



RESEARCH REPORT

Filling The Gap:

Building communities to support
the aspiring apprentice

“Realize what skills are going to be needed and what the gap is and try to fill that in.”

—Lynn Berger

“Teamwork is the ability to work together toward a common vision... It is the fuel that allows common people to attain uncommon results.”

—Andrew Carnegie

ACKNOWLEDGEMENTS

The project researchers wish to thank the following staff and advisors, who graciously offered their time and expertise on a range of topics pertinent to the support of Literacy and Basic Skills students and their successful journey into the skilled trades: Community Literacy of Ontario, Joanne Kaattari; PTP Adult Learning and Employment Programs, Vicky Johnston and Anne Marie Williams; The Wellington County Learning Centre, Elizabeth Debergh; le Centre d'apprentissage et de perfectionnement (Le CAP), Diane Dugas and Donald Lurette; George Brown College, Brenda Pipitone and Susan Toews; Conestoga College, Fran Painter; Deaf Literacy Initiative, Peggy Ann Moore; Miziwe Biik Aboriginal Employment and Training, Cynthia Bird and Eric McGaw; and The Centre for Skills Development & Training, Kathy Mills and Nancy Moore.

Further thanks go to the members of the advisory committee for their input and guidance throughout the project: Linda Conley, Prince Edward Learning Centre, Picton, Ontario; Susan Lefevbre, Toronto Catholic District School Board, Toronto, Ontario; Donald Lurette, Le CAP, Hawkesbury, Ontario; and Norman Rowen, Pathways to Education, Toronto, Ontario.

And finally, sincere thanks to Barbara McFater, Executive Director, and Aleksandra Popovic, Project Manager, of PTP Adult Learning and Employment Programs for their direction, advice and encouragement and in tirelessly seeking to create possibilities for the staff and students of PTP.

PTP is grateful to the Office of Learning and Essential Skills, without whose funding and support this important project would not have been possible.

Project Researchers/Writers: Matt Foran, and Olga Boutsis Herrmann
Project Manager: Aleksandra Popovic
Editor: Lauren Morris
Desktop Publishing: Avis Henry
Cover Design: Paul Bonsell and Ericson Balagtas, Defining Design

TABLE OF CONTENTS

Acknowledgements	3
Executive Summary	6
Introduction.....	10
Background	11
Methodology of Research.....	16
Challenges and Barriers to Apprenticeship for LBS Students	19
The Online Survey.....	25
Training Delivery Agents/Employers.....	27
LBS Providers.....	29
LBS Students.....	33
Summary of Survey Findings.....	35
Case Studies & Site Visits.....	37
Service Delivery Approaches.....	39
Case Studies:	
• Le CAP – Centre d’apprentissage et de perfectionnement.....	43
• The Centre for Skills Development & Training—“The Centre”	51
• Miziwe Biik Aboriginal Employment and Training.....	55
• Wellington County Learning Centre	59
Case Study Highlights.....	61
Action-Based Research: “Building for the Future”.....	63
Research Findings.....	74
• Integrated Linear Model.....	74
• Integrated Concurrent Model.....	75
Best Practices.....	78
Conclusion—What We Learned.....	85

Getting Started..... 87

Appendices..... 89

Appendix A—Summary Charts of Case Studies and Action-based Research..... 91

Appendix B—Online Survey Results..... 96

Appendix C—References.....112

EXECUTIVE SUMMARY

There are more than 300 recognized Community-based Literacy and Basic Skills (LBS) Agencies serving thousands of adult learners across Ontario. Each of these agencies is charged with providing its learners with options for a more prosperous future—a future in which employment is the ultimate goal.

For more than a decade, industry and government have warned of significant labour shortages, with particularly severe labour deficits already existing in the skilled trades and set to reach a critical point by 2014. Because a key tenet of LBS agencies is to pave the way toward employment for our clients, it stands to reason that apprenticeship is another facet within the world of employment that should be available to our learners.

The time has come for Ontario's Community-based LBS Agencies to forge a pathway to apprenticeship; however, the prospect of preparing learners to navigate their way through the apprenticeship maze can be daunting. This research project, therefore, aims to provide valuable insights and tools for LBS program managers and instructors in community agencies across the province who wish to develop programming that will allow their learners to explore and prepare for apprenticeship in ways that are relevant and effective.

The time has come for Ontario's community-based LBS agencies to forge a pathway to apprenticeship.

Research Objectives

The research aims to achieve the following three objectives:

- ◆ To answer the question: *What expanded role could Ontario's Literacy and Basic Skills (LBS) Community-based Literacy Agencies play in supporting would-be and current apprentices' transition to—and through—the apprenticeship delivery system?*
- ◆ To develop and share a functional working model that Community Literacy organizations in Ontario could adopt in order to link existing and future LBS upgrading students to successful apprenticeships and pre-apprenticeship training.
- ◆ To develop a set of “best practice principles” that can be used by Community-based Literacy Agencies in large urban centres, towns or rural areas.

Research Methodology

The researchers conducted a literature review examining successful initiatives within Ontario, other provinces and abroad. A comprehensive search was also undertaken to explore existing apprenticeship-focused partnerships between literacy upgrading providers, unions and/or colleges. In addition, an online survey targeted LBS students, LBS providers, and Training Delivery Agents (TDAs) and employers to gather information on their individual perspective.

Four innovative community-based programs in Ontario were visited: Centre d'apprentissage et de perfectionnement (Le CAP); The Centre for Skills Development & Training (The Centre); Miziwe Biik Aboriginal Employment and Training; and the Wellington County Learning Centre. Each program serves as a case study within this report showcasing innovative approaches and teaching delivery models currently used in either a rural or urban setting within Ontario.

Finally, PTP Adult Learning and Employment Programs, in partnership with George Brown College and Toronto Social Services, sought to develop a functional working model that literacy organizations could adopt. Much of the valuable information that was gathered from the above research components was then applied to the action-based research portion of this project, resulting in the creation and implementation of the “Building for the Future” (BFF) program. This “pre-pre-apprenticeship” program can easily be adopted or adapted by LBS Community-based Agencies.

Best Practice Principles

The researchers formulated a set of best practice principles that were drawn from all components of the research. The following practices are recommended when developing and delivering LBS upgrading targeted to individuals heading for pre-apprenticeship or apprenticeship. The best practices involved:

- ◆ Including a skilled trades exploration in the pre-apprenticeship training
- ◆ Using contextualized, trade-specific LBS upgrading materials
- ◆ Ensuring the pre-apprenticeship upgrading program is anchored in an integrated delivery model
- ◆ Placing a concerted effort on building the students’ Essential Skills¹
- ◆ Providing opportunities for developing valuable learning strategies that pave the way for independent learning
- ◆ Scheduling regular student/instructor advisory meetings
- ◆ Using assessment tools that measure more than grade level
- ◆ Introducing outreach initiatives to recruit students, and networking with employers, unions and Trading Delivery Agents in the community
- ◆ Building partnerships and fostering ongoing collaboration
- ◆ Insisting on a strict attendance policy
- ◆ Assessing behavioral issues and other challenges early on
- ◆ Helping students anticipate incidental issues that could hinder apprenticeship completion
- ◆ Showing cultural sensitivity and being aware of the needs of special groups
- ◆ Recognizing that there may be a need for linking the aspiring apprentice to job development and support upon completion of the LBS upgrading

¹ Essential Skills as defined by Human Resources and Skills Development Canada, hrsd.gc.ca/essentialskills.

Role of Community-based LBS Providers in Preparing Tomorrow's Apprentices

The research findings indicate that Community-based Literacy Agencies could expand their role in supporting the aspiring apprentice by adopting either an *integrated linear* or *integrated concurrent* model of program delivery. (for details, see Service Delivery Approaches pp 39-42) Contextualized or integrated training ensures higher retention for the average adult learner who has less than a Grade 12 level of education or who has not been in a classroom setting for a number of years.

The integrated linear model offers LBS learners the ability to transition sequentially from LBS and Essential Skills upgrading that is contextualized but is not immediately being applied in a practical setting. The hands-on application often occurs later on the shop floor.

The integrated concurrent model seamlessly weaves together the LBS and Essential Skills directly within trade-specific applications and contexts. What is taught in the morning math class is often applied immediately that same day on the shop floor or in the field.

The delivery model each Community-based Literacy Agency may choose to adopt will depend on the willingness of the people who are in the organization, the partnerships they can forge or may have already forged, their location, and the model that best suits the resources the agency has at its disposal.

Those who have developed and delivered the trailblazing programs presented in this report display tremendous resourcefulness and a commitment to serving their clients. Indeed, the strength of Community-based Literacy Agencies has always been their flexibility and their quick response to client needs. Whether in a large urban or small rural setting, the Community-based Literacy Agency can make connections with others that are sure to move would-be apprentices along their path.

It is the hope of PTP Adult Learning and Employment Programs and the researchers that LBS agencies will find this report both informative and practical as they expand their training role to provide the aspiring apprentice with trades-relevant programming that will connect them to the next step on their path to apprenticeship.

INTRODUCTION

Literacy and Basic Skills (LBS) Community-based Literacy Agencies can help aspiring apprentices navigate the skilled trades training labyrinth...

In 2025, Ontario could face a shortage of 364,000 workers.
The Conference Board of Canada 2007

Over 600,000 Ontarians do not have the skills to benefit from job opportunities [within economic sectors in need of workers].

Where do we begin?

If adults aged 25 – 64 with high school or less had the same employment rate as those with college credentials, 289,000 more would have jobs.

Figures cited in *The Challenge Ahead: Averting A Skills Crisis in Ontario*
Ontario's Workforce Shortage Coalition

The need is real and the timing is critical. Apprenticeship may be an ideal path for some of our students to take. Ontario's Community-based Literacy Agencies can be instrumental in ensuring access to apprenticeship and the skilled trades.

Research Objectives

In May 2007, PTP Adult Learning and Employment Programs received generous funding from the Office of Learning and Essential Skills to research and draft *Filling the Gap: Building communities to support the aspiring apprentice*.

The objectives of the research are as follows:

Objective 1—To answer the question, *What expanded role could Ontario's Literacy and Basic Skills (LBS) Community-based Literacy Agencies play in supporting would-be and current apprentices' transition to—and through—the apprenticeship delivery system?*

Objective 2—To develop and share a functional working model that community literacy organizations in Ontario could adopt in order to link existing and future LBS upgrading students to successful apprenticeships and pre-apprenticeship training.

Objective 3—To develop a set of “best practice principles” that can be used by Community-based Literacy Agencies in large urban centres, towns or rural areas.

BACKGROUND

Labour Shortages and the Governmental Push toward Apprenticeship

For over a decade, national reports have been forecasting severe labour shortages across Ontario and Canada, with newspaper headlines often lamenting the shortages already being felt nationwide in the skilled trades. An aging workforce and the onset of retirement for the baby boomers set the stage for serious labour shortages.²

The Conference Board of Canada flags 2014 as the year that labour demand will exceed labour supply province-wide;³ however, some industries are already at, or are fast approaching, this critical point. Nationally, the current skilled trades labour shortage is estimated to be between 35,000 and 50,000.⁴ In Ontario, it is estimated that 50,000 workers will be needed to replace retirees in the construction industry, and the province will require more than 35,000 additional workers to meet construction demand from 2007 to 2015.⁵

Labour market adjustment and immigration may help to relieve some of the labour shortfall, but provincial governments are, more than ever before, promoting apprenticeship programs as a proactive means of stemming the projected scarcity of skilled labour.

Ontario is investing in apprenticeship initiatives to curtail an economically devastating shortage of skilled tradespeople. In 2005–2006 the Ministry of Training, Colleges & Universities (MTCU) reported that there were 21,489 new apprenticeship registrations in Ontario, and that the target for 2007–2008 is 26,000 new registrations.⁶ In 2006 there were more than 70,000 apprentices undergoing training in the province.

² Over the past 25 years, the Canadian labour force grew by 48 per cent. In the next 25 years it will grow by only 16 per cent. Canadian Council of Technicians and Technologists. *TechCanada Roundtable 2007*.

³ The Conference Board of Canada. *Ontario's Looming Labour Shortage Challenges*. 2007. p. 4.

⁴ Skills Canada www.skillscanada.com.

⁵ Construction Sector Council. *Construction Looking Forward: An Assessment of Construction Labour Markets from 2008 to 2016*. p. 1.

⁶ Ontario Newsroom <http://ogov.newswire.ca/>. May 2007.

Ontario is home to Canada's largest apprenticeship system. Initiatives that have helped attract people to apprenticeship in Ontario are as follows:

- ◆ The Apprenticeship Training Tax Credit
- ◆ The Co-op Diploma Apprenticeship Program, combining industry-supported apprenticeship training with college education
- ◆ Expansion of the Pre-apprenticeship Program
- ◆ Increased participation in the Ontario Youth Apprenticeship Program
- ◆ The Apprenticeship Scholarship and Employer Signing Bonus

Integrated Network of Services—"No-wrong-door" Service Delivery Model Facilitates Valuable Partnerships

Launched in November 2006, Employment Ontario is an integrated employment and training network providing services to approximately 900,000 clients in 900 locations and through 1,200 community-based partners. This network is touted as a "one-stop shop" for young people, jobseekers, newcomers and employers who wish to be part of the knowledge-based economy.⁷

Employment Ontario received an added financial boost in January 2007 when the Canada – Ontario Labour Market Development Agreement (LMDA) was signed, transferring many federal training and employment programs, resources and staff to the province. Employment Ontario now brings together almost \$1 billion in labour market services.

The transfer bestowed MTCU with the opportunity to integrate labour market programs within Ontario and expand programs to provide more training, apprenticeship and labour market services. With respect to apprenticeship, the Ministry is now focused on the following goals:

- ◆ Providing a clear pathway into apprenticeship
- ◆ Increasing the focus on employer outreach and recruitment
- ◆ Improving apprenticeship completion rates

⁷ Ibid. November 2006.

Employment Ontario’s integrated model of services—hailed as a “seamless continuum of services”—is psychologically liberating for many Community-based Literacy

Agencies. It allows for greater contact and collaboration with other

Community-based Literacy Agencies,

colleges and apprenticeship Training Delivery Agents (TDAs). The 1,200 community-based partners have begun to move away from working in individual funding silos. The new partnership paradigm makes room for community building and creatively meeting the needs of the adults to be served.

The 1,200 community-based partners have begun to move away from working in individual funding silos. The new partnership paradigm makes room for community building and creatively meeting the needs of the adults to be served.

LBS Learners and Apprenticeship—The Skills Gap

Shortfalls in labour are especially disconcerting when one learns that 600,000 Ontarians do not have the skills required to fill the labour demand.⁸

A serious and growing skills mismatch is cutting Ontario’s growth and contributing to poverty. Without a concerted effort, Ontario’s unskilled workers will see their opportunities drop even faster, while employers have even more difficulty attracting and retaining the talent they need.⁹

Federal and provincial governments struggle to recruit successful apprentices and have identified the Adult Upgrading/Literacy and Basic Skills population as a potential demographic that could help fill the skilled trades gap. In fact, MTCU has committed to supporting LBS programs across all streams (Anglophone, Francophone, Deaf, Native) and all sectors (College, School Board, Community-based) in order to provide the upgrading required by students to pursue further education and employment.

⁸ Ontario’s Workforce Shortage Coalition. *The Challenge Ahead: Averting a Skills Crisis in Ontario*. 2008. p. 3.

⁹ *Ibid.* p. 2.

Who Are the Adults Who Typically Attend Community-based LBS Programs?

Literacy and basic skills students who find their way to LBS Community-based Literacy Agencies tend to have less than a Grade 12 level of education or have a high school diploma and are not functioning at a level where they can move on to employment training or further education. Some of the students have difficulty finding employment and need to strengthen their communications and math skills in order to find an entry-level position. Others need to do academic upgrading in order to qualify for post-secondary education or training.

Students come to Community-based Literacy programs from diverse backgrounds and with diverse needs. They include the following:

- ◆ Early school-leavers who have held down “dead-end” jobs
- ◆ Unemployed individuals who are working on a path to employment
- ◆ Immigrants (either new immigrants, or those who have been here for some time but have never had the chance to strengthen their English and basic skills)
- ◆ Youth who have graduated from high school and have had some workplace experience, yet find they lack the confidence or skills they need to move in a new direction
- ◆ Injured workers
- ◆ Adults looking to improve their lives

Adults in Training—More Than Just Students

It is important to recognize that students in LBS programs are adult participants, and do not see themselves as LBS students; rather, they are *adults in training*. They are working toward real-world goals in the context of an adult life. This often means

They are working toward real-world goals in the context of an adult life.

- ◆ They are working toward certification, accreditation, a high school diploma, GED success, Level 1 apprenticeship, etc.
- ◆ Timelines are extended, and the curriculum may be spread over a longer period of time
- ◆ LBS training is the foundation, yet other skills training (such as hands-on skills for the trades) or work toward certification is often happening simultaneously

- ◆ Motivation and client satisfaction come from participants seeing they are getting closer to their goal(s)

Why Not Apprenticeship for Some of Our LBS Participants?

When helping our participants choose their employment goals, do we have them seriously consider apprenticeship? Do we as Community-based Literacy Agencies have a solid grasp of the apprenticeship system? Do we help our students explore the possibility?

Workforce literacy delivered in many Community-based Literacy Agencies tends to take the form of upgrading for people who wish to access entry-level jobs. The skilled trades shortage that is set to reach critical levels within this decade, coupled with government initiatives intended to facilitate

The skilled trades shortage coupled with LBS targeted government initiatives may provide the quintessential opportunity for some of our students—access to the trades and to apprenticeship.

access to the trades for LBS students, may provide the quintessential opportunity for some of our students—the realistic chance to access the trades and become an apprentice and, ultimately, a journey person.

Apprenticeship is many things:

- ◆ Paid work
- ◆ A form of learning
- ◆ A dignified/logical/empowering training path

The Employment Ontario website describes apprenticeship as hands-on training for people who enjoy learning by doing. Apprentices are paid while gaining work experience, and their wages increase with their level of skills.¹⁰

As managers and instructors within LBS Community-based Literacy Agencies, we can assist our clients in deciding whether apprenticeship is the right fit for them. We can help them to navigate through the maze that is apprenticeship—from exploration to certification!

¹⁰ Ministry of Training, Colleges and Universities, Ontario. www.edu.gov.on.ca/eng/tcu/apprentices/.

METHODOLOGY OF RESEARCH

With recommendations from *Filling the Gap's* advisory committee, community literacy representatives and union representatives, the researchers sought to investigate existing partnerships between literacy support organizations (across several streams and sectors), employers and Training Delivery Agents, who all support the journey of learners interested in a career in the skilled trades.

The following components comprise the methodology for the research, which helped to lead to a set of recommendations toward a functioning model that Community Literacy organizations can implement to support the upgrading of would-be apprentices:

- ◆ Literature Review
- ◆ Environmental Scan
- ◆ Online Surveys
- ◆ Case Studies/Site Visits
- ◆ Action-based Research

Literature Review

Literacy and apprenticeship research from across Canada, the United Kingdom, New Zealand and Australia was reviewed and served to give further dimension to a working model for pre-apprenticeship preparation that Community Literacy organizations in Ontario could adopt.

Research from jurisdictions within other provinces and outside Canada proved to be beneficial when seeking to identify fresh approaches to support would-be apprentices outside our current Ontario apprenticeship framework. Effective teaching methodologies, research findings and models are highlighted throughout this report and informed the action-based research.

Key points from our literature review are highlighted in this report and are referenced in the footnotes. A full list of the literature and resources consulted is found in Appendix C.

Environmental Scan

A comprehensive search was undertaken to explore existing apprenticeship-focused partnerships between literacy upgrading providers, unions and/or colleges.

Contacts were initially made through regional chapters of Community (English and Francophone), College Sector, School Board and Deaf Stream literacy providers, and regional construction unions and training councils throughout Ontario.

The investigations netted valuable information from providers and unions, and led to further data captured through online surveys and site visits.

Information gathered from Training Delivery Agents, instructors and students was also used to inform the “Background” section of this report.

Online Surveys

More than 130 upgrading students, apprentices, LBS instructors, union members and employers throughout Ontario completed online surveys. The data was compiled, and survey objectives were set for each group. In this report a “take away” follows each survey result with an eye to developing best practices and the future direction of apprenticeship training for upgrading students. Although not quantitatively significant, the responses and numbers were considered for their qualitative relevance in the discussion that follows the survey results.

Case Studies & Site Visits

In conducting the environmental scan, the researchers obtained valuable site information. Five locations were visited, four of which had an existing model in place to support the transition of LBS learners into apprenticeships and pre-apprenticeships.

The programs visited were as follows:

- ◆ Centre d'apprentissage et de perfectionnement (Le CAP)
- ◆ The Centre for Skills Development & Training (The Centre)
- ◆ Miziwe Biik Aboriginal Employment and Training
- ◆ Wellington County Learning Centre
- ◆ PTP Adult Learning and Employment Programs

The “Case Studies” section of the report outlines the first four above-mentioned programs and examines their strengths. A discussion follows the case studies, highlighting the strengths and innovative aspects of these programs.

Action-based Research

To meet the second objective of this research project—developing a functional working model that literacy organizations in Ontario could adopt in order to link existing and future LBS upgrading students to successful apprenticeships and pre-apprenticeship training—PTP Adult Learning and Employment Programs formed a partnership with George Brown College and Toronto Social Services. Drawing from the literature review, the site visits, and the environment scan, the “Building for the Future” (BFF) program became research in action. This “pre-pre-apprenticeship” integrated linear program added substantially to the list of best practices formulated in this research.

CHALLENGES AND BARRIERS TO APPRENTICESHIP FOR LBS STUDENTS

In the environmental scan and literature review, the researchers identified several challenges and barriers that impact LBS upgrading students who aspire to become apprentices. The following section points out some of the barriers and challenges that LBS students face as they navigate the maze of apprenticeship. By no means is this list exhaustive. Its inclusion in this research aims to inform curriculum development, from exploration of the trades through to certification.

1. Exploring and understanding the apprenticeship system is daunting

The current model of apprenticeship in Ontario is challenging for many prospective apprentices and service provider personnel to understand and to navigate through.

Information on the trades is accessible via online sources and from choice printed materials; however, for many lower-level literacy candidates the information is not user-friendly. Materials describing access to the trades are often articulated in a tone familiar to the most qualified candidates who likely already meet academic requirements; these same materials can be daunting for our LBS clients. Many would-be apprentices lose hope and abandon their ambitions for apprenticeship.

2. The lack of Essential Skills needs to be addressed

“ ” *“I’m good with my hands. I’ve watched those guys do what they do. No big deal. Why do I need all this writing and math stuff?”*
—A frustrated LBS student upon hearing what it takes to become certified as a journeyperson

New skills required for the knowledge-based economy

The knowledge-based economy has dramatically changed what is required of an apprentice. Technological change, changes in health, safety and environmental legislation, and changes in business and work models all demand a greater skills base. Apprentices will need to be more highly skilled learners than in the past.¹¹

Fownes and Evetts give a powerful example of “cognitive” work replacing “manual” work:

Welding a pipe may no longer mean having a good eye and a steady hand; using the new orbital welder requires reading the manual, looking at the chart, thinking about the requirements of the job and programming the machine to do it.¹²

Inability to pass exams

As noted by many sources, including Fownes and Evetts, Essential Skills are the foundation for apprentices in their pursuit of journeyperson status.¹³

Candidates who lack strong Essential Skills are unlikely to be successful in their entrance exams. Should the individual complete or bypass the entrance exam and yet not

Candidates who lack strong Essential Skills are unlikely to be successful in their entrance exams and/or Certificate of Qualification exams.

strengthen Essential Skills during the apprenticeship, the individual will face a rather daunting obstacle when tackling the Certificate of Qualification exam

¹¹ Lynda Fownes and Julian Evetts. *Essential Skills and Success in Apprenticeship*. SkillPlan. BC Construction Industry Skills Improvement Council. 2001. pp. 2 – 3.

¹² Ibid.

¹³ Ibid.

at the end of the apprenticeship. To pass and obtain a Certificate of Qualification, the apprentice must score 70%—an unpleasantly overwhelming reality for those who have not attended to their literacy and Essential Skills.

Training Delivery Agents and unions regularly encounter a lack of Essential Skills

Many Training Delivery Agents (TDAs) report that prospective apprentices arrive at their centres to complete their entrance/qualifying interviews and exams ill-prepared to successfully meet or exceed the TDAs' requirements for apprenticeship or pre-apprenticeship. As a result, the TDA will not accept the student.

According to two unions in Toronto (LIUNA Local 183 and the Terrazzo Tile and Marble Guild of Ontario), they rarely, if ever, see the student return following the above scenario. The unions suspect that the unsuccessful candidates re-enter the workforce as temporary uncertified labourers, or they abandon their ambitions of a career in the skilled trades.

The research found that TDAs admit their expertise does not lie in Essential Skills upgrading.

TDAs recognize first-hand the consequences of trade shortages and an unqualified workforce. During several interviews, TDAs stated their expertise does not lie in Essential Skills upgrading. Vic Bodnar, a director at the Central Ontario Regional Council of Carpenters, said that when apprentices qualify for entrance to a trade yet do not develop Essential Skills for their continued progression through the apprenticeship, the union is forced to offer academic upgrading on the union's or employer's time and dollars.

A common frustration expressed by trainers is that they feel they cannot teach or develop the Essential Skills many apprentices lack during the short trades school training block. The frustration of one trainer resounds in this statement: "School teachers need to teach the fundamentals. Students need to learn how to count, use their hands, ... put down the calculator or cell phone and pick up a pencil to solve problems."

Many training coordinators have expressed interest in an integrated partnership with a specialty Essential Skills training agency that can *prepare* would-be or unsuccessful applicants and *support* existing journeypersons or apprentices. The aim of an integrated partnership would be to insure against high turnover within the trade.

Fownes and Evetts report that it is far cheaper and more effective to

Many training coordinators have expressed interest in an integrated partnership with a specialty essential skills training agency... The aim ... would be to insure against high turnover within the trade.

provide Essential Skills upgrading to existing tradespersons, keeping them in the trade, than to replace workers who are unable to meet their trade's demands and are forced to resign or are terminated from their position as a result.¹⁴

3. Applying, registering and finding a sponsor can be complex

How does one apply and register for apprenticeship?

Apprenticeship is not simply about “getting a job”—it is best described as a journey in itself—a long one. The apprenticeship journey, however, as it currently rests, prevents many people from embarking on it.

To train as an apprentice, one could apply to a union, successfully pass its internal assessment by qualifying in the top percentile, and then await a call from a union representative to start work or begin pre-apprenticeship training. Alternatively, the candidate could apply to a non-union company that has certified journeypersons on staff in order to be hired as a prospective apprentice.

To officially register as an apprentice, a candidate must find a non-union company or a trade union to take him or her on as an indentured apprentice. The candidate, along with the sponsor (either a non-union company or trade union), will register with the Ministry of Training, Colleges & Universities to complete a training contract, which ensures that the apprentice is exposed to key work activities and remains on schedule for trade school training and the eventual Certificate of Qualifications exam. If the apprentice passes this exam, journeyperson status is granted.

¹⁴ Ibid.

Sometimes it's who you know

In interviews with current apprentices and journeypersons, it was revealed that many had found their way into the trade through family or friend connections. Union and non-union companies hold a power position over all applicants and are reluctant to accept a non-referred candidate. Individuals who do not know any of the insiders must prove previous work experience and fit into the social fabric of the workplace before they will be accepted into the fold.

As Community-based Literacy Agencies work to develop reputable upgrading programs that lead to pre-apprenticeship or apprenticeship, they may be able to introduce students who exhibit a solid grasp of foundational skills and Essential Skills to the unions and Training Delivery Agents; in addition, companies may one day seek out their apprenticeship candidates directly from LBS community agencies.

4. Most apprentices are not straight out of school—older students bring a specific set of challenges to apprenticeship training

As mentioned in the Background section of this report, several Ontario government initiatives have been created to attract young students graduating from high school to apprenticeship programs. A strong academic bias in Canada is often the basis for leading students to consider apprenticeship as a second-rate career choice that cannot compete with post-university career options. The tide is slowly turning, however, and young people are starting to take advantage of such initiatives. In a 2004 backgrounder paper for the campaign “Skilled Trades: A Career You Can Build On,” skilled trades are described as offering “good pay, opportunity and respect.”¹⁵

The fact remains, however, that many individuals who register as apprentices have left school early or have already been part of the workforce. In fact, according to Fownes and Evetts, the average age of those starting an apprenticeship is 28.¹⁶ Other research also points to the reality of an older age of entry into apprenticeship training.

¹⁵ *Skilled Trades: A Career You Can Build On*. 2004. Found online at www.careersintrades.ca.

¹⁶ Lynda Fownes and Julian Evetts. *Essential Skills and Success in Apprenticeship*. SkillPlan. BC Construction Industry Skills Improvement Council. 2001. p. 6.

Apprenticeship in Canada is not chiefly about the school-to-work transition of young workers. Rather, apprenticeship is a means by which individuals without post-secondary training, and often without an affinity for classroom-based learning, get back into the training system and thereby are enabled to make a significant investment in their skills and in their long-run employability.¹⁷

Older students who are looking at apprenticeship as a re-entry into employment training may have been out of school for more than a decade, and often there is an appreciable deterioration of skills. They are also more vulnerable to income interruptions because of their adult responsibilities (children, home, etc.), and non-completion of apprenticeship is a reality for those who experience financial hardship while in training.¹⁸

Adults who have been in the workforce sometimes underestimate the skills they need for succeeding in the skilled trades. In a 2004 consultation report by the Canadian Apprenticeship Forum (CAF), employers commented that “apprentices had not given trades serious thought, held unrealistic expectation of trades’ requirements and rewards, and underestimated the required skills, aptitudes and technological knowledge they needed.”¹⁹

The above challenges and barriers were drawn from the environmental scan and literature review, and these common hurdles must be taken into account when developing curriculum for the exploration of the skilled trades and subsequent LBS upgrading for adults entering apprenticeship.

In the section that follows, details of the online survey will provide a snapshot of how upgrading for apprenticeship is viewed by LBS providers, LBS Students, employers and Training Delivery Agents.

¹⁷ John O’Grady. *Apprenticeship in Canada: Issues and Problems*. Toronto. 1997. p. 1.

¹⁸ Andrew Sharpe and James Gibson. *The Apprenticeship System in Canada: Trends and Issues*. Centre for the Study of Living Standards (CSLS). Ottawa. 2005. p. 9.

¹⁹ Canadian Apprenticeship Forum. *Accessing and Completing Apprenticeship Training in Canada: Perceptions and Barriers*. 2004. p. 42.

THE ONLINE SURVEY

More than 130 current upgrading students, apprentices, LBS instructors, union representatives and employers throughout Ontario completed online surveys.

Survey respondents were contacted following outreach activities, emails, site visits and phone calls to specific agencies or colleges. Emails were distributed through the following networks:

- ◆ Community Literacy of Ontario
- ◆ Ontario Association of Adult and Continuing Education (CESBA)
- ◆ LBS College Sector Committee
- ◆ Goal: Ontario Literacy for Deaf People (GOLD)
- ◆ Ontario Native Literacy Coalition
- ◆ La Coalition Francophone
- ◆ Trade union regional councils (carpentry, electrical, terrazzo tile, drywall)

The results of the surveys are a synthesis of the opinions of respondents and are not intended to be statistically exhaustive. Any conclusions drawn from the data will appear as possible “take aways” that serve as signposts that could inform future direction for community agencies seeking to help their students access the skilled trades.

Full survey results can be found in Appendix B.

Survey Objectives for Each Group:

Training Delivery Agents/Employers

The survey objectives for this group were to

- ◆ Determine whether they had current or previous relationships with Community-based Literacy Agencies or academic upgrading providers
- ◆ Identify if they felt their relationship was successful
- ◆ Inquire if they felt they would be interested in an integrated partnership with an upgrading provider
- ◆ Determine if the students were prepared academically for success in the skilled trades; if not, what areas were of concern
- ◆ Identify general or specific concerns related to apprentices, from the general population or from those coming from literacy organization partnerships

LBS Providers

The survey objectives for this group were to

- ◆ Determine their current role in supporting would-be apprentices
- ◆ Determine whether their agency had a system in place to prepare “would-be” apprentices for applying to the skilled trades
- ◆ Identify if there was previously or currently a relationship between a company and/or union and/or Training Delivery Agent and the LBS agency
- ◆ Identify if the provider had any expertise in supporting would-be apprentices into the apprenticeship process
- ◆ Explore ideas about helping students pass certification exams

LBS Students

The survey objectives for this group were to

- ◆ Determine grade level prior to enrolling in upgrading
- ◆ Identify if they were generally interested in apprenticeship
- ◆ Identify in which of the four apprenticeship sectors they were interested in working (Manufacturing, Construction, Service, Transportation)
- ◆ Determine if they felt confident that they could navigate the apprenticeship system on their own, find a sponsor, etc.
- ◆ Determine if they felt their upgrading institution could support them effectively in their apprenticeship journey

TRAINING DELIVERY AGENTS/EMPLOYERS

TRAINING DELIVERY AGENTS/EMPLOYERS (Total surveys submitted: 9)

Do the Training Delivery Agents (TDAs)/Employers have current partnerships/relationships with Community Literacy organizations or academic service providers?

- 66% or 6 out of 9 respondents indicated they have partnerships/relationships with community-based literacy organizations

Take Away: Two thirds of the responding employers/TDAs count on the expertise of Community Literacy organizations and academic service providers to help prepare their apprentices with foundational skills.

Were previous partnerships/relationships with Community Literacy organizations successful?

- 75% or 6 out of 8 respondents who answered the question said YES

Would they be interested in working in partnership with an upgrading provider again?

- 87.5% or 7 out of 8 respondents who answered the question said YES

Take away: Employers and TDAs see value in their collaboration with literacy agencies.

Were students prepared academically for success in the skilled trades?

- 50% or 4 out of 8 respondents who answered the question felt that the students were academically prepared

Take away: More work needs to be done to prepare the students academically for the demands of apprenticeship. (Also refer to the “The lack of Essential Skills needs to be addressed” portion in the Challenges and Barriers to Apprenticeship for LBS Students section of this report.)

General or specific concerns related to apprentices from the general population or those coming from the literacy organization:

The major concerns the trainers had regarding the students from these partnerships:

- 75% listed unexplained absences
- 50% listed lack of social supports, transportation or daycare
- 25% suggested that the students were not prepared for the actual demands of the workplace

Areas of concern with respects to students' preparedness:

- 89% or 8 out of 9 respondents suggested that if they were to participate in further partnerships, they would emphasize *training for "real-world" work preparedness*—students need to embrace the demands of the job, its responsibilities and consequences

Take away: Inability to meet real-world expectations and lack of solid life skills are barriers to success in apprenticeship.

Obstacles to success

“ ”

“Financial issues were a barrier for students; poor money management resulted in unexplained absences and potentially subsequent failure in the trade”

—Survey Respondent

“ ”

“Positions in construction often demand a driver's licence and reliable access to a vehicle”

—Survey Respondent

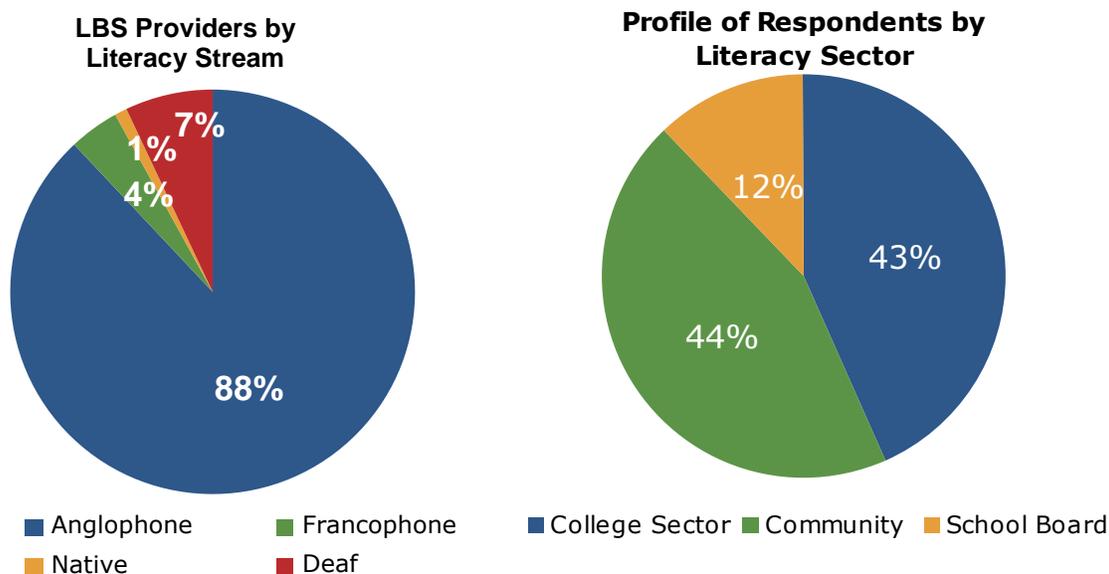
Who teaches the vocational and literacy pieces?

- 25% or 2 out of 8 respondents stated that their agency has ONE instructor for both the vocational and literacy/numeracy portions of their program
- 75% or 6 out of 8 respondents stated that their agency has separate instructors for the vocational piece and the literacy piece

Take away: The majority of partnerships have separate instructors for the vocational and literacy aspects of the training.

LBS PROVIDERS

LBS PROVIDERS (all streams and sectors) (Total surveys submitted: 91)



Does their agency have a system in place to prepare would-be apprentices in applying for the skilled trades?

- 27.3% of *all* LBS providers indicated that they do not have a model in place and do not feel knowledgeable enough to coach students in the apprenticeship area
- 25% of *all* LBS providers indicated that they have a model in place that works
- 81.6% of Community Literacy providers indicated that their organization does not have a model for supporting learners interested in pursuing apprenticeship

Take away: Those with successful models in place need to share their expertise and materials (through professional development—workshops, conferences, etc.).

Is there any interest in apprenticeship expressed by the students?

- 44.4% of *all* LBS providers indicated that less than 10% of their students are interested in apprenticeship
- 87% of respondents from Community Literacy programs alone stated that less than 25% of their students indicated a desire to pursue apprenticeship as an employment option

Take away: LBS agencies may well need to present apprenticeship as a possible employment option to their students. A large number of students may never conceive of apprenticeship as a possibility for themselves because they may not be aware that opportunities in the skilled trades are possible. Also, there is a perception on the part of Community Literacy instructors and managers that one in four students may well be interested in apprenticeship. If this is the case, community-based agencies must address the needs of students wishing to explore apprenticeship.

Do contextualized materials exist to support learners interested in the skilled trades?

- 53% of *all* LBS providers indicated that should learners express interest in apprenticeship, contextualized materials exist at the agency to support them.
- 50% of Community Literacy providers alone indicated that contextualized materials do not exist to support learners interested in the skilled trades

Take away: There is a need for contextualized materials for LBS providers teaching aspiring apprentices. Studies have shown that contextualized materials motivate the population of students that we serve to a greater degree.

Is there now or was there previously a relationship between a company and/or union and/or Training Delivery Agent and the LBS provider?

- NO current relationships exist for 57.5% of *all* LBS providers
- 40.5% of *all* LBS providers indicated that they have relationships/partnerships with industry stakeholders
- NO current relationships exist for 66.7% of Community Literacy providers alone

Take away: A high percentage of LBS providers have not forged relationships with industry—i.e., employers, unions or training delivery agencies. There is definitely room and a need for all LBS programs, including community-based literacy programs to develop relationships with apprenticeship stakeholders in order to help their students achieve their apprenticeship/employment goals.

Does the provider have any expertise in supporting would-be apprentices as they navigate the apprenticeship process?

- 64.4% of *all* LBS providers responded that they are “Somewhat familiar” with the skilled trades available in their region (as opposed to “Very” or “Not at All”);
- 79.5% of the Community Literacy agent respondents alone felt they were “Somewhat familiar” with the skilled trades available in their region
- 48.9% of *all* LBS providers felt their upgrading support was “Somewhat Successful” in preparing students for continued upgrading or skilled trades transitions
- 61.5% of the Community Literacy providers alone felt their upgrading was “Somewhat successful”

Take away: LBS providers need to learn more about the skilled trades in their region. Information packages and links to government, industry and local initiatives with respect to apprenticeship would benefit the literacy community. Knowing where to access this information would also be beneficial.

When asked, “*Despite participating in upgrading programs, why do you think many former LBS students fail to succeed in apprentice entrance and final Certificate of Qualifications exams?*” respondents proposed the following:

- Many of our learners in the Native stream are coming from schooling experiences that provide a result that is less than the expected or required provincial levels for their apprenticeship
- The literacy levels of certain adults often prevent success when it comes to written exams. People can do the actual hands-on work, but sometimes assistance is needed with the reading and writing of exams
- Deaf-friendly reading and understanding needs to be considered when developing/designing the curriculum for the trades
- Once out of classes, students tend to leave academics behind and do not spend time preparing for certification exams
- Exams are poorly designed
- Learners need to attain the OBS (Ontario Basic Skills)/ACE (Academic and Career Entrance) level to succeed

Significant Differences Between Community Literacy and College Sector Responses

It is worth noting from the LBS Provider survey that College Sector respondents felt 25% of their students were interested in apprenticeship—approximately the same proportion as Community Literacy respondents. However, 43.6% of College Sector respondents identified that they have a model in place to support the learning and transition, compared to only 13.2% of Community Literacy respondents.

Similarly, at 82.1% and just over 32% respectively, many more of the College Sector respondents indicated that their agency has a relationship with unions and/or industry than did the Community Literacy respondents. This discrepancy signals a need for investment in Community-based Literacy Agencies across the province if they are to successfully promote their services to industry and unions, and sustain any initiatives they implement for the aspiring apprentice.

Take away: When supporting the needs of current or would-be apprentices, Community Literacy organizations may need to consider a series of outreach and re-branding exercises to alert employers, unions and the public at large to what Community-based Literacy Agencies are and what services they can offer to would-be apprentices and those looking to further train or hire them.

LBS STUDENTS

LBS STUDENTS (Total surveys submitted: 34)

What was the grade level completed prior to enrolling in upgrading?

- 45.2% of all respondents completed Grade 10 in Canada
- 27.3% of all respondents completed Grade 12 in Canada
- 35.3% of all respondents stopped attending school more than 10 years ago
- 46.2% of all Community Literacy respondents stopped attending school more than 10 years ago

Take away: LBS upgrading students present specific challenges. Often the grade level attained may not be wholly indicative of ability. As discussed in the Challenges and Barriers to Apprenticeship for LBS Students section of this report, those away from formal training tend to lose foundational and Essential Skills.

Are students generally interested in apprenticeship? In which apprenticeship sector are they interested in working? (Manufacturing, Construction, Service, Health Care)

- 63.6% of all respondents indicate they are interested in an apprenticeship
- 50% of all Community Literacy respondents are interested in apprenticeship
- 64% of all respondents are interested in the construction trades
- 33% of all Community Literacy students expressed an interest in the construction trades

Take away: Materials and resources explaining the apprenticeship system and procedures, as well as a more detailed orientation with respect to the trades, would benefit students.

Do students feel confident navigating the apprenticeship system on their own, finding a sponsor, etc.?

- 29.5% of all respondents said they know how they would enter or prepare for the skilled trades
- 7.7% of Community Literacy student respondents said they know how they would enter or prepare for the skilled trades

Take away: If this survey is any indication of LBS students' beliefs throughout Ontario, the majority of them may well be at a loss as to how to navigate their way to and through the apprenticeship system. More supports may be needed to help students understand what the apprenticeship journey entails.

Adding to Our Upgrading Outcomes—The Apprenticeship Option

Although student demographics between the College Sector and Community Literacy may vary from institution to institution and from region to region, the comparative results of the total LBS student respondents and Community Literacy students suggest that fewer Community Literacy students are interested in apprenticeships or are aware of paths for transitioning into the skilled trades.

It may be surmised that, when comparing similar-aged student groups in both sectors, *Community Literacy students' lack of access to, or engagement in, apprenticeship training may be a result of factors such as their agency's limited funding, few apprenticeship opportunities in their agency's region or limited awareness of opportunities within the skilled trades in their region.* Instructors and coordinators may feel inadequately prepared to present skilled trades as a valid employment option because of their more familiar literacy upgrading focus.

Indeed, if an organization's learner-centred goals are limited to the traditional LBS outcomes (employment, independence, further education), the possibility of apprenticeship as another option may be overlooked.

SUMMARY OF SURVEY FINDINGS

The highlights of the survey are as follows:

Training Delivery Agents (TDAs) and Employers

- ◆ Are beginning to rely on the expertise of Community Literacy providers to help prepare apprenticeship candidates for acquiring foundational skills
- ◆ See value in their collaboration with literacy agencies
- ◆ Feel that more work needs to be done to prepare students academically and practically for the real-world demands of apprenticeship

LBS Providers

- ◆ Would like to see more sharing of pre-apprenticeship training expertise and materials
- ◆ Need to forge relationships/partnerships with companies and unions
- ◆ Should see to it that their Community-based Literacy Agency addresses the needs of students wishing to explore apprenticeships
- ◆ Feel a real need exists for contextualized materials in order to support learners interested in the skilled trades
- ◆ Need to learn more about the skilled trades in their region and familiarize themselves with government, industry and local initiatives
- ◆ Must consider a series of outreach and re-branding exercises that alert employers and unions to the LBS and Essential Skills upgrading services they can provide to their apprenticeship candidates
- ◆ Could consider special workshops for aspiring apprentices with respect to test-taking strategies that anticipate the academic demands of apprenticeship certification exams

LBS Students

- ◆ May well be at a severe disadvantage when it comes to navigating their way to and through the apprenticeship system
- ◆ Would benefit greatly from apprenticeship exploration workshops/sessions
- ◆ Need to be introduced to the skilled trades as a realistic path to satisfying and gainful employment

CASE STUDIES & SITE VISITS

SERVICE DELIVERY APPROACHES

Before exploring the four case study programs and the action-based research model, it is necessary to define some of the terminology that is used in this report to describe the service delivery of LBS upgrading that prepares students for entry into the skilled trades.

Up to this point in this report, the term *integrated* has been used to describe the network of services that function as a “one-stop shop” for those seeking to be trained and employed within the knowledge-based economy. However, when referring to the service delivery of LBS and Essential Skills, *integrated* means the weaving together of the LBS and Essential Skills within trade-specific applications and contexts. In the United Kingdom, the literacy, language and numeracy (LLN) vocational programs employ the term “embedded” in conjunction with teaching and learning to describe the integrating of foundational reading and math skills within a vocational/occupational context and applications.²⁰

Integrated Concurrent Service Delivery:

For the purposes of this report, we will use the term *integrated concurrent* to mean fully integrated programming, wherein LBS upgrading students participate in concurrent contextualized (trade-specific) upgrading classes that reflect material being instructed or learned in a practical environment. Upgrading material must be delivered in a timely manner in order to complement current concepts being applied. Upgrading and professional training instructors must share their course calendars with one another to ensure concepts taught in the classroom mirror those in the shop room—and vice versa. A great deal of collaboration is required by all involved.

²⁰ Olivia Sagan et al. *Putting good practice into practice: literacy, numeracy and key skills in apprenticeships, Part two: Revisiting and re-evaluating*. Learning & Skills Development Agency (LSDA), National Research and Development Centre for Adult Literacy and Numeracy and Research Development Council (NRDC). UK. 2005. Research Summary, p. 1.

Here is an example of an integrated concurrent daily course schedule in carpentry:

Day 1	Day 2	Day 3
a.m.: Upgrading Communications Concept: Introduction to tools and terms	a.m.: Upgrading Communications Concept: Introduction to carpentry code books	a.m.: Upgrading Communications Concept: Placing work orders
a.m.: Upgrading Math Concept: Whole number operations	a.m.: Upgrading Math Concept: Decimals and fraction operations	a.m.: Upgrading Math Concept: Measurement and Calculations
p.m.: Shop Concept: Introduction to tools and terms, safety guidelines in the shop	p.m.: Shop Concept: Using tools and tape measures	p.m.: Shop Concept: Weekly trade calculation quiz

Integrated Linear Service Delivery:

Within an *integrated linear* service delivery model, academic upgrading precedes any practical, hands-on pre-apprentice training. The literacy, numeracy and Essential Skills are concentrated into the initial segment of the pre-apprenticeship training. In the United Kingdom, focusing on the delivery of LLN skills is referred to as “front-loading” or using a “front-end” delivery model, and it has been found that “front-loaded delivery can be an effective means of offering extra contextualized support to learners with literacy and numeracy needs early in their vocational course.”²¹

Communications and mathematics curriculum is typically contextualized according to the trade which the group is preparing for. In-class upgrading materials and concepts, however, may seem foreign to learners if no practical connection is made in a timely manner. For instance, if a plumbing class were to learn about “offsets” (the distance traveled [rise or run] of an angled pipe) two months before they were to “see” what an offset was in trade school, there is a greater chance the information may not be retained.

Here is an example of an integrated linear pre-apprenticeship program:

8 weeks	8 weeks	Employment Placement
Contextualized Upgrading: Communications	Pre-apprentice training	Unpaid practical employment ranging for 6–17 weeks Goal: to secure employer sponsor for official apprenticeship
Contextualized Upgrading: Mathematics	Upgrading support if funds are available	
Assessment at completion to determine class list	Students must achieve a minimum of 60% in each course to obtain Level 1 card	

²¹ Ibid.

Simple Linear Service Delivery:

The simple linear approach does not contain a contextualized component. It involves delivery of one program at a time from a stand-alone agency, which then passes the student on to the next step or intervention. In other words, LBS or academic upgrading would be delivered first, without any reference to skilled trades or apprenticeship.

CASE STUDY A:

Le CAP—Centre d'apprentissage et de perfectionnement Hawkesbury, Ontario

Community Literacy Organization (Francophone)

Le CAP is located in an industrial community of approximately 10,000 people in Eastern Ontario, delivering LBS upgrading to its Francophone population and providing referral services to centres throughout the greater Prescott–Russell region.

Initial Community Outreach

In 1996, Executive Director Diane Dugas and Project Manager Donald Lurette met with local industry and businesses to assess their needs.

The local business community responded to Dugas and Lurette's inquiries and began referring

employees for Essential Skills assessments and to targeted training programs (LBS, Ontario Secondary School Diploma [OSSD], or English or French as a Second Language training) to strengthen their workforce skills.

As a result of these initial outreach sessions, Le CAP became a central referring agent for their region, serving Ontario Works, Employment Insurance, Workplace Safety and

Insurance Board (WSIB), and independent clients. Dugas and Lurette's interviews also provided Le CAP with valuable insight into the primary needs for adult learners, community businesses and industries in their community. Through this process, Le CAP recognized that within its rural community, literacy programs, employment services and training institutions competed to serve the same clients. There was a great possibility of duplication of services; programs might quietly "bend" their

intake requirements to secure a client for their agency's contact hours.

Ultimately, the competitiveness

among providers did not work in the best interest of the client.

Early Collaborative Partnerships

Le CAP realized that truly working for the success of the individual client meant different players needed to work collectively—sharing responsibility to serve the best interest of their clients rather than competing against one another. In other words, different providers would support the same client in the pursuit of the client's end

[T]ruly working for the success of the individual client meant different players needed to work collectively—sharing responsibility to serve the best interest of their clients rather than competing against one another... Each provider would deliver services according to its area of specialization.

goal, each delivering services according to its area of specialization.

Following community scans and interviews, Le CAP identified different service training providers and school board officials who could offer distinct accreditation with a view to forming partnerships that could net tremendous benefits to students in the community.

A fundamental challenge for Le CAP was to find prospective partners who shared common ideological and philosophical values. Of paramount importance was that each partner would work collaboratively for the benefit of the client.

A fundamental challenge for Le CAP was to find partners who shared common ideological and philosophical values. Of paramount importance was that each partner would work collaboratively for the benefit of the client.

This would mean partners collectively agreeing on program materials, student financial, funding and social supports, learning outcomes and many other issues before a program would launch in the community.

Le CAP's first partnership was with Collège d'Alfred and the Eastern Ontario Education and Training Centre (EOETC), a centre funded by the region's three school boards: Francophone, Anglophone and Catholic. Le CAP, Collège d'Alfred and EOETC first joined forces to

deliver integrated pilot programs for clients wanting to become food handlers, horticultural technicians, sales clerks and accounting clerks.

Starting with these early collaborative experiences, Le CAP became very astute in recognizing clients who would be a good fit for success in the training programs. Factors considered were age, work experience, literacy level, aptitude, attitude and whether social supports were in place, with Le CAP considering the latter two the most important.

The early programs formed the foundation of what would later formally become "Le TGV" or "Très Grande Vitesse"—a progressive set of partnerships that offer lower-educated area residents opportunities for professional skills training in office, nutrition, horticultural, industrial and health care environments.

The Theory upon Which Le CAP's Approach Stands

The origin of the philosophy underpinning Le TGV can be traced to two influential sources: a 1997 research report by Dr. Tom Sticht,

entitled “*Functional Context Education: Making Learning Relevant*”; and Norman Rowen’s 1999 report “*People Over Programs*.”

Sticht’s report suggests that the most efficient model for supporting professional skills training for adult learners is one that is integrated, wherein the concepts learned in the classroom are quickly reinforced in a practical setting, reducing the time between when students develop skills and when they return to the workforce.

Rowen advocated for the creation of one-stop centres, providing clients in search of literacy upgrading or employment assistance with a centralized referral centre. The aim was for the centres to remove service barriers and bottlenecks, and to subsequently provide more informed “client-centred” customer service.

Rowen’s recommendations for greater client-focused efforts by service providers also extended the “one-stop” portal concept to suggest that a centre not only act as a referral agent to programs but also have the capacity to support the client’s needs internally.

Le CAP adopted these principles when it created Le TGV—implementing an efficient integrated professional skills training model, with roots in LBS upgrading. Le TGV affords timely accreditation and rapid re-employment, with the support of Le CAP and willing community partners—all of whom work to help make an individual client’s employment goal a reality.

Forging New Partnerships

Following its successful pilot programs, Le CAP and the EOETC—also known as the Centre d’éducation et de formation de l’Est ontarien (CÉFEO)—explored further local partnerships and

The most efficient model for supporting professional skills training for adult learners is one that is integrated, wherein the concepts learned in the classroom are quickly reinforced in a practical setting, reducing the time between when students develop skills and when they return to the workforce.

approached La Cité collégiale, the local training institution for industrial millwrights, welders, and

tool and die apprentices and pre-apprentices in Hawkesbury.

La Cité serves the busy local manufacturing community, whose major employers in auto parts and smelting works demand a steady flow of skilled manufacturing workers.

Prospective industrial millwrights in Ontario are required to have completed Grade 12 or its equivalent. This posed a challenge to Le CAP, a community literacy organization that typically served a client group with less than Grade 12 standing, and whose organization did not provide school credits for its programs.

The Current Le CAP Model

Under its model, Le CAP first receives all clients at their “One Stop” assessment/referral depot. Clients who express interest and meet the profile for a professional training program are invited to information and orientation sessions at La Cité for its industrial millwright apprentice programs or to Collège d’Alfred for its skilled training certificate or apprentice programs.

Once accepted into the program, students commence training, which typically runs for 25–30 hours per week for 17–25 weeks.

Intake for new students follows the calendar of the professional training programs. Unlike many pre-apprentice programs where students complete upgrading before their practical training and earn their Level 1 apprentice card, industrial

millwrights in Le TGV are registered as Level 1 apprentices and provided with their apprentice cards at the beginning of the program by MTCU.

During the program, instructors from Le CAP and CÉFEO deliver contextualized upgrading and high school classes during the morning or afternoon at La Cité, when students are not doing practical trade school training. All students must attend the upgrading sessions and the high school credit courses. Students who meet the attendance and scholastic requirements can earn credits up to a Grade 12 diploma.

Under this current model, all parties have come to a consensus and developed a framework that works to the benefit of the student.

Attendance for all professional training and upgrading courses is closely

monitored. If a student has more than one unexplained absence per month, a meeting is scheduled with an advisor to assess the situation, which may result in the student’s termination from the program.

Throughout the training, exchange of student information is shared among the partners—for contact hours, progress, concerns, etc. Under this current model, all parties have come to a consensus and developed a framework that works to the benefit of the student.

The integrated TGV model allows for the student/apprentice to receive focused training in specific areas by specialized delivery groups. The stakeholders have niche expertise

and because each partner knows who is

responsible for each specific piece, there is no duplication of services.

The TGV model also ensures that the student is familiar to all stakeholders. In the event of performance challenges, all parties meet to discuss possible strategies to remedy the situation.

Le CAP's model focuses not only on the integration of services but on the integration of instructional materials as well.

LBS upgrading material is built into the trade school in-class work and delivered by Le CAP staff. Students learn and strengthen skills in their classroom and embrace coursework materials essential to their success on the job. In the words of an

instructor, "If we told them that they should go

to LBS upgrading, they wouldn't attend. But since we have integrated

these materials into the overall training program, they attend and they work harder to succeed."

Contextualized upgrading is delivered concurrently to complement "real time" trades or other

professional and practical training. This is a very important component, as a large portion of trades students—especially LBS trades students—have an aversion to formal classroom environments.

An upgrading instructor at Le CAP states that many of their apprentices disliked the formal school environment, suggesting that "apprentices excel in settings where they can see why the material they're learning is relevant to their own real world and apply their knowledge." More often than not, apprentices prefer to work with their hands rather than their pencils.

Under the TGV model, content learned in the classroom is reinforced by material students can see and

experience in their trade school environment. There is only

a short period of time between

“ ”

"If we told them that they should go to LBS upgrading, they wouldn't attend. But since we have integrated these materials into the overall training program, they attend and they work harder to succeed."—Le CAP instructor

“ ”

"[A]pprentices excel in settings where they can see why the material they're learning is relevant to their own real world and apply their knowledge."—Le CAP instructor

concepts being introduced in the shop and taught in the classroom. As a result, there is greater retention of both skill and concept.

Successes

Representatives for La Cité and Le CAP state that approximately 80 per cent of students who begin their industrial millwright apprentice programs successfully complete the program and secure jobs as first-level apprentices following the CÉFEO's paid co-op placement term at a local employer. Co-op placements are coordinated by the CÉFEO, and high school credits are also earned by the student upon successful completion.

Barriers to Completion for Some Students

When considering the reasons why students fail to succeed, instructors and coordinators of the programs list social challenges, including drug or alcohol issues, commitment, maturity level and poor workplace behaviour.

Resolving social issues requires time and personal commitment from the individual. Trainers regard these social challenges as barriers to employment preparedness—they do not have the time, expertise or resources to counsel individuals, and, as a result, many are terminated or leave the program on their own.

Differences Between Older and Younger Aspiring Apprentices

According to the instructors and coordinators of the TGV program, there are notable differences between younger and older students and between those who are independent and those who are receiving Employment Insurance (EI) or Ontario Works (OW) social assistance. Students over 30 years of age tend to be more focused on their personal success and more inclined to take advantage of all instructor or tutoring supports. Younger students have a lesser likelihood of viewing the training and supports as essential for their success and regard their current training as a temporary option in their long working career.

These results are consistent with those found in Katrina Ball's 2004 Australian apprenticeship research, "*Factors Influencing Completion of Apprenticeships and Traineeships*," which noted that apprentices aged 20–24 years are least likely to complete, and those 45 years and older are most likely to complete, at a rate of 55 per cent.²²

²² Katrina Ball. National Centre for Vocational Education Research (NCVER). *Factors Influencing Completion of Apprenticeships and Traineeships*. 2004. p. 9.

Anecdotal information from instructors and coordinators of Le TGV also suggest that student apprentices who have lower “internal motivation” to attend the program are least likely to be successful. Typically these individuals have had little or no related work experience and, in some cases, have been “pushed” by their caseworkers to attend.

The TGV model is comprehensive and provides support, qualification and certification for students. The TGV model has now evolved to offer eight options for further skills training and certification:

- Office Clerk and Accounting certificate program (*Collège d’Alfred partnership*)
- Dietary Aide certificate program (*Collège d’Alfred partnership*)
- Horticultural Technician program (*Collège d’Alfred partnership*)
- Sales Clerk program (*Collège d’Alfred partnership*)
- Early Childhood Education certificate program (*La Cité partnership*)
- Pre-Apprenticeship in Parts Person program (*La Cité partnership*)
- Industrial Millwright apprenticeship program (*La Cité partnership*)
- Learning and Teaching Aide program (*CÉFEO partnership*)

The TGV model has taken close to 12 years to reach this point—a point where all parties feel and realize mutual benefits.

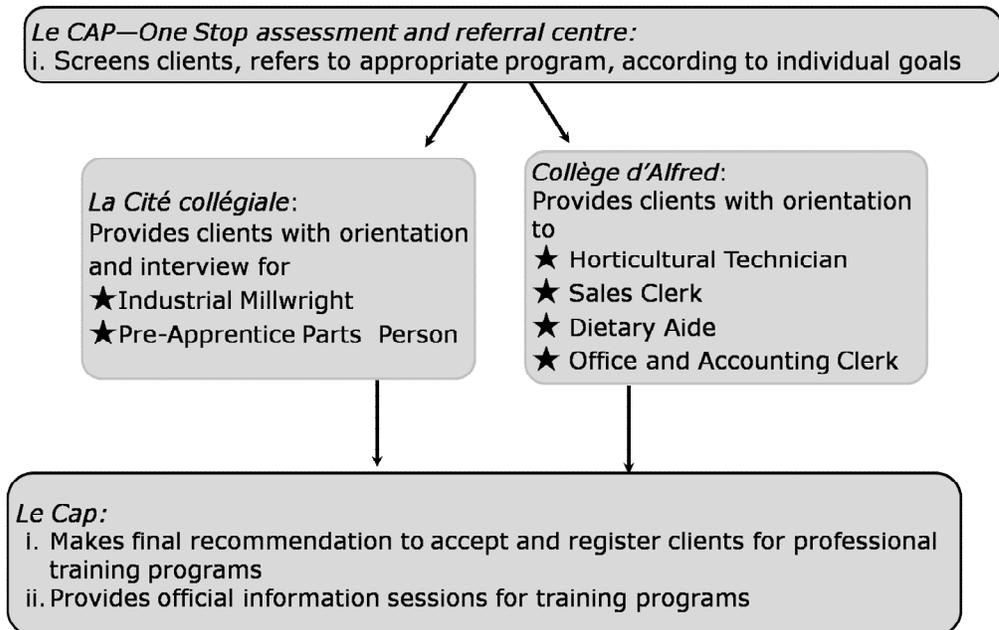
WHAT WORKS

In order to replicate this model, other jurisdictions and potential partners must

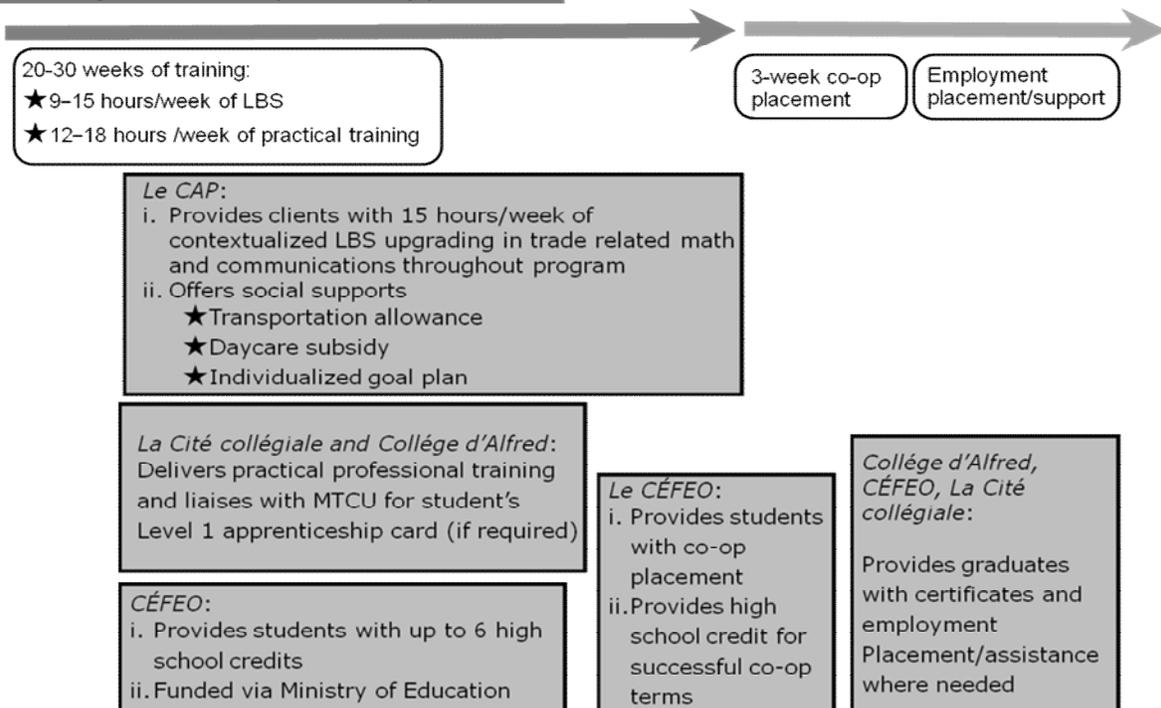
- Be willing to work collectively in the best interest of the student
- Overcome potential political and philosophical challenges and share common goals and ideologies
- Be involved in regular dialogue, with dedicated trust among the partners in order to prevent territorial issues and the subsequent dissolution of the partnership
- Devote considerable time and effort in developing a fully integrated curriculum in which vocational skills and LBS skills are seamlessly linked together

THE TGV INTEGRATED CONCURRENT MODEL

1. Referral, Assessment, Orientation (all programs)



II. Program delivery and support:



CASE STUDY B:

**The Centre for Skills Development & Training—“The Centre”
Burlington, Ontario
School Board**

“The Centre” is an official affiliate of the Halton District School Board. Operating since 1988, The Centre offers private pre-apprenticeship skills training, literacy upgrading, language and corporate training.

The Centre receives government funding for 12 of the programs under its banner, including LBS and employment counselling, and operates its pre-apprenticeship hands-on training programs through tuition fees paid by students, or in part by Employment Insurance (EI) or

Workplace
Safety and
Insurance
Board
(WSIB)

programs. The skills training programs deliver requisite materials up to a Level 1 apprenticeship qualification, although The Centre is not recognized officially as a Training Delivery Agent by MTCU. Certified professional staff deliver industry-quality training, and students benefit greatly from the solid partnerships the agency has formed with large employers.

Pre-apprenticeship training programs are offered for electrical, industrial millwright, tool and die and residential construction trades. Training programs

run over two school semesters for up to 40 weeks. Each student is placed in monitored and paid co-op placements for their final 9–17 of the 40 weeks of training.

Throughout the program, students participate in contextualized learning, in formal classroom settings and while on the shop floor. Instructors are certified tradespeople who engage students in “for grade” activities, inside and outside of the classroom, adapting numeracy or communications assignments

traditionally reserved for the classroom to a shop environment.

“ ” ***“[T]rades students are most eager to learn when the material doesn’t feel like academia.”***
—Nancy Moore, Senior Manager

Nancy Moore, Senior Manager at The Centre, states that “trades students are most eager to learn when the material doesn’t feel like academia.”

Recognizing Ministry and union requirements for Grade 12 equivalency for industrial millwright and tool and die apprentices, The Centre works with students who are shy of having their Ontario Secondary School Diploma (OSSD), General Educational Development credential (GED) or Academic and

Career Entrance certificate (ACE) to acquire outstanding credits via their partner night school, Gary Allan High School in Burlington.

The Centre is an active member of the Halton community, with locations throughout the region. Staff regularly host information sessions at on-and off-site locales. Advertising via direct mail and local newspapers helps to recruit new students for The Centre's many programs.

Students in The Centre's "DoorWays" LBS program are enrolled for full-time study and, following their intake assessment, work with a staff member to chart an individualized path to further education, employment or skilled trades training. An LBS student at The Centre can access all of the programs following upgrading.

If an LBS student without an OSSD declares interest in registering for a pre-apprenticeship program at The Centre, or elsewhere, the LBS advisor helps to place the student on an upgrading path, where the student prepares to write the GED test with the help of instructors in the LBS classrooms over a period of time.

Alternatively, if the student is interested in re-entering the workforce after upgrading, an employment counsellor in The Centre's employment services program meets with the student to provide an assessment and discuss employment options.

The Centre's skilled trades training target clientele is between 23 and 35 years of age, with the majority of students attending as independents, and a small minority in receipt of EI or other financial supports.

As with most skilled trades training centres, there exists a very strict attendance policy for students, allowing for only 30 hours of missed time during their 280-hour training commitment. Attendance is measured in minutes, and students are expected to make up for lost time if they expect to successfully complete the program.

The success rate of graduates who

find employment immediately following their training sessions is 95.3

percent—the majority of whom are hired as apprentices.

“ ”

“[S]tudents take the training seriously; it's real money that they or their family paid. A lot of our students have been in the work world or did some post-secondary studies and they knew that they wanted to get into the trades. They feel this is the first step to their career.”—Nancy Moore, Senior Manager

The skilled trades training programs have a 99 per cent completion rate, due largely to the fact that the training is not free. Nancy Moore states that “students take the training seriously; it’s real money that they or their family paid. A lot of our students have been in the work world or did some post-secondary studies, and they knew that they wanted to get into the trades. They feel this is the first step to their career.”

Ms. Moore cites lack of motivation, maturity and potential substance issues as the main reasons for failure in the skilled trades training programs. The Centre hopes to assist all students, but, as is the case with most soft skills, it is very difficult to teach maturity or responsibility—it is up to the individual to develop those skills.

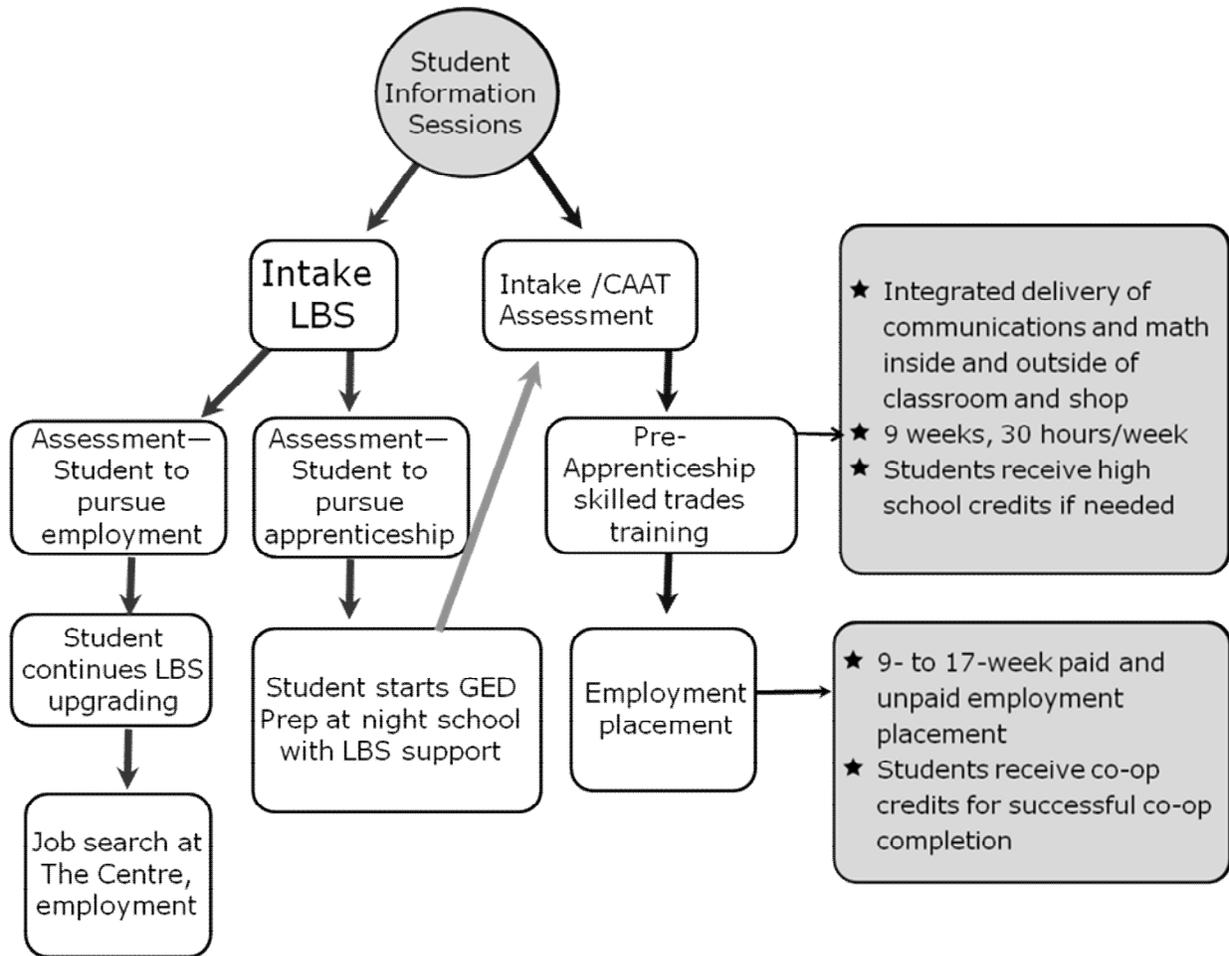
The Centre provides students in each of its programs with integrated professional support in pursuing their future goals or dreams. The Centre operates under a unique business model, in which large amounts of capital have been invested to establish a fully functioning professional trades training centre. The start-up costs for establishing these environments create a very high barrier to entry for many community-based organizations that received limited annual funding from federal and provincial sources.

WHAT WORKS

The Centre’s business model may not be easily replicated by many not-for-profit literacy upgrading or employment service agencies; however, the model offers many approachable and inexpensive “best practices” that organizations interested in supporting the professional training transitions of LBS learners can adopt:

- Students participate in contextualized learning while in a formal classroom setting or on the shop floor (i.e., integrated delivery of math and communications)
- A strict attendance policy is in force (no more than 30 hours can be missed from the 280-hour training commitment)
- The Centre works with a night school partner high school to help students obtain their OSSD, GED or ACE
- Outreach to students is done via direct mail and local newspapers

The Centre: LBS and Integrated Concurrent Training Delivery Model



CASE STUDY C:

Miziwe Biik Aboriginal Employment and Training

Toronto, Ontario

Native Stream

Miziwe Biik is a central Toronto employment and training centre serving the local Aboriginal population.

In the summer of 2007, Miziwe Biik received funding from MTCU to deliver a joint pre-apprenticeship carpentry training program with Toronto Council Fire, a Native Stream Community Literacy organization, and with George Brown College.

Outreach and Assessment

The partner agencies undertook aggressive outreach delivering information sessions at Native employment and neighbourhood centres, and further supported these efforts with targeted direct mail campaigns to Native residents in the city.

The pre-apprenticeship program aimed to recruit, serve and train 25 Aboriginal men and women from the Toronto area, from LBS-level upgrading to pre-apprenticeship carpentry, and then to provide employment support. Their mandate was to successfully assist 19 of the 25 students in completing all components of the training.

Staff from Toronto Council Fire and Miziwe Biik administered the Canadian

Adult Achievement Test (CAAT) and the Communications and Math Employment Readiness Assessment (CAMERA) and interviewed all prospective students at intake.

The Program Schedule

Under the delivery agreement, would-be apprentices participated in 12 weeks of academic upgrading at Toronto Council Fire, with a focus on math and communications.

Following the upgrading sessions, successful students would enter into a further eight-week, hands-on, pre-apprenticeship training session at George Brown College. At the conclusion of the eight-week pre-apprenticeship, students would enroll in an eight-week (240-hour) paid employment placement, with the goal that successful workers would secure official sponsorship for their apprenticeship.

Cultural Supports

Staff members at Miziwe Biik were sensitive to the needs of their students and complemented weekly upgrading sessions with community lunches, prayer circles and visits from guest speakers. The additional sessions helped to bring the learners back to a comfortable place, where

they could re-focus on traditions and meet with local elders and staff to discuss their training.

An Integrated Program is Recommended

The program coordinator, a former tradesperson, suggested that for future programs, students should be offered upgrading and hands-on training each day, perhaps with morning classes followed by afternoon hands-on training sessions.

The program coordinator ... suggested that for future programs, students should be offered upgrading and hands-on training each day, perhaps with morning upgrading classes followed by afternoon hands-on training sessions.

As a result of students consistently facing real world pressures throughout their lengthy upgrading period, such as housing or daycare needs, the coordinator noted that many students began to lose interest in their upgrading and lost focus on their eventual skilled trades training. Many students who started the upgrading did not advance into the skilled trades training as a result of poor attendance or social challenges.

Miziwe Biik is committed to its partnership with George Brown College and the students' March 2008 launch to their pre-apprenticeship program; however, the staff feels it is essential that cultural awareness and sensitivity be integrated into the training setting. Coordinators are wary of George

Brown's strict apprenticeship attendance policy and fear that many students will be terminated from the program as a result.

"We understand the policy and hope our students follow it, but at the same time, we don't want to take away something from our students who already have very few positive things going for them in their lives. They've worked hard to get there and want a better future for themselves," said a coordinating manager at Miziwe Biik.

Barriers to Program Completion

Despite best efforts to keep the students engaged in their learning and remaining focused on the benefits of academic upgrading for their trade, turnover among the group was very high. Issues ranging from housing, homelessness, substance abuse and inadequate childcare kept many of the students from continuing on and resulted in many students withdrawing or being terminated from the program.

WHAT WORKS

The target demographic for Miziwe Biik's carpentry program is unique and presents its own set of challenges for staff and instructors.

Many students have had

challenging lives and require a fine balance of instruction, mentoring, counselling and training for them to gain a strong foothold for their future. Those students who have succeeded in previous carpentry pre-apprenticeship programs run by Miziwe Biik and their partner agencies have embraced all the supports available to them.

Central to the success of this population is having all base-order needs taken care of.

Central to the success of this population, according to the program coordinator, is having all base-order needs taken care of (i.e., housing, shelter and health).

Without these supports in place, learners' priorities

shift, and progression to their apprenticeship future is an even greater challenge.

Miziwe Biik Pre-Apprenticeship Integrated Linear Carpentry Model

Outreach/Intake	Upgrading and Program Coordination	Pre-Apprentice Training and Employment Placement
<ul style="list-style-type: none"> • Toronto Council Fire and Miziwe Biik coordinate outreach and intake • Assessments: CAAT and CAMERA 	<ul style="list-style-type: none"> • Toronto Council Fire delivers LBS upgrading classes for 12 weeks • Miziwe Biik coordinates program, delivers counselling and arranges financial supports for students 	<ul style="list-style-type: none"> • George Brown College delivers eight-week pre-apprentice carpentry program • Miziwe Biik connects students with eight-week paid employment placement following pre-apprentice training

CASE STUDY D:

Wellington County Learning Centre

Arthur, Ontario

Rural Area Community Literacy Program

Located approximately 30 minutes from Guelph, in Arthur, Ontario, a rural community of about 5,000, Wellington County Learning Centre (WCLC) is a learner-focused Community Literacy organization.

WCLC staff is committed to providing local and surrounding area residents with personalized attention in order to meet the goals of each individual.

The WCLC delivers group and personalized LBS upgrading, computer training, employment counselling and General Educational Development (GED) and Academic and Career Entrance (ACE) programming throughout the year.

Initial Interview and Action Plan

Upon intake, a client meets with an assessment counsellor and undergoes an extensive interview to determine training goals. From the assessment and interview, the counsellor and student build a personalized learning contract and action plan. The plan resembles a passport, wherein the student knows and appreciates all of the steps he or she will go through on the learning journey to the chosen goal.

Networking with the Business Community Leads to First Informal Partnership

The WCLC, a member of Arthur's small business community, sent staff to local Chamber of Commerce meetings to inform area businesses of their services.

As a result of the WCLC's networking efforts, the president from a nearby auto parts manufacturer met with WCLC to discuss forging an informal partnership.

The manufacturer explained that it was looking to expand operations in the community but struggled in recruiting and hiring local workers because the company required all employees to pass a mathematics competency exam following the company's orientation and math refresher course.

The WCLC offered to meet with those individuals who had been unsuccessful in their exam attempts in order to deliver LBS workplace mathematics upgrading. The WCLC's goal was to assess students and provide them with the necessary upgrading before recommending that they return to face the manufacturer's entrance test.

As a result of the WCLC's commitment to helping these aspiring apprentices, the manufacturer hired five students who worked with the Community Literacy organization, and continues to actively refer would-be employees to the centre for upgrading.

The WCLC has forged further informal and formal partnerships with the Guelph campus of Conestoga College, to refer students from their ACE, LBS or GED upgrading programs to programs such as Conestoga's Bus and Coach Apprenticeship and construction pre-apprenticeship programs.

WHAT WORKS

All staff at the WCLC recognize the importance of working as a learner-centred institution in a smaller community. Staff members can deliver flexible programming during non-traditional business hours, in order to serve their clients at more convenient times.

The WCLC continues to network and forge partnerships with local businesses in order to provide enthusiastic learners and job seekers with a greater chance for a brighter future. These partnerships also benefit the local businesses that are assured of better-trained workers and a reliable training partner.

CASE STUDY HIGHLIGHTS

The program at The Centre in Burlington and Le CAP's TGV program are strong examples of fully integrated programming. These programs require considerable effort on the part of all involved. Collaboration, consultation, a customized learner-centred focus and a common vision all play a role in ensuring success for participants.

Le CAP's strengths lie in proactive networking and in maintaining and fine-tuning collaborative partnerships over the years. The Centre's success lies in serving highly motivated students who pay for their training in a high-end facility. Both programs encourage their students to display responsible, real-world reliability when it comes to attendance.

The Miziwe Biik Native Stream program in Toronto highlights the need for cultural sensitivity with respect to a demographic that deals with multiple barriers. Partners helping to serve the students realize that learning cannot take place unless the base-order needs (health, housing, etc.) are taken care of first. Attention shifts to learning once the basic needs are in place.

The Wellington County Learning Centre is a shining example of what can happen when a tiny rural Community Literacy program is devoted to networking with employers within the community. Informal partnerships are forged, and commitment to the goals of the learner produces results.

ACTION-BASED RESEARCH

Action-based Research

“Building for the Future” Program

PTP Adult Learning and Employment Programs

Toronto, Ontario

While research was being conducted for *Filling the Gap*, a partnership opportunity presented itself to field-test what a community organization could do for aspiring apprentices with LBS upgrading needs. Here was a chance for the project’s researchers/writers to be involved first-hand in action-based research, in which they would be working on the frontlines, delivering upgrading to a group of students with LBS needs who were interested in exploring the trades and perhaps in moving on to a college pre-apprenticeship program. This action-based research could only serve to benefit the report’s main objective of proposing a functional model for Community Literacy organizations to adopt.

The action-based research was a pilot project in which PTP Adult Learning and Employment Programs partnered with George Brown College (GBC) to deliver a “pre-pre-apprentice” program called “Building for the Future” (BFF).

The Building for the Future program aimed to provide students with the opportunity to refine their math and communication skills, as well as the chance to research skilled trades

George Brown College’s Partnerships with Community Agencies

In 2007, GBC received funding to deliver three pre-apprentice upgrading programs with community partner agencies Miziwe Biik/Council Fire (see above), St. Stephen’s House and PTP Adult Learning and Employment Programs (highlighted in this case study).

A plumbing pre-apprenticeship program was created to serve a largely young population in a high-need area in the east end of Toronto, while a residential air conditioning program targeted a foreign-trained, new-Canadian population.

George Brown College was aware of PTP’s commitment to workforce literacy programming and resource development, and approached PTP to partner in the planning and delivery of a pilot “pre-pre-apprenticeship” upgrading program.

Building for the Future (BFF)—Program Goals

The BFF program aimed to provide students with the

opportunity to refine their math and

communication skills, as well as the chance to research skilled trades via PTP's resource *Building for the Future: Career exploration for the skilled trades* to make an informed decision when planning for their future trade.

The CAMERA scores highlighted the Essential Skills required for success on the job, measuring four skill domains: reading text, document use, numeracy and writing.

Project staff were involved in the instruction and coordination of the BFF program, recruiting students alongside Ontario Works (OW) and George Brown staff via information sessions at neighbourhood centres and community partner employment service sites.

The recruitment sessions netted a group of 50 individuals who had previously met with their caseworkers or employment service counsellors to discuss this opportunity. All individuals expressed a clear interest in pursuing a career in the skilled trades and were eager to begin the process.

Initial Assessment

To assist with the selection of candidates for the BFF program, PTP administered two assessments: the Canadian Adult Achievement Test C (CAAT C) and the Communications and Math Employment Readiness Assessment (CAMERA).

The CAAT C scores provided the individual's grade level indicator,

based on performance on numeracy, reading comprehension and language tasks. The CAMERA scores highlighted the Essential Skills required for

success on the job, measuring four skill domains: reading text, document use, numeracy and writing. The CAMERA results helped to

gauge the prospective students' literacy skills within an employment context.

Final selection of the group was based on both assessment results and answers on each student's application. Entrance into many construction trades requires the applicant to prove a minimum Grade 10 equivalency from school transcripts or in completion of entrance qualifying examinations. Students who scored at or above a Grade 9 level in reading comprehension, near a Grade 8 in numeracy, and at an LBS Level of 4 or 5 were invited to join the program.

Students whose results fell below the above benchmarks were provided with an individual plan, which encouraged each to continue on a path toward the skilled trades, starting with further literacy upgrading at PTP or other local LBS providers. Alternatively, if the student wished to pursue direct employment, a referral was made to nearby employment service support organizations.

A group of thirty-six men and one woman began the “Building for the Future” program. Students attended the preliminary eight-week upgrading for 22 hours per week.

Contextualized Materials

PTP’s *Building for the Future* resource, along with instructor-developed classroom materials, assisted students in

Each student received contextualized, trade-specific materials... Trades-related math instruction was also delivered.

their exploration of the trades. Each student received contextualized, trade-specific materials as well as materials based on learning outcomes from the college’s Academic and Career Entrance (ACE) communications curriculum.

Trades-related math instruction was delivered to two math groups. Students were placed in their math groups—one higher-functioning group, and one lower-functioning group—based on their assessment scores.

The math portion of BFF was delivered in a 10-module format. Students moved on to the next module once they had a solid grasp of the material in previous modules. Both the student and the instructor signed off on each module completed and provided comments as to how comfortable the student felt performing calculations and

solving word problems in that specific module (e.g., the decimals module, the area module). Student reflection on each math module allowed students to actually consider how they learn, how much they had learned, and what they still needed to do to fill any math gaps.

SMART Goals

Another component of the upgrading program was the introduction to, and

development of, student “SMART Goals.” Students were challenged to write out their goals and monitor their progress. Goal writing was somewhat of a foreign concept to a number of the students, as many in the group “just did what they wanted” and had not formally planned goals they wished to achieve.

The SMART Goal format enabled the students to break down their larger goal into realistic pieces, always ensuring that the goal or its parts were

S—Specific
M—Measurable
A—Achievable
R—Realistic
T—Timely

SMART goals assisted the students in conceptually and tangibly planning for their future in both the personal and professional aspects of their lives.

Trades Exploration

Throughout the program, opportunities arose to hear guest speakers and to explore different trades at local Training Delivery Agents (TDAs).

Among the guest speakers to visit the class was Igor Shamraychuk, from the popular TV show, “Restaurant Makeover.” The students appreciated Igor’s candor and his story of his personal journey into the trades. In the words of a student, “He tells it like it is; he doesn’t candy-coat the truth. You either work hard, or you find another job.”

Throughout the BFF program, students worked with the instructor-advisor to assist in planning a clear path into a pre-apprenticeship training program, trade or career of their choice. Students were encouraged to explore all of the skilled trades and to also apply and interview for either the GBC plumbing or residential air conditioning program, should they choose to.

The advisory meetings provided the students with an opportunity to discuss academic, career and

personal matters, if they felt comfortable, and gave the instructor a chance to address any performance or attendance issues with each student privately.

The majority of students in the upgrading program remained interested in applying for either the GBC pre-apprentice plumbing or residential air conditioning program, while a number of students applied to pre-apprentice programs with the Terrazzo Tile and Marble Training School (union) and the Interior Finishing Systems Training School (union).

Interview Preparation

To help students in applying for their programs, students participated in intensive group and one-on-one interview workshops and practice sessions. Employment counsellors from PTP’s Job Solutions program met individually with students to personally craft their resumes for their training program.

Prior to their interviews, students also met with a fashion advisor from Toronto’s Dress Your Best, a non-profit agency that provides job seekers with two to three professional outfits for job interviews.

Students participated in intensive group and one-on-one interview workshops and practice sessions.

Students worked with the instructor-advisor to assist in planning a clear path into a pre-apprenticeship training program.

For entrance into the GBC pre-apprentice plumbing program, each candidate was interviewed, asked “practical” questions about the trade (e.g., converting imperial to metric measurements), and given a standardized math entrance and communications exam based on the EARAT (Evaluating Academic Readiness for Apprenticeship Training) assessment—a common trade-specific assessment tool used by many trade schools across Canada.

Additional Upgrading Support for Successful Candidates

Following the interviews for the plumbing program, 17 students from the “Building for the Future” class were invited to join a follow-up eight-week intensive upgrading and practical program before their pre-apprenticeship training officially commenced. They were to join 13 other students who were recruited by GBC from local OW offices and job-search programs.

Four new-Canadian students were also successfully accepted into the GBC residential air conditioning program and participated in further upgrading before their practical training began.

One of the students to start the program was a foreign-trained plumber. Following the first day of class, he successfully passed his foreign-trained plumber qualifications exam and registered with MTCU as a second-level apprentice.

Two other BFF students were accepted by the Terrazzo Tile and Marble Training School; however, both declined the union’s offer at that time so that they could continue upgrading classes at George Brown.

Non-completion Issues

Personal, behavioural, attendance and attitudinal issues prevented eight students from completing the program. Following a number of interventions these students were asked to leave. They were then referred to local job-search support agencies or to their caseworkers directly, to assist them in taking steps to address individual issues.

Completion Numbers

In all, 29 students completed the initial 8-week upgrading, 21 of whom were accepted into 8- to 12-week pre-apprenticeship training programs at GBC. The remaining eight students who were not accepted were contacted individually so that they could receive

In all, 29 students completed the initial 8-week upgrading, 21 of whom were accepted into 8- to 12-week pre-apprentice training programs at the college.

assistance in mapping out other potential opportunities in post-secondary studies, upgrading, employment services or in other pre-apprenticeship training.

Both the pre-apprenticeship plumbing and residential air conditioning groups completed their second phase of upgrading with the assistance of two job coaches and two upgrading instructors.

The qualifying BFF students will continue on into their pre-apprenticeship training programs once they have successfully passed first-level plumbing or residential air conditioning entrance math exams and modular work.

Toward the end of their practical training, all students will be placed with employers for a 6-week, unpaid co-op period. It is everyone's hope that the employers will officially hire on the students following their term as indentured apprentices.

Contributing Factors to Student Success and Failure

From this group, students who succeeded had the following in common:

- Stable housing arrangements
- Clear police records (received pardons or had no records)

- Stable financial or social supports
- Related work experience
- Willingness to learn
- Strong communication skills (able to demonstrate how to perform an operation to others, able to present opinions clearly, etc.)
- Functional math competence (able to break down problems and use the four basic mathematical operations)
- Positive attitude
- Strong commitment to their future—clear focus

Students who did not succeed in this program had the following factors in common:

- Unstable housing arrangements
- Substance abuse issues
- Marginal math skills
- Active criminal records
- Poor stress management skills
- Demonstrated psychological issues
- Lack of commitment or focus with respect to their future; students were unsure “what to do with their lives”

Differences between Older and Younger Students

The ages of the “Building for the Future” group of students ranged from 18–54. Older students within the group brought a distinct maturity, along with a wealth of related work experience. Some of the younger students had

also held a variety of positions. This group did exemplify the typical demographic cited in our literature review (refer to the “Challenges and Barriers to Apprenticeship for LBS Students” section of this report, p. 19) that seeks to enter the skilled trades in Canada.

Older students demonstrated a greater sense of care and attention to detail while presenting projects and were more reflective in considering their future. Upon introducing himself to the group, an older student stated: “I’m 42 years old. I have worked as a landscaper for 20 years. I figured if I don’t get a professional certification now, I won’t ever get it.”

Clear differences also surfaced in the younger students’ and older students’ math and language skills. The younger generation grew up learning metric measurements and had no familiarity with the imperial system, which is commonly used on most job sites.

In measurement activities using metric and imperial measuring tapes, the older students were given an opportunity to instruct the younger group on the use of measuring tapes, fractions and imperial measurements. The result of the activities served to bridge a divide between the two groups, who didn’t socialize much before this point,

while sharing best practices for measuring distances or objects on the job.

Success Stories

There are many success stories that can be drawn from this group, but perhaps the best example is that of a 27-year-old student who, after finding high school extremely challenging, dropped out to enter the workforce as a temporary labourer for a placement agency.

Throughout the program, the student met regularly with the researcher and shared that, for many years, he had tried to get into an apprenticeship in order to make a better life for himself and, along the way, failed his GED test more than five times.

During the upgrading, the student embraced all activities with vigour and professionalism. Following a workshop on “networking,” the student contacted a plumbing company in north Toronto to see if they would be interested in having him volunteer.

The company took him on to volunteer two days per week and agreed to register him as their apprentice following his pre-apprentice training.

The student struggled greatly with math prior to the upgrading program and “couldn’t connect the pieces.” The student worked with his instructors each day and continued to work at night with family members on material he found challenging throughout both upgrading sessions.

The student worked with his instructors each day and continued to work at night with family members on material he found challenging.

At the conclusion of the second upgrading session, his job coach stated that he was the first person to complete his modules. He also scored 94 per cent on his qualifying math exam—one of the highest marks in the class!

The Building for the Future Integrated Linear Model

Outreach, Assessment and Intake	Upgrading Program Delivery, Phase 1: “Building for the Future”	Upgrading Program Delivery, Phase 2: Job Coaching, Hands-On Training	Pre-Apprenticeship Training, Job Placement
<ul style="list-style-type: none"> • PTP, TSS and GBC conduct joint outreach and information sessions • TSS refers clients and provides students with financial supports • PTP delivers CAAT C and CAMERA assessments • PTP selects students for program 	<ul style="list-style-type: none"> • PTP delivers ACE Communications for the Trades, Building for the Future Trades Exploration and Mathematics for the Trades program at George Brown College (8 weeks) • PTP acts as student advisor and program lead • GBC provides instructor and student support • Students issued student cards • GBC delivers interviews and assessment for pre-apprentice programs 	<ul style="list-style-type: none"> • GBC delivers second phase of upgrading with a hands-on training component (8 weeks) • Job coaches and instructors work with students 	<ul style="list-style-type: none"> • GBC delivers 10-week pre-apprenticeship in plumbing and residential air conditioning • GBC job coaches assist in placing students in six-week unpaid employment placement following pre-apprentice training

RESEARCH FINDINGS

Community-based Literacy Agencies could expand their role in supporting the would-be apprentice by introducing either an integrated linear model or an integrated concurrent model of program delivery.

The case studies presented and PTP's action-based research provide solid examples of delivery models that can successfully be implemented and can reap positive results for aspiring apprentices. Both the integrated linear and integrated concurrent service delivery models provide distinct benefits for the would-be apprentice and serve to strengthen both foundational and practical skills necessary for success on the job.

Integrated Linear Program Delivery Model

The integrated linear model offers LBS learners the ability to transition sequentially from contextualized LBS upgrading to workplace training. Introducing the curriculum sequentially assists learners who have long been away from an academic environment in not feeling overwhelmed by a barrage of new and strange material. For many adult learners, the linear approach offers time to digest new material and understand how concepts can apply to their future career.

The integrated linear delivery model, however, can also be challenging for some students because it compartmentalizes academic and practical learning. A student may learn a mathematical concept such as the slope of a line, and it may be weeks or months before the learning is used in a plumbing application on the shop floor. This is frustrating for those students who see themselves as adults in training yet cannot apply what they are learning right away. For “visual” or “kinesthetic” learners whose comprehension is accelerated by “doing” as they learn, classroom instruction of practical concepts may not be as easily retained. Students will often need to re-learn concepts in the shop that they were exposed to previously in a classroom in order to solidify their understanding.

For this model to be successful, the instructor delivering the LBS upgrading needs to have a real sense of how what is being taught is applied in the particular skilled trade. Collaboration with the trades trainer is a must, and both the LBS instructor and trades instructor need to review their curricula on a regular basis in order to ensure that there are no surprises for the

student weeks or months later when the knowledge must be used in a practical application.

Integrated Concurrent Service Delivery Model

According to the principles of “Functional Context Education,” learners develop knowledge of their subject and apply this new knowledge much more quickly when working within an authentic setting in which the knowledge can be applied.²³ This accelerated learning paradigm is the essence of the integrated concurrent model.

Combining the literacy/Essential Skills training with the practical trade-specific skills training offers the greatest chance for retention. This is of particular import to adults because it allows for immediate and meaningful application of new concepts. There is no feeling of being weighed down by onerous theory. Immediate application eradicates any frustration with the new material.

In practical terms, an integrated concurrent delivery requires a tremendous amount of preparation up front. In the case of Le CAP and its TGV model, it has taken more than a few years to establish a smoothly running model where all partners are content.

What is needed for the success of this model is a shared vision, commitment to the partnership(s) and shared resources (human, space and dollars). It is crucial that the client is the focus for all the personalities who come together to provide their services. This model takes time to perfect—but years of experience and capable partners can create a synergy of service delivery that keeps aspiring apprentices motivated and on track.

There are immediate benefits for the clients and the partners in working collaboratively to support their mutual clients. Should an incident arise in which the learner requires immediate attention or counselling, all parties can lend support to the learner, who is sure to benefit from the expertise of all those involved. Those partnered with LBS Community-based Literacy Agencies benefit from the fact that the LBS providers bring effective teaching methods that are geared to aspiring apprentices with literacy and Essential Skills needs.

²³ Thomas Sticht. *Functional Context Education: Making Learning Relevant*. San Diego Consortium for Workforce Education and Lifelong Learning. 1997. p. 4.

Which model would best be suited for your agency?

Where your literacy organization is located within Ontario may influence which model you choose to adopt in order to help literacy students make their way to apprenticeship programs. Are you situated in a large urban centre, a small town or a remote rural setting?

Upon first glance, it may seem that Community-based Literacy Agencies in a city the size of Toronto have the opportunity to partner with many different organizations and groups (Training Delivery Agents, colleges, unions, employers, etc.). Imagine the endless networking possibilities! Imagine the incredible integrated concurrent model you could build! There are many possibilities and permutations, but sometimes the sheer number of these potential partners and their unwieldy administrative structure may not allow for easy networking.

It may also seem that within tiny communities there are few options for finding partners who can help clients access the trades. In reality, the close-knit communities and the familiarity with most of the people around you may lead to training partnerships that are full of momentum and passion because all participating have the same vision.

The bottom line is that the people in your agency, your shared vision and the effort you are able to expend will help you decide which model is most realistic and compatible with your organization. The trailblazing programs we had the privilege of researching and presenting in this report all show signs of resourcefulness and a commitment to serving their clients in the best way they knew how. LBS providers who are comfortable to share resources and can make the time to collaborate with colleges, Training Delivery Agents, unions and employers may find their potential partners are willing to commit to a long-term integrated concurrent model.

Conversely, other community agencies may wish to build upon the LBS and Essential Skills training they already deliver by developing contextualized, trades-specific materials for use with the aspiring apprentices in their respective programs. This is likely a more manageable task than finding the time to work closely with partners and collaborate on a regular basis. If this sounds like your organization, the integrated linear model may be the training model you choose.

The deciding factor in choosing a model to adopt lies in the community-building style your organization most easily gravitates toward. Some individuals within LBS agencies are naturals at networking and forging partnerships. Some are exceptional when it comes to developing curricula and resources. Others are marketing-oriented and feel extremely comfortable going out to chambers of commerce and union groups to extol the benefits of literacy upgrading programs for their needs.

In this new climate of “no-wrong-door” integrated services, each community-based literacy program can create a partnership platform it feels comfortable with, so long as the clients’ needs guide us to innovate and community-build.

BEST PRACTICES

In reviewing the literature and examining the case studies and action-based research delivery model, the researchers have drawn up a set of best practices that community-based LBS upgrading-for-apprenticeship programs could incorporate into their service delivery. These best practices involve

- ◆ **Including a skilled trades exploration component in your training**

Navigating through the apprenticeship options and understanding the testing, application and sponsorship process is often daunting for LBS students. An accessible introductory workshop or information about the trades helps to clarify the steps involved in becoming an apprentice and ultimately a journey person. This “pre-work” ensures that students will choose apprenticeship because it is the right career option for them.

PTP’s *Building for the Future: Career exploration for the skilled trades* resource is a career exploration tool that will help students explore the skilled trades. BFF guides readers through the apprenticeship system in Ontario, with a particular focus on the construction apprenticeships, by engaging them in reflection and research activities. The resource can be used as part of goal setting, career exploration or skills upgrading programming.

- ◆ **Using contextualized, trade-specific LBS upgrading materials**

Contextualized resources offer students a meaningful learning experience in which they can appreciate the real-world application of the concepts being taught. For example, when students learn to calculate area in the context of laying tile in an irregularly shaped room, they come to realize the usefulness of the math application.

According to a report that examined the effect of delivering literacy within a vocational context in UK community programs, contextualized materials offered the students a new “professional identity” that made them feel less like “school pupils” and more like adults in training.²⁴

◆ Ensuring your pre-apprenticeship upgrading program is anchored in an integrated delivery model

Whether the model your organization chooses to use is a fully integrated concurrent model or an integrated linear model, any level of integration has been considered key in boosting success rates for apprenticeship qualification entry exams, increasing retention rates and achieving LBS benchmarks.²⁵

An extensive research project undertaken in the UK in 2006 explored the impact that an integrated approach (or what in the UK is termed “embedded” approach) had on 1,916 learners in 79 vocational programs.²⁶ Learners who were part of embedded/integrated courses exhibited a 16 per cent higher retention rate, and 43 per cent more learners achieved literacy benchmarks when compared to literacy upgrading students who were not in integrated programs. In fact, data gathered from focus group sessions that were part of the UK research suggest that “learners may be suspicious of [LBS] input which is not vocationally aligned or valued.”²⁷ Learning, therefore, is meaningful for students when they can see that the upgrading piece fits with what they do (or will soon do) on the job.

²⁴ Celia Roberts et al. *Embedded teaching and learning of adult literacy, numeracy and ESOL—Seven Case Studies*. 2005. p. 7.

²⁵ *Ibid.* Summary section.

²⁶ Helen Casey et al. *“You wouldn’t expect a maths teacher to teach plastering...”: Embedded literacy, language and numeracy in post-16 vocational programmes—the impact on learning and achievement*. National Research and Development Centre for Adult Literacy and Numeracy. London. 2006.

²⁷ *Ibid.* p. 27.

◆ Placing a concerted emphasis on Essential Skills

Focusing on the nine Essential Skills, identified by HRSDC, helps students build “the foundation for learning all other skills” and “enables them to evolve with their jobs and adapt to workplace change.”²⁸ Our students need training that has relevance to the hands-on work they will be doing.

Research shows that “while ‘grade level completed’ may demonstrate general ability, ... it is not an accurate indication of essential skills preparation for apprenticeship. In fact, it is almost irrelevant in the case of people who have been out of school for ten years or more.”²⁹

A substantial number of our literacy learners have been away from a school setting for a number of years. They benefit greatly from a model that delivers the Essential Skills that will support them in *learning how to learn*. Instructors have commented that those individuals who do not embrace learning for learning’s sake are probably the ones who will be the first to be laid off in a knowledge-based economy, where ability to learn new procedures and grasp new technological advances are key.

Developing Essential Skills also helps to ensure that qualification and certification exams are tackled with confidence.

²⁸ The nine Essential Skills are Reading Text; Writing; Continuous Learning; Numeracy; Computer Use; Document Use; Oral Communications; Thinking Skills; and Working with Others. As outlined in the Linking Apprenticeship and “Essential Skills” information sheet. Canadian Apprenticeship Forum. You can review all nine Essential Skills online at the HRSDC website. See note 1 above.

²⁹ See note 11 above. p. 4.

- ◆ **Providing opportunities for developing valuable learning strategies that pave the way for independent learning**

Having students engage in self-reflection, goal setting and self-evaluation activities allows them to develop the ability to strengthen their learning strategies. Being aware of how they learn and what strategies work best helps students to build confidence and their ability to learn new things.

- ◆ **Scheduling regular student/instructor advisory meetings**

To maintain a learner-centred focus and to tackle any difficulties or doubts learners may be having during the program, regular student/instructor meetings are a must. They help prevent rash actions (e.g. quitting the program, etc.). Instructors can check in with students and reassure them that there are tough patches and challenges for all program participants from time to time.

- ◆ **Using assessment tools that do not *only* consider the previous grade level attained**

As mentioned above, high school grade levels are poor indicators of adult skills. Administering assessments that test applied Essential Skills are helpful in determining whether the students are ready for pre-apprenticeship training. In fact, HRSDC Essential Skills profiling identifies three areas crucial to apprenticeship that are largely overlooked in the academic system. These are reading, document literacy and learning-to-learn skills.³⁰ An assessment tool like PTP's Communications and Math Employment Readiness Assessment (CAMERA) can aid in determining whether students possess adequate skills with which they can successfully pursue apprenticeship training.

³⁰ Ibid. p. 9.

- ◆ **Introducing outreach initiatives to recruit students, and networking with employers, unions and Training Delivery Agents in the community**

The case studies, online survey and environmental scan highlighted the need for Community-based Literacy Agencies to get out into the community and make others aware of how LBS providers can help people prepare for the skilled trades. Networking and direct mail campaigns are crucial for creating enduring programs that prepare adults for apprenticeship. Letting TDAs, unions and companies know how local LBS agencies can help them often leads to valuable partnerships.

- ◆ **Building partnerships and fostering ongoing collaboration**

Seeking out partners who share the same vision and are committed to helping aspiring apprentices navigate their way to and through apprenticeship—from exploration to certification—helps adult learners successfully make their way to employment that is good for them and good for the economy. Employment Ontario’s integrated gateway approach gives Community-based Literacy Agencies the opportunity to build communities in which many partners with specialized knowledge come together to ensure that LBS upgrading students have a realistic chance of accessing the skilled trades. Ongoing collaboration ensures a coordinated focus that is tailored to meet our students’ aspirations of becoming journeypersons.

- ◆ **Maintaining a strict attendance policy**

Poor program attendance signals the inevitability of not being able to hold down an apprenticeship position. Unless there were extenuating circumstances for the absences, most of the case study programs insisted on consistent attendance.

◆ Addressing behavioral issues and other challenges early on

All of the case studies cited instances of some students exhibiting behavioral problems, poor attitude and negative coping strategies (e.g., substance abuse). Within all programs, failure to complete the training often resulted from these issues. Early intervention and directing the student to programs or agencies that can provide life skills training or help them take care of core needs (housing, health) is crucial. If these issues are promptly addressed, the student may be able to complete the training. Community-based Literacy Agencies have expertise in helping students access supports to address these issues.

◆ Helping students anticipate incidental issues that could hinder apprenticeship completion

Our online survey and environmental scan signalled realities such as lack of a vehicle and lack of child care options as issues that can sabotage apprenticeships. Ensuring students plan ahead and anticipate these possible barriers will ensure they can fulfill their apprenticeship responsibilities.

◆ Showing cultural sensitivity and being aware of the needs of special groups

Literacy upgrading instructors from Community-based Literacy Agencies and any other partners involved in apprenticeship preparation must be aware of the special needs of the group they are teaching. Those involved with learners from the Native Stream and Deaf Stream and other minorities (e.g., recent immigrants, women), must ensure that they are aware of the hurdles these groups face. Community-based Literacy Agencies must ask that the government provide them with adequate knowledge and training to deal with special issues.

- ◆ Recognizing that there may be a need for linking the aspiring apprentice to job development and support upon completion of LBS pre-apprenticeship upgrading

The reality is that no pre-apprenticeship training program is successful unless students find sponsors to take them on as apprentices. Ultimately, what defines the success of an LBS pre-apprenticeship program is its participants' ability to be employed in the skilled trades. If your organization does not provide job search training and support services, help connect candidates to employers or to other agencies that specialize in job development and support. As community-based LBS organizations, we can deliver the relevant pre-apprenticeship piece to our apprenticeship-bound clients, but we need to ensure that once they have completed their upgrading, they can access proper job supports.

CONCLUSION—WHAT WE LEARNED

This report aimed to answer the question:

What expanded role could Ontario's Literacy and Basic Skills (LBS) Community-based Literacy Agencies play in supporting would-be and current apprentices' transition to—and through—the apprenticeship delivery system?

Through the research project's online survey, environmental scan, literature review, analysis of four initiatives in Ontario that specifically prepare adults to enter apprenticeship (the case studies), and our action-based research model that allowed us to field-test a contextualized LBS upgrading curriculum with aspiring apprentices, it became quite evident that LBS Community-based Literacy Agencies can play an integral role in preparing and linking LBS learners to apprenticeship. In light of the impending—if not already existing—skilled tradesperson shortage, there exists an urgent need for Community-based Literacy Agencies to help those adults who are under-represented in the workforce to access the skilled trades.

Community partnerships in all parts of Ontario—be they in rural areas, small towns or large urban centres—are what make it possible for LBS students to receive the training they need in order to be equipped with the literacy and Essential Skills required of apprentices in today's knowledge-based economy. Indeed, to fill the skilled trades gap requires a concerted community effort that fills the foundational skills gap.

In the report's introduction, the rhetorical question “Where do we begin?” looms large as Community-based Literacy Agencies contemplate how to help participants navigate the apprenticeship labyrinth. The answer is the same as it has always been for our organizations: we begin within the community. We work with others to help make our students' goals a reality.

As LBS and Academic Upgrading providers, Community-based Literacy Agencies have always been on the front lines, helping adults make their way toward employment. They have always been resourceful and flexible bastions of upgrading services for their participants.

In fact, Barbara McFater, Executive Director of PTP Adult Learning and Employment Programs, views the role of LBS Community-based Literacy Agencies as an ever-expanding one—one that grows with the needs of their clients:

Our niche encompasses upgrading for employment, for credit studies, for further training or for independence. It is a natural progression that we should also prepare learners for apprenticeship.

The MTCU mandate of positioning LBS students in the direction of apprenticeship is a challenge that literacy organizations are ready to take on. Through community-building efforts, they will support, prepare and guide aspiring apprentices to and through apprenticeship. Through the introduction or adoption of either an integrated linear or integrated concurrent model of program delivery (detailed in this research report), literacy organizations can deliver training that has been proven more effective for adults with literacy needs who have been out of the classroom for several years. As they expand their role to train those aspiring to apprenticeship, Community-based Literacy Agencies can ensure that some, or all, of the best practices principles outlined in this report be implemented in their programming.

Community-based Literacy Agencies have much to offer their partners in pre-apprenticeship preparation. In our interviews with Training Delivery Agents, unions and colleges all expressed that there were tremendous benefit in working collaboratively. Brenda Pipitone, Director of Special Projects/Community Partnerships at Toronto's George Brown College, has worked with several community-based partner agencies and sees their role as critical:

Our partnerships expanded the scope of people we were able to reach. They have allowed us to have a place where people could enter. The Building for the Future pilot project with PTP allowed people to get on a path they previously could not be on... What we are most interested in creating is an educational pathway out of poverty and creating access to programs.

Initiatives throughout Ontario have proven that Community-based Literacy Agencies have the ingenuity, drive and expertise to forge partnerships that achieve results. Within a mighty new climate of integrated service delivery and a sharing of expertise across a continuum of services, Community-based Literacy Agencies are set to play a pivotal role in preparing adults for the trades.

Getting Started...

With more emphasis on apprenticeship and the skilled trades, LBS Community-based Literacy Agencies will see more aspiring apprentices coming to them for help. If you are an LBS Community-based Literacy Agency looking to start or develop new programming geared to pre-apprenticeship upgrading and preparation, you may have some questions or feel you need some advice and/or resources to help you get started.

Case Study Contacts

When reading through the report's case studies, you may have felt that some of the approaches can work in your community.

Representatives from the various organizations whose programs were highlighted in our research have indicated they would be glad to share some of their experiences and answer your questions.

Organization	Contact Person	Telephone Number
Le CAP–Centre d'apprentissage et de perfectionnement	Donald Lurette	(613) 632-9664 or 1-800-830-6531
The Centre for Skills Development & Training (The Centre)	Nancy Moore	(905) 333-3499
Miziwe Biik Aboriginal Employment and Training	Ruby Dreger	(416) 591-2310
Wellington County Learning Centre	Elizabeth Debergh	(519) 848-3462
PTP Adult Learning and Employment Programs	Aleksandra Popovic	(416) 510-3266

Printed Resources

Any community organizations interested in obtaining the workplace and trade-specific contextualized assessment materials and program resources discussed in this report can do so by visiting www.ptp.ca. The resources available for download or purchase are

- ◆ *Building for the Future: Career exploration for the skilled trades*
A career exploration course book for adults or youth interested in exploring the skilled trades. BFF guides readers through the apprenticeship system in Ontario by engaging them in reflection and research activities.
- ◆ *CAMERA (Communications and Math Employment Readiness Assessment)*
A valid and reliable series of assessments that test the Essential Skills of document use, reading text, writing and numeracy.

By using some of the resources included here, and perhaps contacting some of the organizations featured in this report, we hope that Community-based Literacy Agencies can quickly and effectively begin developing their own program within a very short time.

APPENDICES

FILLING THE GAP: Building communities to support the aspiring apprentice

APPENDIX A: Summary Charts of Case Studies and Action-based Research

FACTORS CONTRIBUTING TO EFFECTIVE AND SUCCESSFUL INITIATIVES*	<p style="text-align: center;">CASE STUDY A</p> <p>LE CAP–CENTRE D’APPRENTISSAGE ET DE PERFECTIONNEMENT</p> <p>LOCATION: HAWKESBURY, ONTARIO POPULATION: 10,000</p>
Partnership(s)	<p>Progressive, collaborative partnerships:</p> <ul style="list-style-type: none"> • First partnership was with Collège d’Alfred and the Eastern Ontario Training and Education Centre (EOTEC/CÉFEO) • Also partnered with La Cité collégiale, the local training institution for industrial millwrights, welders, and tool and die apprentices and pre-apprentices in Hawkesbury
Assessment Process	Le CAP staff have become very astute at <i>recognizing clients who would be a good fit for success in the training programs</i> , factoring in age, work experience, literacy level, aptitude, attitude and whether the client has social supports in place, the latter two of which, they feel, are the most important characteristics.
Level of Integrated Programming	Fully Integrated Concurrent Skilled training in office, nutrition, horticultural, industrial and health care environments, etc.
Staff Expertise	The integrated Très Grande Vitesse (TGV) model allows for the student/apprentice to receive focused training in specific areas by specialized delivery groups. The stakeholders have niche expertise in the instruction of materials, and because each partner knows who is responsible for each specific piece, there is no duplication of services.
Apprentice Candidates’ Motivation/Commitment	<p>The clients’ attitude and the social supports are of paramount importance.</p> <p>Le TGV affords <i>timely accreditation and rapid re-employment</i>, with the support of Le CAP and willing community partners—all of whom work to help make an individual client’s employment goal a reality.</p> <p>The student and all partners work to make each student’s individual employment goal a reality.</p> <p>Contextualized upgrading is delivered concurrently to complement “real time” skilled trades or other professional and practical training.</p>
Guiding Principles	The most efficient manner to support professional skilled training for adult learners is one which is integrated, wherein the concepts learned in the classroom are quickly reinforced in a practical setting, reducing the time between when students develop skills and return to the workforce. (Sticht: 1997) One-stop centres; greater people-focused programs (Rowen: 1999)
Identified Barriers to Student Success	Social challenges such as drug or alcohol issues, commitment, maturity and poor workplace behaviour

* Many of the contributing factors listed in the case study summary charts are those that were identified as key factors in the success of a number of initiatives outlined in the Canadian Apprenticeship Forum’s June 2007 report entitled *The Link Between Essential Skills and Success in Apprenticeship Training: An Analysis of Selected Essential Skills Initiatives in Apprenticeship Across Canada*. pp. 9-10.

FACTORS CONTRIBUTING TO EFFECTIVE AND SUCCESSFUL INITIATIVES	<p style="text-align: center;">CASE STUDY B</p> <p>THE CENTRE FOR SKILLS DEVELOPMENT & TRAINING—“THE CENTRE” AN AFFILIATE OF THE HALTON DISTRICT SCHOOL BOARD</p> <p>LOCATION: BURLINGTON, ONTARIO POPULATION: 164,415</p>
Partnership(s)	Partnered with Gary Allan High School in Burlington in order to help students obtain their OSSD, GED or ACE
Assessment Process	LBS Assessment or Canadian Adult Achievement Test (CAAT) Assessment If client is interested in apprenticeship, The Centre does GED prep with LBS Support.
Level of Integrated Programming	Integrated Concurrent delivery model of communications and math inside and outside of classroom and shop
Staff Expertise	Instructors are certified tradespeople who adapt numeracy and communications to a shop environment.
Apprentice Candidates’ Motivation/Commitment	Students are extremely motivated. The students’ or the students’ families are paying for the training. Many of the students have worked before or have done post-secondary studies, and they know they want to get into the trades.
Guiding Principles	Contextualized/fully integrated learning
Identified Barriers to Student Success	A few students lacked the motivation or maturity to pursue the training or had substance abuse issues.

FILLING THE GAP: Building communities to support the aspiring apprentice

CASE STUDY C	
FACTORS CONTRIBUTING TO EFFECTIVE AND SUCCESSFUL INITIATIVES	MIZIWE BIIK ABORIGINAL EMPLOYMENT AND TRAINING LOCATION: TORONTO, ONTARIO POPULATION: 11,370 (REPORTED ABORIGINAL POPULATION IN TORONTO)
Partnership(s)	<ul style="list-style-type: none"> • Toronto Council Fire—A Native Stream community literacy organization • George Brown College
Assessment Process	Both the CAAT and the Communications and Math Employment Readiness Assessment (CAMERA)
Level of Integrated Programming	Linear program delivery LBS upgrading first and then trade-specific pre-apprenticeship program at George Brown College
Staff Expertise	Instruction within a culturally sensitive setting during LBS upgrading First Nations carpentry instructor at George Brown College makes for an easier transition.
Apprentice Candidates' Motivation/Commitment	Students in this target demographic have had challenging lives and require a fine balance of instruction and mentoring; most lose their motivation easily when confronted with difficulty meeting their base-order needs.
Guiding Principles	Cultural sensitivity Base-order needs taken care of through counselling Gentle easing in to classroom instruction and training
Identified Barriers to Student Success	Multiple barriers to success—issues ranging from housing, health, homelessness, substance abuse and inadequate child care interfered with students' ability to focus on the upgrading

FILLING THE GAP: Building communities to support the aspiring apprentice

CASE STUDY D	
FACTORS CONTRIBUTING TO EFFECTIVE AND SUCCESSFUL INITIATIVES	WELLINGTON COUNTY LEARNING CENTRE LOCATION: ARTHUR, ONTARIO POPULATION: 5,000
Partnership(s)	Local manufacturer
Assessment Process	Upon intake there is an extensive interview to determine each individual's goals.
Level of Integrated Programming	Provided upgrading in LBS mathematics as per the requirements of the manufacturer
Staff Expertise	LBS instruction Learner-centred instructors
Apprentice Candidates' Motivation/Commitment	Motivated to pass the test so that they can be formally hired
Guiding Principles	Help each student reach a personalized goal Networking and forging partnerships with local businesses Flexible programming; non-traditional business hours
Identified Barriers to Student Success	N/A

FILLING THE GAP: Building communities to support the aspiring apprentice

	ACTION-BASED RESEARCH
FACTORS CONTRIBUTING TO EFFECTIVE AND SUCCESSFUL INITIATIVES	<p>BUILDING FOR THE FUTURE (BFF) “PRE-PRE-APPRENTICESHIP” PROGRAM PTP ACADEMIC ADULT LEARNING AND EMPLOYMENT PROGRAMS</p> <p>LOCATION: TORONTO, ON POPULATION: 2.48 MILLION</p>
Partnership(s)	PTP Adult Learning and Employment Programs George Brown College Toronto Social Services—Ontario Works clients
Assessment Process	CAAT C CAMERA Students who scored at or above Grade 9 level in reading comprehension, near a Grade 8 level in numeracy, and at an LBS level of 4 or 5 were asked to join the program.
Level of Integrated Programming	Integrated Linear program (front-loaded delivery) of communications and math with contextualized math and communications materials
Staff Expertise	LBS instructors delivered contextualized math and communications (pre-pre-apprenticeship). George Brown College provided training for pre-apprenticeship plumbing or residential air conditioning programs.
Apprentice Candidates’ Motivation/Commitment	All individuals expressed a clear interest in pursuing a career in the skilled trades. Twenty-nine out of 37 individuals moved into George Brown pre-apprenticeship programs (plumbing, residential air conditioning). Phase 2: Those accepted into plumbing and residential air conditioning programs complete a second phase of upgrading with two job coaches and instructors.
Guiding Principles	Never let any of the group of students originally chosen fall through the cracks. Those who were terminated due to behavioural issues were referred to local job search support agencies or to their caseworkers to address individual issues. Those not accepted were contacted individually to map out other potential opportunities for them in post-secondary studies, upgrading, employment services or in other pre-apprenticeship training.
Extra Supports to Build Confidence and Maintain Motivation	Guest speakers SMART (specific, measurable, achievable, realistic and timely) goal-setting component Interview practice sessions Fashion advice and support from a non-profit agency—two to three professional outfits provided for job interviews Job coaching and co-op placement (hope for eventual apprentice position through the co-op)
Identified Barriers to Student Success	Behavioural issues, unstable housing, marginal math skills, substance abuse, poor stress management skills, lack of commitment or focus on the future

APPENDIX B: Online Survey Results

LBS STUDENT SURVEY

Q1. Where do you live in Canada? [what city and province - please do not put your address down!]		
Answer Options	Response Count	
	34	
answered question	34	
skipped question	0	
Q2. Sex:		
Answer Options	Response Percent	Response Count
Male	55.90%	19
Female	44.10%	15
	answered question	34
	skipped question	0
Q3. Please choose where you are doing your upgrading:		
Answer Options	Response Percent	Response Count
Community Literacy Organization	42.40%	14
School Board Literacy class	18.20%	6
At a Community College	39.40%	13

LBS STUDENT SURVEY

	answered question	33
	skipped question	1
Q4. Please select your language stream:		
Answer Options	Response Percent	Response Count
Anglophone [English]	94.10%	32
Francophone [Francais]	0%	0
Deaf	5.90%	2
Native	0%	0
	answered question	34
	skipped question	0
Q5. Before starting your upgrading, what grade level did you complete?		
Answer Options	Response Percent	Response Count
Grade 12 in Canada	33.30%	10
Grade 10 in Canada	46.70%	14
Grade 12 in another country	10%	3
Grade 10 or less in another country	10%	3
	answered question	30
	skipped question	4

LBS STUDENT SURVEY

Q6. How long ago did you complete your schooling before you started upgrading?		
Answer Options	Response Percent	Response Count
1 - 5 years	30.30%	10
5 - 7 years	12.10%	4
8 - 10 years	21.20%	7
More than 10 years	36.40%	12
	answered question	33
	skipped question	1
Q7. Are you interested in starting an apprenticeship?		
Answer Options	Response Percent	Response Count
Yes	62.50%	20
No	37.50%	12
	answered question	32
	skipped question	2
Q8. If you are interested in apprenticeships, what sector are you interested working in?		

LBS STUDENT SURVEY

Answer Options	Response Percent	Response Count
Construction [plumber, electrician, drywall, +]	62.50%	15
Culinary [chef, +]	12.50%	3
Manufacturing [tool & die, millwright, +]	12.50%	3
Service [Hairstylist, Cosmetologist, +]	12.50%	3
	answered question	24
	skipped question	10
Q9. Do you know how you would begin the apprenticeship process?		
Answer Options	Response Percent	Response Count
Yes	27.30%	9
No	33.30%	11
My upgrading centre knows how to help me	39.40%	13
	answered question	33
	skipped question	1
Q10. Do you know where you are going after you finish upgrading?		
Answer Options	Response Percent	Response Count
Job search	13.30%	4

LBS STUDENT SURVEY

A job	26.70%	8
An apprenticeship	36.70%	11
Training	6.70%	2
College	16.70%	5
Comments		5
	answered question	30
	skipped question	4

LBS Provider Survey

Q1. Where in Ontario do you work?		
Answer Options	Response Count	
	89	
answered question	89	
skipped question	2	
Q2. Please select your literacy organization's sector:		
Answer Options	Response Percent	Response Count
Community Literacy Organization	43.30%	39
School Board Literacy	12.20%	11
College Sector	44.40%	40
	answered question	90

	skipped question	1
Q3. Please select your stream:		
Answer Options	Response Percent	Response Count
Anglophone	87.80%	79
Francophone	4.40%	4
Deaf	6.70%	6
Native	1.10%	1
	answered question	90
	skipped question	1
Q4. Please select your position within your organization:		
Answer Options	Response Percent	Response Count
LBS instructor	69.20%	54
Manager	16.70%	13
Director/Executive Director	16.70%	13
Volunteer	0%	0
Comments		19
	answered question	78
	skipped question	13

FILLING THE GAP: Building communities to support the aspiring apprentice

Q5. In your estimation, what percent of your students have expressed a desire to enter the skilled trades as an apprentice?		
Answer Options	Response Percent	Response Count
10% or less	44.40%	40
10 - 25%	43.30%	39
25 - 50%	4.40%	4
50 - 75%	4.40%	4
More than 75%	3.30%	3
	answered question	90
	skipped question	1
Q6. Do you currently have a model for coaching students how they would enter or transition from upgrading into the trades?		
Answer Options	Response Percent	Response Count
We have a model in place that works	25%	22
We have a model in place that doesn't seem to address the needs of the majority of these students	9.10%	8
We do not have a model, but if it was needed, I am knowledgeable enough to coach steps of skilled trades transitioning	38.60%	34
We do not have a model and I am not knowledgeable enough in this area to coach steps	27.30%	24
	answered question	88
	skipped question	3

Q7 Are you familiar with skilled trades available that are in your region?		
Answer Options	Response Percent	Response Count
No	5.60%	5
Somewhat	64.40%	58
Yes	30%	27
	answered question	90
	skipped question	1
Q8. Does your Literacy Organization have any relationships/partnerships with industry or specific employers?		
Answer Options	Response Percent	Response Count
Industry/Unions	18.40%	16
Specific Employers	18.40%	16
Industry and specific employers	21.80%	19
No current relationships/partnerships	57.50%	50
	answered question	87
	skipped question	4

FILLING THE GAP: Building communities to support the aspiring apprentice

Q9. If a number of students expressed interest in a specific skilled trade, are resources available to develop a curriculum, which is contextualized to that occupation?		
Answer Options	Response Percent	Response Count
Yes	53.50%	46
No	47.70%	41
	answered question	86
	skipped question	5
Q10. Despite participating in upgrading programs, many former LBS students fail to succeed in Apprentice Entrance and final Certificate of Qualifications exams. Why do you think this happens?		
Answer Options	Response Percent	Response Count
Curriculum is not designed/contextualized for the trades	56%	42
Students were not offered or did not pursue further upgrading after LBS	50.70%	38
Employers are not aware of how to support various learning needs/styles	48%	36
Comments		24
	answered question	75
	skipped question	16

FILLING THE GAP: Building communities to support the aspiring apprentice

Q11. How successful do you feel your program is for preparing students for further skills training or employment?		
Answer Options	Response Percent	Response Count
Very successful	43.30%	39
Somewhat successful	48.90%	44
Not very successful	3.30%	3
We do not focus on future planning for the employment goals of our students	4.40%	4
	answered question	90
	skipped question	1
Q12. Thank you for completing this survey!		
If you would like to receive updates on the research, please leave your email address [optional].		
Answer Options	Response Count	
	15	
answered question	15	
skipped question	76	

EMPLOYER/TRAINER SURVEY		
Q1. What city and province do you work in?		
Answer Options	Response Count	
	9	
answered question	9	
skipped question	0	
Q2. What sector does your company or training facility operate in or train for?		
Answer Options	Response Percent	Response Count
Manufacturing	16.70%	1
Service	16.70%	1
Construction	100%	6
Health Care	33.30%	2
Comments		4
	answered question	6
	skipped question	3
Q3. Does your company/organization have any relationships or partnerships with Community Literacy Organizations?		

FILLING THE GAP: Building communities to support the aspiring apprentice

Answer Options	Response Percent	Response Count
Yes	66.70%	6
No	33.30%	3
We are considering a relationship/partnership	0%	0
We are not considering a relationship/partnership	0%	0
	answered question	9
	skipped question	0
Q4. From any previous community partnerships related to apprenticeship, would you say the relationship was successful?		
Answer Options	Response Percent	Response Count
Yes	75%	6
No	25%	2
	answered question	8
	skipped question	1
Q5. Were the students prepared for success upon arrival?		

FILLING THE GAP: Building communities to support the aspiring apprentice

Answer Options	Response Percent	Response Count
Yes	75%	6
No	25%	2
	answered question	8
	skipped question	1
Q6. What were the major challenges you felt most students experienced? Check all that apply		
Answer Options	Response Percent	Response Count
Academic preparedness [mathematics, communications]	50%	4
Social supports not in place [daycare, transportation]	50%	4
Students not prepared for work demands	25%	2
Attendance issues [unexplained absences]	75%	6
Comments		2
	answered question	8
	skipped question	1
Q7. If you could help with planning a partnership with a literacy organization, what would you emphasize to the instructors as important training skills or information? Check all that apply.		

FILLING THE GAP: Building communities to support the aspiring apprentice

Answer Options	Response Percent	Response Count
Academic preparedness	55.60%	5
Workplace expectation preparedness	88.90%	8
Comments		0
	answered question	9
	skipped question	0
Q8. Would you work with this or other community based groups again?		
Answer Options	Response Percent	Response Count
Yes	87.50%	7
No	12.50%	1
	answered question	8
	skipped question	1
Q9. Do you have skilled instructors for both vocational and literacy/numeracy training?		

FILLING THE GAP: Building communities to support the aspiring apprentice

Answer Options	Response Percent	Response Count
Yes	88.90%	8
No	11.10%	1
	answered question	9
	skipped question	0
Q10. Does the trainer instruct both pieces, or are there separate instructors for both disciplines?		
Answer Options	Response Percent	Response Count
One instructor for both pieces	25%	2
Separate instructor for vocational and literacy/numeracy disciplines	75%	6
	answered question	8
	skipped question	1
Q11. How do you affect the retention and success of apprentices/trainees - for entrance, completion of apprenticeship, and future training and success?		
Please describe:		

Answer Options	Response Count	
	9	
answered question	9	
skipped question	0	

APPENDIX C: References

Ball, Katrina. 2004. *Apprenticeship Traineeships in Victoria: Building & Construction*. National Centre for Vocational Education Research (NCVER).

Ball, Katrina. 2004. Factors Influencing Completion of Apprenticeships and Traineeships. National Centre for Vocational Educational Research (NCVER).

Canadian Apprenticeship Forum. 2004. *Accessing and Completing Apprenticeship Training in Canada: Perceptions and Barriers*.

Canadian Apprenticeship Forum. 2006. *Return on Apprenticeship Training Investment*.

Canadian Apprenticeship Forum. 2007. *The Link Between Essential Skills and Success in Apprenticeship Training: An Analysis of Selected Essential Skills Initiatives in Apprenticeship Across Canada*.

Canadian Council on Learning. 2007. *Unlocking Canada's Potential: The State of Workplace and Adult Learning in Canada*.

Canadian Council of Technicians and Technologists. 2007. *TechCanada Roundtable 2007*.

Casey, Helen. 2005. *Putting good practice into practice: literacy, numeracy and key skills within apprenticeships: An evaluation of the LSDA development project*. Department for Education: National Research & Development Centre.

Casey, Helen et al. 2007. "You wouldn't expect a maths teacher to teach plastering...": *Embedding literacy, language and numeracy in pos-16 vocational programmes—the impact on learning and achievement*. National Research and Development Centre for Adult Literacy and Numeracy. London.

The Conference Board of Canada. 2007. *Ontario's Looming Labour Shortage Challenges*.

Construction Sector Council. 2007. *Construction Looking Forward*.

Cooper, Bridget and Mike Baynham. 2005. *UK Embedded LLN Summary: Modern Apprenticeship in Construction, Case Study 3: Rites of passage: embedding meaningful language, literacy and numeracy skills in skilled trades courses through significant and transforming relationships*. University of Leeds: National Research and Development Centre for Adult Literacy and Numeracy.

Coppolillo, Frances. 2006. *Addressing Literacy and Numeracy Development for Apprentices and Trainees*. Victorian Equity Projects—An Office of Training and Tertiary Education initiative, Northern Melbourne Institute of TAFE (Technical and Further Education).

Drumbell, Tom. 2003. *Pathways to Apprenticeship*. Australian National Training Authority.

Dymock, Darryl, Visiting Research Fellow. 2007. *Engaging Adult Learners: The Role of Non-Accredited Learning in Language, Literacy and Numeracy*. Griffith University, Adult Learning Australia.

Fownes, Lynda, and Julian Evetts. 2001. *Essential Skills and Success in Apprenticeship*. SkillPlan. BC Construction Industry Skills Improvement Council.

Gammonsway, Sue, and Lynne Clough. 2006. *EZE: Simple Fact Sheet for Entry 2 Employment*. Leading Learning & Skills UK.

GoForth Consulting. 2005. *Essential Skills for Transition to Further Training*. College Sector Committee for Adult Upgrading.

Huget, Stacey. 2002. *Big Picture Up Close Summary: Literacy and Learning in BC*. Literacy BC, Huget Consulting.

Ministry of Training, Colleges and Universities, Ontario www.edu.gov.on.ca/eng/tcu/apprentices.

Movement for Canadian Literacy (MCL) 2002. *Literacy Matters: Why Canada Should Make Adult Literacy and Essential Skills a Policy and Funding Priority*.

Office of Training and Tertiary Education, State of Victoria. 2007. *Factors Influencing Completion of Apprenticeships and Traineeships*.

O'Grady, John. 1997. *Apprenticeship in Canada: Issues and Problems*. Toronto.

Ontario Newsroom <http://ogov.newswire.ca>.

Ontario's Workforce Shortage Coalition. 2008. *The Challenge Ahead: Averting a Skills Crisis in Ontario*.

Roberts, Celia, et al. 2005. *Embedded teaching and learning of adult literacy, numeracy and ESOL—Seven Case Studies*.

Rowen, Norman S. 1999. *People Over Programs: Some Characteristics of More Integrated Planning and Delivery of Employment and Training Programs and Some Possible Directions and Supports for Communities*. MTML, National Literacy Secretariat.

Sagan, Olivia, et al. 2007. *Putting good practice into practice: literacy, numeracy and key skills in apprenticeships, Part two: Revisiting and re-evaluating*. Learning & Skills Development Agency (LSDA), National Research and Development Centre for Adult Literacy and Numeracy and Research Development Council (NRDC).

Sharpe, Andrew, and James Gibson. 2005. *The Apprenticeship System in Canada: Trends and Issues*. Centre for the Study of Living Standards (CSLS). Ottawa.

Skilled Trades: A Career You Can Build On. 2004. Found online at www.careersintrades.ca.

Skills Canada www.skillscanada.com.

Sticht, Thomas. 1997. *Functional Context Education: Making Learning Relevant*. San Diego Consortium for Workforce Education and Lifelong Learning.

Toronto Training Board. 2006. *Trends Opportunities and Priorities in Training in Toronto 2005-2006*.

Toronto Training Board. 2007. *Research Series 2005-2006*.

Weir, Eric. 2007. *The Manufacturing Crisis "Seasonally Adjusted Statistics."* Canadian Labour Congress.