

October 5, 2009

**Skills upgrading for Ontario  
working age adults:  
An environmental scan of programs,  
gaps, and opportunities**

**Final Report**

Prepared by the

**Social Research and Demonstration Corporation**  
Karen Myers, David Gyarmati, and Jean-Pierre Voyer

For the

Ontario Ministry of Training, Colleges and Universities



# Table of Contents

<b>Table of Contents .....</b>	<b>3</b>
<b>Part 1: Introduction.....</b>	<b>5</b>
1. Report objectives, definitions, and methodology .....	5
1.1 Report Objectives.....	5
1.2 Key definitions.....	5
1.3 Methodology .....	6
<b>Part 2 : Workplace LES programs.....</b>	<b>9</b>
2. Key trends, perspectives, AND practices .....	9
2.1 Workplace LES in Ontario.....	9
2.2 Key trends .....	9
2.3 Theoretical perspectives.....	10
3. Learning needs of Ontario low-skilled adults .....	11
3.1 Learner profiles .....	12
3.2 Learner needs: Effective practices and program responses .....	15
3.3 Further research needed .....	16
4. Canadian models for delivering workplace literacy training.....	17
4.1 Model 1: General literacy skills approach .....	17
4.2 Model 2: Essential Skills approach tailored to SMEs.....	21
4.3 Model 3: An integrated approach to Essential Skills tailored to large firms .....	22
4.4 Model 4: Sectoral approach .....	24
4.5a Model 5a: Manitoba .....	25
4.5b Model 5b: Nova Scotia .....	27
5. Evidence about program effectiveness .....	28
5.1 Effectiveness of the general literacy skills approach.....	28
5.2 Effectiveness of essential skills approaches .....	29
5.3 Effectiveness of province-wide approaches.....	29
5.4 Match to learner needs .....	30
6. Workplace literacy — International models .....	30
6.1 Australia.....	30
6.2 New Zealand .....	31
6.3 United Kingdom.....	32
6.4 United States .....	32
7. Consultations.....	34
7.1 Consultation objectives.....	34
7.2 Consultation methodology .....	35
7.3 Consultation findings .....	36
8. Feasibility analysis.....	43
8.1 Purpose and scope.....	43
8.2 Framework and methodology .....	43
8.3 Policy and program environment and key stakeholders .....	44
8.4 Governance and management.....	47
8.5 Service delivery and operations .....	49
8.6 Monitoring and accountability .....	51
9. Recommended Next Steps .....	54

<b>Part 3: Workforce LES Programs.....</b>	<b>57</b>
10. Literacy and essential skills training as part of a workforce development system.....	57
10.1 What is workforce employment and training?.....	57
10.2 How has workforce development evolved?.....	57
10.3 Learner needs.....	58
10.4 Recent developments and key issues.....	60
10.5 Effective Practices.....	64
11. Promising approaches to workforce development.....	66
11.1 Integrated LES and employment: The Foundations Program.....	66
11.2 Worker Support and Advancement Centre Model.....	68
11.3 Ontario pathways programs.....	69
11.4 Comprehensive career pathways approach: making the pieces fit.....	72
12. Consultations.....	75
12.1 Consultation objectives and methodology.....	75
12.2 Consultation findings.....	76
13. Feasibility analysis.....	81
13.1 Purpose, framework and methodology.....	81
13.2 Program environment and key stakeholders.....	82
13.3 Governance and management.....	84
13.3 Service delivery and operations.....	86
13.4 Monitoring and accountability.....	87
14. Recommended Next Steps.....	88
<b>References.....</b>	<b>91</b>
<b>Appendix A : Case study summary chart.....</b>	<b>95</b>
<b>Appendix B : Interview participants and protocol for Workplace LES Consultations.....</b>	<b>99</b>
<b>Appendix C: Protocol for Workforce LES Consultations.....</b>	<b>101</b>

# Part 1: Introduction

## 1. REPORT OBJECTIVES, DEFINITIONS, AND METHODOLOGY

### 1.1 Report Objectives

The overall goal of the proposed research is to provide the Ministry of Training Colleges and Universities (MTCU) with a rigorous analysis of existing gaps and promising approaches to workforce and workplace training for low-skilled adults in Ontario and beyond. This research will assist MTCU in achieving its mandate of ensuring Ontarians have the skills they need to achieve their economic potential. The specific objectives are threefold:

1. To conduct an environmental scan of existing Ontario literacy and essential skills (LES) programs and analyze what exists against what is known about the learning needs of low-skilled adults to identify significant gaps, promising approaches, and potential opportunities.
2. To scan other selected jurisdictions to identify promising approaches in both LES workforce and workplace training.
3. To provide a more detailed examination of the most promising LES program models — particularly those with a sectoral focus or those that aim to address problems of persistence through a pathways approach or by better integrating literacy and occupational training — and to conduct a preliminary analysis of the feasibility of implementing such approaches in the Ontario context.

More broadly, this report aims to contribute to an evidence-based dialogue about promising approaches that may have the potential both to: strengthen Ontario's economic productivity by identifying innovative and effective approaches to providing training and retraining to low-skilled workers; and to reduce poverty by providing skills investment and advancement opportunities to Ontario's working poor.

This final report includes the results of a literature review, consultations on the most promising workforce and workplace program models and an analysis of the feasibility of implementing such approaches in the Ontario context. This report is organized into three major sections. Part 1 is the introduction. This section outlines the report objectives, key definitions, and the research methodology. Part 2 reviews promising models of *workplace* LES training while Part 3 addresses *workforce* LES programs. Results of the consultations and feasibility analyses are presented separately for the workplace and workforce LES approaches in parts 2 and 3 respectively.

### 1.2 Key definitions

For the purposes of this report, **workforce training programs** refer to training programs that target individuals whose literacy and essential skills present a barrier to employment and/or occupational training and labour market advancement. These programs are typically offered by community colleges, school boards or community organizations and are funded by provincial and/or federal government.

**Workplace literacy training programs** are defined as work-based programs designed to ensure that employees have the foundational skills to function effectively, efficiently and safely in the workplace. Increasingly across Canada, workplace literacy programs are now being referred to as workplace essential skills programs. Essential skills are another way of talking about literacy skills development. Recognizing that literacy is about more than learning to read, Human Resources and Skills Development Canada (HRSDC) developed the Essential Skills framework which broadens our understanding of literacy to include other foundational skills, such as writing, computer use, critical thinking skills, and the ability to work with others. According to HRSDC, Essential Skills are the skills needed for work, learning and life. They provide the foundation for learning all other skills and enable people to evolve with their jobs and adapt to workplace change. (See Box 1 for a description of the nine Essential Skills.)

To reflect this broader trend in Canadian policy and program communities, in this report, training programs targeting low-skilled adults will be referred to as *literacy and essential skills* (LES) Note that if the reference is to programs based specifically on HRSDC's Essential Skills framework, the term *essential skills* will be capitalized.

### **1.3 Methodology**

The study used a number of information-gathering techniques and sources including a literature review and consultations with practitioners and other experts in Ontario and other jurisdictions.

A key finding of the literature review was that very few empirical studies have been conducted to assess the effectiveness of workplace and workforce literacy and essential skills training. Especially in the area of workplace LES programs, virtually no studies have been published in peer reviewed journals. As several recent reports have concluded, the few studies that do exist are of relatively low quality (Benseman, Sutton, and Lander, 2005; Brooks et al., 2001; Kuji-Shikatani and Zorzi, 2007). In a systematic review, there is a fundamental question: are we confident that potential for bias was minimized? In all cases, our answer is "no". Thus a major qualification to the findings of this report is that they should be considered suggestive rather than conclusive.

A further challenge is that although in recent years there has been considerable innovation in both workplace and workforce training programs, for the most part these innovations have not yet been formally reflected in the literature. Formal consultations with key experts and practitioners in the field played an important role in providing more current information, bridging gaps in the literature and validating findings. The consultation section in both Part 2 and Part 3 of the report provide a detailed discussion of the strategies used to identify key informants for the consultation exercise.

### Box 1: Essential Skills: What are they?

Through extensive research, the Government of Canada and other international agencies identified and validated nine Essential Skills. These skills are used in nearly every occupation and throughout daily life in different ways and at different levels of complexity. These skills “provide the foundation for learning all other skills and enable people to evolve with their jobs and adapt to workplace change.” Essential Skills provide a foundation both for occupation specific skills and for job-specific skills.

There are nine Essential Skills:

1. **Reading text.** Reading material that is in the form of sentences or paragraphs (i.e. notes, letters, memos, manuals, specifications, regulations, books, reports or journals.)
2. **Document use.** Tasks that involve a variety of information displays in which words, numbers, icons and other visual characteristics are given meaning by their spatial arrangement (i.e.. graphs, lists, tables, blueprints, schematics, drawings, signs and labels).
3. **Numeracy.** Use of numbers and the requirement to think in quantitative terms.
4. **Writing.** Writing texts, filling in forms and typing on a computer.
5. **Oral communication.** The use of speech to give and exchange thoughts and information.
6. **Working with others.** The extent we work well with others to carry out tasks
7. **Continuous learning.** Participating in an ongoing process of acquiring skills and knowledge — including knowing how to learn, understanding one’s own learning style, and knowing how to gain access to a variety of materials, resources and learning opportunities.
8. **Thinking skills.** Five different but interconnected types of cognitive functions, including: problem-solving; decision-making; job task planning and organization; significant use of memory and finding information.
9. **Computer use.** Refers to the variously complex use of computers.

For more information, see HRSDC’s Essential Skills home page at [www.hrsdc.gc.ca/eng/workplaceskills/essential\\_skills/general/home.shtml](http://www.hrsdc.gc.ca/eng/workplaceskills/essential_skills/general/home.shtml)





## Part 2: Workplace LES programs

### 2. KEY TRENDS, PERSPECTIVES, AND PRACTICES

#### 2.1 Workplace LES in Ontario

As of 2009, the Government of Ontario does not directly fund the delivery of workplace literacy or essential skills programs and has not done so since 1998. However, although direct funding is not provided, Ontario supports worker training indirectly through the Literacy and Basic Skills program (Folinsbee, 2001).

All Ontario workers who want to upgrade their literacy skills are eligible to attend literacy basic skills (LBS) programs at no cost. LBS programs are offered by community colleges, school boards, and community-based organizations. Because these programs are offered outside of the workplace and because adults participate on their own time rather than on their employer's time, they are typically classified as *workforce* rather than *workplace* training and will be discussed in more detail in Part 3 of this report. However, some providers of LBS programs do promote workplace literacy and encourage employers to enter into partnerships to support employees with essential skills needs. Although the take up is not generally high, some employers do consult with these agencies, on a fee-for-service basis, to provide training and help with workplace literacy issues (Ontario Literacy Coalition, 2009).

In addition, Ontario provides funding to local training boards which are non-profit community agencies led by business and labour and include representation from other stakeholders (e.g., educators, trainers, women, Francophones, persons with disabilities, visible minorities, youth, and aboriginal people, and others). The role of the local boards is help improve the conditions of their local labour market and includes organizing events and activities that promote the importance of education, training, and skills upgrading.

#### 2.2 Key trends

Our scan of recent literature identified three key trends related to literacy and essential skills training. First, the federal government, through HRSDC's Office of Literacy and Essential Skills has shifted its emphasis from community-based literacy training models to an emphasis on models that are workplace-based (Plett, 2007). A major motivation for this shift is the finding that between 70 and 80 per cent of individuals who struggle with literacy are employed (CCL, 2009). This combined with the finding that individuals with low literacy are the least likely to have access to, or take advantage of outside training or literacy programs, provided a strong rationale for targeting the workplace. Encouraging employers to provide training in the workplace may help individuals overcome barriers to participation, such as cost and lack of time (Saunders, 2007).

A second trend is the growing importance of skills upgrading in the context of economic restructuring. As a recent position paper by the Ontario Literacy Coalition (OLC, 2009) suggests, workplace essential skills programs provide the foundational learning skills necessary to support workers in transitioning to new kinds of work both in and outside of their current workplaces. In addition, there is growing anecdotal evidence that displaced workers often need essential skills upgrading before they are ready to enrol in occupational retraining programs. It is also plausible

that proactive measures that focus on programs to enhance essential skills development at the workplace may assist workers who are at risk of future job loss. For example, those workers who are vulnerable to losing their jobs through layoffs will be better prepared to get another job with upgraded essential skills when, and if, the layoffs happen. Several recent reports have concluded that a workplace essential skills strategy is a pivotal component to ensuring that Canadian workers can reach their full potential in light of the need for different and additional skills within a rapidly changing economy (CCL, 2008; Plett, 2007; OLC, 2009).

A third development is the increased opportunities presented by the recently-signed Canada-Ontario Labour Market Agreement.<sup>1</sup> The new Agreement makes provisions for programs and initiatives to address workers who are still employed, but limited by their essential skills and therefore increasingly vulnerable to job loss. For example Section 9b refers to funds and programs that will be directed to employed individuals who are low-skilled, in particular, employed individuals who do not have a high school diploma or a recognized certification or who have low levels of literacy and essential skills.

Taken together these trends highlight growing awareness of the importance of ensuring Ontario workers have the essential skills they need to succeed in the new economy and recognition that the workplace is an important site for the delivery of essential skills training.

### **2.3 Theoretical perspectives**

While there is growing consensus around the importance of a workplace-based approach to essential skills training, there are different perspectives on how such an integration should take place (Campbell, 2005). A recent report published by the Canadian Council on Social Development identified two broad perspectives: human capital and individual skills perspective and a social practice perspective (Roberts and Gowan, 2009). The first perspective identifies literacy as a component of human capital, that is, as an essential skill required of the labour force, upon which production and service effectiveness and efficiency are dependent.

In contrast, the second perspective views literacy as essential to social development, the maintenance of democratic institutions and the achievement of social equity and justice. This perspective is often held by individuals working in community-based programs. In her introduction to *Reading Work: Literacies in the New Workplace*, Nancy Jackson provides a description of a social practice view of workplace literacy. Instead of viewing literacy as isolated reading and writing skills, she advocates a shift away from treating all forms of literacy as a discrete set of “skills” to be mastered by individuals. (For more on this perspective see also Blunt, 2001; Folinsbee, 2001.)

From the standpoint of this project the most relevant issue of these debates is that the literature associated with perspectives is characterized primarily by expert opinion and professional judgment rather than by empirical evidence. Neither perspective has conducted research to identify program gaps based on a systematic analysis of what is known about the needs of adult learners versus what program offerings are currently available.

---

<sup>1</sup> [www.edu.gov.on.ca/eng/training/labourmarket.html](http://www.edu.gov.on.ca/eng/training/labourmarket.html)

### 3. LEARNING NEEDS OF ONTARIO LOW-SKILLED ADULTS

There have been several recent calls in the literature for more research on the learning needs of low-skilled adults (CCL, 2008). But while many studies have aimed to identify better practices (Box 2), only one study that we are aware of systematically addresses learner needs based on empirical data. In 2008, the Canadian Council on Learning published *Reading the Future*, which uses data from the International Survey of Reading Skills (ISRS) to provide a deeper understanding of the characteristics of adults with low literacy skills and to determine what these characteristics could imply for the content of essential skills instruction. The authors consulted a group of Canadian experts on effective practices in literacy and essential skills instruction. This section draws heavily on the findings of this report. Note that while the analysis in *Reading the Future* is for Canada a whole, the findings likely apply reasonably well to Ontario.

#### **Box 2: Limitations of a case study approach to the identification of better practices**

Several recent studies have analyzed case studies of workplace literacy and Essential Skills programs to identify better practices. For example, in 2002, Mary Ellen Belfiore analyzed principles of good practice statements in workplace education in Canada, the United States, Britain, and Australia. She found that these principles were fairly consistent after two decades of work. The principles were the following:

- voluntary participation in programs
- confidentiality in all needs assessments both individual and organizational and evaluations
- the need to conduct an organizational needs assessment
- customization of learning materials and curriculum
- the need to link learning to other training and education
- the importance of evaluations and goals set by all partners
- the workplace educator as a partner.

In 2005 Allison Campbell, on behalf of the Conference Board of Canada, conducted a research study based on a case study methodology that identified ten program success factors:

- create a learning environment
- recognize literacy needs
- plan before initiating
- find adequate funding and support
- make decision-making inclusive
- customize the curriculum to suit the context of the workplace
- select the right instructor
- use the best delivery mix
- market and sell the program
- engage supervisors
- encourage employee participation
- evaluate programs realistically.

While the findings of these and other studies generate useful debate on critical success factors a key limitation of the methodology typically employed by these studies is that the better practice lists are generated from analysis of existing programs with little attention given to whether these programs should in fact be considered successful programs. As Benseman, Sutton, and Lander (2005) point out there is no generally agreed upon criteria as to what constitutes success and there is typically little evidence in the case study literature linking particular program features to program outcomes.

### 3.1 Learner profiles

Until recently policy makers did not have much more information than the now more than a decade old finding that 42 per cent of the Canadian population does not have the literacy skills they need to function effectively in today's economy. The *Reading the Future* report moves beyond this simple statistic by dividing individuals with low literacy into four distinct groups (A, B, C, and D) based on analysis of the patterns of strengths and weaknesses in individual scores on the International Survey of Reading Skills.<sup>2</sup> Table 1 provides a summary of the characteristics of each of these groups. (This table is adapted from a similar table presented in *Reading the Future*.)

Overall, results reveal four key findings:

- Adults in Group A score relatively poorly on all the component measures.
- Adults in Group B are limited primarily by their lack of vocabulary.
- Adults in Group C do relatively well on the vocabulary measures and on the spelling test, but are still below the standard required for Level 3 attainment.
- Adults in Group D outperform adults in other classes on every component reading measure, but are still below the standard required for Level 3 attainment.

Groups A and B can be divided into two distinct groups based on whether or not the individual's mother tongue matches the language the test was conducted in; and whether there are indications of a reading disability (such as dyslexia). The findings resulted in the creation of six distinct groups of the population with low levels of literacy: A1, A2, B1, B2, C, and D.

Groups C and D are the largest groups, representing a combined 5,075,000 people or 82 per cent of the adults with literacy skills below Level 3. Most adults in English groups A1 through C exhibit some degree of weakness in component scores and can be thought of as still being in the process of "learning to read." Only those in English group D appear to have no discernible reading component deficit. Box 3 provides a more detailed description of each group.

---

<sup>2</sup> Note that this section only includes analysis of adults who elected to take the ISRS in English. *Reading the Future* also includes an analysis of adults who took the ISRS in French.

**Table 1: Six learner profiles derived from ISRS and IALSS assessment scores**

Group	Brief Description	Print Skills (ISRS)	Comprehension Skills (ISRS)	Oral Language Score (ISRS)	Average Prose Literacy Score (IALSS)
A1	Canadian-born, English mother tongue (potential reading disability)	Very Limited	Limited	58.6	High-Level 1 (201)
A2	Majority immigrants, non-English (and non-French) mother tongue	Very Limited	Limited	41.8	Low-Level 1 (165)
B1	Majority born in Canada, English mother tongue (potential reading disability)	Limited	Limited	47.9	Mid-Level 1 (193)
B2	Majority immigrants, non-English (and non-French) mother tongue	Limited	Limited	48.9	High-Level 1 (204)
C	Majority born in Canada, majority with English mother tongue	Limited	Adequate*	64.3	Mid-Level 2 (233)
D	Majority born in Canada, majority with English mother tongue	Adequate*	Adequate*	74.6	High-Level 2 (259)

**Source:** Canadian Council on Learning (2008)

### **Box 3: A closer look at learner subgroups identified in *Reading the Future***

#### **Group A — IALSS Level 1**

Group A represents roughly 10 per cent of the total number of Canadian adults below Level 3 on the IALSS prose literacy scale. In general, these adults have such limited literacy skills that it is very difficult for them to gain new information from print. Group A is sub-divided into two groups depending on whether the individual's mother tongue is English. Almost all adults in A1 (mother tongue English) are male. Most members of this group are under the age of 35 and more than half have not completed high school. These adults have very limited print and limited vocabulary skills, as well as poor spelling skills. Their vocabulary can support very basic day-to-day interactions with print such as grocery shopping or watching television. Reading scores range from Grade 2 to 4 — so low that likely many of them are reading disabled to various degrees. Individuals in Group A2 (mother tongue not English) are considerably older on average than individuals in Group A1. Many have had very limited or no exposure to formal education in their own language.

#### **Group B — IALSS Level 1**

Group B represents roughly 8 per cent of the total number of adults in Canada below literacy Level 3. Group B adults have limited print and comprehension skills and generally need to develop the literacy skills associated with secondary-school completion and college entry. They require the language and literacy skills necessary to integrate various sources of information and to solve more complex problems. Members of Group B1 (mother tongue English) are relatively young with more than one-third of them aged between 16 and 25. The majority of these adults has completed high school but has not pursued post-secondary education. The most striking characteristic of this group is that only 23 per cent of them are employed. Members of Group B2 (mother tongue not English) tend to be older than their Canadian born counterparts. Almost three-quarters are over the age of 46. In sharp contrast to adults in B1, most B2 adults (82 per cent) are employed.

#### **Group C — IALSS mid Level 2**

Group C (IALSS mid-Level 2) is the second-largest group below literacy Level 3. Unlike groups A and B, no clear sub-categories can be distinguished in group C. Most Group C adults (73 per cent) were born in Canada and have English as a mother tongue. The ages of these adults are relatively evenly distributed. About 28 per cent of the group has completed high school and 38 per cent has not. Most of these adults are employed, although those born outside Canada are more likely to be employed (80 per cent) than those born in Canada (55 per cent).

#### **Group D — IALSS high Level 2**

Group D (IALSS high Level 2) is the largest group below Level 3. In fact together groups C and D represent 82 per cent of adults with low literacy. The majority are under the age of 45, making D the “youngest” group. The majority have either a high school diploma or less. Two-thirds are employed and, as with Group C, immigrants are more likely to be employed (82 per cent) than those born in Canada (60 per cent). Most adults in Group D have the primary reading component skills needed to help them become successful, independent, lifelong learners, but are still considered to have low literacy skills at this level.

### **3.2 Learner needs: Effective practices and program responses**

The *Reading the Future* report addresses the individual needs of these six groups based on responses from literacy experts from across Canada, who joined together to develop effective program recommendations.<sup>3</sup> The goal of these recommendations is to raise the level of these adults' literacy skills from IALSS levels 1 and 2 to Level 3.

Program recommendations include both workforce and workplace training. Broadly speaking experts agreed that groups A and B require intensive and formally structured training. These interventions could be offered either in the workplace or the community, but given the intensive nature, they are currently more likely to be offered in the community or in an academic setting, such as a high school or community college. In contrast, groups C and D individuals require considerably less instruction and the type of intervention recommended depends on whether they are employed. Responses for groups C and D individuals who are employed favour workplace over other types of interventions.

Given this section of the report addresses workplace training, it will focus on interventions for employed individuals in groups C and D. Recommendations for groups A and B and for unemployed individuals in groups C and D appear in Part 2 of this report.

For employed individuals in groups C and D two broad types of interventions are recommended: interventions that embed essential skills training in existing workplace training and interventions that offer stand alone essential skills based on authentic workplace materials and delivered in on-site workplace classrooms. These two types of interventions were also recommended by all of the experts SRDC informally consulted with in this initial phase of the research.

#### ***Embedding essential skills training in existing workplace training***

According to the *Reading the Future* report, there was strong consensus that an effective way to raise the skills of individuals in groups C and D is to embed essential skills training in other job-specific training that is already being delivered (e.g., provincially mandated training such as Workplace Hazardous Materials Information System [WHMIS], safe food handling, etc.). The training could include a pre-course or an expanded version of training that focuses on the reading or document use directly related to the training topic. For example, much of safety vocabulary is unfamiliar and often the available text requires interpretation. Codes and manuals can provide opportunities for teaching reading and document use strategies. The principle of embedding could be used for all front-line worker training. The experts consulted agreed that training could be developed for independent study using either paper based or computer based materials.

Such embedded instruction suggestions include the following:

- Reading materials that are based on the training topic.
- Increasing vocabulary, fine-tuning decoding and improving spelling of context-related words.

---

<sup>3</sup> The *Reading the Future* report qualifies the discussion of effective responses by clarifying that despite similar characteristics within each group, it should be noted that the learning needs of individual adults will vary considerably depending upon their personal circumstances and prior life experiences. Therefore, the proposed interventions listed below are meant to be indicative rather than definitive.

- Improving writing skills if appropriate (e.g., completing a safety incident report).
- Using reading strategies that form the basis for Level 3 proficiency (locate, combine multiple pieces of information, compare, contrast, integrate, explain, evaluate).

Perhaps most importantly, experts agreed that to effectively design and deliver this type of training expertise in both adult education and the content is required. Such an approach would require partnerships involving individuals who do not usually work together.

The report also notes that reaching workers currently employed at this literacy skill level poses a particular challenge, as they may perceive that their skill levels are adequate. They are also likely to have completed high school and may have less time to spare. These candidates need a compelling reason to participate. Successful recruitment of this group will likely depend upon the upgrading being a seamless extension of other required training. The most successful interventions will be customized to fit the application and perceived value of the participants.

### ***Delivering Essential Skills training with authentic workplace materials***

Although experts agree that embedding Essential Skills training in existing training is a desired approach in some cases this will not be feasible or will not provide a long enough intervention to raise skills to the desired level. In this case, additional stand alone training may need to be offered. Although the training is stand alone, content should still reflect typical workplace tasks and should be designed based on authentic workplace materials using the Essential Skills profiles for the occupation as a framework. A major advantage of this approach is that without specific scheduling or enrolment requirements (tied to the delivery of other training programs), these programs can respond to immediate needs and opportunities.

According to the *Reading the Future* report both of these approaches are suitable groups C and D. The key difference between Group C and Group D is that Group D members have high decoding and vocabulary skills. It is likely that they are able to cope with most texts and tasks, provided that they have a chance to become familiar with them. Members of this group have difficulty coping with unfamiliar texts and tasks. Most adults in Group D have the necessary components to become successful learners, and they may be able to take advantage of distance and self-study opportunities. Like adults in Group C, these adults need to address their skills gaps in writing and vocabulary to have the best chance of succeeding in post-secondary education opportunities. However, they have the foundational skills to undertake such learning themselves.

### **3.3 Further research needed**

The analysis presented in *Reading the Future* is groundbreaking. The report provides the only Canadian research on the nuanced learning needs of adults below IALSS Level 3. The analysis, however, should be seen as preliminary. Recommendations were based on consultations with experts across Canada but only seven experts were consulted in total. No explanation is provided for why these particular experts were selected. In addition the report does not provide a discussion of how its conclusions were drawn. For example, were the experts unanimous in their recommendations? To what extent were the recommendations based on professional wisdom versus empirical evidence? In what areas are we most certain and what areas require further investigation? For this reason, *Reading the Future* should be considered a starting point for further discussion about the nuanced learning needs of Canadian low-skilled adults.



## 4. CANADIAN MODELS FOR DELIVERING WORKPLACE LITERACY TRAINING

How do Canadian program offerings compare with recommendations outlined in *Reading the Future?*<sup>4</sup> A preliminary scan of the literature revealed that most reports are based on case studies of programs offered by specific employers and do not identify a more general program model on which they are based. A first step for this part of the analysis was to determine the extent to which the types of workplace training described in the case study literature could be characterized as distinct models.

Our analysis identified five broad approaches to workplace essential skills training which could be characterized as distinct models. The first major distinction across these models is whether the program curriculum is based on HRSDC's Essential Skills framework or whether the content is based on a more general framework that includes content typically offered in community literacy programs such as high school equivalency upgrading or improving reading skills. A further distinguishing feature among the Essential Skills models is whether they are targeted towards specific types of employers such as small and medium-sized enterprises or large firms or whether they are targeted at entire industry sectors. Our analysis also identified two province-wide models (Manitoba and Nova Scotia) that targeted all types of employers in their respective provinces regardless of size or sector.

This section provides an overview of each model. Tables 2 and 3 compare the models on a number of key dimensions including objectives, types of employers, and typical content. A table summarizing the list of cases that formed the basis for this analysis is presented in Appendix A.

### 4.1 Model 1: General literacy skills approach

In the past two decades most employer-provided training programs were not based on a specific approach to curriculum design but shared a broad orientation to emphasizing the employee's learning needs as a whole person and not just those that are specifically job-related. Although the case study literature identifies business needs such as a new production process or concerns about health and safety as the key drivers, most employers cited in the literature reported being concerned with the well-being of workers in the context of their personal interests, families and communities (Campbell, 2005). As one key informant explained, this approach can be characterized as a "learning for life" model which conveys a broader picture that includes the employee's personal motivations and needs. This approach was the leading model in the 1990s and early 2000s and is still advocated for by unions and community providers across Canada (see for example, Ontario Literacy Coalition, 2009).

The program offered by Cavendish farms (Box 4) is a prototypical example of the general literacy approach. The content is focused on reading, writing, math and computer skills and often includes academic upgrading such as GED prep. Content may include workplace specific materials. Programs are typically delivered with small group instruction or a "learning centre" model is used. Learning is usually self-paced. Programs are typically delivered by trained facilitators or peer tutors.

---

<sup>4</sup> Note that although our original research objective was to analyze the extent to which Ontario program offerings meet learner needs, because Ontario does not directly fund workplace essential skills training there is not much to analyze. For this reason this section takes a Canada-wide perspective

**Table 2: Comparison of five workplace training models targeting low-skilled workers**

	1. General literacy skills approach	Essential skills approaches				
		2. Customized approach tailored to SMEs	3. Integrated assessment tailored to large firms	4. Sectoral approach	5. Province-wide comprehensive approaches	
<b>Example</b>	Various providers	Douglas College	Bow Valley	SkillPlan	Manitoba	Nova Scotia
<b>Overview</b>	Not based on a specific approach but reflects a broad orientation to employee learning needs beyond job-specific skills Was leading model in 90s and still advocated for by unions and community providers across Canada	The Training Group at Douglas College has developed a model that is based on the Essential Skills framework and adapted to the needs of SMEs	Bow Valley College model is based on using TOWES as an assessment tool to improve the essential skills of a firm's workforce	The SkillPlan model is a sectoral approach to improving essential skills in construction	Manitoba's model is focuses on "Essential Skills consultation, assessment and co-funded workplace training partnerships"	NS's model is a collaborative model administered by The Department of Education, in partnership with business, industry, and labour to promote and deliver learning at work
<b>Objective</b>	Improve literacy and numeracy skills based on employee's individual needs	Improve Essential Skills required for specific jobs	Improve Essential Skills through targeted recruitment and by closing skills gaps of existing employees	Improve Essential Skills required for occupation specific tasks in a specific industry	Support province's employers to invest in workplace skills training	Support province's employers to invest in workplace skills training
<b>Employer types</b>	Any employer	Any employer usually SMEs	Any employer, often large firms	Sector/occupation-wide initiatives	Any employer in the province	Any employer in the province
<b>Industries targeted</b>	Manufacturing	Various	Various	Construction	Various	Various
<b>Employer drivers</b>	Wide range of drivers: - workforce w/o Gr. 12 - performance gap e.g. errors, accidents, low productivity	Small firms that are not able to recruit employees with required skill level and do have capacity to close existing skills gap	Gap between skill of local labour supply and the skill level demanded Safety/quality are critical issues and/or firm is struggling to close skill gap associated with equity-hires	Sectors with high need (large ES gaps) and low capacity for training (high proportion of small firms)	Wide range of drivers: - workforce w/o Gr. 12 - small firm w/o capacity - skill gap labour supply - pressure to improve productivity to remain competitive	Wide range of drivers: - workforce w/o Gr. 12 - small firm w/o capacity - skill gap labour supply - pressure to improve productivity to remain competitive
<b>Who pays?</b>	Usually cost sharing arrangement: employers, government, and unions Employees may contribute time	Various, including employer contributions, and government funds Employees may contribute time	Various but employer often pays	Various, including collective agreements, employer contributions, and government funds Employees may contribute time	Various, including employer contributions, and government funds Employees may contribute time	Various, including employer contributions, and government funds Employees may contribute time

**Table 3: Comparison of the types of interventions associated with five workplace training models**

	1. General literacy	Essential skills approaches				
		2. Customized approach tailored to SMEs	3. Integrated assessment tailored to large firms	4. Sectoral approach	5. Province-wide comprehensive approaches	
<b>Example</b>	Various providers	Douglas College	Bow Valley	Skill Plan	Manitoba	Nova Scotia
<b>Typical content</b>	Broad focus- e.g., computer, reading, writing, math GED prep	ES training materials customized to: - employee's skill level - job requirements - workplace materials	Emphasis is on ES assessment and integrating ES framework into HR processes (recruitment, training, promotions)	Standardized ES training materials that are customized to specific occupations within a sector using authentic workplace material	Standardized ES training materials are customized to the employers needs  Comprehensive, flexible approach could include aspects of models 1-4	Standardized ES training materials are customized to the employers needs  Comprehensive, flexible approach could include aspects of models 1-4
<b>Relationship to other training</b>	Usually stand alone Assumes general literacy skills will transfer to the workplace	Usually stand alone because training is often tailored to each employee skill gap Also SMEs do not typically offer much training on which intervention could be embedded	ES assessments and training interventions are often embedded in overall HR framework and form the "mortar" for job specific skills development	Stand alone or embedded	Stand alone or embedded	Stand alone or embedded
<b>Is training required or voluntary?</b>	Voluntary	Voluntary	Voluntary or embedded in required training	Voluntary	Voluntary	Voluntary
<b>Assessment involved?</b>	Various	Various	Various	Various	Various	Various
<b>Delivery method</b>	Onsite classroom or learning centre with self-paced or small group instruction	Usually self-paced workbooks or online modules with instructor support	Classroom, online, or self-paced	Classroom, online, or self-paced	Classroom, online, or self-paced	Classroom, online, or self-paced
<b>Typical duration</b>	Varies	Varies	Varies	Varies	Varies	Varies
<b>Trainers</b>	Local college, community or private sector instructor	Qualified Essential Skills instructor	Qualified Essential Skills instructor	Qualified Essential Skills instructor	Qualified Essential Skills instructor	Qualified Essential Skills instructor

As several key informants remarked, this program model basically replicates the community-based model in the workplace. This approach is typically delivered through a cost sharing arrangement among employers, governments, and unions. For example the employer may pay instructor/course costs and pays the employee one hour of wages for every two hours of instruction. Support for child care may be provided. Unions may make in-kind contributions. In provinces that have a workplace literacy policy, governments may contribute to the cost of an organizational needs assessment and some delivery. Employee participation is always voluntary. Employers usually conduct an organizational assessment to identify skills gaps but this is often done informally. If employee-level assessments are done they are also typically done informally and often involve the employee conducting a self-assessment and selecting learning activities with which they are comfortable (Campbell, 2005).

Analysis of the case study literature suggests this approach has been adopted primarily by manufacturing firms in a range of sectors including forestry, mining, and steel (Appendix A). Participating firms typically had a large proportion of workforce without a high school diploma and demonstrated need such as high errors or accident rates or an emerging need such as the introduction of a new production process. In the 1990s the general literacy approach was also adopted by a number of municipalities such as Vancouver, Winnipeg and Moncton.

#### **Box 4: Cavendish Farms: Example of a general literacy approach**

The Cavendish Farms Learning Centre is often represented in the literature as a best practice model. In 2005, the Conference Board of Canada awarded Cavendish with an award of excellence for its program. Cavendish Farms produces frozen potato products for retail, restaurant and quick service markets throughout Canada and internationally. Since its founding in 1980, the company has grown to become the fourth- largest frozen potato processor in North America. The New Annan, PEI production facilities employ about 850 people.

A cornerstone of Cavendish Farms' employee development efforts is its on-site Learning Centre. The Centre is accessible to all employees including part-time and contract workers. The family members of all employees are also welcome to attend.

Learners meet with the instructor to share their learning goals. Based on these meetings, the instructor develops individualized study programs. For instance, if learners are interested in applying for a different position, the instructor can prepare programs to help them acquire the skills necessary for the job. After completing a preliminary assessment learners begin individual paths to attain their personal goals. The instructor facilitates this journey by providing learning materials and guidance. By listening to its employees' learning needs, Cavendish Farms helps develop skills and competencies that serve the interests of both its workers and the company.

The Centre is staffed by a full time licensed teacher. The Centre partners with the PEI Department of Education and local literacy groups. Cavendish Farms covers the cost of staffing, classroom resources and day-to-day operational expenses and it reimburses employees for 50 per cent of their time spent studying.

According to Cavendish Farms, the Learning Centre initiative has resulted in positive benefits for both the employees and the company, including: increased advance opportunities; increased GED completion; Red Seal certification; improved relationships between employees and management; improved employee morale; greater employee self-confidence; greater employee commitment to the company; improved employee satisfaction; and increased employee retention.

Source: The Conference Board of Canada (2005) Case Study - Cavendish Farms Learning Centre: Rising to the Challenge of Meeting Employees' Unique Needs. Assessed May 21, 2009.

[www.nald.ca/library/research/CBoC/Cavendish/Cavendish.pdf](http://www.nald.ca/library/research/CBoC/Cavendish/Cavendish.pdf)

## 4.2 Model 2: Essential Skills approach tailored to SMEs

In the early 2000s as the Essential Skills Framework become more widely known, an increasing number of initiatives used this framework to guide the design and delivery of workplace training programs. As Table 2 suggests, there are variants of the Essential Skills model that focus on small businesses, large firms, and entire sectors. The Training Group at Douglas College in British Columbia has developed a model that is targeted to the needs of small and medium-sized enterprises.

The model is based on a standard performance consulting model. The first step is a formal performance analysis to identify the gap between what employees are doing and what employees should be doing to achieve business results. The next step is to determine whether Essential Skills gaps may be contributing to performance gaps. If an Essential Skills gap is playing a role, then an action plan is created. The action plan typically calls for a detailed job and task analysis to assess the gap between the skill levels of employees and the skill level demanded by their jobs. Employee skill levels may be assessed formally through the *Test of Workplace Essential Skills (TOWES)* or informally through web-based tools such as *Measure Up* (see Box 5 for a description of these assessment tools) or observation in the workplace.

The next step is to propose a training plan and design a curriculum. In contrast to the general literacy approach, the curriculum is anchored in the Essential Skills framework. The curriculum design starts with the Essential Skills Framework and the end product is highly customized to the individual employee's skill level and specific job requirements. In order to make the link between the training and on-the-job requirements as concrete as possible, training materials are based on authentic workplace materials. In this context, "authentic" means that the material that learning activities are based on is material that is actually used on the job. Instructors are often former teachers and all instructors have the same form of training in Essential Skills.

Because Douglas College typically works with small businesses only a handful of employees may need training at any given time. Among this small number of employees, the depth of the skills gap may vary substantially. Training curricula often need to be customized for each employee. Employees then work through the material at their own pace with the support of a certified instructor. Training is usually voluntary but sometimes employees are strongly encouraged to participate.

This customized Essential Skills approach is taken up by small and medium-sized firms in a range of sectors. There is some evidence to suggest that small firms may have particularly large Essential Skills gaps because they are unable to compete with large firms to attract the most highly skilled workers (Kelly et al., 2009). In addition, they do not typically have the capacity to use sophisticated recruiting practices. Even if they are successful in attracting highly skilled workers they often quickly lose these workers to larger firms. In addition, small firms typically have little capacity to design and deliver training initiatives to close the skill gap. In response to this need, the Government of British Columbia partially, or in some cases, fully funds the costs associated with the needs analysis and design phases of training interventions provided by Douglas College.

Because this approach is relatively new, there are no published examples of this approach in the case study literature. There is currently a pilot project underway to test the applicability of the Douglas College small and medium-sized business model across Canada.

#### **Box 5: TOWES and Measure Up**

**TOWES** (Test of Workplace Essential Skills) is a tool that uses workplace documents to accurately measure the three essential skills that are needed for safe and productive employment: Reading Text, Document Use and Numeracy. TOWES has undergone an extensive psychometric review and nation-wide field-testing involving thousands of Canadians.

**Measure Up** is a free web-based tool that tests Essential Skills. It has problem sets similar to the ones used in TOWES. Each problem set is based on a document — a memo, catalogue, regulations, or work order — associated with workplace contexts. The self-assessments found in Measure Up! have not been subjected to the rigorous validity and reliability standards of TOWES. It is an informal tool designed to demonstrate the potential of TOWES.

Source: [www.towes.com](http://www.towes.com)

### **4.3 Model 3: An integrated approach to Essential Skills tailored to large firms**

Another model that uses Essential Skills as a framework is tailored to the needs of large firms. This model is exemplified by the work of Bow Valley College in Alberta. The Bow Valley approach emphasizes the integration of Essential Skills into the firm's core human resources processes such as recruitment, training and promotions. The model relies heavily on TOWES (Test of Workplace Essential Skills) as an assessment tool. The objective is to help firms improve the Essential Skills of their workforce through targeted recruitment using TOWES as a screening tool and by using Essential Skills training to close skills gaps of existing employees. Employees are usually required to take the TOWES before and after attending the training.

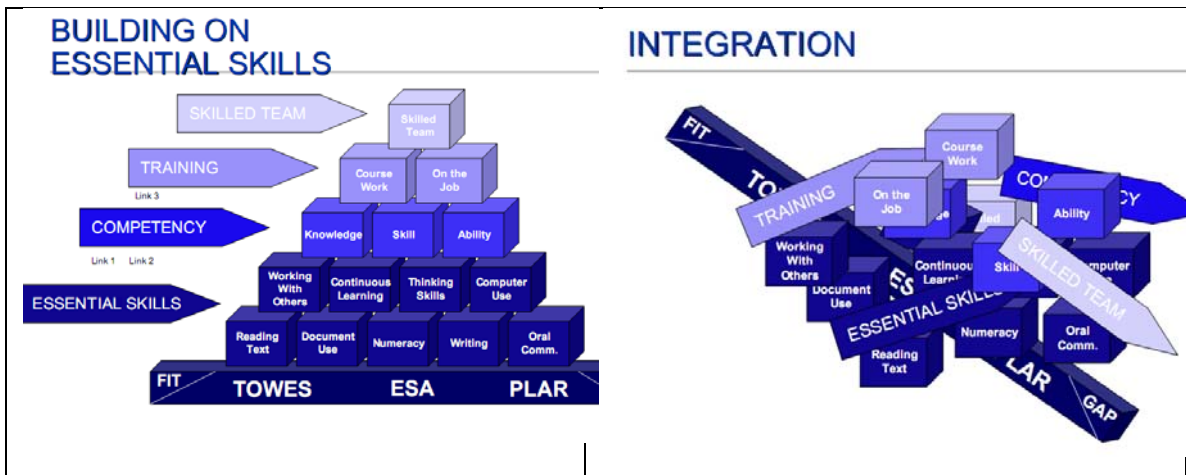
In contrast to the general literacy approach, training interventions are often required because they are embedded in other mandatory training. As described above, the concept of integration or embedding allows two training objectives to be met at once: development of skills for a specific workplace and development of transferable skills for the global economy. For example, in the case of an integrated health and safety program, Essential Skills training would be embedded into the training curriculum so that workers would not only become proficient in workplace safety, but also in their abilities to read, write, use a computer, work as a team member, think critically. Training may be offered in a classroom or through self-paced modules either paper-based or online. Instructors have Essential Skills certification.

Australia calls this the “built-in-not-bolted-on” approach. Under this approach, Workplace Essential Skills are to be recognized as core workplace competencies so that they will be incorporated into firm training packages. Figure 1 provides a graphic illustration of the embedded or built-in concept. Box 6 provides an example of a large firm, Standard Aero, which took this approach.)

Our analysis of the case studies listed on Bow Valley's Web site, suggests that this approach has appealed to firms where there is a large gap between the skill of the local

labour supply and the skill level demanded in the job. This is often because the firm operates in a remote area (e.g., diamond mine north of Yellowknife) or because a firm has signed a labour market agreement with an Aboriginal band. To date this approach has been used in three main sectors: high tech manufacturing, mining and transportation. In this model the employer pays for the assessments. In some provinces, employers may receive some government support for training design or delivery.

**Figure 1: An integrated approach to essential skills training**



**Source:** Hansen, H. (2007). Essential Skills at Boeing. Paper presented at Skills and Learning at Work for BC Conference on October 25, 2007, Vancouver, BC.

**Box 6: Standard Aero: Example of an integrated assessment approach in a large firm**

Bow Valley’s work with Standard Aero illustrates how it uses TOWES assessments as an input in the development of workplace training. Standard Aero maintains repairs and overhauls turbine engines for customers in the global aerospace, defence and energy industries. Their 2,500+ employees are located in six countries.

Because the firm works on many different products by different manufacturers, documents used on the job are not standardized. As a result technicians need to be highly proficient in document use. Knowing that document use was critical, the company launched a research project to assess the Essential Skills levels of production workers. Working with Bow Valley College, they randomly selected 152 employees in the technician group to take a TOWES assessment customized for the aerospace industry.

TOWES test results revealed that numeracy and reading text scores were close to the occupational requirement, but document use scores were low. The results were further analyzed to compare the relationship between test scores and factors such as age, location, industry experience and certification. One of the findings was that employees with less than three years of industry experience tended to have lower levels of reading text scores.

As a result the HR department now uses TOWES for anyone who doesn’t come out of a technical program. Standard Aero is also piloting a document use course created for technicians. The course will be interactive with applied scenarios that they would encounter in a work environment.

The Standard Aero case suggests that Essential Skills may be an issue even in high tech sectors. Workers may have low document use skills even if they are skilled in other areas. This suggests the importance of accurate skills assessment.

Source: Adapted from the Standard Aero case study posted online at [www.towes.com/towescasestudies.aspx](http://www.towes.com/towescasestudies.aspx)

#### 4.4 Model 4: Sectoral approach

The sectoral approach focuses on improving Essential Skills in specific occupations in an industrial sector. The rationale for a sectoral approach is that because different employers within the same industry have similar skill needs and draw on the same labour pool, greater efficiencies can be achieved by spreading the costs of program development across multiple firms. This approach tends to appeal to employers in sectors with high need (large essential skills gaps) and low capacity for delivering training (due to structural constraints). In Canada, the most comprehensive example of a sectoral approach is SkillPlan, a British Columbia-based organization set up to improve Essential Skills in the construction industry (Box 7). A well-known U.S. example is the Massachusetts Extended Care Career Ladder Initiative.

The defining elements of a sectoral approach include a focus on customized solutions for a specific industry, a central role for a workforce intermediary in bringing the industry partnerships together, and the dual goals of promoting the competitiveness of industries and advancing the employment of low-skilled workers.

Sector strategies are industry-specific regional approaches that aim to

- address the needs of employers by focusing intensively on the workforce needs of a specific industry sector over a sustained period, often concentrating on a specific occupation or set of occupations within that industry;
- address the needs of workers by creating formal career paths to good jobs and reducing barriers to employment;
- bolster regional economic competitiveness by engaging economic development experts in workforce issues and aligning education, economic, and workforce development planning; and
- engage a broader array of key stakeholders through partnerships organized by workforce intermediaries.

Some sectoral initiatives may have the additional goal of promoting systemic change that achieves ongoing benefits for the industry, workers, and communities (Conway, Blair, Dawson, and Dworak-Munoz, 2007). Key activities for these partners include

- undertaking research to identify industry and worker needs and the root causes of labour market gaps;
- designing customized solutions such as career ladders, training programs, or technical assistance to help employers improve human resources practices; and
- coordinating training, work supports, technical assistance, and other services.

As with other Essential Skills approaches, standardized training materials are customized, but this time instead of being customized to specific employee skill levels and specific workplaces, they are customized to specific occupations within a sector. The training materials are based on authentic material from a range of workplaces. As with the other Essential Skills approaches, training may be offered in a classroom or through self-paced modules and instructors must have Essential Skills certification.



**Box 7: SkillPlan: A sectoral approach**

SkillPlan is a joint labour and management initiative of the BC construction industry established in March 1991. The mission of SkillPlan is to develop strategies to improve the essential skills of people working in the construction industry in British Columbia and the Yukon Territory. SkillPlan was created to help the industry address labour shortages, skills gaps and inherent difficulties in providing training in a sector where job sites are constantly changing. BC's construction industry includes 14 international unions, 40,000 workers and the 500 companies that employ them.

SkillPlan's engagement with the construction sector is multi-faceted. SkillPlan provides direct assistance to members, including tutoring, study groups and classroom delivery, and works in partnership with a network of training plan administrators and instructors to support apprentices in fulfilling their essential skills upgrading needs.

Source: [www.skillplan.ca](http://www.skillplan.ca)

**4.5a Model 5a: Manitoba**

Manitoba's Workplace Education Program is a province-wide model for delivering workplace Essential Skills training that has been operating for 15 years.<sup>5</sup> Like the other models described above, the program is based on a performance consulting model that engages employers in discussion about the Essential Skills requirements of their workforce. The province's Essential Skills experts partner with employers to determine if there is a need for Essential Skills training in the workplace, as well as the most suitable type of training. This assessment is available at no cost. If an Essential Skills training solution is appropriate Manitoba's Essential Skills curriculum writers and instructors can help design and deliver low-cost, customized training. They also can coach and provide support to in-house training staff. As the example described in Box 8 suggests, TOWES assessments may be part of the process.

The program has worked with hundreds of clients throughout Manitoba since 1991 and has extensive experience working with a wide variety of industries including agriculture, aerospace, mining, garment, manufacturing, construction, retail, transportation, health care as well as parks and recreation. The province typically shares a portion of training costs with the employer.

In 2006 an independent program evaluation concluded that the program was associated with positive employer outcomes including: increased credentials; increased leadership responsibilities in the workplace (and community); greater confidence; greater motivation to seek further education/training; increased culture of workplace literacy and Essential Skills in Manitoba; and an accompanying joint labour-management process and principles for implementing initiatives.

---

<sup>5</sup> For a description of Manitoba's program see *A Case Study on Workplace Education at* <http://triencommunications.com/publications>.

### **Box 8: Manitoba Model: Boeing**

Manitoba's work with Boeing provides an excellent example of the scope of the services it provides as well as its emphasis on Essential Skills and TOWES. In addition, the Boeing case provides an example of a large firm that integrated Essential Skills into all of its human resources processes.

Boeing is a major aerospace and defence corporation, headquartered in the U.S., with operations throughout the world. Boeing Winnipeg employs more than 1,500 workers and is the largest aerospace composite manufacturer in Canada. When Boeing Winnipeg hired a wave of new employees to gear up for the production of a new aircraft (the 787), it began to use TOWES (Test of Workplace Essential Skills) tailored for the aerospace industry a recruiting tool. Even though they were hiring for entry-level manufacturing positions, all jobs at Boeing require Level 3 skills or higher. For example, plastic and assembly technicians have to navigate a lot of specification documents.

Motivated by the success of new hires that were screened based on TOWES, Boeing partnered with the Workplace Education Manitoba to accelerate the integration of an Essential Skills framework in all of its human resources processes including recruitment, training and development and promotion. Manitoba provided consulting services and curriculum design support.

In 1997 Boeing developed an Essential Skills assessment process for math and reading. Passing this assessment became a requirement for promotion and remedial training continues to be available for all interested employees. By 2003 Boeing had embedded Essential Skills into its competencies and human resources reporting system. In 2004 Boeing developed a computer skills course that embedded reading and math skills in the curriculum. In 2005 Boeing adapted this curriculum to meet the learning needs of its hearing impaired employees. In 2007 Boeing conducted needs analysis of its workplace teams and based on this assessment developed additional computer training.

According to Boeing outcomes include: increased productivity; improved safety; reduced defects; accelerated improvement activities; employees are more engaged — improved morale; allows promotion from within; provides a foundation for hiring the best possible employees; provides more opportunity at home, personally, and in the community; builds confidence enabling employees to adapt to ongoing change.

Source: [www.towes.com/towescasestudies.aspx](http://www.towes.com/towescasestudies.aspx)

#### 4.5b Model 5b: Nova Scotia

Nova Scotia's Workplace Education program is also a province-wide model. The program is based on a collaborative model administered by The Department of Education, in partnership with business, industry, and labour to promote and deliver learning at work.<sup>6</sup> Workplace Education was launched in 1989 to: create a lifelong learning culture in Nova Scotia; help the Nova Scotia workforce meet the challenges of the new workplace; and to partner with business, labour and workers to deliver essential skills.

Each program is developed to respond to the specific needs of the workplace and the employees so that employees are more likely to transfer and apply skills to the workforce. The program's **Skill Development Coordinators** help employers assess employee learning needs and recommend programs. They also offer support while the program is ongoing. Each Workplace Education program brings together representatives from management, union, and employees to form a Project Team to initiate, coordinate, and monitor the program. Project Team members share the costs. In contrast to Manitoba, program promotional materials clearly state that employee assessment is informal and TOWES is not typically used.

Also, in contrast to Manitoba, where HRSDC's Essential Skills Framework is always the starting point, as the Elmsdale Lumber example (Box 9) illustrates in the Nova Scotia model that the approach has historically been closer to the general literacy approach (Model 1). As one key informant explained, Nova Scotia has a long history of a community-based approach to literacy. Despite this historical orientation, we have characterized the Nova Scotia model as an Essential Skills model because this is the stated direction that the province is taking.

##### **Box 9: Nova Scotia model: Elmsdale Lumber**

Elmsdale Lumber Corporation is a family-owned producer, exporter and wholesaler of kiln-dried lumber that employs 57 people at its mill. In the late 1990s the industry was transformed from a low-tech sector to one using sophisticated equipment. As a response to a sharp increase in skill requirements Elmsdale partnered with the Nova Scotia Workplace Education Program. Through this partnership an on-site program team runs learning programs for employees, covering communications for staff and supervisors, academic upgrading, written communications and basic computer literacy. Elmsdale reports that as a result of this program workers become more efficient were able to apply what they have learned to new ways of harvesting, processing and selling lumber. According to the company, in addition to a more knowledgeable and well-trained workforce, there have been real economic benefits including reduced sick time and absenteeism; an improved safety record; increased productivity; a better working environment; greater initiative shown by employees. Broader benefits also include 10 employees earning their GEDs and others obtaining industry certification by completing courses in the forestry program at the University of New Brunswick (e.g., 4th Stationary Engineer; licensed Lumber Grader; one licensed Log Scaler).

Source: The Conference Board of Canada — Awards for Excellence in Workplace Literacy, 2004 Winner: Elmsdale Lumber: At the Cutting, accessed on May 30 2009 at [www.conferenceboard.ca/documents.aspx?DID=1408](http://www.conferenceboard.ca/documents.aspx?DID=1408)

<sup>6</sup> For further description of Nova Scotia's program see Canadian Council for Social Development report at [http://www.ccsd.ca/pubs/2007/literacy/Workplace\\_Literacy\\_Programs.pdf](http://www.ccsd.ca/pubs/2007/literacy/Workplace_Literacy_Programs.pdf).

## **5. EVIDENCE ABOUT PROGRAM EFFECTIVENESS**

This section analyzes the available evidence on the effectiveness of the program models outlined in the previous section.

While there has been a considerable amount of research and writing about workplace literacy and essential skills programs over the past three decades (Bloom, Burrows, Lafleur, & Squires, 1997; Bloom & Campbell, 2002; Bloom & Lafleur, 1999; Campbell, 2003; Campbell & Gagnon, 2001; Long, 1997; Manning, 2003; Kelly, 1999), most of these studies do not meet generally agreed upon standards of evidence. In an exhaustive search of the British and American literature on basic skills education, Brooks et al. (2001) conclude that there were virtually no credible studies of the effectiveness of basic skills education. A more recent international review (based in New Zealand) of empirical studies of literacy education effectiveness found that studies of workplace programs specifically focused on literacy education are very few and those few do not rate highly in terms of research quality.

### **5.1 Effectiveness of the general literacy skills approach**

Most, if not all, of the studies cited above involve studies of workplace programs that would fall under Model 1 — the general literacy approach. Case studies which draw on employers' and/or workers' perceptions or judgments to illustrate program benefits are by far the most common type of research. There are, however, two Canadian studies based on employer surveys. Long (1997) on behalf of ABC Canada conducted a survey of Canadian employers who had implemented workplace literacy programs. Bloom, Burrows, Lafleur, and Squires (1997) conducted a similar study for the Conference Board of Canada around the same time period. As Kuji-Shikatani and Zorzi (2007) point out, more recent studies seem to be primarily based on literature reviews of these earlier studies (e.g., Ananiadou, Jenkins, & Wolf, 2003; Bassi & Belfiore, 2001).

Based on an exhaustive review of the literature of the Canadian and American literature Kuji-Shikatani and Zori (2007) identify ten commonly cited benefits of workplace literacy or essential skills training:

1. Workers improved their document use, communication, problem solving, and technological skills.
2. Workers were more confident and had a better attitude toward their work.
3. Absenteeism was reduced.
4. Workers were more able to cope with change and adapt to new processes or products.
5. Teamwork improved, with workers working together more effectively and being more willing to participate and contribute in meaningful ways.
6. Labour-management relations improved because there was better communication between management and workers and workers better understood organizational culture.

7. The productivity of workers improved: workers were better able to follow instructions, made fewer errors, worked faster, were more efficient, were able to produce more complex products, and were able to troubleshoot and identify solutions.
8. Workers were more receptive to further workplace training, enabling them to learn more complex skills, and to learn skills more quickly.
9. There were fewer accidents in the workplace.
10. It was easier for the companies to recruit and retain workers, with some companies having turnover rates much lower than the industry norms.

But as Kuji-Shikatani and Zori (2007) point out, while the literature does provide some anecdotal evidence, there are no studies that investigate actual outcomes such as skills gained, reduced error rates, or return on investment. Moreover as Bergman (2009) points out the literature rarely captures evidence of learner gain or evidence of the specific factors that may have led to it. Finally, there are no studies that we are aware of that indicate one model or set of program elements is more effective than another.

## **5.2 Effectiveness of essential skills approaches**

There is no publically available data on the effectiveness of the three Essential Skills approaches described in Tables 2 and 3. Informal interviews with program managers using these approaches suggest that there may be administrative data that could be used to assess program effectiveness on a number of counts.

## **5.3 Effectiveness of province-wide approaches**

Both Manitoba and Nova Scotia's programs have been independently evaluated in recent years. In both cases the evaluations were favourable but once again neither program tracks actual employer outcomes.

For example the evaluation of Manitoba's program found that it was associated with a number of positive outcomes including: increased credentials; increased leadership responsibilities in the workplace (and community); greater confidence; greater motivation to seek further education/training; increased culture of workplace literacy and Essential Skills in Manitoba, and an accompanying joint labour-management process and principles for implementing initiatives.

Similarly, a recent study conducted on behalf of HRSDC (Praxis 2008) concluded that Nova Scotia's workplace education program provided a model for effective development and delivery of workplace essential skills training and that a number of specific aspects of the program represent best practices in the field. The critical success factors in the Nova Scotia program were the following:

- The high level of professional facilitation, planning and administrative capacity provided to participating firms.
- The use of a partnership model requiring joint employer/employee participation and buy-in throughout the needs assessment and program development and delivery processes.

- The flexibility built into the program, allowing participating firms to develop tailor-made training courses making use of on-site materials and addressing specific learner needs.
- The provision financial support to sustain program development and delivery.
- The effectiveness and credibility of the needs assessment process employed during the initial planning phase.
- The development of a province-wide network of professionally trained and experienced workplace educators. Participating firms are able to select course instructors from this network and often work with individual instructors over extended periods of time.
- The increasing use of sector councils and industry associations to recruit enough trainees across a number of firms to be able to deliver training locally and on a sustainable basis.

#### **5.4 Match to learner needs**

This review of literature did not identify any studies of the actual outcomes associated with literacy and essential skills programs delivered in Canada. Therefore, it is difficult to draw any conclusions about the effectiveness of the program models presented in this report and their match to learner needs.

## **6. WORKPLACE LITERACY — INTERNATIONAL MODELS**

The section takes a wider look at programs in four jurisdictions outside of Canada: Australia, New Zealand, the United Kingdom and the United States. The information presented in this section is drawn primarily from government websites in each country.

### **6.1 Australia**

Australia has a comprehensive national workplace education program that is well-integrated into the nation's industry training system (Wignall, 2007). The objective of the federal Workplace English Language and Literacy (WELL) program is to assist organizations to train workers in English language, literacy and numeracy skills. Federal funding is available on a competitive grants basis to organizations for English language and literacy training that is linked to job-related workplace training and that is designed to help workers meet their current and future employment and training needs.

Funding for WELL training projects is available for organizations that have demonstrated a need for language, literacy and numeracy in the workplace. The WELL program delivers flexible, specialist training. Projects operate in a wide range of industry settings, including health services, manufacturing, hospitality, and local government administration. Training is flexible and can be varied to suit the individual needs of work teams and their leaders. The employer applying for the funding grant must co-ordinate project activities and to use approved training providers, as set out in the guidelines. Employers are expected to contribute at least 25 per cent of training costs (50 per cent for second and third year projects) and provide regular reports.

A key characteristic of the Australian approach is that literacy and essential skills training is integrated with other forms of job-specific training including the delivery of industry Training Packages. Australia has a national system of training which is consistent across the entire Australian workforce. The development of Training Packages is coordinated by the relevant Industry Training Advisory Body (ITAB). As firms prepare to deliver Training Packages in the workplace they may partner with a language and literacy practitioner to ensure employees have the essential skills to benefit from more complex industry specific technical training. This integrated approach is often referred to as “*built-in, not bolted on*” and essential skills are often described as the “mortar” that makes technical skills stick (Australian National Training Authority, 2000; Wignall, 2007). This approach requires both a multi-disciplinary approach to provision and a structured curriculum with standard modules and tools.

## **6.2 New Zealand**

The importance of literacy training has gained increasing recognition in New Zealand over the last 10 years. The Tertiary Education Strategy 2007-12 (TES) identifies increasing literacy and numeracy levels for the workforce as a priority outcome for tertiary education. The Workplace Literacy Fund provides funding for programs that allow eligible employees to improve their literacy and numeracy skills.

The main aim of the WPL Fund is to provide workers with literacy, English language and numeracy skills. Therefore, funding is available for literacy, language and numeracy training integrated with vocational/workplace training to help workers meet their employment and training needs. The WPL Fund targets employees who need improved literacy, language and numeracy skills in order to remain or progress in employment, (including avoiding displacement).

Like Australia, New Zealand also has a national industry training strategy and a national qualifications system. This system was instituted as part of an effort to give New Zealand industry, which is comprised mostly of small businesses, a competitive edge by enhancing the overall skill level of the workforce. It created incentives for employers to invest in training, primarily through government contribution to the costs of the development and delivery of both on- and off-job training.

Funding is available to undertake an initial needs analysis to demonstrate an in-depth understanding of the workplace context and describe the literacy and numeracy requirements of the workplace within the specific workplace context. Funding is also available for program delivery. Programs must assess and document employee gains in building literacy and numeracy skills. Note that the Government has provided funding for the development of a national assessment tool for adult literacy and numeracy. The assessment tool will be linked to the learning progressions and will be available for workplace literacy providers during 2010. In addition, all workplace literacy providers will need to show evidence of: New Zealand Qualifications Authority (NZQA) or Institutes of Technology and Polytechnics Quality (ITPQ) accreditation or be actively working towards this accreditation.

One of the largest providers of workplace essential skills programs is Workbase. Working with business, unions, industry training and tertiary education organizations,

Workbase develops tailored literacy solutions that support government and company initiatives, delivering on our vision of a literate New Zealand workforce. Workbase partners with Industry Training Organisations to support the integration of literacy to improve training completions and on job performance. Workbase supports Government initiatives across tertiary education and employment.

### **6.3 United Kingdom**

The UK approach to skills is described as a whole of UK whole-of-government strategy (Plett, 2007). The UK has recently launched *World Class Skills* which is an initiative that responds to the Leitch report. The Leitch Report which was an independent review of the UK's skills needs published in 2006 that identified skills as one of the most important drivers of a successful economy and a just society that offers opportunities for all citizens, regardless of their background. In addition, the Leitch report made a compelling case for how much further there is to go if the UK is to have a highly skilled workforce by 2020.

*World Class Skills* introduced a single Skills Funding agency that will bring together all skills services for business and adults to reduce bureaucracy and allow it to provide a more flexible and rapid response to skills development. The Skills Funding Agency will become operational in April 2010. Core services will include the following:

- *Employer Skills Services* — a national skills service to all sizes of business in all sectors via Skills Funding Agency managed programs — Train to Gain and the National Employer Service.
- *Adult Advancement and Careers Service* — a universal advice service for individuals, both in and out of work.
- *Learner Skills Services* — including Skills Accounts, FE college and provider based funding, integrated employment and skills services for the unemployed, offender learning, informal adult learning etc.

The Skills Funding Agency will take a more demand-led approach to funding adult skills. A demand-led skills system is one that responds to demand for skills and training from employers and adults rather than trying to plan supply. In funding terms this means colleges and training providers will receive funding as they attract customers (learners or employers), rather than receiving a block grant based upon estimates of expected demand.

### **6.4 United States**

Workplace literacy is supported in the U.S. in several ways. Unlike, Australia, New Zealand, and the United Kingdom, the United States does not have a national workplace literacy and essential skills program. Also in contrast to these other countries, the U.S. does not have a national skills strategy and qualification system. Limited federal funding is available through the Workforce Investment Act (WIA) and the Personal Responsibility and Work Opportunity Reconciliation Act of 1996. But leadership for workplace essential skills resides largely at the state level (Imel, 2003). Many states have well-established programs. However, since there is no specific national effort, there are



no comprehensive data on how many programs there are, how many people are served, or what their outcomes are.

In a recent report Parker (2007) studied the workplace education programs of 20 states. He categorized 10 of these states as having comprehensive state workplace education systems, characterized by factors such as: provision of state-wide services, collaboration with partners and alignment of partner roles, state staff position(s) dedicated to workplace education, program or instructor certification or standards, certification of skills attained by learners, state leadership to local programs, and sponsorship of program improvement. According to Parker the following states fit this category: Arkansas, Connecticut, Indiana, Kentucky, Massachusetts, Minnesota, Mississippi, New York, Ohio, and Pennsylvania. In addition, Parker categorizes eight states as Leadership System states, “because they are characterized by providing state workplace education leadership and direction to local programs and the sponsorship of program improvement/development.” According to Parker, states fitting these criteria are: California, Florida, Georgia, Louisiana, North Carolina, South Carolina, West Virginia, and Wisconsin. He also lists two additional states as being in the Process of Development: Texas and Virginia.

Massachusetts is widely regarded as having one of the most comprehensive and innovative workplace education systems. Boxes 10 and 11 profile two different aspects of Massachusetts’ program.

#### **Box 10: Massachusetts Workforce Training Fund (WTF)**

The WTF program targets newly hired or incumbent workers. WTF legislation states that the program must prioritize low-skilled, low-wage workers, but rather than explicitly target those groups, the state meets this goal by funding grants to communities with larger proportions of low-wage, low-skilled workers. An estimated 10 to 15 per cent of grant funds go toward basic skills training. In 2005, the state began a pilot initiative for training grants focusing primarily on adult basic education and/or English for Speakers of Other Languages.

WTF is financed through employer contributions to the UI tax fund. Between 1999 and 2005, WTF awarded \$107 million to 2,258 companies. State appropriations for the program increased from \$18 million to \$21 million in fiscal year 2004-05, with \$22.7 million in grants awarded in 2005. Training grants typically range from \$2,000 to \$250,000 for training that does not exceed a two-year period. The typical grant averages between \$60,000-70,000.

The WTF allows employers to choose the provider, content and outcomes targeted, but training must be job specific and not already in process. A degree-granting program or for-credit course that is specific, technical, and necessary to the company’s continued competitiveness is eligible for funding. Training must be completed within two years. The majority of training providers are for-profit institutions, followed by community colleges, and community-based organizations.

The employer contracts with the training provider and the state does not give preference to certain types of trainers. According to state staff, the Advisory Board was initially hesitant to fund basic skills instruction, such as ESOL and basic math and reading, because they believed other systems provided sufficient funding for it. Eventually these services were funded by WTF as they discovered the demand for basic skills services actually out-paced supply in the state and many employers promoted providing ESOL and other basic skills as meeting a legitimate business need, particularly in order to promote from within the company. The majority of basic skills training is ESOL- related with some basic math and reading.

Source: Hollenbeck (2007)

### **Box 11: Massachusetts: Evolution of a state sector strategy**

Massachusetts' sector strategy began about 25 years ago with the creation of the Bay State Skills Corporation (BSSC), which was established as a catalyst between the private sector and government, and specifically to help the private sector address immediate and long-term workforce needs.

Between 1981 and 1996 BSSC operated a program that required a 50 per cent employer match for every dollar of state funds spent. This program funded sector initiatives in every major industry and created programs that spanned the continuum of the workforce pipeline, from youth to adult, and from entry-level worker to management. In 1996 BSSC merged with Industrial Services Program (ISP), to become the Commonwealth Corporation.

Massachusetts's Extended Care Career Ladder Initiative (ECCLI) is one of the largest sector initiatives of its kind. The initiative was designed to meet the needs of the long-term care industry, which faced increasingly high turnover rates and a corresponding decrease in the quality of patient care.

The BEST initiative was launched as a result of a concern that many adult workers were lacking basic skills. BEST took a sector approach, with a goal of dual customer benefit — meeting needs of industry/the economy while also benefiting individual workers through career advancement and job security. Until recently, the focus has been on developing the skill level of low-skilled workers, but the approach is now being extended to higher skill workers as well. In 2007, Bay State Works gained increased state funding and was renamed the Workforce Competitiveness Trust Fund. To date, it has awarded over \$6.7 million dollars in implementation and planning grants related to sector strategies.

Source: [www.nga.org/Files/pdf/06STATESECREG.PDF](http://www.nga.org/Files/pdf/06STATESECREG.PDF)

## **7. CONSULTATIONS**

This section of the report provides a summary of the findings from a consultation exercise on promising approaches to workplace literacy and essential skills training. This section starts by outlining the objectives and methodology of the consultation exercise.

### **7.1 Consultation objectives**

The purpose of the consultation phase was to confirm and expand on the results of the literature review phase as well as to address gaps that were identified in the literature:

There were five objectives:

1. Identify the most promising program models according to a broad range of experts in the field.
2. Document best available evidence on *how* these promising models meet both learner and employer needs.
3. Identify what approaches are *not* working well according to this same group of experts.
4. Further describe Ontario's existing workplace training policies and programs.
5. Gather preliminary info about feasibility of implementing these promising program models in the Ontario context.

At a meeting with MTCU's Program Design team held in mid June 2009, it was clarified that based on the findings of the literature review and given emerging strategic direction of the Ministry, MTCU would like the consultations to take a more focused look at the feasibility of pilot testing a province-wide model in the Ontario context.

## **7.2 Consultation methodology**

The study used a number of information-gathering techniques and sources. In-depth interviews were conducted with key informants who have in-depth knowledge about workplace LES training in Ontario and/or other jurisdictions.

Considerable attention was given to the selection of the key informants. To ensure a broad range of perspectives, we selected key informants by identifying leading experts associated with each of the models identified in the literature review. Each of these experts participated in-depth and in most cases multiple interviews. As a next step we asked each expert to recommend individuals who could contribute to this project. Specifically we asked key informants to identify individuals who they considered:

- a) To be experts and individuals who are well known and respected by others in the field of workplace LES.
- b) To be "strategic" thinkers about the issues related to workplace LES and to have viewpoints that are broader than their own specific programs, i.e., are able to talk more generally about the field.
- c) To have a perspective that differs from your own on at least some issues.

Interviews were conducted with a broad range of Ontario stakeholders including representatives from business, labour, and practitioners in the community and college sectors. In addition, both researchers participated in a three day conference held in Montreal on June 25 to 27 with over 90 participants. This conference provided the opportunity for the researchers to reflect not only on formal conference presentations but also on informal reactions and discussions of a large number of conference participants. Thus the report also reflects observations from individuals who are interested and experienced in literacy provision but who may not have been identified as "experts" in workplace LES.

Interviews were semi-structured and were guided by an interview protocol (see Appendix B) as well as by issues identified by the participants.

The researchers produced memos for all interviews. The analysis for this report included three steps. First, interview data was organized into categories and themes. The next step was to identify patterns and relationships within and across categories and to draw out implications or findings. Findings from the interviews were compared both with findings from participant observations from the Montreal workplace LES conference and with findings from the interim literature review report.

## **7.3 Consultation findings**

### ***7.3.1 Program models: key features, differences and success factors***

#### **Feedback on the program models identified in the literature review phase**

A key finding of the consultation phase was that the emphasis on individual cases rather than program models that were identified in the literature was also reflected in the practice and discourse of literacy practitioners and experts. In both the key informant interviews and at the Montreal Conference there was little discussion about program models or broad approaches. The discussions that took place at a conceptual level tended to be debates about the meaning of key terms such as essential skills, workforce literacy, workplace literacy and types of literacy. The lack of discussion about different program approaches was reinforced by the Ontario Literacy Coalition's recent position paper on workplace LES. Although this paper aims to provide an overview of approaches to workplace literacy it does not describe or compare any specific models. However, despite the widespread lack of discussion about program approaches, when we presented an overview of program models that was developed for the interim report the response was generally positive. Key informants recognized the distinctions made across the models as being meaningful and reflecting current practices. In particular, informants emphasized that the most important distinction in current practices was between general literacy approach and essential skills approach. This distinction is described in more detail below.

#### **Traditional literacy approach versus an Essential Skills framework**

Several key informants remarked that there were perceived and actual differences between the traditional literacy and Essential Skills approaches. In general these differences are not well understood or well-articulated across Ontario's literacy provider communities. When the Essential Skills framework first emerged, community-based and labour practitioners tended to see this framework as unduly narrow. For example, a study commissioned by HRSDC to explore the perspectives of the labour movement concluded that the Essential Skills framework "is narrow and does not represent the broad view of literacy that labour uses in its approach" (Folinsbee, 2005). A more recent study echoes this perspective, urging workplace educators to "hold on to the practices of an approach based on the broader, social development notion of literacy for life despite the policy and funding shifts away from this model" (2008:67). However, several informants observed that they do not see the Essential Skills framework as more narrow and in fact would argue that it is actually broader given that it expands on traditional definitions of literacy to include nine dimensions.

One key informant argued that the key difference between the two approaches is that the approach typically delivered by community agencies is about empowering citizens and fostering civic engagement while the Essential Skills approach is about building an individual's capacity in the workplace. This distinction resonated with many informants. However other informants pointed out that programs delivered by community agencies also prepare individuals for employment, retraining opportunities and labour market advancement. Moreover as one informant pointed out, using the term "community" to signal a fundamental approach to literacy training is confusing given that the location in

which a program is delivered does not necessarily determine the approach used. These debates underline the importance of a conceptual framework that defines key terms.

### **Key features of essential skills models**

The consultation exercise aimed to gain feedback not only on differences across program models but also similarities. To this end, practitioners were asked to describe the core features of their programs. As most of the case study literature focuses on the general literacy model and the critical success factors are well-described in this literature, the consultations focused on newer Essential Skills models. The consultations identified six features that were common across program models. Box 12 describes these features.

#### **Box 12: Six key program features**

- a. **Partnerships** — All of the program models discussed in this report use a partnership approach that includes business, government and labour. In models such as the Douglas College model that are geared to small businesses that are usually not unionized, the approach to partnerships is typically informal and flexible. In the province-wide models the approach is more formal. For example, Manitoba's Workplace Education Program is governed by a steering committee comprised of two representatives from business, two representatives from labour and a government coordinator. In Nova Scotia, each project must set up a project team comprised of all partners in the workplace. In cases where there is no union, care is taken to ensure employee interests are represented throughout the process using by having employees as part of the project team.
- b. **Business alignment** — A second key feature is that the service delivery is aligned with the business needs of the employer. This is achieved through a consulting process that begins with working with the employer to diagnose the performance problem and identify the root cause. If an Essential Skills gap is found to a cause of the problem then a project team will work together to design and deliver a training solution to close this gap. This approach is in contrast to an approach that starts with a pre-packaged curriculum.
- c. **Customization** — A third feature is that training programs are customized to employees' jobs and skill levels and based on authentic workplace materials. While the second feature ensures that the training program is meeting a business need, the third feature helps ensure that what employees learn in the program is actually transferred to the workplace. The emphasis on customization is consistent with workplace instructional design literature that emphasizes the importance of learning in context or "learning to do."
- d. **Qualified providers** — A fourth feature is the use of trained and certified professionals. All programs ensure their staff have extensive training and most require certification. This includes staff that provides consulting services to businesses and conducts the needs assessments as well as staff that designs and delivers the training.
- e. **Blended delivery model with a service orientation** — A fifth feature is a blended delivery model where delivery caters to the needs of the worker and firm, with on or off-site instruction, in classroom or group setting, and with varying degrees of one-on-one instruction, peer learning, and self-paced modules. An overall service orientation aims to provide a high quality experience that is as administratively straightforward as possible.
- f. **Government financial support** — A final feature is that a least some portion of the service delivery is government funded and that employers do not bear the full costs. There is a strong consensus among experts in the field is that government funding is critical to obtaining employer buy in and that without it most employers would not be willing and or able to participate. The need for government support was thought to be especially important for small businesses.

An additional feature of the Nova Scotia and Manitoba models is *government coordination*. Nova Scotia's program is situated in the Department of Labour and Workforce Development. This Department has a mandate to support employers in creating safe work environments and in building a highly-skilled and competitive workforce. The Department focuses on a number of labour issues including employment rights, adult learning, apprenticeship training and trade qualification, skill development, workplace safety and industry regulation. Manitoba's program is part of the Department of Competitiveness Training and Trade. This department has a mandate to support growth for Manitoba business, meet provincial labour demands, increase training opportunities and expand trade relations. While Workplace Education Manitoba is an agency situated outside of government rather than part of a unit inside government, the program coordinator is a government employee and as such the program benefits from strong links to government.

The next section takes a closer look at both the Nova Scotia and Manitoba models.

### **7.3.2 Province-wide models — Nova Scotia and Manitoba**

#### **Nova Scotia — An integrated approach to skills development**

Nova Scotia's Workplace Education program is administered by government in partnership with business, industry, and labour. Workplace Education was launched in 1989 with three key objectives: create a lifelong learning culture in Nova Scotia; help the Nova Scotia workforce meet the challenges of the new workplace; and partner with business, labour and workers to deliver essential skills.

Workplace Essential Skills training is part of an integrated suite of skills development programs offered by the province. Skills development programs fall under three broad categories:

1. Workplace Essential Skills training programs including programs for apprentices and small businesses;
2. Transition programs for individuals who are re-training or entering or re-entering the labour market;
3. Workforce planning and adjustment programs including sectoral initiatives.

#### **Workplace Education: how it works**

The overall process is initiated either by an employer contacting Workplace Education or by one of Workplace Education's Skills Development Coordinators reaching out to an employer. Service delivery begins with a **Skills Development Coordinator** collaborating with the employer to assess the firm's performance needs and related skills gaps.

Each participating employer is required to develop a Project Team which brings together representatives from management, the union, and employees. The Project Team works with the Skills Development Coordinator to initiate, develop, implement and evaluate the Essential Skills program. Skills Development Coordinators provide support

throughout the lifecycle of training projects. Each member of the Project Team shares the costs.

During the needs assessment phase information about Workplace Education is communicated to all workers. The assessment is voluntary and is completed on a random sample of workers, including management. A report is compiled with aggregate findings and recommendations are made based on the assessment (Findings are confidential at the individual level). The Skills Development Coordinator uses the findings of the needs assessment to make recommendations and develop a training plan. The Coordinator then works with the Project Team to design an Essential Skills training program that is customized to the workplace and tailored to employee skills levels and the demands of the job. Customization helps ensure employees transfer and apply skills to the job. In the year 2007-2008, there were just over two hundred programs funded.

### **Manitoba — An integrated approach guided by an Essential Skills Policy Framework**

Manitoba's Workplace Education program is guided by a province-wide Essential Skills Policy Framework designed to promote a coordinated and integrated approach to essential skills training that addresses comprehensive learner needs along a continuum, including a specific Northern strategy. The Framework conceptualizes Essential Skills as the skills needed to be successful at work and the foundation on which a skilled and adaptable labour force sits. The vision underlying the Framework is that *Manitobans will value and acquire Essential Skills as a critical means to achieve learning, employment and economic goals*. The mission statement is to *increase our capacity to assess Essential Skills and deliver appropriate Essential Skills training*.

In addition to providing Essential Skills programs to employees, Workplace Education Manitoba (WEM) also provides Essential Skills training to job seekers including programs that embed essential skills in occupation specific training and specific programs for under-represented groups. More recently WEM has begun to provide human resource supports to employers including: recruitment, internal improvement, performance improvement, process definition, job descriptions, and training plans. The program has worked with hundreds of clients throughout Manitoba since 1991 and has extensive experience working with a wide variety of industries including agriculture, aerospace, mining, garment, manufacturing, construction, retail, transportation, health care as well as parks and recreation.

### **Manitoba Workplace Education: how it works**

WEM uses a similar process to the process used by Nova Scotia's program. As with Nova Scotia, service delivery begins with a needs assessment phase that is available at no cost to the employer. At the Montreal Conference in June 2009, WEM's Coordinator described the process as having the following nine steps.

## **The WEM process**

### ***Engagement and assessment***

1. **Engagement** - Engage the employer, communicate and explain the process
2. **Needs assessment 1** — This phase is a high level needs identification that involves identifying the issue and defining the performance gap (what *is* happening versus what *should* be happening). A fundamental question at this stage is whether an Essential Skills gap is at the root of the problem. If an Essential Skills gap is not an issue then the employer is referred other programs as appropriate.
3. **Triage 1** — Based on the results of the high level needs assessment a team is assembled to conduct a more detailed needs assessment.
4. **Needs assessment 2** — This phase involves an in-depth identification of needs, systems, success indicators, risks, partners, time lines, costs.
5. **Triage 2** — Based on the results of the second more detailed needs assessment a training plan is developed that includes recommendations for training programs, an evaluation framework, and a budget. Once the training plan is approved a team is assembled to design and delivery the training.

### ***Implementation and delivery***

6. **Develop/pilot solution** — Instructional designers develop customized Essential Skills training. Depending on the complexity and scale of the project, delivery may include a pilot stage.
7. **Implement** — Delivery may be provided by WEM or WEM may train in-house staff to become program deliverers. Delivery is supported by an implementation process that involves a formative evaluation and accountability and reporting mechanisms.

### ***Evaluation and continuous improvement***

8. **Summative evaluation** — Programs are evaluated against a set of success indicators that are developed in the assessment phase.
9. **Inform** - Project partners analyze results and identify areas for improvement. Findings are communicated broadly.

Interestingly although this process was intended to describe Manitoba's program, other program coordinators, including coordinators from Nova Scotia, Douglas College and SkillPlan indicated that this process is an accurate representation of their own process.

### ***7.3.3 Relationship between workplace and workforce programs***

#### **Strong workplace and workforce programs**

A further key finding related to programs in other jurisdictions is that Nova Scotia and Manitoba, the two provinces with the most well-developed workplace LES programs also have the highly developed workforce programs including community-based adult learning programs.

Manitoba has a province-wide community-based literacy program as well as a system of Adult Learning Centres (ALCs). These Centres integrate literacy upgrading with programming for adults to obtain secondary education courses and credentials (high



school diploma) required to pursue further education and employment. Manitoba's adult literacy strategy is currently under development. In January 2009, the province passed the Adult Literacy Act. The act identifies the Department of Advanced Education and Literacy as the lead for adult literacy and requires the development of a comprehensive provincial adult literacy strategy to address the needs of Manitobans.

Nova Scotia has the Nova Scotia School of Adult Learning (NSSAL). NSSAL offers programs for adult Nova Scotians who want to improve their literacy skills and/or obtain a high school diploma. Programs are tuition-free and offered at more than 150 sites across the province. NSSAL is supported by an information and referral services as well as a comprehensive prior learning assessment and recognition process.

### **Different competencies required to deliver LES in the workplace**

From all sources, including the Montreal Conference and key informant interviews in Ontario as well as in other jurisdictions, there was strong agreement that effective workplace LES programs require a delivery stream that is distinct from community LES programs. As one key informant explained:

Workplace literacy is not about bringing the community into the workplace. It is very different process. You must be able to do a needs assessment and talk in the employer's language not the LBS curriculum. You must talk about what workers need to be able to do on their jobs such as use a computer program or find information in a document. Learning in the context of doing is a fundamental component.

Another key informant raised the issue of the complexity of relationships:

Balancing relationship is essential. Traditional adult literacy practice does not fit the workplace, because it is not just a practitioner-learner relationship. Management and unions are also involved. The practitioner needs to balance these relationships and consider all the different vantage points. The stakes are higher at the workplace. Jobs can be gained or lost because of literacy.

These distinctions have been formally articulated by key stakeholders in Ontario's literacy community. For example in a recent position paper authored by the Ontario Literacy Coalition's Provincial Advisory Committee, the issue of workplace literacy provision requiring different skills was raised.

As the position paper explains, while community literacy practitioners have great skills in assessing and teaching literacy, they would have to acquire some additional skills to be able to function in the workplace including the:

- Ability to assess not just learners but the workplace itself to see gaps and address employer needs
- Sensitivity to union situations
- Ability to use or to source authentic workplace materials
- Ability to shape curriculum to the needs of the employer and the learner

- Ability to conduct assessments in the workplace; keep confidential information confidential
- Ability to recruit participants in the workplace
- Understanding of language issues as well as literacy, something often encountered in the workplace that may not be seen as much in community programs.

Given the competencies required, there was strong agreement across all sources that extensive and professional provider training must be a core component of any effective workplace LES program. The OLC as well as many key informants, such as ABC Canada note that providers of LES programs in all three adult education sectors may welcome the opportunity to be trained to provide workplace programs. Most key informants stated that any training and certification system that is developed should be accessible to existing LES providers in all sectors.

The next section provides of a summary of the key findings from the perspective of Ontario key informants about the desired direction for a provincial workplace LES program.

#### ***7.3.4 Perspectives from Ontario***

A major finding of the consultation exercise was the high degree of consensus among Ontario key informants about a desired strategic direction with respect to workplace LES training. This section highlights four key findings based on the perspectives of key informants from Ontario.

1. **Need for government intervention** — There was strong consensus across Ontario stakeholders about the need for government action in the area of workplace LES training. This action includes the government playing a coordinating role and the government making a substantial funding investment including support for practitioner training and certification.
2. **Strong consensus on the importance of a partnership approach** — But unlike the tripartite approach (business, labour, government) in other jurisdictions, Ontario informants, especially from the adult education sectors, strongly recommended a multi-partite approach that includes representatives of existing LES organizations.
3. **Strong support for new delivery system using an “agency” approach similar to Workplace Education Manitoba** — Most of the informants, especially ones who had just participated in the Montreal Conference and thus seen a presentation of the Manitoba model, suggested that the ideal delivery structure would be an agency like Manitoba’s WEM combined with a regional delivery model like Employment Ontario. In addition, while informants indicated that any workplace program would need to be integrated with existing literacy and employment delivery networks, they felt strong that the program could not simply be added to the existing network without a significant investment in capacity building.

4. **Strong interest in a pilot of a comprehensive program** — There was strong interest in a large scale pilot that demonstrates and evaluates a comprehensive program model for workplace LES training. There was less interest in a pilot that would involve an RFP process for a number of small unconnected initiatives not coordinated by government and not supported by an investment in infrastructure. Several informants referenced previous workplace LES pilots stating that they were not a success because there was not a sufficient investment. Most significantly, previous pilots asked the existing LBS delivery system to do something it was not designed to do. An additional related point is that there are two successful Canadian province-wide models. A few key informants felt that Ontario initiative should build on these Canadian success stories. All of the Ontario informants emphasized the importance of evaluation so that pilot results would be able to inform a full rollout in a systematic way. Several informants stated that in too many cases pilot success stories were lost and did not inform future programs.

## 8. FEASIBILITY ANALYSIS

### 8.1 Purpose and scope

This section presents a preliminary analysis of the feasibility of implementing a provincial workplace LES program in Ontario. The purpose of a feasibility analysis is to assess whether a proposed program can be successfully implemented within a particular environment and to identify critical success factors and areas of potential risk. As discussed above, based on direction provided at a July 2009 meeting with the MTCU's Program Design team, the analysis focuses on the feasibility of implementing an approach similar to Manitoba or Nova Scotia's program.

The Manitoba and Nova Scotia models share many common features, particularly their delivery models of workplace LES training. For example, the delivery models in both provinces aim to align training with business needs, customize it to specific jobs, and tailor it for individual workers. However, the two provinces differ significantly in how they administer and manage the delivery of program services e.g., an outside agency versus a *within-government* governance structure.

In this section we consider the types of structures, systems, and resources that would be required to successfully implement a program with respect to three critical dimensions: governance and management, participant intake and service delivery, and monitoring and evaluation of program objectives. Note that as this is a preliminary analysis, we do not address the entire scope of the proposed program but instead concentrate on specific areas that are likely to be most critical to program success.

### 8.2 Framework and methodology

A feasibility analysis usually involves macro-level considerations of *governance and management* along with a series of more refined details associated with operationalizing the *delivery of program services* and plans for maintaining *accountability through a monitoring and evaluation* component.

The analysis would then seek to determine if there were appropriate *structures and functions, systems and processes, and resources and expertise* in place to support a successful implementation for each component of the proposed program. Table 4 illustrates an analysis framework that includes some of the key considerations that will need to be made at each level.

To conduct the feasibility analysis we identified key features of the Manitoba and Nova Scotia models related to governance, service delivery, and accountability. Next we analyzed the Ontario environment to determine the extent to which capacity currently exists or new investments are needed to develop the necessary structures, systems, or resources to support an Ontario-wide model of workplace LES training.

**Table 4: Framework for assessing key program feasibility issues**

	<b>Governance, management</b>	<b>Operations, service delivery</b>	<b>Monitoring, accountability</b>
<b>Structures, functions</b>	Within government or agency-led governance structure  Ministry, branch, management functions	Defined roles and responsibilities for outreach, assessment, LES curriculum design and delivery  Partnerships, regional networks	Conceptual Framework, Policy Objectives  Evaluation Framework
<b>Systems, processes</b>	Regional, Local Coordination Systems  Communication, Reporting and Feedback Processes	Standardized operating procedures, forms  Program Management Information Systems (PMIS)	Data Collection Plans and Processes
<b>Resources, expertise</b>	Budgets, Investments, Management Resourcing  Partnership model, advisory committees, working groups	Funding model, training grants  Technical expertise	Evaluation Funding Evaluation Expertise

The analysis is based on a review of publically available information and interviews with key informants. The interview protocol included several broad questions on the successful delivery of workplace-based LES training (see Appendix B) while probing follow-up questions were also used, when appropriate, to further explore critical issues in each of the cells of Table 4. Informants varied in their experience and capacity to speak to these issues. Informants with expertise in LES training tended to focus on service delivery, while others were in a position to address larger issues of governance and management.

### **8.3 Policy and program environment and key stakeholders**

#### ***Employment Ontario***

Ontario’s employment and training policy and program environment has recently undergone fundamental transformation. Employment Ontario, the province’s new employment and training network, was designed to operationalize the ministry’s vision of an integrated training and employment system. This transformation is still in progress.

From the standpoint of the public, Employment Ontario will provide easy access to training, apprenticeship, and labour market services for job seekers, employees and employers. Service delivery and program management has a regional structure with four regions across Ontario: Central Region, Northern Region, Eastern Region and Western Region. Central Region includes Toronto, Durham, York, Peel, Halton, Simcoe, Muskoka, Midland, Collingwood, and Orillia.

The new network builds on the strengths of the current network and is facilitating a process of enhancing services to be more customer-centric, responsive and flexible to local community needs. At maturity the network will link the service quality dimensions of the Performance Management system — Effectiveness, Customer Service and Efficiency — to funding and integrate the five service components into a more flexible, customer-centric access to services. This will lead to a network comprised of community organizations that have demonstrated capability, experience and are effective and responsive working in and with their respective communities in support of the Employment Ontario promise.

### **Key stakeholders**

There are numerous groups that are part of the Employment Ontario service delivery network with a direct and significant stake or interest in LES workplace training programs in the province. In addition, business organizations, employers and unions are also stakeholders. This section includes a brief analysis of key stakeholders with interests and capacities in LES workplace training. (It is not intended to be a full or systematic review of their roles, relationships, interest and influence in the decision-making process.)

**Ontario Literacy Coalition (OLC)** — OLC is a provincial advocacy organization with a mission to lead the discussion on literacy and to support and empower the literacy community. The scope of the OLC's work includes research and resource development, policy analysis and guidance, government relations and knowledge exchange. The OLC also brings stakeholders together to pursue strategic partnership development.

In recent years the OLC has been active in the issue of workplace literacy. The OLC has brought together labour and business partners to form a *Provincial Advisory Committee*. This committee has developed a set of recommendations for a workplace literacy initiative. The committee has representatives from labour, community literacy organizations, business (the Ontario division of the Canadian Manufacturers and Exporters), workplace training associations (the Canadian Society for Training and Development).

The OLC has developed a well-organized and multipartite approach to workplace learning and as such is well-positioned to be a partner in any provincial initiative. A significant gap, however, in their current work is that their Provincial Advisory Committee does not include any members from other adult education sectors such as the college sector. Ontario's college upgrading sector has launched a number of Essential Skills initiatives in the past several years and would likely expect to play a key role in any provincial LES workplace training initiative (see below).

Perhaps the most significant potential risk is that while the OLC was successful in building partnerships with business and labour, it is ultimately accountable to its core constituency which is comprised of community-based literacy providers. Although there are exceptions, community-based literacy providers typically do not have expertise in workplace training. While the Regional Literacy Networks played a key role in the workplace pilots launched several years ago, many of the key informants interviewed felt that the networks did not have the needed training to be effective providers of workplace services. While some networks may be interested in building this capacity, there was strong consensus that this activity must not jeopardize existing programming and that a number of networks may not be interested.

**The College Sector Committee for Adult Upgrading (CSC)** — The CSC has been actively engaged in re-orienting its Academic Upgrading programs to have a stronger workforce development focus. A key initiative currently underway involves embedding an Essential Skill Framework into the existing curriculum with the goal of placing more emphasis on “learning to do” and “learning for work”. A second ongoing initiative is to train instructors to use authentic workplace materials in their programs. In May, 2009, the CSC worked in partnership with SkillPlan to provide workplace materials development training to thirty academic upgrading providers representing colleges from across Ontario. In addition, several Ontario colleges have been participating in a national pilot project led by Douglas College to learn how to best engage employers and to deliver LES training in the workplace. Results from the Ontario pilot site are mixed. While colleges have embraced the movement towards a more employment focused curriculum, engaging employers has been an uneven process. Like most Ontario training service providers, working in partnership with employers is still an evolving process and currently represents a capacity gap.

**The Ontario Association of Adult and Continuing Education (CESBA)** — CESBA is an umbrella group representing adult and continuing education departments of school boards across Ontario. School boards play an important role in the continuum of skills and employment program options available to communities. Although in the past, school boards were typically associated with upgrading programs that lead to a high school diploma, an increasing number of school boards are delivering career and employment services, upgrading and literacy programs, and pre-apprenticeship and vocational training. Again like most adult educators, working partnership with employers to provide workplace training is still a significant capacity gap.

**Labour** — Several Ontario labour organizations have long-standing experience with partnerships in workplace training programs. In most provincial programs labour unions are partners and play a key role in both recruiting employees as program participants and ensuring employee interests are represented. An analysis of existing LES programs with strong union involvement suggests that these programs typically fall under the “general literacy approach” and do not usually involve a detailed needs analysis of the organizational and job requirements. Lack of emphasis on the needs assessment phase represents a potential capacity gap.

**Business — The Ontario Division of the Canadian Manufacturers and Exporters** — has a long history of educating employers about the importance of literacy and

essential skills training and recently produced a toolkit to assist employers in launching their own workplace LES programs. A key strength of the CME is that it can reach large numbers of employers and speak directly to them. The current CME vice-president is passionate and articulate advocate of workplace literacy. A key risk in reaching employers is while the previous era of skills shortages provided a strong incentive to employers to focus on skills development, the current economic climate means that many Ontario employers are focused on more immediate and urgent labour force adjustment issues.

In addition, the Ontario Chamber of Commerce has recently expressed an interest in workplace LES and has engaged in discussions with the Ontario Literacy Coalition. To date there has been little engagement from Ontario members of the Canadian Federation for Independent Business.

## **8.4 Governance and management**

### ***8.4.1 Structure and management functions***

#### **Bureaucratic versus agency structure**

There appeared to be strong consensus among all key informants about the need for government action in the area of workplace LES training. Beyond the provision of funding, most felt that a coordinating role for government was also important. However, there was less support for a bureaucratic approach where all components of workplace LES delivery are managed and delivered through existing governance structures within a lead ministry. There was strong support for a new delivery system using an “agency-led” approach similar to Workplace Education Manitoba.

Although some key informants suggested that a *within-government* management and delivery system may make it easier to maintain core funding and longer-term commitments to workplace LES training, the same key informants acknowledged that a *within-government* approach may have the disadvantage of leaving the program vulnerable to shifting priorities which could compromise program activities. Maintaining priorities and activity levels may be easier within an independent agency structure albeit with a somewhat higher degree of uncertainty in longer-term funding.

#### **Management functions, administration**

While most key informants argued for a new system, specifically calibrated to the needs of workplace LES training, they also agreed that an LES workplace program should build on existing capacities where possible. Informants who were familiar with Employment Ontario’s integrated service delivery framework agreed that the program should become part of this framework.

In addition, key informants suggested that there would need to be strong political will at a senior level — a “champion” within government — *and* within business and that management functions should be placed within a business-friendly, lead ministry and branch.

## **8.4.2 Systems and Processes — Coordination, Communication and Reporting**

### **Regional coordination, Employment Ontario**

Though key informants largely preferred an agency-led approach, they also identified the need for regional coordination. Given Ontario's sheer size and diversity, the need for regional control is greater than in either Manitoba or Nova Scotia. Though a single-agency-led model is feasible in principle, in the Ontario context it will need to include regional divisions not just for coordinating service delivery activities but also with management centres. The suitability of Employment Ontario's existing regional structure will depend on the precise nature of the model — what services Ontario chooses to include and who the providers are — as different partners will require different management structures.

### **Communication, reporting, and information systems — Role for local boards network**

Whatever the governance structure, there will be a need for systems and processes to support management decisions including communications, reporting and information systems. Key informants advise that some of the risks to the implementation may include bottlenecks in these systems — or an entire lack of appropriate processes — due to insufficient investments. Beyond the usual informational and systems supports for program operations and governance — such as the maintenance of statistics on service delivery and clients — there is likely to be some new investments required. Notably, existing systems and infrastructure may have inadequate links to business to support the unique needs of a workplace-based delivery model in its communication strategy.

A specific area of concern for some key informants was in the support for outreach to employers. Though some standardization was encouraged in initial contacts, catering of subsequent messages to the specific needs of employers was stressed, which demands up to date information on local market conditions facing firms. There is likely to be significant regional and even local variation in information needs to support both service activity and management decisions. Ontario's local training and adjustment boards could play an important supporting role in information gathering and reporting.

## **8.4.3 Resources, expertise — Required investments and partnerships**

### **Scale of investments — Piloting a comprehensive initiative**

Though it is difficult to estimate the scale of investment that would be needed to support a workplace-based LES training initiative, some key informants had strong opinions about what would be required to implement a province-wide model. One key informant suggested that given the Manitoba and Nova Scotia models have about six to eight staff, Ontario would need at least 10 times this number given population and regional differences. This same key informant noted that the extent to which staff is dedicated specifically to workplace-based LES programming varies both by province, and over time, as these programs are often in competition for resources with other workplace and workforce programs. The required investment will ultimately depend on the precise service delivery model that Ontario chooses.



In this respect, most informants made broad recommendations that government not fund small pilots but rather launch a larger scale pilot program that is accompanied by an appropriate investment in infrastructure. The main reason for supporting a larger scale pilot program is that it would be a better test of a provincial workplace training model. Several informants referenced previous pilots stating that success was jeopardized because there was a lack of investment and the existing regional networks and LBS delivery system was asked to do something they was not designed to do (e.g., no training for providers and no workplace curriculum design standards).

### **A partnership model — Advisory committees, working groups**

Whether the model uses a *within-government* or agency governance approach, there was unanimous consensus on the importance of a partnership approach. But unlike the tripartite approach (business, labour, government) in other jurisdictions, it was strongly recommended that a multi-partite approach be taken. Almost all key informants, including those from business and union, identified a role for adult educators. However, there were different perspectives about the nature of this role and the extent of the literacy community and other adult education providers' involvement. Some key informants proposed two levels of engagement — advisory panels and working groups.

There is evidence of several solid working partnerships in the Ontario context including the OLC's work with the Provincial Advisory Committee (see Section 4.3) and the CAMA-CUPE partnership. Where appropriate, Ontario should utilize and build on the strengths of existing networks and partnerships.

Though a multipartite approach was highly recommended, it is not without its challenges. The implementation of a partnership model — and how Ontario manages its evolution over time — will be one of the critical factors in the longer-run success of a workplace-based LES training program.

## **8.5 Service delivery and operations**

### **8.5.1 Structure and functions — Roles and responsibilities**

#### **Outreach and intake — Business needs assessment, workplace expertise**

Key informants offered several recommendations about service delivery with respect to outreach and engagement of employer clients. Informants emphasized that engaging employers and assessing workplace training needs is the most challenging part of workplace LES programs. Actual workplace “classroom” delivery is comparatively easier. The unique expertise required to discuss performance gaps with employers and conduct a business need analysis should not be underestimated. Several informants indicated that lack of expertise in this area is the main challenge to building on the existing LBS system.

In addition, several key informants suggested that there are differences in the basic orientation of literacy training in a community context and that of essential skills in the workplace. Many informants suggested that community literacy has broad scope and reach — it is about empowering citizens, social justice, and fostering participation in

community. In contrast, an Essential Skills framework emphasizes an individual's capacity in the workplace.

The above assessment also applies to the college-based academic upgrading sector. In general, the strong consensus among key informants about the importance of building service provider capacity was striking.

### **Service delivery — Certification of providers, curriculum development, training provision**

A system of training and certification for service providers was recommended as an essential component of a province-wide program model. The provision of this training, standards, and the certification process should also be overseen by a workplace coordinating unit. The training could be developed and delivered through a partnership between private sector training and development professional associations or by organizations from other jurisdictions with have expertise in provider training.

For instance, Douglas College is respected for its experience in working with employers and integrating essential skills with technical training and could play a valuable advisory or partnership role in training service providers. In Ontario, some informants indicated that the college sector academic upgrading program has developed capacity for curriculum design, which focuses on essential skills in the workplace rather than in a traditional academic paradigm.

Notably, several key informants mentioned the work of SkillPlan and indicated that this organization has an excellent reputation for delivering high quality workplace LES provider training (see Section 2.3 for more information about SkillPlan).

Ontario may want to consider the use of training grants for community providers to participate in workplace-based training.

More broadly, there was strong consensus that *a new workplace-based delivery infrastructure would need to draw on several potential delivery partners including community, college, and private sector and that a new delivery system is required. In addition there was consensus that a workplace coordinating unit needs to exist within government.* This unit would oversee the outreach and engagement of business and draw on relevant expertise with performance consulting — from various sectors and other jurisdictions — to coordinate employer engagement and business needs assessments.

### **8.5.2 Systems and processes — Standardizing and leveraging**

#### **Standardizing procedures — Operations, communications and information systems**

Each component of the program model — from business engagement and needs assessments to the certification of providers, curriculum design, and actual delivery of LES training — should be well defined and documented in terms of the scope of service provision, any eligibility and entitlement criteria, roles and responsibilities of providers, and operating procedures. The later should include the development of appropriate forms, documents, and information systems to support the implementation. Preferably the design phase would precede implementation but in practice it may develop through an iterative process over time. A monitoring and program evaluation component could track the

evolution of procedures and service delivery in an effort to elucidate best practices and lessons learned (see next section).

Standardization of operating procedures will provide significant short and long-term benefits in terms of efficiency and quality of delivery. Furthermore, in the context of a pilot program, standardization will provide a stronger basis for evaluating program practice.

### **Coordination with existing programs — Leveraging infrastructure and resources**

Although most key informants have suggested Ontario needs a dedicated workplace delivery system, integration with existing programs is essential to maintaining the integrity of Employment Ontario.

Notably, the relationship between workplace and workforce training programs needs to be well understood and defined, not only in terms of their objectives and scope, but also in how synergies can be maximized to the benefit of both types of programs.

#### ***8.5.3 Resources and expertise — Service delivery funding models and partnerships***

Sufficient and stable funding is one of the long-term challenges facing existing provincial models of workplace LES training. A related challenge will face a pilot program of workplace LES training, as Ontario attempts to determine the appropriate *relative* funding levels for each of its new program components. This will be a particular challenge under a partnership model, where different providers may be involved in each program element. Flexible funding arrangements across these program elements and providers may be required to allow for quick adjustments to resource allocations as the pilot evolves and best practices are developed.

## **8.6 Monitoring and accountability**

### ***8.6.1 Structure — A conceptual and evaluation framework***

Implementation of a program, particularly a pilot, should include plans for maintaining accountability through a monitoring process and a comprehensive evaluation component. Indeed, all Ontario informants who participated in the consultations emphasized the importance of evaluation, learning what works and continuous improvement. However, many were less clear about what success would look like in the context of workplace-based LES training. Furthermore, there is evidence of some confusion over terminology and a lack of clarity in concepts.

#### **A conceptual framework**

The presence of ambiguity and confusion in concepts will compromise an evaluation — and potentially the success of the program itself — if the objectives are unclear or inconsistent with the design and program parameters. A conceptual framework is required to place the program design on firm ground and allow for consistent communication and understanding of objectives and parameters. Key areas where ambiguity or differences in perspectives might exist include the distinction between

literacy and essential skills and what is meant by workplace versus workforce training. In the face of differing perspectives, it is crucial that a conceptual framework be developed that supports the policy goals of the program, not the needs of any one stakeholder.

As mentioned above, the notion of literacy often has broader scope being about empowerment, social justice, and participation in community. In contrast, Essential Skills are often focused on an individual's capacity in the workplace and a means to economic empowerment. Similarly, the definitions around workplace and workforce training may need further clarity in an Ontario setting. Notably, key informants cautioned that the definition of workplace training needed to be carefully considered. Several key informants recommended that workplace training be defined as training to help workers develop the foundational skills to become more effective employees. Though these skills may transfer to other jobs, to family, and to communities, the orientation remains on the needs of individuals, as employees, and the needs of the specific firm. Other key informants added that the program eligibility should include some flexibility and be responsive to the labour adjustment process and include individuals who have been laid off. Indeed both Nova Scotia and Manitoba's models include a suite of programs that address the needs of job seekers, employees, employers and recently laid off workers. One key informant suggested the following definition:

Workplace education programs focus on the literacy and essential skills training that workers need to gain new employment, retain current jobs, advance in their careers, or increase productivity.

### **An evaluation framework**

With a well defined conceptual framework, a program can be better designed and communicated in a way that meets specific policy objectives. However, to assess whether a specific program or pilot is implemented as planned and whether it effectively achieves its objectives requires evaluation. Ideally, a conceptual and evaluation framework is developed prior to or early in the implementation process to ensure opportunities for learning from the pilot are maximized.

An evaluation framework begins with the objectives of the program, identifies the key questions to be explored, and defines key outcomes of interest. It then lays out an appropriate research strategy for answering these questions, which often involves both implementation research to study processes and impact studies to evaluate outcomes and effects. The development of this framework should involve consultations with key stakeholders including policymakers, program design staff, and delivery partners. The effort should include broad input on defining policy objectives, program parameters, and constructing a program logic model or theory about how the program is linked to outcomes of interest.

### ***8.6.2 Systems and processes — Research strategy, monitoring and data collection***

A well developed program logic model — a theory linking a concrete program to well defined outcomes — is essential to a rigorous and practical strategy to answer the most important policy relevant research questions and determine if objectives are being met. A

central part of this strategy should be the development of a monitoring and data collection plan, which includes well *defined and measurable* indicators that are matched to the outcomes of interest in the program. These would be linked to the key research questions some being indicators of “process” and effective implementation, others as indicators of outcomes or effects. Data should come from a range of sources to increase their validity.

For questions related to the process of implementation, the strategy should involve careful documentation of the experiences of program delivery staff and its partners in administering the program from recruitment through service delivery. Implementation research examines the approaches taken at different sites, problems encountered and corrective measures taken. It looks at the implementation of the program and any change in the program’s setting (social, economical, and policy) that might influence its success. Implementation research has several uses, the primary one often being to compare how closely the program as implemented matched the intended program model. If the implemented program differs markedly from the design, then it can be argued that the intended program was not given a “fair-test” in the pilot. In addition, whatever the eventual constituents of the program, there will be a need for documentation on actual services delivered that will help inform the interpretation of subsequent impact results, and facilitate later replication or implementation elsewhere.

For questions about the effects of the program, an impact study or outcomes-based evaluation strategy is required. Often program evaluations of outcomes rely on pre-post analysis — comparing individuals before and after their participation in a program. The challenge with this approach is that the outcomes individuals experience are not the result of program participation alone but are also influenced by a wide range of additional factors (individual motivations, capacities, external economic or social factors). What is required is a counterfactual — a measure of what participants would have experienced in the absence of the program. There are several ways to construct a counterfactual, but it is widely accepted that the best way is through the use *of* random assignment, by which participants are assigned at random to a treatment group that is eligible to receive the intervention or to a control group that is not eligible. Canada has a strong track record of implementing several large-scale demonstration and evaluation projects using random assignment, however, evaluations of this type are not always practical given the nature of the intervention and the desired timelines for implementation. In these cases, other non-experimental approaches to constructing comparison groups can be developed.

### **8.6.3 Resources and expertise — Evaluation design, funding, partnerships**

Developing an evaluation framework and research strategy requires significant expertise but not necessarily onerous investment of resources. There are several cost-effective ways to develop high quality conceptual frameworks and evaluation designs that may be useful in the Ontario context. For instance, a framework could be constructed using an approach called theory of change (Connell and Kubisch, 1998) — a consultative approach where evaluators work with policy and program teams along with other stakeholders to lay out the explicit or implicit theories about why a program should or should not work by specifying in detail all the expected outcomes and critical assumptions built into the program. The logic, timing, and thresholds for expected

implementation and outcomes are then specified. Methods for data collection and analysis are then constructed to track the evolution of the program and its effects.

## **9. RECOMMENDED NEXT STEPS**

Based on the findings of the consultation exercise, we conclude that there is strong support among Ontario stakeholders for the development of a province-wide workplace LES training program. A preliminary feasibility analysis has also highlighted some of the key requirements of a province-wide program in terms of the structures, systems, and processes that would need to be in place to best support the implementation.

An analysis of LES programs in other jurisdictions including Manitoba and Nova Scotia identified six program features deemed by many to be critical to success. The six factors are: a partnership approach, alignment with business needs, customization of training materials, use of trained and certified providers, a blended service delivery model with a service orientation and a co-funding model in which costs are shared by all partners including a significant portion covered by government funding (see page 11 for a full description). These success factors resonated with Ontario key informants including spokespeople for the Ontario Literacy Coalition, ABC Canada, and the Ontario Division of the Canadian Manufacturers and Exporters.

There is strong support and consensus among these and other Ontario key informants for the demonstration and evaluation of an initiative that would test the effectiveness and appropriateness of these program features in the Ontario context. In addition, there was support for an initiative that would address some of the implementation issues highlighted in the preliminary feasibility analysis such as whether an agency governance model is desirable in the Ontario context and how such a model could be integrated into the Employment Ontario regional delivery network.

Together these findings provide a strong rationale for a workplace LES pilot initiative. Though many informants felt that significant investment in infrastructure was required, this need not involve a single large-scale program implementation. The initiative could be comprised of several strategically selected projects that would, when taken together, test the effectiveness and appropriateness of these key program features in the Ontario context. This approach would allow for the gradual development of the necessary capacities and provide a platform from which to develop an Ontario-wide program. Emphasis could be placed on projects that aim to develop a platform for bringing an LES program to scale and that address capacity and feasibility challenges in specific areas such as governance, operations and service delivery and monitoring and accountability.

The initiative could be focused on several strategic objectives including:

- Increasing opportunities for Ontario working age adults to develop their literacy and essential skills
- Generating an Ontario-specific evidence base for promising LES program approaches through rigorous evaluation methods

- Developing a conceptual and policy framework for understanding the role of workplace LES training and its relationship with the ministry's other strategic priorities
- Developing an overarching program logic model and evaluation framework that aims to integrate learning across pilot projects
- Fostering innovation to provide a platform for developing capacity to support a province-wide rollout that would bring workplace LES programs to scale.

Key areas of focus for the initiative could include projects that address one or more of the following:

- Operationalizing and demonstrating the effectiveness of key program features such as engaging employers, conducting needs assessments, and the design and delivery of workplace-based training curriculum;
- Building workplace LES provider capacity and including innovative approaches to training and professional certification;
- Exploring best practices in service delivery and the standardization of information systems, communication processes, and operating procedures;
- Testing governance models and strategies to integrate workplace LES delivery with the existing Ontario employment and training delivery network;
- Developing monitoring processes and collection and data management strategies for maintaining accountability and transparency;
- Building on relevant existing initiatives and pilots that have shown promise such as the Integrated Local Labour Market Planning pilot project;
- Supporting other meta-analyses or collaborative projects that aim to integrate lessons from multiple sources and develop shared conceptual frameworks and logic models for understanding workplace LES.

To maximize utility from pilot projects that involve delivery of services, projects should include a conceptual framework and theory or logic model that underlies the proposed program. An evaluation component that includes both process research (to explore best practices and implementation lessons) and an impact or outcomes evaluation (to measure program effects) is also important.





## Part 3: Workforce LES Programs

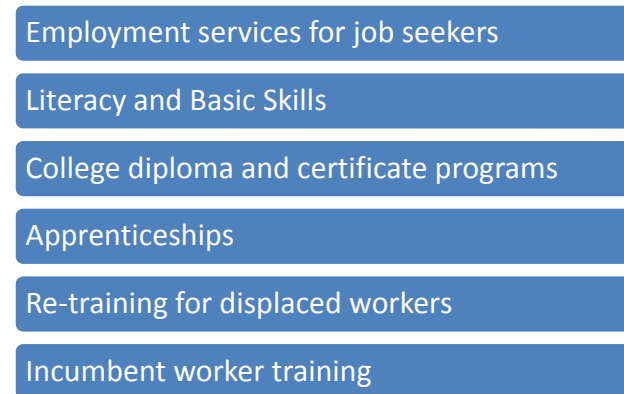
### 10. LITERACY AND ESSENTIAL SKILLS TRAINING AS PART OF A WORKFORCE DEVELOPMENT SYSTEM

#### 10.1 What is workforce employment and training?

Although definitions of workforce development differ across jurisdictions, there is general agreement that workforce development education and training programs include programs that help individuals gain the skills they need to enter the workforce, advance in their careers, or retrain for new occupations. Some definitions also include outcomes from the employer's perspective such as improving individual and firm productivity.

Workforce programs generally include six broad types of initiatives: employment programs; literacy and basic skills programs; college programs; apprenticeships; customized retraining programs; and programs for incumbent workers (Osterman, 2007). Although the types of programs included in the rubric of workforce programs are quite broad, this report is focused specifically on skills upgrading programs for working-age adults with low levels of literacy and other essential skills.

**Figure 1: Categories of workforce employment and training programs**



#### 10.2 How has workforce development evolved?

In recent years, there has been growing recognition of the importance of ensuring individuals have the skills they need to succeed in the new economy. The connection between literacy and essential skills and individual and societal economic well-being is now well established. Yet many Ontario working-age adults do not possess the requisite level of skills observers believe is needed to maintain competitive in a global knowledge-based economy. Recent analysis suggests that the proportion of adults with less than adequate skill levels has remained unchanged for a decade and may continue to remain unchanged over coming decades unless new approaches and new investments are made in our workforce development systems (CCL, 2008).

While in past years a major motivator for addressing this persistent skills gap was skills shortages, with the loss of manufacturing jobs and the restructuring of Ontario's economy, the skills gap has even greater significance. Policymakers are increasingly realizing that literacy and essential skills provide an important foundation for further learning and transitions to new kinds of work. We now know that a significant proportion of displaced Ontario workers require skills upgrading before they are ready for occupational re-training programs.

This increased demand for foundational skills training has underscored the importance of ensuring skills upgrading opportunities are responsive to the needs of working-age adults and provide effective and efficient pathways both to employment and further education and training. The importance of this endeavour is also underscored by evidence from the U.S. and other Canadian jurisdictions that suggest only a small proportion of low-skilled adult learners persist long enough to raise their skills level and to significantly improve their labour market outcomes (Prince, 2008; CCL, 2008). While Ontario does not publish the specific further education and labour market outcomes of Ontario adult learners who start in literacy and basic skills programs, anecdotal evidence suggests that low transition rates to post-secondary programs are also a significant issue here.

Growing awareness of the problems of persistence combined with increased demand among job seekers and laid off workers has reinforced an already existing trend toward more closely integrating adult education programs with employment outcomes. Literacy and essential skills programs across Canada and internationally are placing increasing emphasis on the goal of providing disadvantaged job-seekers with the foundational skills they need to transition to further education and training and obtain decent jobs with opportunities for advancement.

These issues have led to the emergence of new practices and even new types of programs. The next section provides an overview of these developments and presents a framework for conceptualizing them in relationship to new program types.

### **10.3 Learner needs**

As described in Section 3.1, *Reading the Future* (2008) identified six distinct sub groups of adults with literacy skills below what experts have agreed is the necessary level to function effectively in today's economy (see Table 1 for a description of each group). The report then made recommendations on the learning needs of these sub groups based on responses from literacy experts from across Canada.

This section discusses the workforce training recommendations for groups A and B and for unemployed individuals in Group C and D. The recommendations for employed individuals in Group C and Group D relate primarily to workplace-based interventions and are discussed above in Section 3.2.

#### ***Learning needs of Group A and Group B***

According to *Reading the Future*, successful practices suggest that, for members of Group A and Group B, the literacy program should be customized to the individual. Participants can meet with instructors to develop an individual education plan that

outlines literacy activities designed to address their respective skill gaps in literacy. This group needs literacy programs that concentrate on print skills first. Program materials should be relevant to the general interests and career goals of each student — for example, authentic workplace materials or other items such as restaurant menus, notices from schools, television guides and newspapers. The most effective primary mode of instruction for this group is classroom instruction. Most participants in this group will likely require intensive small group instruction by teachers who are trained in structured language approaches to reading.

Classrooms should be set up to facilitate an emphasis on reading exercises and vocabulary-building, teacher-assisted learning, group and independent work, and the delivery of self-directed learning modules. In addition, some of these adults may be able to improve their background knowledge, vocabulary and quality of life by using assistive technology such as text-to-speech devices and books on tape.

Especially for individuals in Group A, such instruction may extend over several years. According to *Reading the Future*, experts estimate that for individuals in Group A, an average of 200 hours of instruction time is required in order to move to Group B.

### ***Learning needs of unemployed individuals in Group C and Group D***

According to *Reading the Future*, individuals in groups C and D are best served by interventions that blend literacy and essential skills upgrading with occupational training. The report identifies three broad approaches:

1. **Blended occupational and high school completion** — One approach is to offer high-school/GED completion attached to an occupational goal such as licensed practical nurse or to sector interests where there is a high local labour market need.
2. **Supported occupational training** — A second approach would support individuals who wish to pursue occupational training even if they do not have a high school diploma. This support could take several forms including pre-course essential skills training, essential skills training embedded in the occupational training, and/or a learning coach available throughout the occupational training.
3. **Stand alone essential skills training** — A third approach could offer essential skills training with a strong emphasis on authentic workplace materials. This approach could be targeted to Employment Insurance recipients or offered as part of a job club for individuals that were not ready for a formal occupationally specific training program.

In contrast to individuals in Group A and B, the learning needs of individuals in Group C and D may be met in relatively short periods of time (75 and 40 instructional hours respectively).

As described in Section 3.3, these recommendations should be seen as tentative. While recommendations are based on consultations with experts across Canada but only seven experts were consulted in total. In addition the report does not provide a discussion of how its conclusions were drawn. For this reason, *Reading the Future* should be

considered a starting point for further discussion about the nuanced learning needs of Canadian low-skilled adults.

## **10.4 Recent developments and key issues**

### ***The rise of workforce intermediaries***

Perhaps the most important development in the workforce field in recent years is the recognition that workforce development systems must meet the needs of both workers and employers. A major finding of the large-scale Jobs Initiative project led by the Annie E. Casey Foundation in the 1990's was that workforce programs are typically relegated to "silos," leading to inefficiencies and poor alignment with regional employer needs. Numerous reports have since confirmed this finding (See Loewen et al. for a review).

As part of the effort to break down these silos, "new" actors known as workforce intermediaries have emerged on the workforce development scene. Workforce intermediaries have a dual-customer focus, which aims to address the needs of both workers/individuals and employers while playing the middle ground between the demand and supply sides of the labour market. These organizations act as a broker, a go-between linking employers, service providers and other key institutions. They seek to enhance the quality of employment opportunities for job seekers and incumbent workers and to increase the productivity of the workforce, which appeals to participating employers by improving their competitiveness.

There is now evidence to suggest a dual customer approach can be effective. A recent evaluation of the workforce intermediaries approach conducted by the Annie E. Casey Foundation found evidence that dual customer approaches improve outcomes for both individuals and employers.<sup>7</sup>

For example, one of the most well-known and longest running workforce intermediaries is the Wisconsin Regional Training Partnership (WRTP) which has ties to both labour and employers. WRTP uses a collaborative strategy to ensure that its workforce services are beneficial to both job seekers and employers. A non-profit association of more than 125 labour unions and employers, WRTP sees its role as one of an intermediary encouraging labour management collaboration within companies and forming partnerships within key employment sectors, partnerships that bring together businesses, labour unions and community partners.

The evaluation found that between 1995 and 2000, the WRTP's worksite-partners invested more than \$100 million in education and training. That investment has paid off in the form of higher productivity, higher wages, and the creation of some 6,000 new jobs. In addition, the WRTP has placed more than 1,300 community residents in good jobs that offer higher than average starting wages as well as health insurance, pension, and other benefits. Of workers placed in jobs, 90 percent are people of color, and about half received some form of public assistance before becoming gainfully employed.

---

<sup>7</sup> Workforce Intermediaries: Powering Regional Economies in the New Century," 2005, Annie E. Casey Foundation. [www.aecf.org/upload/PublicationFiles/FES362\\_2H336.pdf](http://www.aecf.org/upload/PublicationFiles/FES362_2H336.pdf)

Some Canadian jurisdictions are now exploring a dual customer approach to workforce development. For example Manitoba recently launched a research project to explore the feasibility of building on existing programs and services to create a workforce intermediary that would take a dual customer approach to ensuring disadvantaged individuals benefit from economic development activities in sectors expected to be future growth industries. Engaging employers is a key objective of Employment Ontario, Ontario's new network of employment and training services.

### ***Sectoral approaches***

Although some workforce development initiatives focus on building relationships with individual employers, an increasingly common approach taken by workforce intermediaries is a regionally-based sector-specific approach that brings together all employers in a specific industry. The objectives of sectoral initiatives include:

- organizing employers within a specific industry to address its workforce needs;
- aligning educational opportunities with economic development objectives and providing training to help workers access higher-skilled jobs;
- promoting systemic change that achieves ongoing benefits for the industry, workers, and communities (Conway, Blair, Dawson, and Dworak-Munoz, 2007).

There is growing evidence to suggest that sectoral approaches are more effective than traditional approaches. In 2003, based on promising earlier findings from two large scale implementation or "process" evaluations of nine sectoral programs (Aspen Institute, 2003) Public/Private Ventures (P/PV), an American non-profit agency, launched the Sectoral Employment Impact Study with funding from the Charles Stewart Mott Foundation.

Researchers set out to conduct a rigorous random assignment evaluation that would answer the question: Can well-implemented, sector-focused training programs make a difference to the earnings of low-income disadvantaged workers and job seekers? Through nominations from leaders in the workforce development field, P/PV identified organizations that had been operating workforce programs for at least three years, had well-implemented training that served more than 100 people each year and targeted an occupation or cluster of occupations with jobs that paid a decent wage.<sup>8</sup> Programs provided a range of services including training that integrated technical, work readiness and basic skills training and offered individual case management services when needed.

P/PV used an experimental research design to bring as much rigor as possible to the question of whether these types of sector-focused training programs result in significant gains for participants. In total, 1,285 people were recruited across the three sites. Half were randomly selected to participate in the program (the treatment group); the remaining

---

<sup>8</sup> Three organizations were selected: Jewish Vocational Service, a community-based nonprofit in Boston; Per Scholas, a social venture in the Bronx in New York City; and the Wisconsin Regional Training Partnership in Milwaukee, an association of employers and unions in the region.

half were assigned to the control group and could not receive services from study sites for the next 24 months but were free to receive services from other employment programs.

Impacts at the two year mark were measured by comparing the progress made by people in the treatment group with that made by those in the control group. Because assignment to these groups was random, any differences between the treatments and controls can be attributed to participation in the sector-focused training program. While further analysis is still under way, several key findings have emerged.

1. Participants in sector-focused training programs earned significantly more (18.4%) than the control group members, with most of the earnings gains taking place in the second year.
2. Participants in sector-focused training programs were more likely to work and, in the second year, worked more consistently.
3. By the second year, employed program participants were working more hours and were earning higher hourly wages than employed controls.

These findings suggest that training programs focused on industry-specific needs — with employers who are substantively involved in the program’s design and implementation — can produce positive outcomes for participants. In addition to providing training focused on specific industry needs, programs in this study integrated technical, work readiness and basic skills training and offered individual case management services when needed.

### ***Pathways approaches***

A third more specific development related to curriculum design is the emergence of pathways approaches. Many jurisdictions including Ontario have responded to the problems of participation and persistence by launching initiatives that aim to create more integrated and transparent learner pathways. The recent Learner Skill Attainment initiative identified five basic pathways pursued by LBS learners: civic participation, employment, credit study towards a high school diploma, college post-secondary and apprenticeship programs. The Initiative also found that there are core competencies common across the transition paths. This finding helped set the stage for an ambitious project to design a province-wide LBS curriculum that is building on a base of existing assessment tools and materials and include new elements organized around essential skills and the five transition paths. (See Section 2 for more detail).

There has also been significant work done to create pathways from LBS programs to apprenticeships programs. A 2008 report by the College Sector Upgrading Committee entitled “Filling the Gap” looks at how community-based agencies can support the aspiring apprentices and documents innovative programs. The key recommendation related to LBS delivery was to use contextualized, trade-specific LBS upgrading materials. Contextualized learning can be either linear with the learner completing contextualized LBS training and then entering an apprenticeship or integrated which seamlessly weaves together LBS upgrading with trade-specific training. The report argues that either approach to contextualization will facilitate higher retention. In addition, key informants from the College Sector described research that the College

Sector Committee on Academic Upgrading has conducted research on how academic upgrading programs can support apprenticeship and pre-apprenticeship programming.

Another new initiative of the Ontario government is the Adult Learning Centre Demonstration project. This recently launched project is seeking innovative community solutions that demonstrate how collaborative partnerships can result in ways to deliver better coordinated, more widely accessible and more effective adult education and training programs and services. A number of proposals have just been selected to begin two year demonstration projects.

In addition there are several other innovative programs that aim to build connections across existing programs. For example Seneca College and St. Christopher House are working on a project that would encourage LBS learners at St. Christopher House to make the transition to Seneca College by having a Seneca program staff person on site at St. Christopher House to provide information, support and counselling and to make the transition to college more coordinated and streamlined.

Finally, there are “pathways” programs such as the “pre” or “fundamentals” two semester programs at most Ontario colleges. These are primarily designed for students with literacy and numeracy skills that are not strong enough to move directly into a two or three year career program at college. There are currently “pre” programs in areas such as Health, Technology, and Business. Program content is balanced with about 70% literacy education and about 30% introductory career courses. Supports include one-on-one tutoring and help developing learning strategies. Learners have the opportunity to explore careers in their chosen field and the ability to obtain credits towards the degree program.

Another “pathways” approach emphasises comprehensive initiatives that integrate entire education pathways starting with foundation skills programs, including diploma programs and extending all the way to degree programs. Large-scale comprehensive *career pathways* initiatives have been recently launched in Washington, Oregon, Ohio and Massachusetts. These initiatives are sector-specific career ladders linked to a sequence of modular or “stacked” educational opportunities. A major innovation of the career pathways approach is that literacy training is offered in the context of occupational training which accelerates learning and ensures that the transition from basic training to post-secondary is as seamless as possible (Duke, Martinson, and Strawn, 2006). In addition to providing training focused on specific industry needs, programs in this study integrated technical, work readiness and basic skills training and offered individual case management services when needed. (See Section 2 for more detail.)

Washington State’s Integrated Basic Education and Skills Training (I-BEST) program is probably the most well-established Career Pathways initiative in the United States. I-BEST began as a demonstration project with ten sites and a strong commitment to evaluation and continuous improvement. Initial results were impressive. Students in the (I-BEST) pilots earned five times more college credits and were 15 times more likely to complete a workforce education program than other adult learners with the same goals (Jenkins and Prince, 2005). There are now over 70 I-BEST programs in Washington State. A recent report found that in 2006-07, adult basic education student participation in college-level programs has jumped 33 percent since I-BEST began (Prince, 2008).

## 10.5 Effective Practices

Until recently adult education programs and workforce development programs were largely separate. Workforce development programs emphasized rapid attachment to the labour market and left low-skilled individuals with few opportunities to gain the skills needed for advancement. Adult education programs have always provided skills upgrading but because they were often disconnected from the local labour market, learners often did not see any improvement in their labour market outcomes (Gilothe, 2004). As the above discussion suggests, there is now emerging evidence to suggest a change in direction is warranted and that this direction includes comprehensive, sector-focused programs. This change is already underway in Ontario and other jurisdictions. Figure Two provides a summary of effective practices associated with a comprehensive sectoral-approach based on the analysis presented in the previous section.

**Figure 2: Effective workforce development practices**

### Focus on in-demand industries and occupations

- Workforce development initiatives should target jobs that are in-demand and of importance in the local labour market. In addition, targeted jobs should offer benefits, opportunities for advancement, and a living wage.

### Offer a dual customer focus

- Initiative should address the needs of both workers and employers seeking to enhance the quality of employment opportunities and to increase the productivity of the workforce.

### Create Partnerships

- Community-based organizations, colleges, government, unions, and especially employers need to collaborate to create advancement opportunities and ensure a region's economic well-being. Labour market intermediaries bring diverse stakeholders together.

### Engage employers

- Employers should be involved from beginning to end in designing the initiative. They can identify jobs, identify desired skills, help design training curricula, offer jobs to participants.

### Offer integrated and flexible learning opportunities

- Integrate and accelerate learning by offering literacy and essential skills training in an occupationally specific context. Develop flexible approaches that are responsive to the needs of working-age adults by designing modular based curricula with multiple entry and exit points.

### Offer comprehensive learner supports

- Provide a range of support services (child care, transportation and financial assistance, drug / substance abuse counseling etc.) to help clients overcome barriers to participation and to increase the likelihood of persistence and successful completion

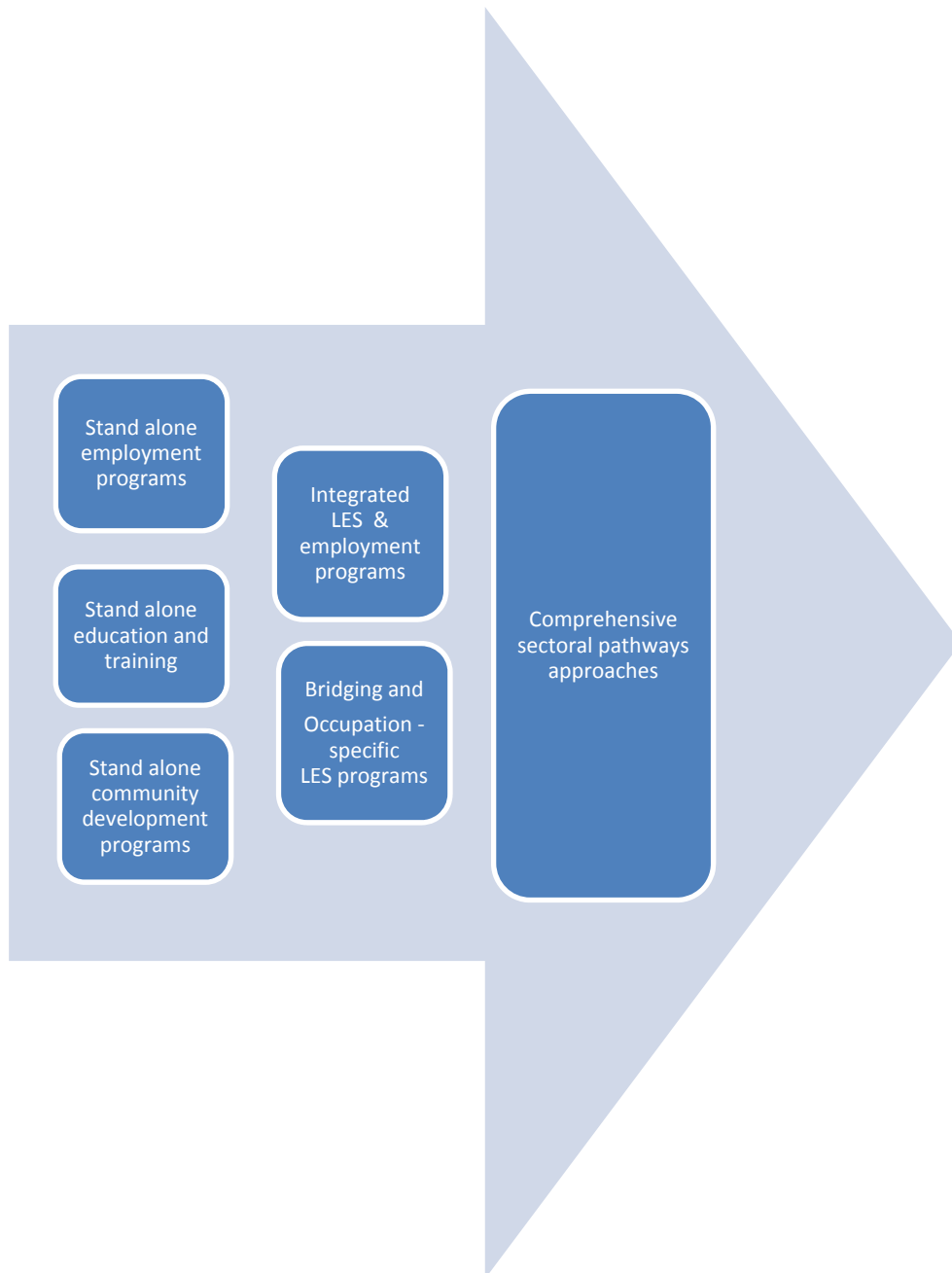
### Provide Post-Employment Support

- Provide supports, mentoring, and/or follow-up counseling after individuals leave the program to increase job retention and support advancement.



Figure Three provides a conceptual map of workforce programs situating them on a continuum which ranges in comprehensiveness from traditional stand alone employment and training programs to programs delivered in an integrated employment and occupationally-specific context to fully developed career pathways approaches. The next section of this report takes a closer look at workforce LES programs that move beyond stand alone employment and training programs towards more comprehensive approaches.

**Figure 3: A continuum of integrated and comprehensive pathways approaches**



## **11. PROMISING APPROACHES TO WORKFORCE DEVELOPMENT**

This section highlights innovative approaches to workforce development in Ontario and in other jurisdictions in Canada and the United States.

### **11.1 Integrated LES and employment: The Foundations Program**

The Foundations Workplace Skills Program, delivered by Douglas College in British Columbia is a skill exploration program designed to assist unemployed individuals re-enter the labour market. This program offers a flexible three-phase approach that clients can enter and exit based on need. Phase one is a skills assessment phase (using the Test of Workplace Essential Skills TOWES) that provides clients with an awareness of their current skill level so they can make informed planning choices that lead to success in the workplace. At the end of this phase individuals develop an action plan that guides program activities in the next two phases.

Phase two involves skills exploration and portfolio development. Participants learn about the HRSDC's nine Essential Skills and how to assess their current skill levels in light of future occupational requirements. Participants also develop a Skills Portfolio that includes past work and education history, personal accomplishments, and volunteer experiences. At the end of phase two, participants prepare a plan of action to address any skill gaps. Phase two completion is based on completing an individual Skills Portfolio, conducting occupational research, determining which skills development modules to take in phase three.

Phase three involves participants following through on their action plan, taking skill training modules as needed, writing a post TOWES test and attending an exit counselling session that involves planning for next steps.

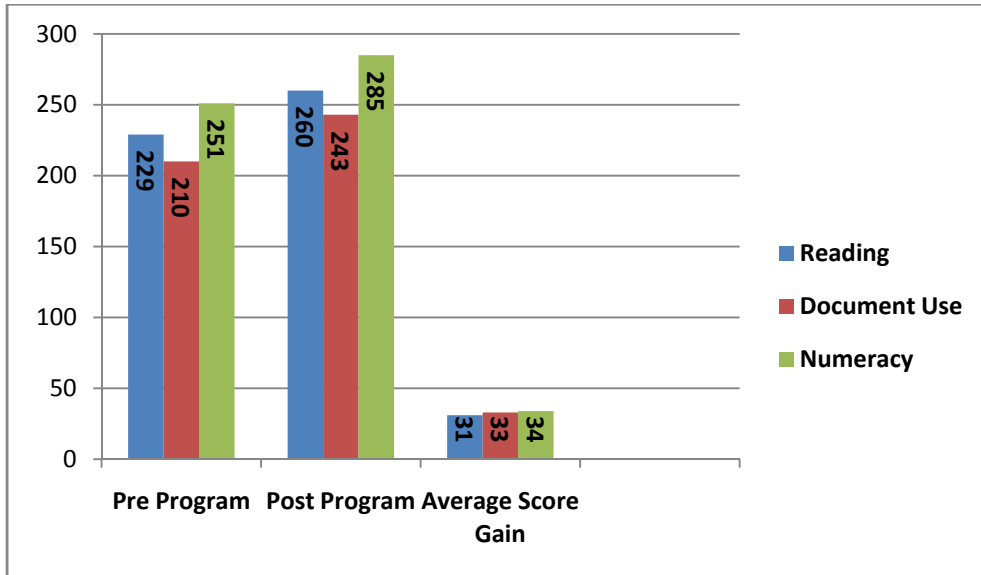
While the stated program goal is to raise TOWES scores by 5-20 points, as Figure 4 shows, the pre-program vs. post-program average score gains for program participants in 2008 were: Reading Text: 31; Document Use: 33; and Numeracy: 34. To help put these gains in context, the score difference between each TOWES level is 50 points. This means that clients are gaining on average of more than half of an entire level. Figure 5 shows the score gains for three different target groups: non-immigrants (English First Language); immigrants (English second language); and Aboriginals. As this chart shows average score gains for all three groups are substantial.

In addition, the 2008 program evaluation identified several qualitative benefits including increased in confidence for participants after seeing their score gains. As the 2008 program report notes:

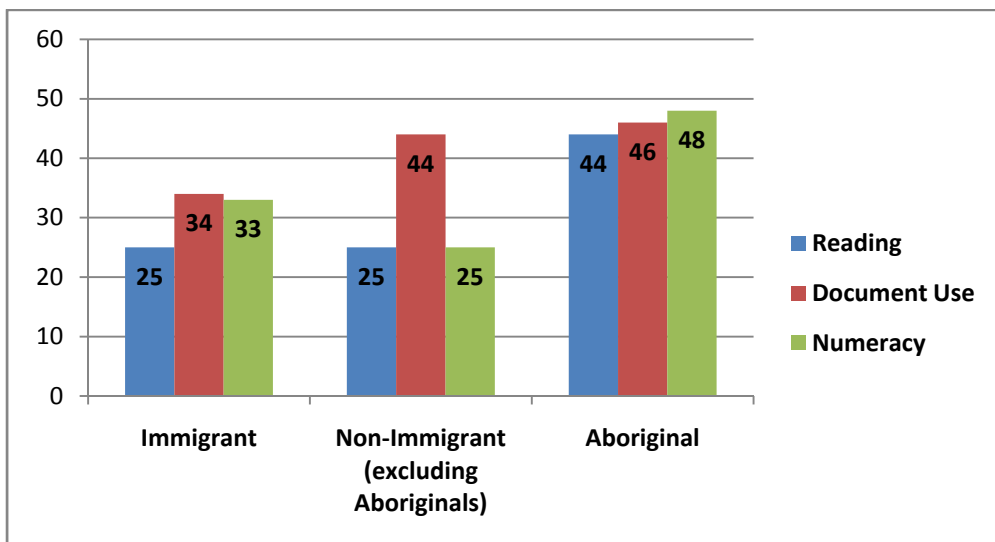
“Many of our learners struggle in traditional educational settings and are therefore extremely surprised and pleased when they recognize their ability to succeed quickly with learning. This customized approach using individual, career-focused Learning Plans has allowed us to serve populations that are frequently unsuccessful in mainstream class environments. Additionally, clients benefit from “fast tracking” their way to success. Rather than taking a general GED-type approach, which clients often believe is beyond their ability

or time frame, clients are able to focus in on only those skills required for their occupational goal and quickly enter their occupation of choice.”

**Figure 4: TOWES score gain averages for 2008 Foundations Workplace Skills Program participants based on an intervention 2-11 weeks in duration**



**Figure 5: TOWES score gain averages for 2008 Foundations Workplace Skills Program participants for three sub-groups**



**Source:** Foundations Workplace Skills Program, Third Year Program Report, Douglas College (2008).

## 11.2 Worker Support and Advancement Centre Model

The Worker Support and Advancement Centre Model (WASC) is an innovative approach to career counselling that aims to help workers take strategic steps to advance in the labour market. The WASC approach involves the provision of advancement and work support services provided by career coaches who work closely with low wage workers to identify their short-term and long-term goals, and the steps they need to take to reach them. Career coaches bring a combination of technical knowledge of the labour market, education and training opportunities, along with a personal, motivational touch to help low wage individuals advance in the labour market. This option addresses the notion that the best path toward advancement is sometimes complicated and may be difficult to navigate on one's own.<sup>9</sup>

Workers in low-level jobs may need assistance to take advantage of advancement opportunities, especially if doing so involves overcoming barriers such as education and skills deficits, lack of child care, and lack of access to the social and professional networks where information about better-paying job openings is circulated. To help low-wage workers move into new jobs and careers, staff must have an in-depth understanding of the labour market, connections to employers, knowledge of which sectors have better-paying jobs, and a good sense of what kinds of training programs can lead people to a better advancement trajectory.

The WASC program is currently being delivered by integrated teams of workforce and human services professionals in four sites: Dayton, Ohio; San Diego, California; Bridgeport, Connecticut; and Fort Worth, Texas. A rigorous evaluation is underway to test the program's effectiveness using a random assignment research design, in which low-wage workers are assigned, using a lottery-like process, to either the Worker Advancement Support Centre group or a control group which is not eligible for services. While the evaluation is still in progress, the key findings to date is that advancement programs for low-wage workers should be prepared to help participants get the training necessary to move into a new career. While seeking more hours or a promotion with a current employer may be a faster advancement goal to obtain, according to career coaches, it was not the path to advancement that was chosen by most program participants. Instead, most participants wanted to leave their jobs and move into a new career. For the vast majority of participants moving into a new career required additional training.

The program has several key features:

- Caseload sizes are kept small to facilitate close relationships with customers and a focus on substantive progress, rather than the more typical "case management" function of completing paperwork.
- Services are typically located in existing employment counselling services to build on existing resources.
- Career coaches tailor their services to different types of customers and their particular needs. Some know precisely which training courses they needed in

---

<sup>9</sup> See Bernhardt, Morris, Hancock, and Scott (2001) and Martinson and Strawn (2003).

order to reach their career goals; some were already in the midst of training or education and others know only that they wanted to leave their jobs but had no idea what they wanted to do next. For those with a clear direction and an interest in education or training, coaches facilitated access to training; for those already in education or training, coaches facilitated access to funding and provided incentives to complete their programs; and for those without a clear direction, coaches used career assessments, labour market information, and job searches and job-shadowing to help customers find their strengths and interests.

- Given that participants will have a varied set of needs, no single method of advancement coaching, and no uniform type of service delivery will be suitable for everyone. Career coaches must draw from a variety of “tools” at their disposal and work with each customer individually to develop a successful advancement plan.
- Finally and perhaps most importantly, coaches encourage, guide, and smooth the way for their customers, allowing them to focus on achieving their goals. Every interaction with a customer should leave the customer with a tangible benefit or a specific next step in realizing his or her advancement plan. A finding of the U.S. evaluation was that both the interpersonal style and the “technical” qualifications of staff mattered a great deal. Success can ride on whether the coach can develop a relationship of openness and trust with customers, perhaps as much as it depends on the career coach’s knowledge of labour market information and training programs. Finding coaches who can deliver on both technical knowledge and emotional support is critical.

### **11.3 Ontario pathways programs**

As described in the first section of this report, there are several recent and ongoing Ontario initiatives that focus on developing strategies to improve access, transitions and completion rates of literacy and basic skills (LBS) and academic upgrading learners.

The Literacy and Basic Skills (LBS) Program is part of Employment Ontario, the province’s integrated employment and training network. The program assists learners to develop the literacy, numeracy, and other essential skills they need to achieve their goals related to further education, training, employment or independence.

The LBS Program serves individuals whose literacy skills are below Grade 12 of the Ontario Curriculum and who have a facility in English or French. Approximately 50,000 learners were served by the LBS Program in 2008-09. About 30 per cent of these learners are Ontario Works recipients.

The LBS Program is learner-centred, goal-directed and outcomes-based. Learner-centred means that learners make choices in terms of the goals of their learning program. In addition, learners are included in decisions affecting the way that learning is assessed. There is also flexibility in terms of the instructional method depending on the preferences and needs of learners. Goal-directed means that the program is focused on helping learners to develop the literacy, numeracy and other essential skills they need to achieve

their goals related to further education or training, employment or independence. The LBS Program is outcomes-based in that it prepares learners to demonstrate their skills in measurable ways, using assessment methods that are accepted in diverse training and employment settings as evidence of skill attainment.

Training services offered through the Literacy and Basic Skills (LBS) Program are delivered through a third-party network of approximately 300 government-funded agencies including colleges of applied arts and technology, school boards, and community-based organizations at sites throughout the province. Services are provided throughout the province by agencies that coordinate their work at the community level as part of Employment Ontario through participation in regional planning and coordination.

The orientation and training services funded by the LBS Program includes the following:

- **Information and Referral** provides potential learners with information about LBS as well as other related services in their community.
- **Assessment** ensures that learners receive the training they require by helping them determine their existing literacy and numeracy needs and recognize that they are progressing towards their literacy goals.
- **Training Plan Development** provides learners with an opportunity to develop a plan that identifies specific literacy skills they need to achieve their literacy goals.
- **Training** in the form of literacy instruction is provided by LBS agencies through diverse training approaches and methods that produce measurable results. Approaches include one-to-one tutoring, small group, classroom settings and on-line learning. Agencies have further adapted their services to meet the needs of specific areas, such as inner city neighbourhoods or rural communities.
- **Follow Up** demonstrates the value and effectiveness of the LBS delivery services in meeting the literacy needs of learners by contacting learners at three months and at six months after they leave the program to document their success.
- **Orientation Services**, including various forms of assistance that are provided to individuals to increase their understanding of and readiness for intensive training services through LBS or other programming through Employment Ontario.

The LBS Program also funds organizations that support delivery agencies. There are 27 provincial and regional organizations that provide services such as technology assistance, materials development and practitioner training for LBS delivery agencies. The organizations include the following:

- 16 regional networks;
- four umbrella organizations serving agencies in the Anglophone, Francophone, Aboriginal, and Deaf service streams;

- four sectoral bodies, one each supporting agencies in the school board and school board sectors, and two supporting agencies in the community based sector;
- three service organizations, including one each serving Francophone learners and Aboriginal learners in the development of learning resources, and one organization supporting all four service streams (Anglophone, Francophone, Aboriginal, and Deaf), particularly for technology and e-learning.

A major innovation in the LBS program is the implementation of a Continuous Improvement Performance Management System (CIPMS). The LBS performance management system focuses on the three internationally accepted core measures used in measuring success: Effectiveness, Efficiency and Client Satisfaction. Measures already in place are:

- client satisfaction - determined using a Learner Satisfaction Survey;
- effectiveness — measured by the number of learners who go on to further education, training, or employment.

In 2008-09, 70% of learners went on to further education and training, or employment.

Work is proceeding on developing and implementing additional measures. An effectiveness measure being developed is learner skill attainment through the development of an Ontario Adult Literacy Curriculum.

The new Ontario Adult Literacy Curriculum is intended to improve the capacity to provide adult learners with the right type of training according to their goals and to facilitate transitions to further education, training, and employment. The new curriculum will also respond to demand for enhanced efficiency in instruction and transparency of foundation skills services on the part of next-step stakeholders such as employers and training providers. The new curriculum will be built around five transition paths:

1. Civic Participation
2. Employment
3. Credit study towards an OSSD
4. College Postsecondary
5. Apprenticeship

The curriculum will be structured around six key competencies for successful functioning in the information-rich environment of the 21<sup>st</sup> century community and workplace. Skill attainment will be measured according to the scale of the HRSDC's Essential Skills. The curriculum will be piloted in LBS agencies beginning January 2010 and will be implemented field-wide beginning January 2011.

A major outcome of the implementation of the new curriculum will be that LBS Program deliverers will be able to assist learners to demonstrate their achievements to employers and training providers such as school boards and colleges, based on the common language of essential skills. The new curriculum will be mapped on to the

Ontario Secondary School curriculum and the Canadian Language Benchmarks to foster transparency and further assist transitions.

#### **11.4 Comprehensive career pathways approach: making the pieces fit**

As described in Section 1.3, several U.S. jurisdictions have also responded to the issue of transitions and persistence by developing initiatives that more closely link literacy with occupational training, accelerate learning and create more transparent learner pathways linking foundational training to college post-secondary programs.

A career pathway has been defined in the literature as a “framework for connecting a series of educational programs with integrated work experience and support services, thereby enabling students and workers to combine school and work and advance over time to better jobs and higher levels of education and training” (Agrawal et al., 2007, p. 3). As this definition suggests, a career pathway is not a program, but a systemic framework for a new way of doing business. Career pathways are not just one strategy implemented at a single point along the learning continuum. Rather, career pathways work on multiple fronts to ease student transitions from secondary to postsecondary education and into lifelong learning (Jenkins and Spence, 2006). The ultimate goal is for pathways to provide a seamless system of career exploration, preparation, and skill upgrades linked to academic credits and credentials, available with multiple entry and exit points spanning secondary school, literacy and essential skills training, postsecondary institutions, and workplace training.

Although Career Pathways initiatives differ in scale and scope, this review found that initiatives typically share five key features:

- Demand-driven partnerships — Employers are involved at each step of the way. Partnerships of government, educational institutions, unions and employers ensure that pathway initiatives target jobs that are of importance in the local labour market and offer the potential for workers to advance to higher wages.
- Modular and multi-level pathways — Curriculum is structured in short modules with multiple entry and exit points and with multiple levels of industry-recognized credentials built into the sequencing of the pathway. The first tier typically delivers literacy skills in the context of occupational training; the second tier focuses on short-term certificates; the third tier offers college diplomas; and the fourth tier links to university level bachelor’s programs. Visual roadmaps assist students and workers as they navigate their pathways to better jobs and increased earnings.
- Competency based — Curriculum meets academic standards and defined in terms of competencies required for jobs and further education at the next level. Where possible, curriculum is tied to industry skill standards, certifications or licensing requirements. Job profiling and the use of subject-matter experts is typically used to strengthen the curriculum and ensure programs meet the competency needs of business.



- Wrap around supports — Colleges provide additional supports such as academic counselling, referral to community resources, and childcare to ensure students have the best chance to succeed. In some cases institutional incentives for each student that makes it past key transition points also increase the likelihood of student success.
- Continuous improvement — Career pathways are characterized by extensive reliance on data at all stages of development and represent a shift from seeking best-practice models to a continuous improvement approach that evaluates all activities based on measurable outcomes and established feedback mechanisms.

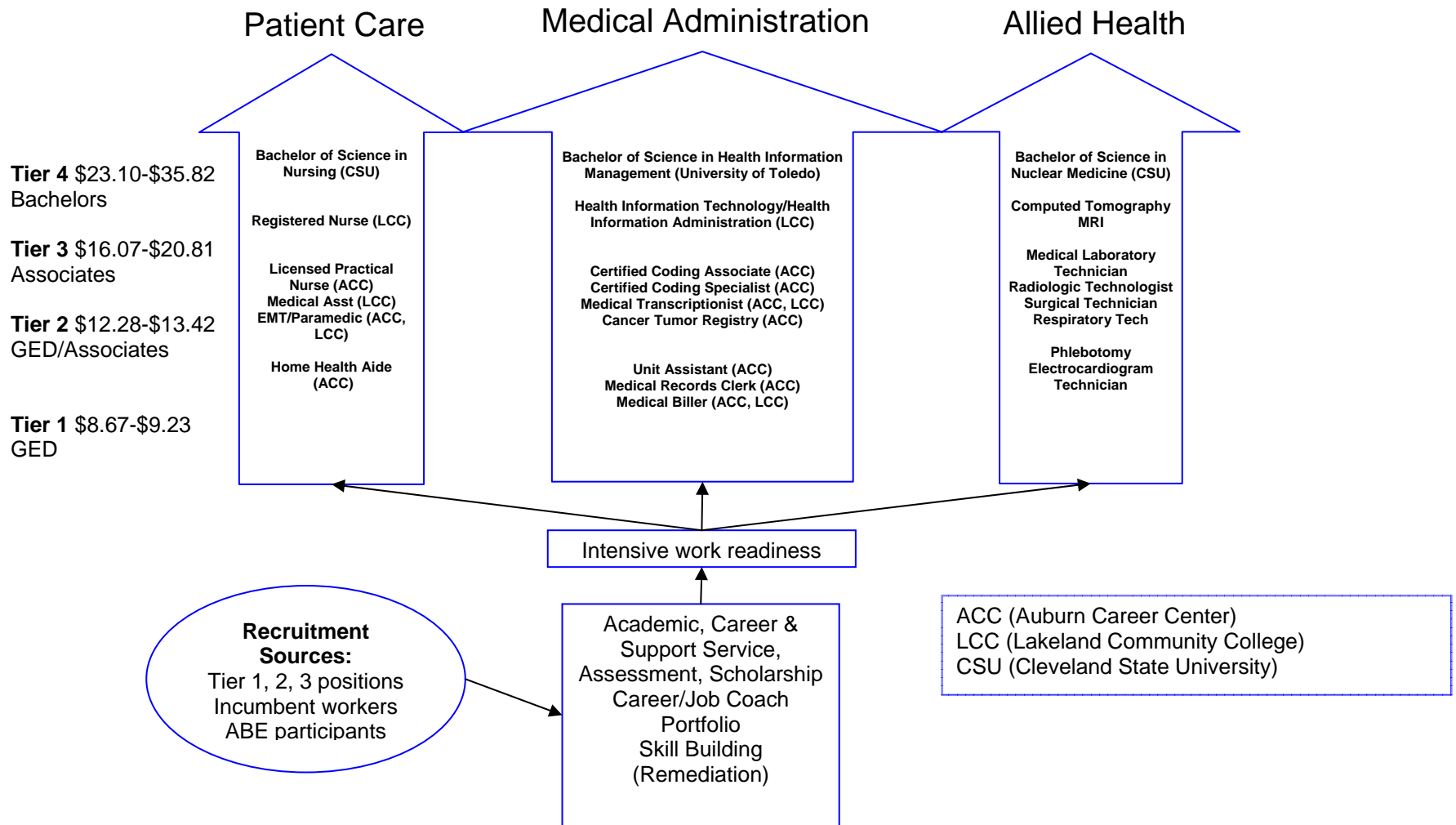
In the United States, several federal and state agencies and a variety of national organizations are actively supporting the efforts of career pathways partnerships (Park and Kim 2006). Washington State’s Integrated Basic Education and Skills Training (I-BEST) program is probably the most well-established Career Pathways initiative in the United States (see Section 1.3). A more recent pathways project is the Kentucky Career Pathways initiative. Spearheaded by the Kentucky Community and Technical College System (KCTCS), this initiative gives grants to local partnerships of community colleges and businesses to develop and implement career maps that focus on job and educational advancement for low-income individuals and meet business needs. Although KCTCS does not require business partners in Career Pathways to provide a cash match, several business partners offer financial support and many are making substantial in-kind donations.<sup>10</sup> Several businesses are providing release time for employees and some are paying tuition. Sixteen colleges have received Career Pathways grants. To date there are 22 pathways: allied health (14); advanced manufacturing (3); construction (2); transportation (1); and business (1). Preliminary results show Career Pathways students have higher retention rates than non-pathways students (Duke, Martinson, and Strawn 2006). KCTS has recently begun a rigorous evaluation of its pathways programs. Students will be tracked through the KCTCS system and into the labour market, using unemployment insurance records for the latter. This will be the most extensive effort to evaluate career pathways to date, and should yield valuable findings.

A third initiative, is unique in that it was lead by a community foundation. The Ohio Bridges to Opportunity Initiative (Bridges) was spearheaded by the Knowledge Works Foundation. The initiative began in 2005 with the Foundation providing nearly one million dollars worth of grants and technical assistance to three Ohio community colleges. After the initial pilot several more colleges launched career pathways. One of the most promising Ohio projects is the Lakeland Community College’s healthcare career pathway (Jenkins and Spence 2006). This pathway includes patient career, medical administration and allied health. See Figure 6 for the career pathways road map. Core committee members were the Auburn Career Center, the Lakeland Community College and the Lake County Job and Family Services One Stop. The pathway was developed based on extensive labour market information research and consultation with employers including all of the area hospitals and a local hospice and health centre.

---

<sup>10</sup> For instance, in Elizabethtown, the college negotiated the use of facilities and equipment with the hospital and the hospital is subsidizing the cost of the nursing professors (salary and health benefits).

**Figure 6: Lakeland Healthcare Career Pathways**



Source: Jenkins and Spence (2006).

The target audience for comprehensive career pathways initiatives tends to be broadly defined and include individuals in a range of circumstances including social assistance recipients, low wage workers and individuals who have been laid off from declining industrial sectors. Some initiatives have a specific emphasis on engaging racial/ethnic minorities as well as immigrants and English language learners.

Most programs, however, have a minimum literacy requirement with learners below a certain level being referred to community-based literacy programs. Thus it is important to note that any type of comprehensive career pathways approach would be a complement to existing services not a substitute. It would be targeting the largest group of low-skilled adults — learners in the mid-to-upper level 2 range. However, those with lower levels of literacy and no post-secondary aspirations may be better suited for existing community learning programs.

## **12. CONSULTATIONS**

This section of the report provides a summary of the findings from a consultation exercise on promising approaches to workforce literacy and essential skills training. This section starts by outlining the objectives and methodology of the consultation exercise.

### **12.1 Consultation objectives and methodology**

The purpose of the consultation phase was to confirm and expand on the results of the literature review phase as well as to address gaps that were identified in the literature:

There were five objectives:

1. Identify the most promising approaches to workforce development according to a broad range of experts in the field
2. Document best available evidence on *how* these promising models meet both learner and employer needs
3. Identify what approaches are *not* working well according to this same group of experts
4. Further describe Ontario's existing workforce training policies and programs
5. Gather preliminary info about feasibility of implementing these promising program models in the Ontario context.

The study used a number of information-gathering techniques and sources. In-depth interviews were conducted with key informants who have in-depth knowledge about workforce LES training in Ontario and/or other jurisdictions. Each of these experts participated in-depth and in some cases multiple interviews. As a next step we asked each expert to recommend individuals who could contribute to this project. Specifically we asked key informants to identify individuals who they considered:

- a) To be experts and individuals who are well known and respected by others in the field of workplace LES.

- b) To be “strategic” thinkers about the issues related to workplace LES and to have viewpoints that are broader than their own specific programs, i.e., are able to talk more generally about the field.
- c) To have a perspective that differs from your own on at least some issues.

Interviews were semi-structured and were guided by an interview protocol (see Appendix C) as well as by issues identified by the participants.

The researchers produced memos for all interviews. The analysis for this report included three steps. First, interview data was organized into categories and themes. The next step was to identify patterns and relationships within and across categories and to draw out implications or findings.

## **12.2 Consultation findings**

### ***12.2.1 Focus on creating pathways and increasing transitions***

Key informants across Canada identified that the creation of pathways and improving transitions as the major focus of work across all adult education sectors. Key informants from Ontario mentioned several large scale recent and ongoing projects that were focusing on developing strategies to improve access, transitions and completion rates of LBS and academic upgrading learners.

Several key informants referred both to the Learner Skill Attainment initiative and the LBS curriculum project that is currently underway. Key informants felt strongly that these projects are innovative, cross-cutting initiatives that have involved providers across all adult education sectors. Key informants also referred to work done to integrate LBS programming with trade-specific training. In addition, key informants from the College Sector described work that colleges are doing to explore how academic upgrading programs can best support both pre-apprenticeship and apprenticeship programming. Key informants also mentioned the Adult Learning Centre Demonstration project describing it as an innovative approach that may have the potential to deliver more effective programming to LBS learners who have the goal of pursuing further education.

In general there was strong consensus among key informants that the Ontario adult learning system had made considerable progress in the past several years in terms of creating learner pathways for adults with low literacy skills and facilitating transitions for these learners both to employment and to further education and training.

### ***12.2.2 Innovative efforts to connect skills upgrading and employment across Canada***

A second major finding is that in Ontario as in most Canadian jurisdictions several recent initiatives have aimed to connect adult education programming with workforce development objectives. While in recent years this connection was driven by skills shortages, in Ontario this connection is now driven by economic restructuring and labour adjustment needs.

Several key informants in Ontario stated that economic restructuring has created an urgent need to link skills upgrading to employment. Recent layoffs in the manufacturing sector have illuminated low levels of literacy and essential skills among the workers in semi-skilled and low-skill jobs. One key informant remarked that MTCU’s Second Career program has created a large

and unprecedented market for academic upgrading programs. A large majority of recently laid off workers who have applied for Ontario's Second Career program are not "college-ready" and will require upgrading before college entry.

Ontario LBS and academic upgrading delivery agencies have responded to this urgent need in innovative ways. For example in Ontario, The Employment Track Express Pilot Project is an example of recent effort to use LBS resources to respond to the employment development needs of Ontario working age adults. The project was developed to support laid-off workers involved with Labour Adjustment Committees in Ontario's Western Region. The purpose of this pilot was to provide an opportunity for laid-off workers to gain familiarity with the use of computers in labour market research, job search and job application, using an approach that introduced and integrated Essential Skills. The College Sector Committee for Adult Upgrading created a computer curriculum which included labour market research and used an Essential Skills approach. Seven community-based literacy agencies and one school board were enlisted to deliver the 60-hour course (15 hours per week for four weeks) to workers referred by Labour Adjustment Committees in nine Western Region communities.

### ***12.2.3 Moving toward integrated services***

The goal of Employment Ontario, the province's new employment and training network, is to integrate training and employment services to provide easy access to training, apprenticeship, and labour market services for job seekers, employees and employers. Many delivery agencies have taken innovative steps in this direction. For example, Seneca College has created a new faculty to better co-ordinate academic upgrading and job training for adults, youth and foreign-trained professionals. Seneca has offered these services for years, but the new faculty will help co-ordinate the many programs and provide one-stop shopping for job hunting and upgrading.

Another example was the recent MTCU partnerships project to promote Essential Skills. The project involved a partnership of the College Sector Committee for Adult Upgrading (CSC), Community Literacy of Ontario (CLO), Ontario Continuing Education School Board Administrators (CESBA) and Ontario Native Literacy Coalition (ONLC). Although these organizations were familiar with each other, they had never had an opportunity to work together to address a common training need. The project allowed these organizations to explore the challenges and opportunities of partnering more closely by focusing on the creation of a common, basic introduction to Essential Skills. According to one key informant, this partnership was a groundbreaking venture.

"The project staff were able to demonstrate the common denominator was commitment to the field of literacy . . . "There was a sincere desire to create something that would support practitioners from all literacy sectors in learning about and integrating Essential Skills into adult literacy programming and, ultimately, to enhance the lives of the people served by our programs."

Although there has been considerable activity in recent years, the transformation towards integrated service delivery is still a work in progress. Many of the "parts" are strong; however they are not yet connected sufficiently to form a coherent whole or networked system.

#### **12.2.4 Innovative approaches to partnerships**

A key finding of the literature review phase of this project was that partnerships are one of the most important critical success factors of a region's workforce development system. The Ontario government has recently made a major commitment to foster meaningful collaboration between partners and key stakeholders at the local level. Some key informants spoke enthusiastically about MTCU's efforts to facilitate this collaborative process by creating an Integrated Local Labour Market Planning (ILLMP) framework. This framework is designed to help communities work together to identify, assess and prioritize their skills and knowledge needs. The preliminary framework is being pilot tested in seven areas across Ontario — Durham Region, Niagara, Peterborough, Ottawa, Windsor, Thunder Bay and Timmins.

The local training boards in these areas will support the integrated planning process by taking on the role of a "secretariat" to an ad hoc group of community leaders called the Labour Market Planning Committee (LMPC).

According to MTCU program materials the ILLMP is about:

- engaging communities, employers and individuals in an in-depth discussion of what their employment and training priorities are;
- developing, in partnership with MTCU, other ministries and other levels of government, an employment and training plan to help inform program, services and budget decisions over time;
- providing communities with the necessary supports, structure and information upon which to develop and implement a strategic employment and training plan.

The pilots will test the ILLMP framework and identify best practices and lessons learned for customizing a labour market planning process for local areas across the province. More specifically, the pilots will aim to understand the key players in local labour market planning. Who are the customers and who are the partners? What is needed to address customer needs? In addition the pilots will address the question of how success should be measured.

Two key informants held up the Durham Region pilot as a highly effective example of a partnership that fostered the meaningful involvement of senior leadership of the key stakeholders in the region's employment and training system including the CEOs of major employers, executive directors of community organizations, and presidents of the region's university and college. See Box 13 for more about the Durham Region pilot.

#### **12.2.5 Developing the "demand-side"**

Another key finding is that a great deal of employment development work continues to be focused on the supply side, with a relatively low level of employer involvement in the total process. The "supply-driven," community-based side of the labour market system is well developed. But as one key informant pointed out, training alone does not necessarily lead to jobs — more work needs to be done on the "demand-side."

As another key informant pointed out, fostering a "dual customer" workforce system that effectively responds to employers' needs is easier said than done. Ontario's workforce development programs are essentially an extension of public welfare and social services systems. These programs focus on meeting the needs of their clients and are not used to talking the

“language of business.” Bridging this process, communications and language gap can be challenging for all parties.

This same key informant pointed out that work is being done in most jurisdictions across Canada to explore ways to involve employers in all aspects of employment development programs, including program design, providing work experiences, and changing recruitment practices. In most cases, however, engagement with employers is uneven and at best could be characterized as a work in progress.

### **Box 13: Integrated Local Labour Market Planning — The Durham Region Pilot**

In June 2008, the Durham Region Local Training Board learned that it had been selected to lead a demonstration pilot project to develop an integrated local labour market planning (ILLMP) model for the Region of Durham as part of the transformation of the Employment Ontario brand.

The Local Training Board was designated as "Secretariat" and lead partner for this project. We conducted extensive labour market research and undertook a broad consultation with the Durham community via a series of 12 focus group sessions between December 2008 and April 2009.

The pilot aimed to build on what already existed and to provide:

- better information based on a shared understanding of community and regional needs, and economic and labour market indicators; improved coordination of services where needed;
- coordinated local focus on customer needs that are responsive to changes in local market conditions;
- consistent information between agencies and service providers.

All aspects of labour market supply and demand have been explored during the course of this project, revealing significant issues, imbalances and service and program gaps. A number of actions have been suggested to address our present and future needs. We have also begun to assess the impact of existing public and private sector programs and services that relate to training and employment, as a starting point in making recommendations to government that in time will influence decisions about the allocation of resources in our region.

A first draft of the Durham Region Integrated Local Labour Market Plan was produced in June. Copies of the draft report were mailed to over 200 people who participated in the consultation process and comments and suggestions were incorporated into a second draft, which appears as a link below. Final changes will be made and a final version will be submitted to the Ministry of Training Colleges and Universities in August.

There is a strong consensus among stakeholders involved that this initiative has been successful both in terms of the relationships it fostered and the value it added to the region's workforce development strategy.

### **12.2.6 Perspectives on promising directions for Ontario**

A final finding relates to key informant opinions about promising directions for Ontario. While key informants agreed with the conclusions of several recent reports on adult learning that Ontario's adult learning system was disconnected and piecemeal, most key informants felt that Ontario had made considerable progress in recent years to create an integrated, coherent and

responsive system for adults with low literacy levels. Key informants talked with enthusiasm about the growing momentum of recent years. Key informants, however, also did agree that more needs to be done.

In terms of potential promising directions for Ontario, there was strong interest in the comprehensive career pathways approach in principle. Although some key informants stated that the career pathways approach was one of the models that informed their program design, most of the key informants interviewed for this project were not actually aware of the career pathways approach. Several key informants asked for more information about pathways projects.

Most key informants were supportive of the career pathways approach because as they pointed out, Ontario is already doing many of the things associated with the pathways approach and that this would be an opportunity to enhance and solidify recent efforts. For example, one key informant stated:

It seems to me in Ontario we are doing some of the pathways things that Oregon and Washington are doing but we do not present it in as comprehensive a fashion as they do. The major accomplishment is making it into a state-wide system, linking local resources, employers, education organizations and employers.

Another key informant pointed out that a recent College Sector Committee report (2006) titled *Innovative Approaches and Promising Directions* made a number of recommendations that addressed transitions and pathways are consistent with the pathways approach. These recommendations included:

- That all colleges make a commitment to develop policies which facilitate the movement of AU students into further training. MTCU should promote (with senior college management) the importance of developing linkages and coordinating programming (Recommendation 5.5).
- Colleges explore potential for implementing AU program advisory committees that include participation from postsecondary and apprenticeship programs, employers, sponsoring agencies and community partners (Recommendation 5.13).
- Colleges develop a provincial information strategy to promote AU. Should build on the notion of pathways and include desirable program features articulated by students in recent focus groups (Recommendation 4.1).

Two key informants also pointed out that there is a recent precedent for a pathways approach in Ontario. They saw the Occupation Specific Language Training (OSLT) pilot project as building on the same principle of delivery basic skills training in the context of occupationally specific training that underlies Washington State's I-BEST program. In this case, the OSLT project is piloting an integrated approach that provides the delivery of language training specific to an occupation. In the opinion of these key informants, experimenting with a similar approach to LBS training would be an opportunity worth pursuing.

Thus the consultation exercise provides strong evidence to suggest that Ontario has implemented many of the elements of a pathways approach but, as one informant put it, has stopped short of a comprehensive province-wide system that links in-demand occupations with integrated and transparent educational pathways that start with literacy and basic skills training delivered in an occupational context and extend seamlessly to college post-secondary programs.



The consultation exercise also suggests that Ontario already has many of the building blocks in place to make the implementation of comprehensive pathways demonstration project a feasible option. The next section addresses this issue in more detail.

### 13. FEASIBILITY ANALYSIS

#### 13.1 Purpose, framework and methodology

The final section of this report is a preliminary analysis of the feasibility of building on, and integrating pathways initiatives currently underway in Ontario (described in Section 1.2) and testing whether this enhanced and more comprehensive approach improves learning and employment outcomes for adults with low literacy skills.

The purpose of a feasibility analysis is to assess whether a proposed program can be successfully implemented within a particular environment and to identify critical success factors and areas of potential risk. Note that as this is a preliminary analysis, we do not address the entire scope of the proposed program but instead concentrate on specific areas that are likely to be critical to program success.

A feasibility analysis usually involves macro-level considerations of *governance and management* along with a series of more refined details associated with operationalizing the *delivery of program services* and plans for maintaining *accountability through a monitoring and evaluation* component. The analysis would then seek to determine if there were appropriate *structures and functions, systems and processes, and resources and expertise* in place to support a successful implementation for each component of the proposed program. Table 5 illustrates a framework for analysis.

To conduct the feasibility analysis we identified key features of a comprehensive career pathways approach and the potential steps to implementation as related to governance, service delivery, and accountability. Box 14 provides an overview of these steps. Next we analyzed the Ontario environment to determine the extent to which capacity currently exists or new investments are needed to develop structures, systems, or resources to support a comprehensive pathways approach to LES training. The analysis is based on a review of publically available information and interviews with key informants.

**Table 5: Framework for assessing key program feasibility issues**

Governance, management	Operations, service delivery	Monitoring, accountability
<ul style="list-style-type: none"> <li>•Lead agencies, management functions</li> <li>•Regional Coordination</li> <li>•Communication</li> <li>•Reporting</li> <li>•Investments</li> </ul>	<ul style="list-style-type: none"> <li>•Program model</li> <li>•Roles and responsibilities</li> <li>•Partnerships</li> <li>•Funding Model</li> <li>•Technical expertise</li> <li>•Information systems</li> </ul>	<ul style="list-style-type: none"> <li>•Conceptual/evaluation framework</li> <li>•Data collection</li> <li>•Evaluation expertise</li> </ul>

### **Box 14: Five steps to developing a career pathways initiative**

The literature generally identifies five broad steps to developing career pathways: gap analysis, partnership planning and development, implementation, continuous improvement and expansion.

#### **1. Gap analysis**

This stage involves identifying and engaging potential partners, such as employers, industry associations, CBOs, foundations, education and training providers, social services, and workforce development agencies. Once potential partners are identified they can be brought together to identify occupations of importance to the local economy and mapping the requirements of entry and advancement in these occupations. Official statistics must be supplemented with direct input from employers. The next step is to analyze the extent that existing education programs and services are supporting student/worker access and advancement in these high-demand fields.

#### **2. Career pathways planning**

Develop an agreed-upon goal based on the gap-analysis findings, and clearly define the expected role and contributions of each partner. Clearly articulate the roles, commitments and contributions of each partner—including employers—through written memoranda of understanding. Identify costs and develop a funding strategy. Establish measurable goals and create a methodology for tracking educational and career outcomes for individuals over time. The major focus of this stage is curriculum redesign and re-alignment of student support services.

#### **3. Implementation**

Operationalize plans for program development, marketing and recruitment, delivery of programs and support services, job development, and outcomes tracking. Often, this means dedicating staff to coordinating the work of the partners. Most initiatives implementing projects in stages, rolling out and beta-testing aspects of programs or policies before broader implementation occurs.

#### **4. Continuous improvement**

Systematically track education and labour market outcomes at each level, and continually modify programs and services to ensure that they produce the desired improvements. Several reports suggest this approach is part of a larger shift in adult education community away from seeking best-practice models to an approach that evaluates all activities based on measurable outcomes and established feedback mechanisms (For example see Jenkins and Spence (2006) and Agrawal et al (2007).

#### **5. Expansion**

Expansion may involve building relationships with other partners; bringing the model to scale to serve larger numbers of students and employers; and/or adapting the approach for replication in other sectors or with other target audiences.

## **13.2 Program environment and key stakeholders**

### ***Building on existing programs and infrastructure***

Understanding the policy and program environment in which an enhanced pathways approach would be piloted tested is an important starting point. A key finding of the literature review is that although pathways initiatives share some core features in practice there is considerable variation across jurisdictions in the specific configuration of these features. This variation occurs because the specific form and content of a pathways initiative will depend not only on the particular industries targeted but critically on the existing infrastructure for education and workforce development in those jurisdictions.

A best practice highlighted in most career pathways how-to-guides is that many key practices of an effective career pathway are often already in place and functioning well. A critical success factor is to avoid “reinvention” and instead align with and compliment these existing practices.

Ontario’s employment and training policy and program environment has recently undergone fundamental transformation. Employment Ontario, the province’s new employment and training network, was designed to operationalize the ministry’s vision of an integrated training and employment system.

The new network builds on the strengths of the current network and is facilitating a process of enhancing services to be more customer-centric, responsive and flexible to local community needs. At maturity the network will link the service quality dimensions of the Performance Management system — Effectiveness, Customer Service and Efficiency — to funding and integrate the five service components into a more flexible, customer-centric access to services. This will lead to a network comprised of community organizations that have demonstrated capability, experience and are effective and responsive working in and with their respective communities in support of the Employment Ontario promise.

This integrated and networked approach is consistent with the comprehensive pathways approach and would in fact provide a solid foundation for the pilot testing of such an initiative. Moreover, a comprehensive career pathways approach can be seen as an extension of Ontario’s existing LBS/OBS program. The LBS program already takes a pathways approach and has already identified five pathways that LBS learners pursue. The comprehensive career pathways approach would fit with and has the potential to strengthen and enhance both the college post-secondary and the apprenticeship pathways.

Similarly the Academic Upgrading program delivered under with OBS funding has several features that are consistent with the comprehensive pathways approach. These features include:

- **Flexibility** — Students leave when they have achieved their goals i.e. programming is not semester, credential or hours based. Most programming is modularized and students take only the course they need. Intake is continuous or based on monthly/weekly block intakes based on availability of space in classrooms.
- **Goal oriented** — All students are assessed at intake and receive individualized training plans. Progress is tracked and reported based on those plans.
- **Support services** — AU programs offer a variety of support services especially academic and personal counselling. In addition, programs have developed creative ways to take advantage of broader college services.

More broadly, a comprehensive pathways approach would complement existing components of the *Skills to Jobs Action Plan*, such as the Ministry’s flagship program, *Second Careers*. In contrast to *Second Careers* which provides financial incentives to increase participation, a comprehensive *Career Pathways* approach focuses on improving learner outcomes such as increased persistence and successful completion rates. In this sense, the two initiatives each address a different aspect of the government’s knowledge and skills policy agenda.

### ***Key stakeholders***

There are numerous organizations with a direct and significant stake or interest in LES workforce training programs in the province. Some of the key provincial level stakeholders include the Ontario Literacy Coalition and the College Sector Committee for Adult Upgrading. Leaders in both organizations were interested in the career pathways approach but strongly emphasized that the success of any initiative would depend on the extent to which it built on existing programs. Several key informants suggested the focus should be on drawing on career pathways lessons learned to assist in “putting the pieces together” to strengthen Ontario’s system.

The Ontario Literacy Coalition (OLC) is a provincial advocacy organization with a mission to lead the discussion on literacy and to support and empower the literacy community. Given the scope of the OLC’s work includes research and resource development as well as bringing stakeholders together to pursue strategic partnership development, the OLC could play a partnership role in any comprehensive pathways initiative. The College Sector Committee for Adult Upgrading (CSC) would also likely be strongly interested in a partnership role. The CSC has been actively engaged in re-orienting its Academic Upgrading programs to have a stronger workforce development focus and to integrate programming with credit-based college programming.

From a business standpoint, the Ontario Division of the Canadian Manufacturers and Exporters — which has a track record of educating employers about the importance of literacy and essential skills training — pointed out the career pathways approach is a flexible approach that could be helpful both in addressing skills shortages as well and in the current economic climate where the most pressing issue is assisting employers in dealing with labour force adjustment issues.

Finally, as one key informant pointed out, the various adult education sectors have been involved in several partnership projects in recent years. A comprehensive pathways approach may provide an opportunity to further build on these new working relationships and developing mutually beneficial solutions to some “sticky” problems. This is consistent with the career pathways best practice literature which suggests that career pathways initiatives can serve as a framework for aligning priorities across agencies. For example, although Washington State colleges had generally good working relationships with other agencies that were serving low-skilled adults, I-BEST provided incentive to redouble efforts to break down silos. Similarly, one report cites a Kentucky educator as saying “this initiative has given us the opportunity to do what we have been talking about for a long time, which is building concrete and tangible stepping stones for students — connecting the dots in the curriculum.”

## **13.3 Governance and management**

### ***Consortia and lead agencies***

In most comprehensive pathways initiatives documented in the literature, overall leadership and strategic coordination comes from college state and technical boards with local colleges leading design, delivery and administration at specific program sites. In a few cases, leadership is situated in a community-based organization.

By definition, initiatives operate with multiple external partners including community organizations, workforce development agencies, employers, business associations and industry groups. As with any collaborative partnership effort, commitment from the top leaders in each organization is critical to success. College presidents, employer CEOs, community agency heads and other leaders can provide momentum at start-up and help keep things moving when progress slows. Several initiatives indicated that involvement of the college presidents and company CEOs signalled a level of commitment that was critical to earning the trust of the other partners, especially faculty and employers.

The Ontario equivalent to a college state and technical board is *Colleges Ontario*. Two key informants suggested that Colleges Ontario would be well-positioned to play a leadership and coordinating in any consortium arrangement. Indeed this is the role that Colleges Ontario is playing with the federally funded demonstration project that is currently underway to test the effectiveness of delivering language training in the occupation-specific training for recent immigrants.

Another strong possibility for leadership would be to build on the success of the local training boards and the Integrated Local Labour Market Planning Pilots. For example the Durham Region local board has done an outstanding job of bringing together the senior leadership of all the key players in the region. Moreover, the region has already completed the first steps of engaging employers and identifying promising industries and occupations in the region.

In addition, one informant pointed out that the new Adult Learning Centre Demonstration project is designed precisely to build the type of multi-partite leadership and coordination capacity that would be necessary to launch a career pathways initiative.

Although most key informants argued that any new pilot project should build on existing capacities where possible, even in a system such as Ontario's that already has many of the pieces in place, a comprehensive pathways approach requires thinking in a new way about program design and delivery. The amount of time and effort involved in coordinating partner activities should not be under-estimated. Many initiatives assign full time government staff to participate in this coordinating role.

### ***Coordination, Communication and Reporting***

A key requirement is systems and processes to support management decisions including communications, reporting and information systems. This is an important area where investments may need to be made. Existing systems as currently configured may not provide the necessary infrastructure to systematically monitor a comprehensive pathways approach. In terms of communications, establishing a well-positioned lead agency would likely simplify this process.

### ***Resources and investments***

Most comprehensive career pathways initiatives started with pilot projects and then built on these successes and early wins. Building comprehensive pathways involves a great deal of planning, partnering and coordination. With government resources at a premium, pilots serve to test the concept and ensure further resources are spent in a cost-effective manner. In addition, well-implemented and rigorously evaluated pilots allow jurisdictions to use early wins to build momentum. Most initiatives start with the partners who are most willing and able to participate.

The literature suggests that comprehensive pathways projects need start up funding for activities such as planning, partnership building, labour market analysis, and curriculum re-design and articulation. However initiatives should also require demonstrated efforts to leverage existing resources and coordinate existing funding more effectively. Several jurisdictions have demonstrated that governments can use comprehensive pathways initiatives to create incentives for local service providers to use existing resources in ways that achieve better economic returns for their citizens, employers and communities (Jenkins and Prince, 2006).

However they may be some incremental program costs. For example, Washington's I-BEST programs are funded at the rate of 1.75 FTE in order to cover the cost of joint curriculum development and two instructors. An additional .25 FTE is provided to cover costs associated with coordination of an integrated program. To qualify for these funds, colleges have to meet a strict set of program requirements and undergo a rigorous evaluation.

### **13.3 Service delivery and operations**

#### ***Roles and responsibilities for service delivery***

Ontario already has considerable capacity and expertise in terms of service delivery. Given the Ontario LBS and academic upgrading curricula already involve many elements of a pathways approach, existing service delivery agencies should be able to build on existing education and training service delivery in a fairly straightforward way. Outreach and intake may require additional coordination and a more formal referral protocol; however these activities should be able to continue primarily through existing channels. Ontario agencies also have considerable expertise in terms of curriculum design.

Enhancing and coordinating wrap around services may require some additional effort. As with existing programs, career pathways learners tend to need an extensive array of support services. Most programs offer standard academic services such as financial, academic, and career guidance, but they also offer more intensive support services than most community college programs (Cohen & Brawer, 2003). These services include case management, transportation and child care assistance, mental health services. In some cases, services are provided through partnerships with community agencies, in others services are provided by the lead institution. Support services played an important role at all career pathways initiatives reviewed in the research literature. For example in their in-depth case study analysis, Bragg et al. (2007) report that in all cases studied, both local administrators and students described comprehensive supports as essential to student persistence. In addition, Bragg et al (2007) also report that while support services were tailored to reflect the needs and geographical realities of each location, they were similar in intent and scope.

#### ***Information systems***

Tracking participants as they move through pathways helps partners identify gaps in programs and services and reveals opportunities for improvement. Many groups struggle to do this because it involves data sharing among different organizations, but tracking students and worker flows is critical both for identifying needed improvements and for establishing benchmarks with which to measure progress. Governments can help by allocating resources and the facilitate data sharing across different organizations.

## 13.4 Monitoring and accountability

### ***Conceptual and evaluation framework***

Implementation of a program, particularly a pilot, should include plans for maintaining accountability through a monitoring process and a comprehensive evaluation component. With a well-defined conceptual framework, a program can be better designed and communicated in a way that meets specific policy objectives. However, to assess whether a specific program or pilot is implemented as planned and whether it effectively achieves its objectives requires evaluation. Ideally, a conceptual and evaluation framework is developed prior to or early in the implementation process to ensure opportunities for learning from the pilot are maximized.

As discussed in the Workplace part of this report, an evaluation framework begins with the objectives of the program, identifies the key questions to be explored, and defines key outcomes of interest. It then lays out an appropriate research strategy for answering these questions, which often involves both implementation research to study processes and impact studies to evaluate outcomes and effects. The development of this framework should involve consultations with key stakeholders including policymakers, program design staff, and delivery partners. The effort should include broad input on defining policy objectives, program parameters, and constructing a program logic model or theory about how the program is linked to outcomes of interest.

### ***Data collection***

A well developed program logic model — a theory linking a concrete program to well-defined outcomes — is essential to a rigorous and practical strategy to answer the most important policy relevant research questions and determine if objectives are being met. A central part of this strategy should be the development of a monitoring and data collection plan, which includes well *defined and measurable* indicators that are matched to the outcomes of interest in the program. These would be linked to the key research questions, some being indicators of “process” and effective implementation, others as indicators of outcomes or effects. Data should come from a range of sources to increase their validity.

### ***Evaluation expertise***

Again as discussed in the Workplace part of this report, developing an evaluation framework and research strategy requires significant expertise but not necessarily onerous investment of resources. There are several cost-effective ways of developing high quality conceptual frameworks and evaluation designs that may be particularly useful in the context of comprehensive pathways pilot project. For instance, a framework could be constructed using an approach called theory of change (Connell and Kubisch, 1998) — a consultative approach where evaluators work with policy and program teams along with other stakeholders to lay out the explicit or implicit theories about why a program should or should not work by specifying in detail all the expected outcomes and critical assumptions built into the program. The logic, timing, and thresholds for expected implementation and outcomes are then specified. Methods for data collection and analysis are then constructed to track the evolution of the program and its effects.

## 14. RECOMMENDED NEXT STEPS

While Ontario has implemented many of the elements of a pathways approach it has stopped short of a comprehensive province-wide system that links in-demand occupations with integrated and transparent educational pathways that start with literacy and basic skills training delivered in an occupational context and extend seamlessly to college post-secondary programs. Based on the findings of the consultation exercise, this report finds that there is strong interest among Ontario stakeholders for a pilot project that demonstrates and evaluates a comprehensive career pathways approach that both builds on and enhances existing pathways programs.

A rigorously evaluated comprehensive pathways demonstration project could explore the extent to which the comprehensive career pathways approach has the potential to contribute to four key Ministry goals:

1. Increasing the percentage of working-age adults who increase their literacy skills
2. Increasing the percentage of working-age adults who undertake and complete PSE
3. Increasing access to relevant training based on local labour market needs
4. Increasing access to skills investment and advancement opportunities to Ontario's working poor and other at-risk groups.

In addition, the research and evaluation component of such a project would address several of MTCU's research priorities including: providing new evidence on how best to help low-skill individuals realize their economic potential in the labour market; testing an innovative approach to increasing participation and persistence in postsecondary education; and identifying Ontario best practices in training, education, and delivery systems.

More broadly, a demonstration project would initiate an evidence-based dialogue about a promising approach that may have the potential both to: strengthen Ontario's economic performance by providing skills upgrading and re-training opportunities to workers in areas that are experiencing economic restructuring and where industries are experiencing skills shortages; and to reduce poverty by providing skills investment and advancement opportunities to Ontario's working poor. In addition, the project may serve as a catalyst to foster the development of strategic partnerships that will strengthen key industries.

The ministry has already funded a number of research and theoretical projects so the next steps could focus on improving learner outcomes. Emphasis could be placed on projects that aim to develop a platform for bringing a comprehensive pathways program to scale and that address capacity and feasibility challenges in specific areas such as governance, operations and service delivery and monitoring and accountability.

The initiative could be focused on several strategic objectives including:

- increasing opportunities for working age adults to develop their literacy and essential skills and make the transition from literacy programming to occupational training;
- generating an Ontario-specific evidence base for promising LES program approaches through rigorous evaluation methods;
- developing a framework for understanding the role of workforce LES training and its relationship with the ministry's other strategic priorities;



- developing an overarching program logic model and evaluation framework that aims to integrate learning across pilot projects;
- fostering innovation to develop capacity to support a province-wide rollout that would bring comprehensive LES pathways programs to scale.

Key areas of focus could include projects that address one or more of the following:

- operationalizing and demonstrating the effectiveness of key program features such as delivering LES upgrading in the context of occupationally specific training programs;
- exploring best practices in service delivery and the standardization of information systems, communication processes, and operating procedures;
- testing governance models and strategies to integrate a comprehensive pathways approach with the existing Ontario employment and training delivery network;
- developing monitoring processes and collection and data management strategies for maintaining accountability and transparency;
- building on relevant existing initiatives and pilots that have shown promise such as the Integrated Local Labour Market Planning pilot project;
- supporting other meta-analyses or collaborative projects that aim to integrate lessons from multiple sources and develop shared conceptual frameworks and logic models for understanding workplace LES.

In order to enhance existing capacities in these areas, MTCU could proceed to implement a number of targeted and well defined pilot projects, possibly in parallel with a demonstration project that would provide the most reliable evidence on the effects of pathway initiatives and occupationally specific training programs. To maximize learning from each of these pilots, it is strongly recommended that MTCU develop a comprehensive evaluation strategy. Though the diversity of potential projects may present a challenge for designing evaluations, one could proceed in multiple stages, with comprehensive designs preceded by Evaluability Assessment (EA) for each project.

EA is a systematic process that helps identify whether program evaluation is justified, feasible, and likely to provide useful information (JJEC, 2003). It is recommended as an initial step to evaluating programs that increases the likelihood that the study will produce timely, relevant and responsive findings for decision makers. EA is a stepping stone toward any type of evaluation. A formal EA process could form the basis of a first phase where each project proposal is assessed and logic models and evaluation design options are explored. This could be used in conjunction with *theory of change* methodology (Connell and Kubisch, 1998) with the aim of building a comprehensive and overriding conceptual and evaluation framework. This would be particularly useful in ensuring that the individual projects fit under the shared policy framework and are consistent with MTCU strategic direction. A second phase would then involve conducting the actual evaluations for each project, possibly in conjunction with, or leading to a larger scale demonstration project that would provide the most reliable evidence on program impacts.



## References

- Ananiadou, K., Jenkins, A., & Wolf, A. (2003). *The benefits to employers of raising workforce basic skill levels: a review of the literature*. London, UK: National Research and Development Centre for Adult Literacy and Numeracy.
- Agrawal, A., Alssid, J. L., Bird, K., Goldberg, M., Hess, S., Jacobs, J., et al. (2007). *Career pathways as a systemic framework: Rethinking education for student success in college and careers*. Phoenix, AZ: League for Innovation in the Community College. Retrieved October 8, 2007, from [http://www.league.org/league/projects/ccti/files/Systemic\\_Framework.pdf](http://www.league.org/league/projects/ccti/files/Systemic_Framework.pdf).
- Bassi, L.J., Ludwig, J., McMurrer, D.P., & Van Buren, M. (2000). *Profiting from learning: Do firms' investments in education and training pay off?* Alexandria, VA: American Society for Training and Development (ASTD).
- Belfiore, M.E. (2002). *Good practice in use*. Toronto, ON: Ontario Literacy Coalition.
- Benseman, J., A Sutton, J. Jander (2005) *Working on the light of evidence as well as aspiration: a literature review of the best available evidence about effective adult literacy, numeracy and language teaching instruction*. Prepared for the Tertiary Education Learning Outcomes Policy Group, Ministry of Education, New Zealand.
- Bernhardt, A., Morris, M., Hancock, M., & Scott, M. (2001). *Divergent paths: Economic mobility in the new American labor market*. New York: Russell Sage.
- Blunt, Adrian. "Workplace Literacy: The Contested Terrains of Policy and Practice." In *Adult Literacy Now!* Edited by Maurice C. Taylor. Toronto: Culture Concepts Inc., 2001. 89-107.
- Bragg, D., & Barnett, E. (Eds). (2006). *Academic pathways to and from the community college* (New Directions for Community Colleges No. 135). San Francisco: Jossey-Bass.
- Bragg, D., & Barnett, E. (2007). *Promising breakthroughs: Year-one evaluation results of Breaking Through*. Boston: Jobs for the Future.
- Bloom, M., Burrows, M., Lafleur, B., & Squires, R. (1997). *The economic benefits of improving literacy skills in the workplace*. Ottawa, ON: Conference Board of Canada.
- Bloom, M., and Campbell, A. (2002). *Success by design: What works in workforce development*. Ottawa, ON: The Conference Board of Canada.
- Bloom, M. & Lafleur, B. (1999). *Turning skills into profit: Economic benefits of workplace education programs*. Ottawa, ON: The Conference Board of Canada.
- Bloomer, T., & Prince, D. (2005, December). *I-BEST: A program integrating adult basic education and workforce training* (Research Report No. 05-2). Olympia, WA: Washington State Board for Community & Technical Colleges. Retrieved November 8, 2008, from [www.sbctc.ctc.edu/docs/data/research\\_reports/resh\\_05-2\\_i-best.doc](http://www.sbctc.ctc.edu/docs/data/research_reports/resh_05-2_i-best.doc).
- Campbell, A. (2003). *Strength from within: Overcoming the barriers to workplace literacy development*. Ottawa, ON: Conference Board of Canada.

- Campbell, A. (2005). Profiting from literacy: Creating a sustainable workplace literacy program. Ottawa, ON: Conference Board of Canada.
- Campbell, A. & Gagnon, N. (2001). Breaching the barriers to workplace literacy. Ottawa, ON: Author.
- CCL (2008). Reading the future: Planning to meet Canada's future literacy needs. Ottawa: Canadian Council on Learning.
- Conway, M, A. Blair, L. Dawson, and L. Dworak-Munoz (2007) Sectoral Strategies for Low Income Workers: Lessons from the Field. Workforce Strategies Initiative, the Aspen Institute.
- Desjardins, R., Y. Clermont, T. S. Murray, and P. Werquin (2005). Learning a Living: First Results of the Adult Literacy and Life Skills Survey Adult Literacy and Life Skills Survey 2005.
- Duke, A., Martinson, K. and Strawn, J. "Wising Up: How Government Can Partner with Business to Increase Skills and Advance Low Wage Workers." (Washington, D.C.: Center for Law and Social Policy, 2006).
- Folinsbee, S., "Briefing Paper: Literacy and the Canadian Workforce," May 2001. Retrieved December 2006 from [www.nald.ca/library/research/mcl/brief/brief.PDF](http://www.nald.ca/library/research/mcl/brief/brief.PDF).
- Hawley, Josh and Sommers, Dixie (August 2005). Ohio Bridges to Opportunity Initiative Career Pathways Year One Evaluation Report, Unpublished report to the KnowledgeWorks Foundation (cited in Jenkins 2006).
- Henle, T., Jenkins, D., and Smith, W. "Bridges to Careers for Low-Skilled Adults. A Program Development Guide." (Chicago, IL: Women Employed Institute, 2005).
- Hollenbeck, K. M., & Huang, W. (2003). Net impact and benefit-cost estimates of the workforce development system in Washington State (Technical Report No. TR03-018). Kalamazoo, MI: W.E. Upjohn Institute for Employment Research. Retrieved November 8, 2008, from [www.upjohninstitute.org/publications/tr/tr03-018.pdf](http://www.upjohninstitute.org/publications/tr/tr03-018.pdf).
- Hollenback (2007) The Benefits of the Massachusetts Workforce Training Fund. Research and Evaluation Brief: Commonwealth Corporation Volume 4, Issue 8.
- Hughes, K. & Karp, M. "Strengthening Transitions by Encouraging Career Pathways: A Look at State Policies and Practices." (New York: Columbia University, Community College Research Center, 2006).
- Jackson, Nancy. "Reading Work: A Social Practice Approach to Workplace Literacies." In Workplace Literacy: National and International Perspectives on Research and Practice. Toronto: Ontario Literacy Coalition, August 2003. 62-64.
- Jenkins, D., & Spence, C. (2006). The career pathways how-to guide. New York: Workforce Strategy Center. Retrieved November 8, 2008, from [www.workforcestrategy.org/html/publication/66](http://www.workforcestrategy.org/html/publication/66).
- Jenkins, D. "What Community College Policies and Practices Are Effective in Promoting Student Success? A Study of High- and Low-Impact Institutions." (New York: Columbia University, Community College Research Center, 2006).

- Kelly, S. (1999). Workplace education works: The results of an outcome evaluation study of the Nova Scotia workplace education initiative. Halifax, NS: Nova Scotia Department of Education.
- Kelly, D. A. Azoulay, A. Debus B. George L.M. Parent P. Petkov (2009) Canada's Training Ground: SMEs' \$18 Billion Investment in the Nation's Workforce. Ottawa: Canadian Federation for Independent Business.
- Kuji-Shikatani, K and R. Zorzi (2007). Impact of Workplace-Supported Literacy and Essential Skills Enhancement in Small and Medium Size Businesses in Canada. Ottawa: Strategic Policy Research Directorate, Department of Human Resources and Social Development.
- LaLonde, Robert, J. The Promise of Public-Sector-Sponsored Training Programs, *Journal of Economic Perspectives*, Vol. 9 No. 2 Spring, 1995 149-168.
- Long, E. (1997). The impact of basic skills programs on Canadian workplaces: Results of a national study for ABC CANADA Literacy Foundation. Toronto, ON: ABC CANADA.
- Manning, A. (2003). U.S. adult literacy programs: Making a difference—A Review of Research on Positive Outcomes Achieved by Literacy Programs and the People They Serve. Syracuse, NY: U.S. Programs Division of ProLiteracy Worldwide.
- Mazzeo, C., Roberts, B., Spence, C. and Strawn, J. "Working Together: Aligning State Systems and Policies for Individual and Regional Prosperity." (New York: Workforce Strategy Center, 2006).
- Ontario Literacy Coalition (2009) Unpublished preliminary positioning paper on workplace literacy in Ontario submitted to the Ministry of Training Colleges and Universities.
- Park, R., Ernst, S., & Kim E. (2007). Moving beyond the GED: Low-skilled adult transition to occupational pathways at community colleges leading to family-supporting careers research synthesis. St. Paul: University of Minnesota, National Research Center for Career and Technical Education.
- Plett, L. (2007) Programs in the workplace: how to increase employer support. Ottawa: Canadian Council on Social Development. Retrieved on May 15 2009 at [www.ccsd.ca/pubs/2007/literacy](http://www.ccsd.ca/pubs/2007/literacy).
- Praxis Research and Consulting (2008) Impacts of Workplace Supported Literacy and Essential Skills Enhancement in Small and Medium-sized Businesses in Canada. Ottawa: Human Resources and Social Development Canada.
- Prince, D., & Jenkins, D. (2005) *Building pathways to success for low-skill adult students: Lessons for community college policy and practice from a longitudinal student tracking study* (CCRC Brief No. 25). New York: Columbia University, Teachers College, Community College Research Center. Retrieved October 8, 2007, from <http://ccrc.tc.columbia.edu/Publication.asp?UID=288>.
- Riddell, C.W. (2007). The Impact of Education on Economic and Social Outcomes: An Overview of Recent Advances in Economics in Fulfilling Potential, Creating Success: Perspectives on Human Capital Development edited by G. Picot, R. Saunders and A. Sweetman. Montreal: McGill-Queen's University Press.

- Roberts, P and R. Gowan (2009) Canadian Literature Review and Bibliography: Working Paper. Ottawa: Canadian Council on Social Development.
- Tetarenko (2008) Foundations Workplace Skills Programs Final Report 2008. Douglas College Vancouver B.C.
- Tessler, Betsy L., David Seith, and Zawadi Rucks. 2008. "Moving from Jobs to Careers Engaging Low-Wage Workers in Career Advancement " Manpower Demonstration and Research Corporation, New York.
- Wignall, L (2007). Joining up the dots: a picture of workplace literacy in Australia. Paper presented at Skills and Learning at Work for BC Conference on October 25, 2007 Vancouver, BC.
- Wolfe, B. and R. Haveman. (2001). Accounting for the social and non-market benefits of education. In Contribution of Human and Social Capital to Sustained Economic Growth and Well-being. Ed. J. Helliwell. Vancouver: UBC Press.

## Appendix A : Case study summary chart

### General Literacy Model

Prov	Firm	Industry	Description	Employee
AB	City of Edmonton	Public Service	Computer, reading, writing, math	Various
AB	Stelco Steel	Steel	Computer, reading, writing, math	Various
AB	Molson Canada	Brewery	Computer, reading, writing, GED prep,	Production
BC	The Slocan Group	Forestry	Computer, reading, writing, math GED prep	Production
BC	The Teck Cominco	Mining	Computer, reading, writing, math, MS Office, stress management.	Production
BC	Vancouver	Public Service	ESL and communication training.	Various
BC	City of Port Moody	Public Service	Computer, reading, writing, math	Various
MB	Assiniboia Downs.	Gaming	Computer, reading, writing, math GED prep, academic upgrading, ESL	Various
MB	Loewen	Manufacturing	Computer, reading, writing, math GED prep, diploma prep	Production
MB	La Ronge Hotel	Hospitality	Reading text, Document use, Writing, Numeracy, Computer use	Various
MB	City of Winnipeg.	Public Service	Computer, reading, writing, math, GED prep, accounting, supervisory	Various
NB	City of Moncton	Public Service	Computer, reading, writing, math, GED prep	Various
NB	City of Bathurst	Public Service	Computer, reading, writing, math, other interest	Various
NS	Basin Pulp	Pulp	Computer, reading, writing, GED prep,	Various
NS	Elmsdale Lumber	Lumber	Computer, reading, writing, GED prep, forestry certification courses	Production
NS	Canada Bread	Manufacturing	Computer, reading, writing, GED prep,	Production
NFLD	City of St. John's	Public Service	Computer, plain language and report writing	All workers
ON	Honeywell		Computer, reading, writing, math, other interest	Production and office
ON	Dofasco	Manufacturing	Computer, reading, writing, math GED prep	Production
ON	Royal Canadian Mint	Coin production	Reading, writing, math	Production
PEI	Cavendish Farms	Manufacturing	Computer, reading, writing, GED prep, biology, physics, economics	Production
QC	Bristol-Myers	Pharmaceutical	Basic skills testing, literacy and numeracy, leadership, communication,	Operators

### General literacy model (continued)

Prov	Firm	Industry	Description	Employee
AB	Keyera Energy	Resources	Just-in-time learning to validates employees' current skills vs. industry standard to maintain certification (Includes industry and basic skills)	Various
AB	Syncrude Canada	Oil	Effective Reading in Context Program (ERIC)	All
BC	CME BC and Teleflex Canada	Several	Involved authentic, team-developed material and small group instruction to prepare employees for LEAN manufacturing	Various
NB	Alcool New Brunswick Liquor (ANBL)	Customer service	Customer service training - industry-specific knowledge and communication skills	Store customer service
QC	Bell Canada Job Specific	Telecommunications	Training included technical knowledge, problem solving and teamwork	Various

### Integrated approach to Essential Skills

Prov	Firm	Industry	Description	Employee
MB	Hudson Bay Mining	Mining	TOWES Reading, document use, numeracy	Labourers
MB	Boeing	Aerospace	TOWES Reading, document use, numeracy	Technicians
NS	Marine Atlantic Inc.	Ferry Operator	TOWES Reading, document use, numeracy	Technical
ON	Ontario Northland	Rail services	TOWES Reading, document use, numeracy	Electricians and mechanics
PEI	Durabelt Inc	Manufacturing	Reading text, document use, numeracy, communication, problem solving <sup>11</sup>	Operators
QC	Service G.P. Cuisine	Food production	TOWES Reading, document use, numeracy	Primarily cooks
SK	Kahkewistahaw Gas	Retail	TOWES Reading, document use, numeracy	Customer service
NWT	Diavik	Mining	TOWES Reading, document use, numeracy	Various
NWT	BHP Billiton Diamonds	Mining	TOWES Reading, document use, numeracy	Various
CAN	Standard Aero	Aerospace	TOWES Reading, document use, numeracy	Technical
N/A	Forest Company	Forestry	TOWES Reading, document use, numeracy	Paper Machinists

<sup>11</sup> Sample curriculum content included: writing out machine operating instructions to develop writing and communication skills while learning how to operate equipment safely and efficiently; locating Durabelt's customers on maps, using a list of companies from accounts payable/receivable — this activity helped teach geography and map-reading skills while acquainting employees with Durabelt's customers; having employees calculate percentages to help them make their own conversions when mixing chemicals to make urethane — previously, employees relied on examples listed on the mixing chart, which did not cover all the possibilities and led to inappropriate pours and wasted product; and using ratio and proportion to calculate the number of crank rods to straight rods used in a belt.



**Sectoral model**

<b>Prov</b>	<b>Firm</b>	<b>Industry</b>	<b>Description</b>	<b>Employee</b>
BC	SkillPlan	Construction	Modules based on Essential Skills profiles and authentic workplace materials	Various occupations
	Construction Sector Council	Construction	Modules based on Essential Skills profiles and authentic workplace materials	Various occupations
	Trucking Human Resources Council	Transportation	Modules based on Essential Skills profiles and authentic workplace materials	Drivers
	Tourism Human Resource Council	Tourism	Modules based on Essential Skills profiles and authentic workplace materials	Various occupations
	Automotive Repair and Service Council	Automotive Repair	Modules based on Essential Skills profiles and authentic workplace materials	Various occupations
	Council of Professional Fish Harvesters	Fishing	Modules based on Essential Skills profiles and authentic workplace materials	Various occupations
ON	National Silicates	Chemical	Chemical Process Operator (CPO) upgrade operator skills with 6,000 hours of theoretical and practical training in safety, dissolver, furnace, utilities operations etc	Machine operators



## **Appendix B : Interview protocol for Workplace LES Consultations**

### **Interview questions**

1. What are you/your organization currently doing in relation to workplace literacy and essential skills training?
2. What is your past experience with LES training?
3. What are the most promising approaches to delivering workplace literacy and essential skills training?
  - What are the most important elements of this approach?
  - How does this approach meet the needs of learners and employers? How do you know this approach is working?
  - How could this model be enhanced? What would be the next logical steps to make this model work even better?
4. What types of approaches are not working?
5. Which ministry oversees your program? Is this good fit? How could the fit be improved? OR — Which ministry should overview workplace LES training?
6. What types of organizations are best suited to provide workplace training services (e.g. governments, government agencies, non-profit organizations etc.)?
7. What are the individual competencies of successful workplace LES providers?
8. In your jurisdiction, what is the relationship between workplace LES training and other types of LES training? What works well and what could be improved with this relationship? How has this relationship evolved over the past several years?
9. How does your program work with labour? How is the approach different for non-unionized workplaces?
10. What are lessons learned/critical success factors for implementing a successful workplace program? OR what factors do you believe would be important?
11. More specifically, what resources and systems are (would be) most critical to success?



## **Appendix C: Protocol for Workforce LES Consultations**

### **Interview questions**

1. What are you/your organization currently doing in relation to workforce literacy and essential skills (LES) training?
2. What are the most promising approaches to delivering workforce LES training?
  - How does this approach meet the needs of learners and employers? How do you know this approach is working?
  - How could this model be enhanced? What would be the next logical steps to make this model work even better?
3. What types of approaches are not working?
4. Which ministry oversees your program? Is this good fit?
5. What types of organizations are best suited to provide workforce LES training services?
6. What are the individual competencies of successful workforce LES providers?
7. In your jurisdiction, what is the relationship between workforce LES training providers and other types of adult education? What works well and what could be improved with this relationship? How has this relationship evolved over the past several years?
8. What are lessons learned/critical success factors for implementing a successful workforce LES program? OR what factors do you believe would be important?
9. More specifically, what resources and systems are (would be) most critical to success?