been approached by any organization/person looking for this service”* (Kirkland Lake). A Sudbury Employment Service observes that it does *“have some candidates that have been working in a trade for a very long time but do not have the educational or certification backgrounds”*... and *“some candidates were unsuccessful in challenging their tests,”* but makes no comment about interventions or follow-up referrals. A Blind River provider has *“not had the opportunity to work with clients needing these skills.”* It works instead with those *“who need to learn basic skills like reading, math, etc. We also assist learners looking for employment who need help understanding material needed to get the job such as computer skills, reading WHIMS manuals, and getting a driver’s licence.”*

Finally, a Sudbury Employment Service provider commented, *“I think there would be more people willing to take on a trade if they knew that supports were available to them. I had a client who worked in auto body repair for 20 years and needed to challenge the exam. He has literacy issues, so I sent him to New Leaf Literacy (at the time) and they coached him well enough to pass the exam.”*

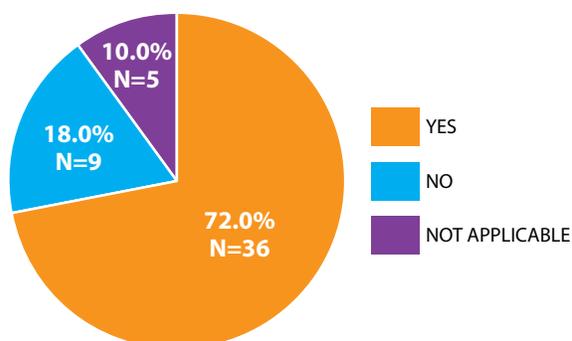
Question 6

Does your organization meet/serve apprentices who need to obtain a high school diploma or equivalency in order to maintain their employment and apprenticeship status?

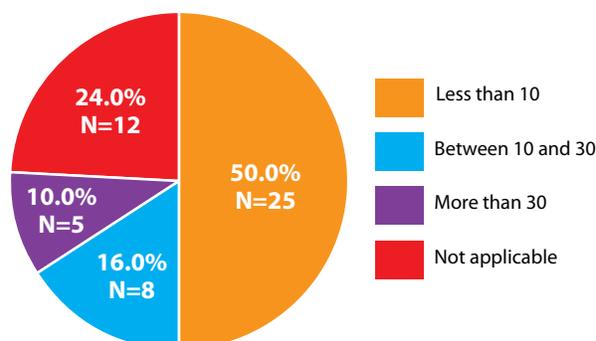
Question 7

How many people described in question six (6) does your organization meet/serve annually?

Does your organization meet/serve apprentices who need to obtain a high school diploma or equivalency in order to maintain their employment and apprenticeship status?



How many people described in question six (6) does your organization meet/serve annually?



Thirty-six (36) service providers meet/serve apprentices who need to obtain a high school diploma or equivalency. The majority (25) serve less than 10 apprentices annually.

Table 5:
Apprentices Needing Grade 12 by Service Provider, Activity Level and Geographic Region¹⁶

	Employment Service	LBS	ASETA
> 30 (n=5)	Sudbury (2)	Sudbury (1)	Sudbury (1), Timmins (1)
10-30 (n=8)	Fort Frances (1), Sudbury (2), Thunder Bay (1)	Northern College in Moosonee (1), Sudbury – Collège Boréal (1), Sudbury (1)	Treaty 3 (1)
< 10 (n=25)	Fort Frances (1), Kapuskasung (1), Kenora (1), Marathon (1), Sudbury (3)	Blind River (1), Greenstone (1), Kirkland Lake (1), North Bay (2), Parry Sound (1), South Porcupine (1), St. Charles (1), Sturgeon Falls (1), Sudbury (3), Temiskaming Shores (1), Timmins (1), Others (3)	Wikwemikong (1)
Total (n=38)*	13	21	4

* The total number of yes responses (n=36) is not the same as the total number of service providers who serve apprentices who need Grade 12 (N=38). Some providers who responded *no* or *N/A* also identified that they meet/serve apprentices.

¹⁶ Larger urban centres are highlighted in a different font.

Two (2) Employment Service providers (Sudbury), one (1) LBS provider (Sudbury), and two (2) ASETA holders (Sudbury, Timmins) serve more than 30 apprentices who need to obtain a high school diploma or equivalency.

A Kirkland Lake LBS provider said regarding the high school diploma, “We have never served anyone for the purpose of maintaining apprenticeship status. However, our organization provides bridge programming and support services to learners taking independent correspondence credit courses with the School Board (DSB1-Rainbow Project) for the purpose of obtaining Gr. 12. If an apprentice came to us seeking the same service, we would provide it. RE: equivalency to high school diploma – we do not provide this service...most learners that we serve and support that are working on credit courses are not employed and are usually doing it for postsecondary entry or for personal gratification. Last year we had one individual in our organization working on credit programming to get Grade 12 for maintaining employment.”

A Native stream LBS provider does “not provide the academic preparations for high school diploma or equivalency; this is a referral out after LBS completion.”

One LBS provider in Blind River indicated they have “not had the opportunity to work with clients needing these skills” but “we have a local Adult Education partner who takes that role. We help the clients prepare for that step.”

Models of Service Provision

The research component of this project explores service provision along three dimensions:

- 1 Information and Referral
- 2 Assessment
- 3 Program and Service Delivery

Information and Referral

Information and referral is one of the LBS service delivery functions. The LBS Service Provider Guidelines state that LBS agencies must not only provide interested individuals with information about literacy supports and services but also provide them with information on and referrals to all Employment Ontario employment and training programs and services.¹⁷

Referrals help learners transition to programs and services needed to achieve their goals. Referral is learner/client centered. Learners/clients who access any EO agency can expect access to a full suite of services. If the agency does not have expertise to

17 http://www.tcu.gov.on.ca/eng/eopg/publications/2013-2014_lbs_sd_guidelines.pdf

provide the service(s), it makes a referral to an appropriate service within the local EO network.

LBS service providers conduct information and referral services within their community networks. They promote their programs and services through local advertising; distribute information about services to community-based agencies; advocate for literacy through community planning (i.e., committees); work with local advisory boards and the regional literacy network to plan and coordinate services; and work with local workforce planning boards to gather information about employment and training needs.

Referrals are made and received within the community's service provider network. Available services include: college-based LBS/AU, community-based LBS, regional networks, Employment Service providers, Ontario Works, Ontario Youth Apprenticeship Programs, Ontario Disability Support Programs, Ontario Employment Assistance Services, Ministry of Citizenship and Immigration, apprenticeship offices, Indian Friendship Centres, multicultural associations, labour organizations/unions, employers, self-referrals, etc. Often, learners hear about programs through word-of-mouth.

Findings from the survey of Northern Ontario service providers describe a distinct urban/rural divergence with respect to access and provision of services. There is simply more apprenticeship activity at EO service providers based in urban centres. Since rural or remote literacy providers haven't seen a lot of apprenticeship activity, they haven't had a strong need to develop credible apprenticeship programs, resources and services.¹⁸

Each pilot site's information and referral practices will be unique to its local geographic area. Each site will pilot activities that inform the development of more generalized information and referral models that the LBS service providers can use to support apprenticeship completions.

Information and Referral Models

A referral model is informed by a good understanding of the *apprenticeship certification process*.¹⁹ Early in the certification process there is opportunity to assess the applicant's understanding of apprenticeship and readiness to challenge the Certificate of Qualification. Later, if the apprentice has been unsuccessful with the challenge exam, there is again opportunity to refer the apprentice to LBS service providers who conduct assessments and implement training interventions.

18 There are exceptions. Some community-based agencies have developed strong relationships with their local apprenticeship office; as a result, these LBS agencies receive a lot of referrals and have developed strong programs and services to serve apprentices. Dryden Literacy is a good example.

19 The process is described earlier in this report.

The Ministry of Training, Colleges and Universities' *Information and Referral Resource Guide (2008)*²⁰ provides LBS service providers with good information about services that support information and referral. It “supports the ministry’s vision of an integrated training and employment system with improved access for clients ... builds on current practices to create a common framework for ETD programs and services in the areas of information provision and client referral” (p. 4). It presents EO programs and services that are available to clients and to employers. The ‘client’ and ‘employer’ sections include a flowchart linking the inquiry to services as well as a short list of questions to guide the process. The Guide provides LBS service providers with good information about services that support information and referral.

The *Assessment and Training Referral Guide for Northwestern Ontario Employment Ontario Service Delivery Partners* (Alers, 2012)²¹ helps practitioners: 1) identify whether or not clients are academically prepared to reach their goals, and 2) make appropriate client referrals within the EO service delivery network and/or the community at large. To determine if a referral is needed, practitioners assess clients’ language needs and service needs, and then determine the specific services that are required. Clients may be referred to literacy services other than English, identified with literacy challenges, and/or retained within the agency conducting the process or referred to a more appropriate EO service provider. The Guide includes a literacy and Essential Skills awareness exercise,²² OALCF-linked templates that help practitioners through a decision path to make appropriate client referrals, and reproducible tools for documenting client scenarios.

The Adult Basic Education Association (ABEA) in Hamilton developed a two-page *Literacy and Basic Skills and Apprenticeship Referral Protocol*.²³ It outlines two scenarios – apprenticeship-to-LBS and LBS-to-apprenticeship. The apprenticeship-to-LBS referral involves determining the apprentice’s readiness for apprenticeship based on a short list of questions. If there is any doubt about the apprentice’s readiness, he/she is referred to the Literacy Network which makes a referral for assessment with an appropriate community agency. The LBS-to-apprenticeship referral is much simpler. Clients who need more information about apprenticeship are referred to a local Employment Service provider.

Referring apprentices to urban Literacy Networks makes sense because there is easy access to many co-located service providers. One point of contact between the apprenticeship office and the local literacy providers means apprentices are

20 www.tcu.gov.on.ca/eng/eopg/publications/ir_resource_pkg_2008.pdf

21 This resource is available on the Northern Literacy Network website – <http://www.northernliteracy.ca/index.php/resources-2/resource-library/nwo-information-referral-guide-and-toolkit>

22 Literacy Ontario Central South, Ottawa Community Coalition for Literacy, Literacy Link Eastern Ontario. (2009). *Literacy and Essential Skills Awareness Guide*.

23 <http://www.abea.on.ca/Files/LSPDocs/LBS-ApprenticeshipReferralProtocol.pdf>

likely to be referred for assessment and/or training to an appropriate LBS service provider. Referrals to rural/remote Networks make less sense because Networks are usually not co-located with their LBS service providers. Regardless of the scenario, a good relationship between the apprenticeship office and the Literacy Network is necessary.

The questions to assess readiness used in the ABEA model will help service providers (Employment Services/Apprenticeship/LBS) engage apprentices in a conversation about readiness to succeed in a trade. *Evaluating Academic Readiness for Apprenticeship Training (EARAT)* held some promise as a skills-based assessment. ETCs administer it in the apprenticeship office and send results to an external evaluator for marking. The EARAT is no longer used but some of the resources associated with it are still available.²⁴ The recent project, *Access to Apprenticeship*, made some progress towards better aligning EARAT materials to current apprenticeship requirements and ACE curriculum.

An Information and Referral Guide for Ontario's Online e-Channel Program (Davidson, 2011) provides a very clear description of online literacy programs and delivery mechanisms. The Guide contains step-by-step instructions for referring learners as well as a single-page graphic showing the decision process for enrolling learners in online programs. Programs include ACE Distance Delivery, Good Learning Anywhere, Le service de formation à distance pour adultes de l'Ontario, and The LearningHUB. Delivery mechanisms described include Contact North and AlphaPlus.

LBS service providers who pilot models to support apprenticeship completion will consider blended delivery and e-Channel options for apprentices who require supports and services at a distance. The guide provides information about e-Channel programs and good questions to help LBS service providers decide what kind of e-Channel services apprentices are ready for and could pursue.

Assessment

Assessment is another of the LBS service delivery functions.²⁵ LBS service providers meet with apprentices to review their school and work history, and their attempts, if any, to complete the C of Q exam. Assessment is a process to diagnose barriers getting in the way of successfully completing an apprenticeship. Reasons for not completing include difficulty writing multiple-choice exams, poor test preparation (study strategies), test anxiety, weak understanding of the specialized language of trades terms and tasks, gaps in the knowledge of trade tasks, weak reading or math skills/Essential Skills, etc.

²⁴ <http://theapprenticeshipnetwork.com/>

²⁵ http://www.tcu.gov.on.ca/eng/eopg/publications/OALCF_Tools_and_Resources_Diagram_Oct_11.pdf

LBS programs have a lot of experience with assessment; indeed, assessment tools used prior to the OALCF implementation continue to be useful. Post-OALCF implementation, LBS service providers have access to updated inventories of assessment tools described in the Ministry of Training, Colleges and Universities' compilation of *OALCF Selected Assessment Tools*²⁶ and in the *Collective List of Assessment Tools* document.²⁷

Finally, *A Guide to Apprenticeship Support Tools and Resources Available in Northern Ontario*²⁸ is the most recent resource available to the field. It describes apprenticeship-specific tools and resources in six categories:

- general information about apprenticeships
- information and referral resources for Literacy and Basic Skills providers and other Employment Ontario providers
- assessment tools and online learning opportunities for potential and current apprentices and LBS practitioners
- sites and resources related to training and learner plan development
- supports that exist for potential and current apprentices
- information and tools for employers and other stakeholders.

The Guide is posted on the Northern Literacy Networks website²⁹ and on the National Adult Literacy Database (NALD).

Assessment and Essential Skills

Essential Skills are the “enabling skills that help people perform the tasks required by their occupation and other activities of daily life [that] provide people with a foundation to learn other skills, and enhance their ability to adapt to workplace change.”³⁰ Pre-OALCF implementation, LBS curriculum focused on skill development for learner transition to employment, further education or independence. Post-OALCF implementation, LBS curriculum focuses on mastering tasks within six competencies at three levels of complexity. Learners transition to one of five goal paths – employment, postsecondary, secondary school credit, apprenticeship, and independence. Literacy practitioners’ long history with assessing learner skills is a foundation for developing learner tasks informed by Essential Skills that will be integrated in the OALCF.

26 http://www.tcu.gov.on.ca/eng/eopg/publications/OALCF_Selected_Assessment_Tools_Mar_11.pdf

27 Sauvé, L. (2012). Collective List of Assessment Tools. <http://www.literacy.ca/content/uploads/2012/06/Assessment-Matrix-all-tools-individuallyJune2012.pdf>

28 The Guide is one of the products developed for the 2012/2013 MTCU project, *Supporting Apprenticeship Completions: Model of Service Provision*.

29 <http://www.northernliteracy.ca/index.php/resource-library/category/75-supporting-apprenticeship-completions>

30 Statistics Canada: <http://www.statcan.gc.ca/pub/81-598-x/2008007/app-ann/5202748-eng.htm>

Coe (2011) found no strong relationship between higher grade levels and apprenticeship completion. The CAAR project (Nelson, Morrisseau, Louis, & Pilato, 2010) noted the importance of Grade 12 English and math as a prerequisite for success in the carpentry C of Q; however, this achievement may not be enough. Apprentices who've acquired a Grade 12 credential may not have the specific Essential Skills of Reading Text, Document Use, and Numeracy at a level of complexity required for the trade. The OECD, for example, states that level 3 is the minimum level required to function in a knowledge-based economy.³¹

The Canadian Apprenticeship Forum (CAF) (2007) works with employers to promote understanding and acceptance of Essential Skills in the trades. It has produced good research linking Essential Skills to success in apprenticeship, specifically the importance of Reading Text, Document Use, Numeracy, and Writing skills to apprenticeship completions.

“Case study interviews identified that a need to assist candidates in acquiring or refreshing their Essential Skills was the primary catalyst for the development and implementation of the initiatives... apprenticeship candidates who lack Essential Skills have a tendency to fail their exams or abandon apprenticeship programs altogether” (p. 7).

Construction trades are disproportionately represented in the CAF study. Many of the case studies involved Aboriginal people. One of the case studies (Nova Scotia) found that a high number of apprentices (25% to 50%) looking to complete the Certificate of Qualification or to add their Red Seal endorsement were repeating technical training because they had difficulty responding accurately to exam questions. Following completion of Essential Skill-building, they were able to report that 90% of apprentices completed.

Canada has a strong history with Essential Skills. The Office of Literacy and Essential Skills (OLES) website provides a robust inventory of 42 easily downloadable tools and resources (e.g., Literacy and Essential Skills,³² Essential Skills Profiles,³³ and Tools and Resources³⁴). Overall, the literature pointing to the link between successful apprenticeship completions and Essential Skills is strong (Canadian Apprenticeship Forum, 2007; Fownes & Evetts, 2001; Glass, Goforth & Kallio, 2007). The Construction Trades Council's website posts good, practical Essential Skills resources and tools that can be freely downloaded.³⁵

31 Nine million Canadians have less than level 3, including 2 million young entrants to the market, 2.6 million immigrants (mother tongue French or English), 400 thousand Aboriginal people, and older workers over the age of 45. Source: OLES webinar March 19, 2013.

32 <http://www.hrsdc.gc.ca/eng/workplaceskills/LES/index.shtml>

33 <http://www.hrsdc.gc.ca/eng/workplaceskills/LES/profiles/profiles.shtml>

34 http://www.hrsdc.gc.ca/eng/workplaceskills/LES/tools_resources/tools.shtml

35 <http://www.csc-ca.org/en>

Free Essential Skills assessment tools are publically available and provide important resources to support apprenticeship completion. LBS service providers can use the tools to assess apprentices' readiness to perform on-the-job tasks and/or write the C of Q exam. Essential Skills for Ontario's Tradespeople (ESOT),³⁶ Build Your Career with Essential Skills (BYCES),³⁷ the Industry Training Authority (ITA),³⁸ and Skillplan's Measure Up³⁹ provide free, online assessments of Reading Text, Document Use, and Numeracy for levels 1 to 3. They also set out customized learning plans with links to online learning resources.

ESOT is aligned with the 53 Red Seal trades in Ontario. It gives practitioners a tool to assess learners' readiness to enter the level I in-school apprenticeship. More generally, it is freely available to the literacy field. The tool is a credible diagnostic tool that provides Essential Skill information for LBS service providers working with learners in the apprenticeship goal path. The tool is currently being evaluated by the Higher Education Quality Council of Ontario (HEQCO).⁴⁰

Build Your Career with Essential Skills is aligned with the 50 most recent HRSDC occupational profiles. ITA is aligned with industry trades in British Columbia.

Other tools are available on a fee-paying basis. TOWES⁴¹ offers a suite of assessment and skill-building tools including the TOWES assessment series, TOWES Prime and Essential Skills Direct. TOWES also includes the free Measure Up tool. Eskilon Learning Solutions⁴² provides web-based Essential Skills assessment, planning and portfolio development and e-learning programs designed to help learners develop Essential Skills. It uses the PLATO Web Learning Network. It has recently integrated online TOWES assessments into its services.

Essential Skills assessments are employed informally (low-stakes) or formally (high-stakes). The OLES tools are informal self-assessments. ESOT, BYCES, and ITA are primarily formal online tools that provide more thorough assessment of the skills needed for specific trades. They also assess for learner skill gain pre- and post-training. In summary, literacy practitioners can use many free online Essential Skills assessment tools. They can also use purchased tools. All tools are grounded in Essential Skills methodology; as a result, assessments share a standardized skill description and level of analysis.

36 <http://csc.essentialskillsgroup.com/>

37 <http://en.careers.essentialskillsgroup.com/>

38 <http://ita.essentialskillsgroup.com/>

39 <http://measureup.towes.com/>

40 http://www.collegeupgradingon.ca/current/heqco_evaluating_esot_project.pdf

41 <http://www.towes.com/en/home/home>

42 <http://www.eskilonlearning.ca/>

Program and Service Delivery

“Even students at the most basic levels of literacy can learn using digital technologies”

(Moriarty, 2012, p. 32).

The Ontario Chamber of Commerce (2012) states the Ontario government needs to invest in more flexible delivery models, particularly those that address Aboriginal and immigrant populations. Moriarty (2012) finds there is very little literature directly related to adult learning, literacy and e-learning. She argues that the proliferation of digital devices is actually transforming the learning environment for adult literacy and learning. LBS programs have a long history of face-to-face delivery. But, as the adult learner profile changes and new delivery technologies become available, LBS programs and practitioners will include more robust forms of blended delivery in their services. Younger learners will arrive with a strong affinity for using digital technology; learners in rural or remote regions will come online as e-learning infrastructure extends to areas not previously served.

According to the Canadian Apprenticeship Forum (2013), technology is impacting apprenticeship training in significant ways. “Skilled trades workplaces are becoming increasingly reliant on technology...technical training programs are experimenting with new technologies to improve knowledge transfer...On-the-job training is increasingly marked by e-learning, vendor training and the use of mobile technology” (p. 2). Adult learners and literacy practitioners learn and teach in a world rich with access to digital devices, online communication, and e-learning opportunities. Apprentices, however, tend to be hands-on learners who learn by doing. Theory is best learned in context, especially if theory and practice are integrated (Folinsbee, 2008, Labour Education Centre, 2009, PTP, 2008). Blended delivery, therefore, may not be appropriate for apprentices.

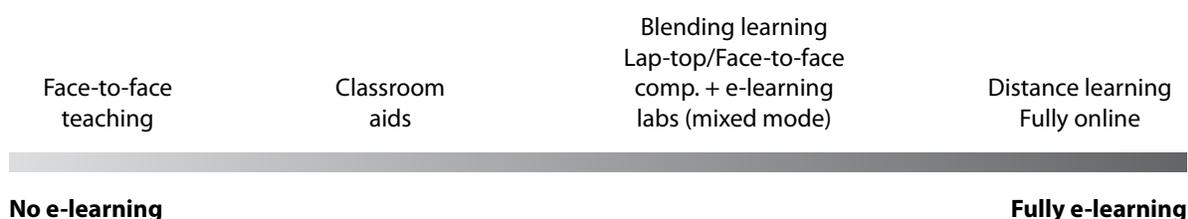
LBS programs that use e-learning need to acknowledge real socioeconomic realities – 56% of low income Canadians (defined as earning less than \$30,000) report use of the internet; 94% of high income Canadians (income more than \$85,000) report use of the internet (Grieg & Hughes, 2012). As a result, many adult learners will be ‘digitally excluded’ (Grieg & Hughes) or marginalized in the ‘digital divide’ – the “gap between digital technology haves and have-nots” (Moriarty, 2012, p. 20). Literacy program learners tend to be older and have lower incomes. The move to use of online technologies in literacy will impact learners who can’t afford the technology, have poor internet access because they live in rural or remote areas, or have little day-to-day experience/interest using digital devices.

Bates (cited in Moriarty, 2012) describes e-learning as “a broad term encompassing a wide variety of electronic technologies used for educational purposes, and a wide variety of educational formats and designs” (p. 13). Folinsbee (2008) describes e-learning as “the development of knowledge and skills through the use of

information and communication technologies (ICTs) to support interactions for learning – interactions with content, with learning activities and tools, and with other people” (p. 3).

Clark (2011) and Folinsbee (2008) describe blended/flexible learning models as a continuum from traditional classroom-based, face-to-face delivery to learning delivered entirely online independent of a formal classroom. The core characteristics that define blended learning describe a combination of face-to-face classroom instruction with reduced classroom hours replaced by learning delivered through online resources and technologies. Blended delivery is generally a ratio of 70% face-to-face and 30% online. Moriarty (2012) suggests blended learning is a good model of e-learning for many adult students.

The Continuum of Technology-based Learning Distributed/Flexible learning



e-learning in Northern Ontario

In a survey of Northwestern Ontario literacy service providers,⁴³ Davidson (2012) found 67% had participated in e-Channel training and the majority felt competent and confident with both blended learning and e-Channel delivery. Respondents reported that e-Channel complements face-to-face learning and blended delivery improves learners’ digital skills.

The infrastructure for e-learning is well supported in Northern Ontario. Contact North has a long history as Ontario’s distance education and training network with 112 online learning centres, partnerships with 44 colleges, school boards and universities, as well as over 250 literacy and training organizations. The organization provides learning technology platforms including e-learning, audio conferencing and videoconferencing. It also showcases new learning technologies. Courses are offered through online live (synchronous) learning, online anytime (asynchronous) learning, blended delivery, or through correspondence.

The Ministry of Training, Colleges and Universities (MTCU) supports blended learning infrastructure. E-Channel⁴⁴ is “an MTCU-funded delivery initiative

⁴³ Literacy service providers generally had 5 to 9 years or more experience.

⁴⁴ <http://www.e-channel.ca/en/>

that provides online learning for Ontario adults including those with barriers to participating in on-site programming...[it] enables adults to participate in Literacy and Basic Skills (LBS) and Academic Upgrading (AU) programming” (Davidson, 2011, p.3). E-Channel uses the Centra delivery platform. Delivery is synchronous; however, Centra sessions are recorded so people can view the class later. For learners who don't like to speak up in class or need time to process information, Centra can be a comfortable way to engage in learning at a distance.

Northern Ontario LBS practitioners have access to good information about e-learning.

An Information and Referral Guide for Ontario's Online e-Channel Program (Davidson, 2011) provides detailed information with respect to protocols required to admit learners, deliver programming, and document learner progress.

Best, L., Kaattari, J., Morgan, D., Trottier, V., & Twiss, D. (2009) looked at research trends, technologies, and promising practices for online learning in the Canadian literacy community. The scan explores being an online learner, developing online learning content, exploring online learning technology, and facilitating online.

Community Literacy of Ontario (Trottier & Kaattari, 2011) looked at how online learning for adult learners at the lower literacy levels is being delivered in Ontario's community literacy agencies. The report provides a comprehensive inventory of instructional strategies and promising practices for digital learning, a discussion of digital learning technologies, digital learning resources including instructional websites for adult learners, and information about social media and social networking.

Moriarty (2012) provides the most recent scan of e-learning and adult learners. The scan is one of many documents posted on the AlphaPlus website – a website that maintains an up-to-date inventory of online tools, publications, reports, podcasts and training. AlphaPlus' Web Index has a collection of over 1000 web-based resources on all aspects of Adult Basic Education (ABE) and literacy from provincial, national and international sources. AlphaPlus is also assisting the QUILL Learning Network to post OALCF tasks to a provincial web portal.⁴⁵

The literature describing e-learning and digital technology undergoes constant change and should be read with a critical eye. LBS practitioners need to be critical consumers of this information and vigilant about the currency and relevancy of the information they find.

Capacity to Work Online

Adult learners need the technical capacity to access learning in a digital environment. Do they have good internet access with sufficient bandwidth capacity? Do they have the technology to go online? Do they know how to use it? Home-based

⁴⁵ <http://taskbasedactivitiesforlbs.ca/english>

internet access in rural communities is widely available. Where it is not, learners may be able to access the internet in libraries, schools, and Contact North.

Grieg & Hughes (2012) explored the perceptions of nonusers or limited users of digital technology in literacy programs. They noted a growing divide between older and younger users, with younger users more likely to have grown up in a technology-rich environment. They asked what would motivate adult learners and encourage them to commit to using digital technology. They found that adult learners tend to be ‘consumers’ rather than ‘producers’ of online products and services. Adults don’t have a lot of patience with developing a nuanced understanding of digital technology and its applications; they just want to get on with using it to learn something useful.

Learner interest in and ability to use digital technology is enhanced with higher literacy skill levels. Reading in a digital environment, however, imposes new literacy demands, especially for those with weak reading skills (Chinien & Boutin, 2011). Adult learners used to traditional text-based reading must shift to non-linear “screen-based reading behavior...characterized by more time spent on browsing and scanning, keyword spotting, one-time reading, non-linear reading, and reading more selectively, while less time is spent on in-depth reading, and concentrated reading” (p. 26). Learners not only have to manipulate technology in their search for information, they also have to be disciplined as they negotiate the spider-web of online links.

LBS practitioners need to help learners develop digital literacy skills to work effectively in an online environment. A number of good online preparatory courses are available. Ontario Learn offers, Are you ready for Online Learning?,⁴⁶ which takes learners through a quiz and self-assessment. The College Sector Committee’s (CSC) ACE online includes two free courses to help learners prepare for online learning: Introduction to Online Learning Course and Learn to Learn.⁴⁷ Both courses are 20 hours in length, are supported by an online facilitation, and use Moodle as the learning platform. The AlphaPlus course, Are You Ready to Learn Online?,⁴⁸ is available in two versions – an audio version with talking points and another version that requires facilitation. The activities included in the course are aligned with the OALCF ‘Use Digital Technology’ competency.

Literacy practitioners also need to develop personal capacity to deliver e-learning. They need to practice continuous learning as they integrate and try new deliveries that use digital technologies. Too often, training is technology-focussed but not particularly useful for practitioners. Professional development must focus on practical, applied learning that specifically builds the practitioner’s capacity to deliver the agency’s e-learning programs and services. It must be useful.

46 http://www.ontariolearn.com/index.php/en/?option=com_k2&view=item&id=3569

47 <http://www.acedistancedelivery.ca/Online-Learning.php>
<http://www.acedistancedelivery.ca/learn-to-learn.php>

48 <http://alphaplus.ca/en/training/moodle/are-you-ready-to-learn-online.html>

Success factors for implementing e-learning⁴⁹

- *Respect the “realities of day-to-day programming” (AlphaPlus, 2012, p.31). Who is served by the organization? How does it serve learners? What is the capacity of its staff and learners to engage in e-learning?*
- *Align the use of digital technology and e-learning with the organization’s culture and values.*
- *Implement e-learning in a phased approach respecting the organization’s capacity to plan, fund and deliver it.*
- *Acknowledge and respect relationships of power. Perceived ‘class’ differences with respect to socioeconomic status, literacy skill, and technology ‘savvy’ can shape the learning environment. Learners need to feel safe, confident and capable as they negotiate newly established relationships.*
- *Ensure learners and practitioners feel like they are in control of the implementation (locus of control).*
- *Support access to digital technology and e-learning delivery for marginalized learner populations. Support e-learning infrastructure – agency has a commitment to maintain and upgrade technology; learners at distance delivery sites have technology that works and is supported by competent technical experts.*
- *Design well. Learners don’t object to on-line learning; they object to bad on-line learning.⁵⁰ A good practice is to acknowledge that learners bring transferable digital skills (i.e., smart phone) which become a starting point for building new skills and confidence.⁵¹*
- *Acknowledge and respond to learners’ capacity to engage in e-learning. Learners have varying levels of interest, motivation and experience working with digital technology. Their capacity to work independently and their level of literacy skills impact on success.*
- *Use online ‘shared’ meeting space (i.e., Moodle, Centra, Skype, GoTo Meeting) strategically to work with learners who have common needs and others who need individual attention.*
- *Encourage learners to develop more skill and confidence with digital technology by using it more.*
- *Encourage learners to work collaboratively. Research shows that collaborative learning promotes stronger gains.*
- *Develop instructors. They are a significant influence on how well learners receive online learning. They need “orientation, training, professional development, appropriate resources, and time to develop their skills in online instruction” (p. 33).*

49 This list is compiled from the literature reviewed and consultations with practitioners.

50 Personal communication, Co-Executive Director, Community Literacy of Ontario

51 Personal communication, Manager, Owen Sound in North Grey Union Public Library

Concluding Thoughts

LBS service providers have a real opportunity to show leadership with respect to supporting apprenticeship completions in their communities. They have a long history of serving adult learners and they have strong relationships with their community partners. They know adult learners and they hear their stories about the challenges of completing apprenticeships.

This report suggests there is a great deal of added value to completing an apprenticeship (i.e., higher income, greater employability, greater job satisfaction and security). It also finds that educational attainment is directly related to employability (i.e., higher level of education = greater employability). LBS service providers have good tools to market their programs and services and they can use those same tools to reach out to apprentices to 'sell' the value of re-engaging in literacy training. They are also well-established in their communities where they can bring a recruiting focus to planning and conversations with other literacy and employment providers, employers, and labour groups.

Primary research was conducted to describe the extent to which Employment Ontario and other service providers support apprenticeship completions in Northern Ontario. Findings pointed to a strong rural/urban divide. Most apprentices who seek assistance from EO service providers are located in urban settings. Rural communities, with some exceptions, don't see a lot of apprentices.

A rationale, therefore, for piloting programs to support apprenticeship completions in rural communities was established.

Additional primary research was conducted through forty-two (42) consultations and interviews with practitioners. Consultations with the field took on a strong iterative quality as additional information was often available in the many informal discussions that occurred throughout the life of the research.

The research then moved to a review of best practices related to: 1) information and referral, 2) assessment, and 3) program service and delivery.

Information and referral is an LBS service delivery function. As LBS service providers start to see more OALCF apprenticeship goal path learners, they will need a strong grasp of the apprenticeship system, especially the learners' experience in it. Not only will LBS service providers need to understand apprenticeship, they will also need a thorough understanding of the EO network of services and how learners/clients transition within that network. Learners/clients will expect a full suite of integrated services regardless of where they enter the EO system. Identifying and describing client pathways within EO will be important.

Assessment is another LBS service delivery function. LBS practitioners have a long history with LBS programming. They know their craft, they know assessment, and they know delivery. But, the transition to the OALCF opens a new paradigm for assessment and delivery, one that is informed by Essential Skills-based tasks and competencies. The Ontario colleges, provincial trades authorities, and others continue a very strong shift to Essential Skills assessment linked to trade-specific learning plans and resources. Indeed, the Canadian Apprenticeship Forum recently launched a national project to determine how many skilled trades employers in Canada participate in Literacy and Essential Skills training, assess the extent to which employers recognize the need for Literacy and Essential Skills training, and determine the costs and benefits for those employers that participate.⁵² There is clearly a movement to use effective Literacy and Essential Skills diagnostic tools to not only determine where to place learners in training but also establish programs and services that support apprenticeship completions.

Recent research suggests an important link between Essential Skill levels and success with the C of Q exam. There are strong indications that the Aboriginal population in Northern Ontario is poised to play a real role in supplying labour for the emerging employment opportunities. And, there appears to be a workforce employed in the trades who need to transition to journey person status to improve their employability. LBS service providers can build on the Essential Skills framework to prepare workers for employment in the skilled trades.

Program and service delivery are at the core of how LBS service providers support apprenticeship completion. This is important for two reasons. There's a long history with face-to-face instruction, including the use of online computer-based tools in the classroom. And, recruiting and retaining apprentices in rural or remote communities will require reaching out to them through digital technology and e-learning approaches. This means supporting learners' capacity to use e-learning technology.

Models of service provision are not created in the ideal; instead, they are created in response to unique needs present at each site. Pilot models of service provision that emerge will be structured around principles of good practice – characteristics that are present and which make them work. LBS service providers can build on principles of good practice to tailor effective, site-specific training solutions.

This report identifies a rich inventory of e-learning resources currently available in Canada and elsewhere. It also describes the e-learning environment in Ontario, including some of the successful practices already in place (i.e., ACE online, and preparation for online learning courses available from e-Channel and AlphaPlus).

52 Canadian Apprenticeship Forum. (2013). The Costs and Benefits of Literacy and Essential Skills: Is there a Business Case for Employers in the Trades?

The geography of Northern Ontario with its many small communities scattered across the North and the new communities emerging in response to economic activity (i.e., mining sites) continues to drive a pressing need for e-learning. Contact North is the primary delivery mechanism, but even simple access to the internet opens up many other opportunities. As the pilot sites recruit and prepare apprentices, they will consider learning at a distance options. The resources, best practices and guides identified in this Report will help them select and design blended delivery models to support apprenticeship completion.

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