



The Centre for Literacy

Le centre d'alphabétisation

Workplace **Literacy &** **Essential Skills**



What **Works?** and **Why?**

LITERATURE REVIEW

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PREFACE

This review examined the literature from 2006 to 2009 as a follow up to a comprehensive report on international Workplace Literacy & Basic Skills, published by Alison Gray for the government of New Zealand in 2007. This review was written by researcher Maria Salomon as background for The Centre for Literacy's 2009 Summer Institute and revised based on feedback from Institute participants. It has been edited by the staff at The Centre.

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LITERATURE REVIEW

“Workplace Literacy & Essential Skills — What Works and Why?”

INTRODUCTION

The Centre for Literacy’s 2009 Summer Institute on workplace literacy and essential skills brought together policy-makers, providers and researchers at the forefront of a field that has been evolving over the past twenty years. During this period, many industrialized countries have adopted initiatives aimed at raising the skills of individuals at the low-skilled end of the workforce. The experience of two decades offers a wealth of information and insight now being tapped to design more effective interventions and achieve better outcomes in the 21st century.

This literature review was written to help anchor discussion at the 2009 Institute. Its starting point is a 2006 report, prepared by Alison Gray for the Department of Labour of the Government of New Zealand (see Bibliography). That report reviewed relevant international literature on workplace literacy and essential skills as part of a larger, three-year project aimed at “upskilling” the literacy, language and numeracy (LLN) skills of the New Zealand workforce at the low-skilled end. This literature review follows from Gray’s work; it surveys research, policy and practice documents from Canada, the United States, the United Kingdom, Australia and New Zealand between September 2006 and April 2009. The sources examined comprise primarily research studies and reports, including some French-language materials. Most of the sources were available online at the time of writing (see Bibliography for web links).

The review is divided into the following five sections with a few Concluding Remarks:

1. The Drivers behind Workplace Literacy and Essential Skills Initiatives
2. The Role of Government, Employers and Unions
3. The Outcomes of Workplace Literacy and Essential Skills Training: Does It Work?
4. What Works in the Workplace
5. Evaluation Issues

SECTION 1: THE DRIVERS BEHIND WORKPLACE LITERACY AND ESSENTIAL SKILLS INITIATIVES

The drivers behind workplace literacy and essential skills initiatives identified in Gray have been quite clear since these were first undertaken in the 1990s. They include: *workplace changes* (new work systems and processes, such as technological and product innovations, the use of computers, e-mail communications and the Internet, team-working, more auditing, compliance requirements and quality control, greater concern over health and safety hazards); *demographic shifts* (ageing population, shrinking workforce); and *broader, worldwide developments* (the globalization of the economy and competition). These factors, combined with low literacy statistics published since the 1990s by the International Adult Literacy Survey (IALS) and reports demonstrating “a strong plausible link between literacy and a country’s economic potential” have fed a “growing anxiety about global competition” (Merrifield, 2007:

10). At the same time, some studies have suggested that countries that invest in skills training — including training for the least educated — “will reap enormous benefits in terms of growth” because such investment will translate into higher levels of productivity (CCL 2007a: 5; Myers and de Broucker 2006: i, vi).

The Economic Future

Sober economic projections continue to appear in policy statements and reports relating to skills training. According to recent predictions, Canada will not have enough workers within a few years and the available workforce “will lack the skills and knowledge that the global economy demands” (CCL 2007). The most recent forecast in the United States suggests if the trend continues, millions of jobs will suffer because of a serious lack of specialized skills among the workforce, leading to estimated shortages of over 10 million skilled workers by 2012 (Parker 2007: 1). In the UK, calls for a “renewed focus on the skills of adults” are linked to the improvement of lagging productivity and an economy that needs to be “driven forward” (Merrifield 2007: 9). Current international financial crises and uncertainties only darken the already troubling picture, as has recently been underlined by a lengthy report from the European Centre for the Development of Vocational Training/Cedefop. It suggests Europe needs to “anticipate more effectively its future skill needs over the long, and not just the short term” (Cedefop 2009: 1).

Skills development, including literacy and essential skills, is seen by many experts and policy makers as the “key” to addressing the serious economic challenges that lie not too far ahead, a central “priority”, a “must” (CCL 2007; CCL 2007a: 5; Merrifield 2007: 9; Folinsbee 2007: 9; Dunberry and Péchard 2007: 43), particularly among older and less skilled workers and in small and medium-sized enterprises (SMEs) (Daniau and Bélanger 2008: 5-6). Thus, recent Canadian Government funding proposals for literacy have been connected to a “focus on creating the most flexible, well-educated workforce in the world in order to improve Canada’s economic prosperity and establish a global competitive advantage” (Folinsbee 2007: 9). In a similar vein, predictions relating to the UK assert that, “In the new global economy economic security will depend on having a ‘basic platform of skills’ that allows individuals to update and adapt to change” (Merrifield 2007: 9).

SECTION 2: THE ROLE OF GOVERNMENT, EMPLOYERS AND UNIONS

The Role of Government

The literature continues to underline the central role national governments can play in promoting and supporting workplace literacy and essential skills. At its core, commentators suggest this role should rest on a *national strategy* to strengthen the skills of the adult workforce. The strategy needs to be tied to a long-term vision of the kind of society and economy the country is working towards, a strong statement on how skills development, especially literacy, is critically connected to this vision, and clear goals on skills training for adults that centre on a broad-based, comprehensive approach (Gray 2006: 11-12, 84; Cedefop 2009: 21; Rosen 2008: 12; Plett 2007: 69; CCL 2007; CCL 2007a: 26).

National strategies along these lines currently exist in only a few countries, for example the UK’s Skills for Life Strategy (Wolf 2005: 2, Plett 2007: 7, Merrifield 2007: 12) and New Zealand’s Upskilling the Workforce Initiative/Tertiary Education Strategy and the Statement of

Tertiary Education Priorities (STEP) (Plett 2007: 7; Gray and Sutton 2007: ii, 2; Benseman and Sutton 2007: 11, 22). Similarly, in Australia, pivotal agreements have been reached between state, territorial, and federal levels of government on strategies and objectives in adult education and workplace training that allow for a coordinated approach (Plett 2007: 7). However, the recent reallocation of national funds for adult literacy to the states and territories has raised concerns about the degree to which the national government is committed to supporting and promoting literacy and essentials skills training among workers. The Australian Council for Adult Literacy sees this development as “the culmination of a gradual erosion of targeted funding for research and development for adult literacy and numeracy” that reflects a “loss of policy focus” and “national leadership” (ACAL 2009: 1-2, 14). In response, the government maintains that the focus on adult literacy has actually become “greater” in recent years, especially with the introduction of the Social Inclusion Policy Agenda (Coughran 2009: 13).

In North America, where such strategies are absent, voices are increasingly being raised for a new approach. A recent report surveying the current situation in the US ended with a comprehensive list of policy recommendations for a federal workplace literacy initiative (Rosen 2008: 28-30), and several other reports urge the same for Canada (CCL 2007; CCL 2007a; Plett 2007: 69; Saunders 2007: 6; Goldenberg 2006: 26-7; Myers and de Broucker: vi-viii:). In the case of Canada, experts have pointed out how the absence of a national adult literacy strategy has led to the creation of a “patchwork” of “complex”, “fragmented” provincial and territorial approaches that have prevented the integration of workplace literacy training into “coherent, long-term adult education and training strategies and programs” (Plett 2007: 10, 17, 69; Folinsbee 2007: 11, 22; Myers and de Broucker 2006: i, vi)

Beyond a national vision and plan, the literature surveyed also calls for strong government leadership in specific areas, notably:

Financial Support — There is a need for more funding of programs, providers and learners. Incentives aimed at employers (and possibly learners) could prove useful in strengthening support — for example tax credits, a training tax similar to that introduced in Quebec and a matching training fund (Gray 2006: 3, 18; Saunders 2008: 6; Murray et al 2008: 73; Rosen 2008: 28-30; Plett 2007: 69; CCL 2007; Myers and de Broucker 2006: vi; Goldenberg 2006: v, 26-7). Co-financing or cost-sharing strategies are increasingly mentioned (Saunders 2009: 10; Cedefop 2009: 58 Folinsbee 2007: 25; Goldenberg 2006: iv).

Advocacy and Information —The government’s role as champion of workplace literacy and essential skills should extend beyond money to raise awareness, particularly to employers, that: 1) the skills of the workforce are inadequate to meet current and future economic challenges; 2) boosting the skills of workers is good for business; and, 3) programs and supports (financial, as well as referral services, resource materials, help with forms, help with program design/implementation and evaluation) are available to employers and workers. Providing such information, energetically marketing workplace literacy and essential skills initiatives and fostering dialogue among stakeholders, it is suggested, will help raise awareness and promote greater engagement, as will supporting research and disseminating the results (Gray 2006: 2, 11; Murray et al 2008: 73; Rosen 2008: 28-30; Parker 2007: 4-6; Merrifield 2007: 22-3; Goldenberg 2006: 26-7).

Quality Control — The government should take the lead in ensuring the quality of skills training provision by supporting the ongoing professional development of teachers and trainers, curriculum and resource development, evaluation approaches and strategies for analyzing the training needs of particular employers and/or sectors. (Gray 2006: 3, 11; Cedefop 2009: 101; Murray et al 2008: 73; Rosen 2008: 28-30; Goldenberg 2006: 26-7). Recent recommendations in Canada and the US include the development of national accreditation standards and “certification” for training providers (Saunders 2007: 5; Parker 2007: 7-78).

Access — The government can help by ensuring that learning opportunities are accessible to all, including individuals in remote areas, the disadvantaged and at-risk populations (Gray 2006: 3, 11; Murray et al 2008: 73; Goldenberg 2006: 26-7). This issue also touches SMEs, which might not be able to take advantage of available training information, options and supports because constraints of limited time, money and personnel are more acute for these employers (Gray 2006: 18).

The Role of Employers

There is universal agreement in the literature that *partnerships* — between and among government departments and agencies, employers, sectors, unions, providers and community groups — are “crucial” to workplace literacy and essential skills programs (Gray 2006: 4, 84; Saunders 2009: 7; Murray et al 2008: 72-3; Bélanger and Robitaille 2008: 67; CCL 2007; WfDB 2007: 21; CAEL 2006: 89-102; Goldenberg 2006: v; Saunders 2007: 6-7). The role of employers is particularly important. Their awareness, attitudes, commitment and support are key ingredients to any workplace skills training drive.

From this perspective, the “low” commitment of employers to workplace literacy training, for instance in Canada (Folinsbee 2007: 22; Bailey 2007: 6; Lowe 2007: viii; Plett 2007: 69-70; Saunders 2007: 1; CCL 2007a: 14), New Zealand (Gray and Sutton 2007: iii-iv; Benseman and Sutton 2007: 8) and parts of Europe (Cedefop 2009: 49), is a serious challenge that needs to be addressed. Complicating the task is that employers who do invest in training still tend to focus on their high-skilled workforce and not the less educated in need of literacy and essential skills support (Myers and de Broucker 2006: v). The less skilled, many employers seem to believe, should be the state’s responsibility (Gray 2006: 13; Goldenberg 2006: iii, vi). This does not seem to have changed appreciably over the years.

The literature highlights several important and widely encountered barriers to greater employer investment in workplace literacy, including: a lack of awareness about the connection between low literacy in the workplace, job performance, productivity; limited time, resources and personnel to seek out relevant information about options (funding, programs, providers); management attitudes — lack of a learning or training culture within the enterprise; absence of champions within enterprises, sectors and professional business organizations; complexity of the training landscape — too many agencies and bodies, regulations, paperwork etc... (Gray 2006: 3-4; Cedefop 2009: 49; Plett 2007: 69-70; CCL 2007a: 14; Merrifield 2007: 28; Gray and Sutton 2007: iii; Benseman and Sutton 2007: 4-5).

Experts believe, often based on consultations with employers and business organizations, that greater government vision and clarity, planning, support (financial and other), advocacy (including use of the media and recruiting prominent business-world champions to highlight gains and “success stories”) and quality control can go a long way towards bringing down these barriers (Gray 2006: 16-17; Plett, 2007: 71; Parker 2007: 4-6; Goldenberg 2006: iii; CCL 2007; Benseman and Sutton 2007: 8; Gray and Sutton 2007: iii-iv). In this connection, the case of the UK, where, since the launch of the Skills for Life Strategy, “employers are increasingly willing to make provision for basic skills development for their employees”, is worth watching closely (Merrifield 2007: 18, 20-1).

The Role of Unions

While government can do much to convince and support employers, employer partnerships with unions are also fundamentally important to workplace literacy and essential skills training in large enterprises. A recent report surveying a range of effective workplace literacy programs in the US identified “strong connections to organized labour” as an important element promoting success (Parker 2007: 4-6). Unions, many of which have substantial experience with workplace literacy projects, can act as advocates or champions to promote training programs within enterprises (among employers, management and workers) and, increasingly, sectors. Over the years, they have been involved in initiating programs as well as providing workplace literacy training. Unions can also support both employers and workers with funds (helping to match government support) and negotiate collective agreements that make provisions for training (Gray 2006: 7, 81; Bélanger and Robitaille 2008: 68; Plett 2007: 70; Folinsbee 2007: 21-2).

In Canada, the Canadian Union of Public Employees (the country’s largest union) has played an important role in promoting and supporting workplace education for the less-skilled in the public sector. Similarly, in the US, the New York State (NYS) and Civil Service Employees Association (CSEA) Partnership for Education and Training, a collaboration between labour and management, provides programs and services to 77,000 CSEA-member NYS employees in over 1,000 agency facilities and worksites within the state’s Executive Branch (Salomon 2009: 2-3). In the UK, union involvement in literacy and essential skills training is not only prominent, but also institutionalized through the Skills for Life Strategy. Union Learning Representatives (ULRs) and Unionlearn (set up in 2006) work to “promote lifelong learning, increase workers’ life chances and strengthen their voice at the workplace through high quality union learning” (Merrifield 2007: 21).

SECTION 3: THE OUTCOMES OF WORKPLACE LITERACY AND ESSENTIAL SKILLS TRAINING — DOES IT WORK?

Gains to Individuals

There has been a strong consensus in recent years that individuals who participate in literacy and essential skills training benefit in terms of both improved skills and positively changed attitudes. Since the publication of Gray’s report in 2006, this finding continues to surface in much of the literature. The gains most often mentioned include: better communication skills (language comprehension and expression, information-sharing, speaking up), understanding of machines, technology and work practices (filling out forms, compliance, handling charts, following health and safety precautions); increased morale, confidence, self-satisfaction, work satisfaction; increased participation (taking on more responsibilities, involvement in committees

or union work, teamwork); greater job/career advancement potential; greater interest in and willingness to participate in further training (Gray 2006: 5, 28-9, 55; Campbell 2008: 16-17; Rosen 2008: 6-7; Gray and Sutton 2007: iii; Plett 2007: 65-6; WfDB 2007: p. 11; Parker 2007: 3-4).

Some studies have linked improved wages to enhanced literacy skills (WfDB 2007: 11; Parker 2007: 3-4). However, as Gray noted, the link is not absolutely clear (Gray 2006: 5, 54). This remains the case: “While there is evidence that individuals with higher skills benefit in terms of wages and employment, the evidence that engaging in basic-skills learning as an adult increases wage or employment outcomes is less clear” (Merrifield 2007: 28-9). The literature also considers whether the gains of workplace literacy and essential skills training extend beyond the individual and the workplace, into family life and the community. According to some studies, they do — in the form of a greater ability of parents to help their children with schoolwork, more engagement in community life and volunteer activities, stronger respect for diversity, reduced crime and improved health (Gray 2006: 57; CCL 2007a: 8-9; Campbell 2008: 16-17).

Gains to Employers — Productivity

Gray’s report underscores that determining the extent to which literacy and essential skills training leads to gains is far from straightforward, particularly in economic terms. Advocates of workplace initiatives and policy makers promote the connection between higher skills and increased productivity, but as Gray and others point out, “that relationship is hard to define”, which is why “the literature is hedged with cautions.” While it is true that the relationship between productivity and skills development in general has been discussed in an extensive body of literature, relatively little attention has been devoted specifically to the impact of literacy and essential skills training. Furthermore, those studies that address the issue are very few in number and have not, according to some experts, been “rigorous” (Gray 2006: 4-5, 28-9, 51).

The literature produced in the past two years or so reflects a persistent linking of skills training to employer gains and productivity (Tamkin 2008: xvi, 57; Campbell 2008: 1, 16-17; Rosen: 2007: 6-7; CCL 2007; Parker 2007: 3-4; Lowe 2007: 66, 68-71; Goldenberg 2006: 8-9), although again, authors are often cautious in extending the link specifically to literacy and essential skills training. Thus, a recent report observed that, while there is growing evidence that workplace training in general improves productivity (in terms of reduced labour turnover and stronger worker commitment and loyalty to their employers), “there is remarkably little evidence of the benefits for employers of improving basic skills employees”. According to the author, claims of outcomes appear, ultimately, to be “based on faith as much as evidence” (Merrifield 2007: 10-11, 30-1).

Tentative evidence is also conveyed in a new study of eleven workplace literacy and essential skills programs in Canada and the UK which found that, although there were “significant gains in abilities for the individual worker . . . the extent to which these translated into gains for the employer or sustained over time was much more mixed” (Taylor, Evans and Mohamed 2008: 9-10). The authors pointed out at the outset, however, that a 1 percent increase in a country’s score on the IALS has been “associated with an eventual 2.5 percent relative rise in labour productivity and a 1.5 percent rise in GDP per capita” (Taylor, Evans and Mohamed 2008: 2).

A longitudinal research project in the UK (Enhancing 'Skills for Life': Adult Basic Skills and Workplace Learning, 2003–2008) that has been tracking outcomes from workplace literacy for individuals (over 400 employees) and their employers found that “very few examples of direct impact in narrowly economic terms” were reported by employers. The study concluded that “government policy makers were mistaken in expecting immediate and major effects on productivity” (Wolf 2008: 1). Other studies have found otherwise. For example, in the US, the state of Indiana is reported to have experienced “an overall state return on investment (ROI) of 148 percent for companies that invested in workplace education programs (Parker 2007: 3-4). Similarly, although no figures were given, a study of twenty-seven Australian employers offering workplace literacy and essential skills training to their workers found “improved organizational performance and enhanced bottom line” (Townsend and Waterhouse 2008: 8).

SECTION 4: WHAT WORKS IN THE WORKPLACE

Gray’s review of the literature identified a cluster of “best practice” components relating to workplace literacy and essential skills training, what a recent and comprehensive document put out by the US Council for Adult and Experiential Learning termed the “building blocks for building skills” (CAEL 2006). These continue to inform the discussion and design of programs.

Employer Commitment

The Enhancing 'Skills for Life' longitudinal study in the UK concluded that, “Learning programmes initiated by and within workplaces are the ones that survive long-term”. In other words, employer “commitment” is crucial to the “stability” and “sustainability” of workplace literacy and essential skills training efforts (Wolf 2008: 1). An in-depth review of a number of workplace initiatives in the US came to the same conclusion, linking employer engagement, “participation and support” to a program’s “impact” and ability to “endure” (Rosen 2007: 10). The issue is underlined in other literature, which places employer commitment and willingness to make learning “a priority” at the top of the list of ingredients for success (Gray 2006: 25-6; Townsend and Waterhouse 2008: 8; Gray and Sutton 2007: 41).

Unpublished research produced by Workbase Training in the UK in the mid-1990s also underscores the importance of employer commitment to providing training and learning opportunities below the managerial level. It appears to shape worker perceptions of being valued and supported in rapidly changing economic conditions and workplaces where anxiety can run high. The research suggests that these perceptions feed into worker self-confidence, a lack of which was identified in the study as a major barrier to participating in workplace training programs (particularly among workers with low literacy and numeracy skills). According to the study, where workers are “recognized” and encouraged to improve their skills by committed employers, confidence can improve, providing an important stimulus to workplace training and, as workers themselves indicated, “enhanced performance”, adaptation to new responsibilities and technology, and “a more effective contribution to team-[work]” (Workbase Training 1996: 9-10, 12).

Learning Organization

Recent research in the UK stresses “the wider organizational environment” in which workplace training is offered, which can either “support” or “undermine” investment in learning. Studies suggest that, for training investments to pay off, programs need to be supported by “learning

rich working environments” (Taylor, Evans and Mohamed 2008: 9). Gray and others mention the “adoption of new management practices” actively supportive of learning, in particular becoming a “learning organization”. Such an organization, described by some as “high-performance” (CCL 2007; Jurmo 2004: 25-6), generally has “a greater commitment to the development of the potential of the individual employee, rather than a straightforward commitment to raising the overall level of skills or volume of training”. There is a “can-do”, positive climate in these workplaces, characterized by respect, a desire to make learning as accessible as possible, the use of multiple learning approaches that are connected to the work at hand, curiosity about learning, and a team-working approach to problem solving at all levels within the organization (Gray 2006: 4, 31-2, 36-7; Townsend and Waterhouse 2008: 8; Folinsbee 2007: 23-4; WfDB 2007: 21; CAEL 2006: 70, 73-4).

Another important feature of the learning organization is that training is perceived more as a long-term investment than a short, “magic bullet” program leading to narrowly-defined, necessarily tangible and immediate results. As one report observed, “A short-term timeframe and a narrow of view of learning, dominated by measurable changes in performance, will not enhance the learning environment and can stifle innovation” (Taylor, Evans and Mohamed 2008: 9). In a learning environment, learners work together and with management continuously to develop problem solving, listening and speaking, research, teamwork, math, and presentation skills, while contributing to improvements in workplace operations” (Jurmo 2004: 25-6). There is a caveat — for a learning organization to really promote skill development and success, the necessary management practices must be “thoroughly implemented” (Gray 2006: 4).

Collaboration

The collaborative approach to workplace literacy and essentials skills training calls for joint inclusive involvement of all stakeholders in all stages of the program, from conception through to planning, design, marketing, implementation, delivery and evaluation. Managers, supervisors workers, union representatives, providers and instructors as well as outside consultants in some cases — must work together as a team to determine where the training needs are, what the goals of training should be, how training should be delivered and how the entire process and its results should be evaluated. The various stakeholders have their own perspectives, interests and objectives but it is only by recognizing this and incorporating the diversity into the training agenda that strong support for and participation in the program can be ensured. Giving everyone an “equal voice” fosters confidence and trust. It also strengthens the stakeholders’ commitment to the program and ownership of it, thereby promoting not only quality and relevance, but also sustainability (Gray, 2006, 4, 36-7; Townsend and Waterhouse 2008: 8; WfDB 2007: 21; Folinsbee 2007: 23-5; Parker, 2007: 5; Jurmo 2004: 25-6).

In the UK, the approach has been promoted for many years in numerous workplace training strategies and programs developed by Workplace Training since the 1980s (Workbase Training 1996: 1, 3-4). It has gained growing acceptance over the past two decades and was recently described in an important “inventory” of adult learning models as one of the two “overarching” components of workplace literacy and essential skills training, the other being evaluation (CAEL 2006: 89-102).

Proponents of the collaborative approach point out that it can be effective in recruiting and retaining learners. If workers are part of a training program team or committee and the decision-making process from A to Z, they are more likely to feel that the program is in tune with their interests. They will therefore be more willing to invest themselves in it and stay the course. Another advantage is that learners bring experience to their jobs that they have acquired in other workplaces or outside work. By including workers on a program committee, this wealth of knowledge can be tapped to inform a more effective training program (Jurmo 2004: 25-6).

On the other hand, there are critics of this approach. Some argue that involving numerous stakeholders slows down the decision-making process and might lead to too much debate and possibly conflict about goals and implementation. Others believe that it is unrealistic, even naïve to ignore that “relationships among employers, workers, and workers’ labour unions are inherently adversarial . . . and are doomed at best to token cooperation” (Jurmo 2004: 26). A 2005-2008 workplace literacy and essential skills project in the UK involving a number of London authorities did indeed find that the collaborative approach “can be time-consuming and may mean that projects will progress more slowly”. Nevertheless, it concluded that collaboration was “crucial . . . in order to take full advantage of stakeholder support and expertise . . . and ensure sustainability” (Noel, 2005: 13).

Planning and Design

Doing the legwork, i.e. proper planning and design, is another best practice highlighted in the literature. This process involves making sure that adequate resources (human, monetary, time, space) are available within the organization to offer a training program, and securing outside funding if necessary. Fund-raising efforts might require seeking financial support from one or more levels of government and/or a local sector council. Identifying and partnering with a suitable provider is also part of the planning stage, as is working out the details of release time for learners or compensation for participation in off-site courses (Gray 2006: 36-7; WfDB 2007: 21; CAEL 2006: 7-13). Broadly speaking, careful thought needs to be put into ensuring that the proper supports are in place for a program to be implemented as effectively as possible.

Needs Assessments

According to the literature, the starting point of planning is a literacy needs assessment — from both an organizational and worker perspective. Getting a firm handle from the outset on what the particular needs of both employer and workers are in a specific workplace will make it easier to design “customized and firm-specific” programs. The needs assessment will also help define clear and realistic program goals, which could cut down training time and effort in the long run. In addition, it will help place learners at the appropriate training level and provide the base for evaluating learners’ progress (Gray 2006: 36-7; CCL 2007; WfDB 2007: 21; Folinsbee 23-5, 33; Gray and Sutton 2007: 41; CAEL 2006: 42-3). The practice, employed since the 1980s in the UK by Workplace Training, is a relatively recent one in general, but has been “rapidly gaining popularity” (Workbase Training 1996: 1; Pye and Hattam 2008: 68-70).

Learning Assessments

While there is a growing consensus that learners should be assessed at the outset of a program to identify needs, facilitate placement and tailor program goals, as well as throughout the program to monitor progress and evaluate, there are varying opinions on how best to carry out assessment. Figuring out what evaluation method to use is a “challenge”, but should not

therefore be neglected. Rather, a method or set of methods should be adopted or devised based on certain fundamental principles: reliability, fairness (no bias against certain groups or individuals), validity (the assessment should be measuring what it claims to measure) and suitability (the assessment should be appropriate to the learner's "cognitive functioning level, reading ability, math ability, and level of career development"). Other important factors to consider include: cost, time to administer and score, the qualifications of the individual/s administering the assessment, ease of use and reporting format (results should be presented in an understandable way) (CAEL 2006: 46).

Standardized Tests

A variety of generalized or standardized assessment tools intended for use across a broad spectrum of workplaces have been developed over the past two decades in North America and the UK, for instance the Work Readiness Credential and WorkKeys in the US, and TOWES/Test of Workplace Essential Skills in Canada (CAEL 2006: 46, 49; Folinsbee 2007: 25). Elsewhere, in New Zealand for example, there are calls for a national assessment tool that might provide "clearer data on learner gains" that are "both specific and nationally standardized" (Benseman and Sutton 2007: 9-10).

The existing tools have their critics. The Canadian Labour Congress has found that many have "serious concerns" about TOWES and see it as "detrimental to workers". According to the report, "TOWES does not measure what people know, and there is no diagnostic". The fact that test results are given to employers is also perceived to be a problem (Folinsbee 2007: 25). In the UK, the Basic Skills Agency's Initial Assessment is widely used (Merrifield 35-6) at the outset of programs. Ongoing assessment is based on various tests and qualifications developed over the past few years by different examining boards and approved as part of the National Qualifications Framework. As in North America, there are those who have reservations about these tools, which measure only reading for information. Some believe they are "too narrow as a measure of achievement for a much broader view of literacy" (Merrifield 2007: 35-6).

In this connection, the Enhancing 'Skills for Life' longitudinal study developed and piloted a Reading and Writing Assessment Tool after "an extensive review of existing assessment tools for adult literacy [showed that] none of the existing ones were sensitive enough to measure the small amounts of progress that participants may make as a result of workplace training". Another tool developed by the study is an Inventory of Teacher Attitudes and Practices, designed to measure the teaching orientation of instructors in various workplace literacy programs. The study also devised an Effective Lifelong Learning Instrument (ELLI) to help assess so-called 'learning power' or "the complex mix of dispositions, lived experiences, social relations, values, attitudes and beliefs that coalesce to shape the nature of an individual's engagement with any particular learning opportunity" (Gray 2006: 73-5).

Prior Learning

The discussion on whether and how to assess learners in a workplace literacy and essential skills program has grown in recent years to include the issue of prior learning, i.e. the extent to which participants should be tested and given credit for relevant knowledge and experience they already possess. Recognizing prior learning is seen by many as beneficial because it: validates the worth of learning individuals have acquired on their own, helps identify learners' needs towards achieving their personal, career or academic goals, fosters pride and self-esteem among

learners, enhances the understanding of learning as a lifelong process and can reduce necessary training time and costs (CAEL 2006: 46-48).

In Canada, educators support assessment and recognition of prior learning, as do representatives from the business community recently consulted on issues relating to workplace skills training. The latter believe that such recognition will promote more learning activity in the workplace as well as a greater use of workers' existing skills. Those consulted however appear wary of using existing prior recognition systems, recommending instead the establishment of "an ongoing multipartite (business, labour, governments, educators) mechanism to develop standards for prior learning certification" (Saunders 2007: 5; CCL 2007a: 27).

Delivery — Learning Models

Any discussion on how best to deliver literacy and essential skills training in the workplace must take into account that there is very little information about what kinds of programs workers with basic skills needs are actually participating in, let alone what is working best (Taylor, Evans and Mohamed 2008: 2). Bearing this in mind, a 2007 review of workplace literacy and essential skills training programs in New Zealand found "no evidence that one programme model was more effective than any other". The report's conclusion echoes what the larger literature conveys: what counts ultimately is not which model is used, but making sure that it "suits" the learners and their employer in terms of their specific needs and goals (Gray and Sutton 2007: 5). In other words, there needs to be a "fit" between the program and the clientele it is supposed to serve. "Flexibility", "customized" and "right" are often used to describe this approach (CCL 2007; CCL 2007a: 27).

Contextualized Learning

Within this broad approach to delivery, there has been a trend in recent years to offer programs tailored to the learners' work context and tasks (Rosen 2008: 10). Referred to as "contextualized learning", this approach favours programs that "focus more directly on job-related content, build on learners' job-related knowledge and motivations, and teach the strategies they need to apply basic skills to the tasks they face on their current or may face in future jobs". Advocates of contextualized learning believe that it produces quicker and better mastery of skills, stronger skills retention, as well as "clear, tangible, more immediate results in job performance and job prospects". The job-specific focus of the approach can also "help employers and public funders to see how workplace education can contribute to increased productivity and competitiveness" (Jurmo 2004: 23-4).

According to the literature, employers clearly prefer programs that revolve around work-based learning and their specific context and needs (Gray 2006: 3). Workers seem to agree. A recent UK survey on learning at work found "an overwhelming preference" among employees for "more experiential ways of learning to improve job performance" i.e. "learning by doing the job" (Merrifield 2007: 18-19). Current research also supports this approach. New work investigating the transfer of learning from workplace literacy programs to the shop floor after training (which past studies have shown to be quite weak) has found that contextualized learning is "key" to knowledge transfer (Folinsbee 2007: 33). At the same time, others have cautioned that this delivery approach "runs the risk of neglecting the basic skills side of the curriculum and becoming merely a narrow job-training program" that does not ultimately boost the basic skills individuals need for work generally or life outside the workplace (Jurmo 2004: 24).

Integrated or Embedded Learning

Another trend to emerge from recent literature is the move towards “integrated” or “embedded learning” (CAEL 2006: 73-4). In programs built around this approach, workplace literacy and essential skills training is delivered alongside another body of work-related knowledge and skills, and not as a first step or prerequisite towards more advanced job skills training. According to its supporters, integrated learning is more “efficient” than other delivery approaches because it cuts down on training time and costs and allows workers to spend more time on productive work. According to a leading expert, a review of recent research on embedded literacy in the UK shows that the more the approach is used in vocational training, the better the outcomes, for example increased completion rates and achievements of qualifications (Sticht 2007). Others are more cautious in their assessment of this mode of delivery, noting that it is not yet been adequately studied as a model and in terms of its outcomes (Benseman and Sutton 2007: 6).

While the approach has been gaining ground in the past few years in all the countries surveyed in this report, it is in the UK and New Zealand that it is being “promoted as a cornerstone” for workplace literacy initiatives (Benseman and Sutton 2007: 6). In Ireland, the National Adult Literacy Agency (NALA) has developed a set of tools for adult educators to guide them in integrating literacy with job training. It has also pioneered a university-level certificate program to assist the professional development of adult educators to do this work (Sticht 2007).

Formal and Informal Learning

Gray’s review found that employers offering workplace literacy and essential skills training to their workers supported the use of both formal and informal approaches to learning (Gray 2006: 3; CCL 2007a: 27; Townsend 2008: 8). Most, in fact, “use these in tandem”. That being said, some employers believe that informal strategies are in fact “more important and effective” than formal training and workers have shown “an overwhelming preference” for less formal, more hands-on training, as opposed to courses or classes (Gray 2006: 3, 20-21; Merrifield 2007: 18-9). In addition, SMEs tend to prefer informal training (much of it undocumented) because they can only train small numbers of workers at a time and are limited in terms of the amount of training time they can offer and the resources they can devote to the effort (Gray 2006: 20-21).

There are other factors to consider when deciding whether to go the formal or informal route. For example, in the UK, the national Skills for Life Strategy centres on the formal approach (courses) because it is simply more difficult to manage and assure quality when informal strategies are used (Merrifield 2007: 18-9). At the same time, evidence is emerging that formal learning has important benefits relating to shifts in worker attitudes and knowledge transfer. A new study looking at literacy and essential skills programs in workplaces in Canada and the UK has found that “formal workplace programs had the potential to compensate for previously negative educational experiences”. In addition, “employee participation in a formal program acted as the catalyst for the various informal training activities that occurred back on the shop floor” by building a new confidence in participants that prompted them to “seek out” informal learning opportunities connected to their job tasks (Taylor, Evans and Mohamed 2008: 6-9, 11).

Blended Learning

The literature suggests that, regardless of the broad approach to delivery, participants in a workplace literacy and essential skills training program will benefit most from the use of multiple teaching methods, tools and contexts (Gray 2006: 36-8). “Blended learning” is a term used to describe this approach. (CAEL 2006: 14, 73-4; Hinman and Fletcher 2008: 6). Blended learning responds to a growing diversity among the worker population. Different workers have not only different skills needs, but also learning styles, schedules at and outside of work, technical supports (such as, a computer at home or access to one within the community), etc... (Gray 2006: 20-21; Hinman and Fletcher 2008: 2). By showing flexibility and incorporating a mix of teaching methods, tools and contexts, a workplace training program has a better chance of recruiting, assisting and retaining workers with basic skills needs. There is no perfect cocktail in blended learning. What is important is getting the mix right for each specific work context. This could mean using some combination of: instructor-led classes, drop-in workshops, shop-floor, hands on instruction, the use of peer trainers and mentors, simulation or role-playing, field trips to worksites, job-shadowing, self-access e-learning, etc... (CAEL 2006: 34; Hinman and Fletcher 2008: 6).

E-Learning

A recent project in the UK piloting Skills for Life programs found that the most effective mix in terms of learner success and retention was one with a strong interactive component in terms of instruction and content. The twenty-six literacy providers involved in the project also tried to “replicate” the positive aspects of formal group-based activity in the classroom when using other strategies, such as drop-in workshops and distance learning (Hinman and Fletcher 2008: 12, 14). Their experience with e-learning in the project suggests some caution in the use of this increasingly popular method, which has been shown to be effective in responding to learning needs in workplaces internationally (CCL 2007). Most of the learners who participated in the UK project “responded positively” to e-learning (either at a distance or in the classroom). However, older men resisted and others were limited by the degree to which they were familiar with computers and the Internet. In some cases, access to e-resources outside work was problematic.

The study concluded that e-learning was “not right for all learners” and that, to ensure true flexibility in delivery, programs need to include paper-based methods and resources (Hinman and Fletcher 2008: 10). A recent report in the US also pointed to the limitations of e-learning, especially at a distance, noting that not all learners necessarily possess the “discipline” required to truly benefit from online learning (CAEL 2006: 17).

Supporting Learners, Providers and Instructors

Learners

Best practice in workplace literacy and essential skills training involves providing workers with the supports they need to join a program, stay with it and learn. Gray described this aspect as “the pro-active management of the positive and negative forces that help and hinder persistence” (Gray 2006: 37-8). Access is a term that recurs in the literature in this connection. It refers to ways a training program can be made appealing and doable from a worker’s perspective. It can include such elements as, active marketing of a program, financial support (including paid release time and compensation for training done off site, government assistance in the form of

tax relief, student loans and grants for buying materials or computers), a resource library and phone support (especially in the case of distance learning).

The issue of access is not new. It was underlined over a decade ago in unpublished research conducted by Workbase Training among private and public sector employees in the UK (2117 individuals in 31 organizations) in the mid-1990s. Interviews with workers elicited complaints about training programs being poorly advertised (lack of information), too limited (for example, some training at induction, but no follow-up or ongoing learning opportunities), conflicting with shift schedules, and located at sites difficult for workers to get to, especially women “reluctant to travel to them in the evening” (Workbase Training 1996: 6-9, 12).

Other supports proven effective include providing “greater instructional intensity” or longer courses, smaller classes (Rosen 2008: 10; Wolf 2008: 1; Folinsbee 2007: 33), the use of peers as tutors or mentors, mentoring, providing learners with regular, frequent and immediate feedback on their progress, recognizing achievements and offering follow-up after the program has been completed (Gray 2006: 36-8; Murray et al 2008: 50-1; Folinsbee 2007: 23-5; WfDB 2007: 21; CAEL 2006: 50-67). Making training voluntary, respecting privacy and confidentiality (especially with respect to assessments) and being sensitive to cultural differences are also important to ensuring access.

Providers and Instructors

At the heart of the learner’s experience in a workplace literacy and essential skills training program is the provider and instructor. The literature stresses the importance of choosing the right provider for a program, of a “sound” provider-employer relationship and of employing appropriately trained, qualified instructors with experience in workplace literacy. Such professionals will help design and deliver a curriculum best suited to the needs and goals of a particular program and its stakeholders.

Providers and instructors, however, cannot stand alone. They need funding to support their ongoing professional development (in the areas of literacy education, analysing the training needs of specific employers, industries and sectors, assessment, curriculum design, integrated learning, cultural awareness, etc . . .) and the production of and access to relevant instructional materials, resources and tools. Technical assistance is also often needed (Gray 2006: 3, 36-8; Rosen 2008: 10; Parker 2007: 4-6, 51; WfDB 2007: p. 21; Folinsbee 2007: 23-5; Benseman and Sutton 2007: 41).

Quality Control

“Quality instruction” continues to be stressed in the most recent literature. For example, a new report on vocational training in Europe identifies measures that focus on instructors as one of several “priority areas”. In this connection, “setting standards, increasing qualification levels and keeping initial and continuing training up-to-date have . . . become major issues of concern in policy-making” (Cedefop 2009: 101). Along these lines, participants in a Canadian national forum on workplace learning recently called for efforts to identify ways of “measuring the quality of training providers and develop a standard for accreditation” (Saunders 2007: 5). Similarly, experts in the US are recommending the establishment of a national certification on “Effective Instruction of Essential Skills” that would “help to establish a community of practice and to improve instructional practice” (Parker 2007: 7-8, 51).

Evaluation

Evaluation has been identified as an “over-arching” component of workplace literacy and essential skills training (CAEL 2006: 102-6). It is what allows stakeholders to determine the value of and make decisions about their program. Evaluation, properly carried out, will show to what extent a program is meeting its goals and also reveal unexpected results. The information provided by evaluation will inform decisions about whether to continue the program or not and how to improve it. The central importance of evaluation is repeatedly stressed in the literature (Gray 2006: 36-7; Salomon 2009: 6; Folinsbee 2007: 23-5; WfDB 2007: 21).

Collaboration, Planning and Design

The collaborative approach to workplace training outlined earlier extends to evaluation as a best practice. The literature also recommends that evaluation be part of the planning and design stage of a training program (Gray 2006: 6). Incorporating evaluation into this initial stage helps stakeholders define clear, realistic goals at the outset of the program and helps in early decisions about resources (money, time, space, personnel) that need to be allocated to support the evaluation process. The discussion about resources will in turn influence and fine-tune the design of the program (Gray 2006: 76-7; Salomon 2009: 10-11).

Summative and Formative Evaluation

Another best practice promoted in the literature is the use of both formative (ongoing during the program) and summative (final, end-of-program) evaluation (Gray, 2006: 6, 36-38; Salomon 2009: 11). The summative evaluation is concerned with a program’s overall effectiveness and the extent to which it met its goals. It is particularly important to making a case for a program’s continued existence and funding, and introducing changes to a program. It can also “contribute to the field’s understanding of best practices ... and invite replication” (CAEL 2006: 103; Descy and Tessaring, 2005: 7-9).

Formative evaluation provides important feedback on how a program is doing (how it’s operating, how well the trainees are doing) that can be used to “realize continuous improvement in both design and implementation” while the program is in progress. The process has been likened to taking a pulse or monitoring your vital signs during a marathon (CAEL 2006: 103, 105; Descy and Tessaring 2005: 7-9). In both cases, it is important to note not only what worked, but what did not or not so well. This will allow for improvements (Gray 2006: 76-7).

The Evaluation Context

A number of reports have cautioned against evaluating programs from the narrow perspective of measurable gains and outcomes without taking into consideration the environment in which the program was offered. Recent research, for instance, has shown that one of the barriers to knowledge transfer in workplace literacy and essential skills training is the “organizational climate, including poor communication, poor employee morale, lack of a learning culture or lack of encouragement”. From this perspective, evaluation needs to expand its lens beyond the training itself and factor in how the entire organization functions (Folinsbee 2007: 33; Dunberry and Péchard 2007: 43).

Time Frame

The literature also suggests that evaluations to date have not allowed enough time for gains and outcomes to become fully apparent (Gray 2006: 76-7). There is therefore a call for “longer timeframes to allow for more robust data collection” (Benseman and Sutton 2007: 9-10). In this connection, a 2002 study on training and ROI in the UK (Keep, Mayhew and Corney) reviewed by Gray pointed out that, “Lasting gains are those most to be desired, but are the most problematic to evaluate because the modern political process is extremely impatient. It wants long-term results, but it wants them to be demonstrated fast” (Gray 2006: 62).

SECTION 5: EVALUATION ISSUES¹

Does the Literature Discuss Evaluation?

The literature on workplace literacy and essential skills training often notes a shortage of information on evaluation. For years, the extent to which programs incorporate evaluation and the methods they use have been very difficult to determine with any precision, and this remains a problem. Within studies on training evaluation broadly speaking, very few deal specifically with literacy and essential skills education among workers. A 2008 report published as part of a larger (European) project to develop a workplace LLN evaluation toolkit, found, after a comprehensive review of international sources, that there is “little literature available specifically on . . . evaluation of training interventions on basic skills, literacy or numeracy in the workplace”. The report cautioned that, given how “sparse and diverse” the literature, it would be difficult to “draw generalised conclusions on the most appropriate techniques” (Pye and Hattam, 2008:10, 38).

French-language sources are also lacking. A recently published review of French-language literature on evaluation of basic skills training in the workplace found not a single source dealing specifically with the subject. The authors were able to identify a body of literature on evaluation in the literacy field generally, but these were “rare” and not directly concerned with workplace interventions. The authors concluded that relevant literature on the evaluation of workplace literacy and essential skills training is “practically non-existent” (Daniau and Bélanger, 2008: 5, 14-15).

Barriers to Evaluation

Recent literature discussing evaluation of workplace literacy and essential skills training raises the important issue of barriers to evaluation. On a general level, literacy and essential skills training “is too easily assumed to produce positive results in and of itself” (Bélanger and Robitaille 2008: 64). But, there are other reasons as well. According to a 2008 report, American employers who offer such training have tended to neglect evaluation of their programs because monitoring and reporting “do not always suit business interests or needs . . .” Also, some employers are uncomfortable publicizing the basic skills problems of their employees (Rosen 2008: 12). In other cases there is a lack of interest or initiative (Bélanger and Robitaille 2008:

¹ This section follows closely the discussion that appears in “Evaluation in Workplace Literacy/Essential Skills Programs: Public Sector — A Review of the Literature.” Unpublished Literature Review prepared by The Centre for Literacy of Quebec for the Canadian Association of Municipal Administrators (CAMA) and the Canadian Union of Public Employees (CUPE) [cited with permission].

65). For instance, a 2007 review of New Zealand's national Workplace Literacy Fund (WLF) that supports workplace programs noted not only an "absence of standardised reporting of learning outcomes... and a limited number of final reports", but also the fact that most managers seemed to be "quite disinterested" in the final reports (Gray and Sutton, 2007: 52).

Anxiety is also at play in certain workplaces, with some fearful of the "risk of showing that a poor training decision was made by a senior level of management" (Bélanger and Robitaille 2008: 65). Other common constraints relate to costs, lack of personnel, limited time and insufficient knowledge or training to carry out an evaluation (Dunberry, 2006 10-11; Bélanger and Robitaille, 2008: 64-65). Thus, employers in Australia worry about the administrative burdens of evaluating and reporting. In the UK, the main current barriers to evaluation have been identified as: securing "buy-in" to the process from managers/staff, the difficulty of the process, limited time and cost (Pye and Hattam, 2008: 46-47).

Measuring Performance and Productivity Outcomes

Over the years, evaluation of workplace literacy programs has followed the Kirkpatrick model, which remains the most popular and, according to recent studies, appropriate and "adaptable" approach (Pye and Hattam, 2008: 68-70; Dunberry and Péchard 2007: 8, 13). Kirkpatrick's four levels of evaluation include: 1. Learner reaction to the training program, 2. Learning or knowledge acquisition, 3. Learning or knowledge transfer (job performance), and 4. impact on the business (productivity). As Gray pointed out, employers tend to view training within "a narrow organisational perception of the importance of skill development . . . their primary concern being to achieve returns from their investment in the form of improved performance and cost savings" (Gray 2006: 12). However, program evaluations have tended to revolve around the first two levels, focussed on the learner and learning, with some reporting on Level 3 and very little on Level 4, which is "typically not addressed" (Gray and Sutton, 2007: 52).

Evaluation at Level Four is not easy "because it can be extraordinarily difficult to isolate the effects of the training alone on certain business metrics, [especially since] employers often implement more than one improvement strategy at a time" (CAEL 2006: 105-6). In Canada, for example, a 2005 report by the Conference Board indicated that only 12% of member organizations evaluated the business impact of their training programs (Bailey, 2007: 23). Growing concern about getting employers more interested and involved in literacy and essential skill training is now helping to fuel a call for a shift in evaluation focus from concentrating on the learning process and learner gains towards performance and productivity evaluation.

Some Examples

One example of this development is provided by the WoLLNET Project (jointly funded by the European Commission's Leonardo da Vinci Sub-Programme, the London Development Agency and the Learning and Skills Council London Region), which is currently "developing a web-based, user-friendly, theoretically grounded Toolkit to enable employers, providers and unions in participating countries to systematically evaluate the impact of workplace basic skills training programmes". One of the key innovations featured in the project is to "extend the traditional areas of workplace basic skills training evaluation beyond the typical focus on learner response

and the value to the learner, by measuring the impact of training on individual and organisational performance”. The stated goal of this shift is to generate evidence that can help “make a strong business case” to employers for basic skills training (WoLLNET Workplace Literacy Language and Numeracy Evaluation Toolkit Project: http://www.wollnet.org/inbrief_en.htm). Also in the UK, the Enhancing 'Skills for Life' Project has been tracking outcomes to both workers (improved LLN skills) and their employers (productivity) (Gray 2006: 74).

Generating interest among employers is also a growing concern in New Zealand, where learner gains continue to be the focus of evaluations that often contain no information on outcomes for the company. There have been calls in recent years to address this issue since “companies are less interested in individual learner gain and much more interested in how performance changes on the job” (Gray and Sutton, 2007: ii, 56). One suggestion is the use of software developed by Workbase (The New Zealand Centre for Workforce Literacy Development) to capture a range of outcomes and specific LLN gains, including company goals.

The recent push towards evaluating performance and productivity in New Zealand’s workplace literacy and essential skills training can also be seen in the Upskilling Partnership Project that has produced fifteen workplace partnerships in a variety of contexts “to trial a range of foundation skills approaches and interventions. The programs incorporated a “comprehensive evaluation” with a specific “focus” on workplace gains for the employee *and* the employer, as well as the wider industry (Benseman 2006: 22). This report will be published in 2009.

Measuring Return on Investment (ROI)

Evaluating the impact of literacy and essential skills training on productivity is, as noted earlier, difficult. Adding to the challenge is the appearance of a new, related, and equally tricky Level Five to the traditional evaluation scheme: return on investment (ROI). This measure seeks to “capture the true monetary value of the program by comparing the monetary benefits with the actual costs of administering the program” (CAEL 2006: 105-6). Measuring the ROI of workplace training programs, including those in literacy and essential skills, is mentioned more and more in the literature as a desirable and appropriate component of workplace training evaluation, although it remains on the margins of practice (Saunders 2009: 6-7; WfDB 2007: 20; Dunberry and Péchard 2007: 8; Bailey 2007: Benseman and Sutton 2007: 9-10; 37; CAEL 2006: 105-6; Literate Cities 2002: 21-2). For example, in Canada, the Conference Board reported that only 8% of member organizations evaluated training of any kind in terms of ROI (Bailey, 2007: 23).

ROI evaluation can be very difficult to carry out, usually requiring expert and costly assistance and/or special software (Benseman and Sutton 2007: 9-10). But many believe it is “critically important for showing employers the strategic, bottom-line importance of training and workforce development” (CAEL 2006: 105-6; Parker 2007: 7). In this connection, a recent report noted that Canadian employers invest relatively little in basic skills upgrading and this is not likely to change in any major way as long as there is “little hard evidence to encourage them to do so” (Bailey, 2007: 37).

This assessment of employer thinking is supported by the findings of a series of roundtables held in 2007-8 (Toronto, Halifax, Edmonton) on learning investment in the Canadian workplace. Among the “best bets” for improving employer investment suggested by participants

(senior government officials and senior representatives from business, labour, colleges, universities and NGOs) was more “data”, “clear measurements” and evidence of ROI in training programs (Saunders, 2008: 5; Goldenberg, 2006: 42). The final report in the series stressed the importance of ROI evaluation and the sharing of results the most forcefully: “The decision by employers to invest in training is all about the bottom line. They must have reason to believe the investment will be profitable” (Saunders 2009: 6-7).

The shift to evaluating gains to employers is driving ROI measurement in workplace literacy and essential skills training programs. In New Zealand, the comprehensive evaluation component that is being built into the trial programs now underway as part of the Upskilling Partnership project attempts to capture ROI if possible. At the same time, the WoLLNET Workplace LLN Evaluation Toolkit Project, also in progress, is considering measuring ROI as well (WoLLNET Workplace Literacy Language and Numeracy Evaluation Toolkit Project: http://www.wollnet.org/inbrief_en.htm).

Cautionary Voices

Not everyone agrees. Evaluation that focuses too heavily on improvements in performance and productivity, while paying little attention to or downplaying the impact on the individual learner is seen by some as too narrow an approach. For example, the Enhancing 'Skills for Life' Project in the UK has found that, “The most marked benefits for individuals and organisations are in personal and/or work satisfaction. Workplace learning has the potential to change individuals’ ‘learning trajectories’ and encourage them to rethink their ambitions and capabilities... and continue with formal learning in later years” (Wolf 2008: 1). Similarly, a connected study of eleven workplace literacy and essential skills programs in Canada and the UK found that “there were significant gains” to individual workers, particularly in attitudes. The authors concluded that “it may be more advantageous to better understand employee job satisfaction and engagement with the workplace” (Taylor, Evans and Mohamed 2008: 6, 9-11).

A recent survey of European employers offering literacy and essential skills training in their workplaces supports this view. For example, most participants from the Irish group interviewed believed that the evaluation of organisational/financial impact was “important” or “essential. At the same time, however, they expressed strong support for evaluating improvements in the LLN skills of their workers as well as capturing so-called “soft measures” or “intangibles” (non-monetary), such as increased morale, self-esteem and confidence, greater job satisfaction, greater participation and a willingness to continue work-related training (Pye and Hattam 2008: 49-50).

A new survey of Canadian employers obtained similar results, i.e. employers appreciated the value of how their programs “enhanced workers’ lives, personally and at work, and thereby contributed to a culture of lifelong learning in the workplace”. The report also indicated that most of those interviewed “were reluctant to try and measure the economic benefits of workplace literacy training or tie the results too closely to the bottom line”. An important reason cited was the fact that such programs cannot be expected to have an “immediate” impact (Plett 2007: 65-6). This remark reflects a “reality about what outcomes can be expected in the short term” that Gray underlined in her report as an important consideration to emerge from the literature addressing the issue of evaluation (Gray 2006: 77).

“Hard” versus “Soft” Evaluations — Quantitative and Qualitative Approaches

Discussions about and shifts towards performance and productivity evaluation come up against the issue of how to obtain the needed information. The increasing call for “hard” evidence is another way of saying that evaluations should become more quantitative. In the case of ROI in particular, there is no way around an “exclusively quantitative” approach (Dunberry and Péchard 2007: 8). However, the reality is that quantitative evaluation has not been the dominant practice, as various important studies have noted since the late 1990s (Gray 2006: 4-5, 28-9, 51; Pye and Hattam, 2008; Plett 2007: 65-6; Roberts and Gowan, 2006: 7-8). These have criticized the “informal”, “unsystematic”, “unscientific”, “anecdotal”, “qualitative” and “subjective” nature of many if not most of the evaluations used in workplace literacy and essential skills training programs and urged a more “formal”, “empirical”, “scientific”, “rigorous”, “robust”, “quantitative” and “objective” approach (Salomon 2009: 16).

The literature suggests a number of reasons why there has been so little quantitative evaluation. In Canada, employers have cited time and cost constraints, the complexity of the process, the comparative ease of relying on qualitative methods and indicators, a reluctance to “intensively monitor” employees, the “sensitive” nature of the process, and confidentiality concerns among workers (Salomon 2009: 16). In Australia, similar obstacles exist. For instance, employers have recently voiced concerns about government recommendations that they broaden the scope of their evaluations and use more “rigorous indicators”. The fear is that this would overburden their staffs and budgets (WELL 2006: 13, 59-60).

The complexity of quantitative evaluation is a serious challenge, as Gray highlighted in her report (Gray 2006: 51, 62-3, 76-7). The “true” effect of a program can only be measured if the method used to quantify change distinguishes the program effects from the effect of other factors, determines what the hypothetical outcomes would be for the same people if they had not participated in the program, accounts for short-, medium-, and long-term outcomes, and avoids selectivity and heterogeneity biases while ensuring validity (Descy and Tessaring, 2005: 13).

A Combined Approach

Many organizations, especially SMEs, are simply not equipped to deal with this kind of evaluation. At the same time, it has been argued that qualitative or “soft” evaluation can be more useful in measuring the “intangibles” or changed attitudes that are seen by many as being generally “at least as important as harder financial impacts” (Pye and Hattam 2008: 49-50) and even more important in certain work settings. In other words, not all outcomes can be easily quantified or converted to monetary value (Bailey 2008: 44). In this view, a qualitative approach to evaluation can capture “the complexities of real-world programmes and participants’ experiences” that a quantitative method might miss or “oversimplify” — unless, of course, some method was devised of quantifying these complexities.

Along these lines, experts in New Zealand have recently recommended the development of “a common measure of changes in confidence and literacy behaviours that providers could use alongside other outcome measures ... [that] would provide consistent and quantifiable results in

an area that many teachers, employers and learners think are as important as LLN skills gain” (Benseman and Sutton 2007: 9-10).

At the end of the day, “pragmatism” is called for — an acceptance of the uses and limitations of each approach and an understanding of how one can usefully complement the other, taking into account the work setting, the goals of the training program and the resources available to carry out an evaluation (Descy and Tessaring 2005: 13, 15). Recent literature and studies support the use of a combined quantitative and qualitative evaluation of workplace literacy and essential skills training (Gray 2006: 74-6; CAEL 2006: 105; Descy and Tessaring 2005: 13, 15; Noel 2005: 39-44).

“Hard” quantitative measures can be based on in-house records and statistics, pre- and post-training assessments or “tests” that are broadly, creatively and fairly defined, control charts and checklists, benchmarking and productivity analyses, including ROI. The qualitative component of an evaluation can also benefit from a variety of information-gathering techniques, such as interviews, focus groups and surveys involving employers, managers, supervisors, instructors and program participants, qualitative assessments and other feedback from instructors on classroom performance and attitudes, role-playing and mock situations, journals, portfolios and narratives produced by participants, observations of workplace behaviour, meeting minutes, etc... Time and resources permitting, triangulation and the use of a control group are recommended. Throughout, the process should aim for balance, complementarity and respect for the fundamental principles of feasibility, validity, reliability, confidentiality, anonymity and unobtrusiveness, (Gray 2006: 76-7; Salomon 2009: 17-18; Benseman and Sutton 2007: 9-10).

CONCLUDING REMARKS

This review of international literature on workplace literacy and essential skills training produced between late 2006-early 2009 supplements the larger work on the topic published by Alison Gray in 2006. Taken together, these two reports provide a systematic overview of the main lines of research and practice in the field in the past decade. In the process, they point out challenges and obstacles, highlight best practices and discuss issues debated in the literature.

Many forces are driving and shaping workplace literacy training. As Gray observed, it is a complex situation that calls for action on various fronts: The government’s role is crucial at many levels, but sectors, employers, unions, training providers, as well as employees must all do their part, work in partnership to understand the benefits of workplace literacy training, determine where the basic skills needs are and how best to address them. No one group can do it alone. Beyond commitment, engagement and partnership, workplace literacy and essential skills training needs to be supported by solid funding and greater investment from both government and business, an energetic information campaign, advocacy, quality control and greater access.

The literature offers much in terms of best practice recommendations on getting training programs off the ground and running, delivery, learning models and evaluation. At the same time, it points to some serious gaps in the research. Evaluation, in particular, has been inadequately implemented or studied to date. Policy impacts are also just beginning to be assessed. Workplace literacy continues to be a developing area. There is still much to think about, investigate and discuss.

We offer this review and the three days of discussion and reflection at the 2009 Summer Institute as contributions to moving forward on all these fronts.

BIBLIOGRAPHY

Australian Council for Adult Literacy/ACAL (2009). "No National Spotlight on Adult Literacy?." *Literacy Link* (29/1): 1-2, 14. Retrieved 15 May 2009.
http://www.acal.edu.au/publications/newsletters/LL2009/0903_v29n1LitLink_www.pdf

Bailey, Allan (2007). "Connecting the Dots... Linking Training Investment to Business Outcomes and the Economy." Report. Canadian Council on Learning. Retrieved 14 April 2009:
http://www.ccl-cca.ca/NR/rdonlyres/F6226BEA-0502-4A2D-A2E0-6A7C450C5212/0/connecting_dots_EN.pdf

Bélanger, Paul and Magali Robitaille (2008). "A Portrait of Work-Related Learning in Quebec." Canadian Council on Learning. Retrieved 15 April 2009:
<http://www.nald.ca/library/research/ccl/quebec/quebec.pdf>

Benseman, John (2006). "Upskilling the Workforce Evaluation Framework - Evaluation Synthesis of Literacy, Language and Numeracy Skills Initiatives - Evaluation of the Upskilling Partnerships Projects." Draft Document [cited with permission].

Benseman, John and Alison Sutton (2007). "A Synthesis of Foundation Learning Evaluation and Research in New Zealand since 2003." A Report Prepared for the Department of Labour, Government of New Zealand. Retrieved 16 April 2009:
<http://www.dol.govt.nz/PDFs/learning-and-evaluation-july-2007.pdf>

Campbell, Alison (2008). "All Signs Point to Yes: Literacy's Impact on Workplace Health and Safety." Report. The Conference Board of Canada. Retrieved 15 April 2009 :
http://www.workplacebasicskills.com/non_frame/pdfs/AllSignsPointtoYes.pdf

Canadian Council on Learning/CCL (2007). "Canada's Biggest Economic Challenge: Improving Workplace Learning in Canada." Report. Retrieved 17 April 2009:
http://www.ccl-cca.ca/CCL/Reports/LessonsInLearning/LinL20070315_improving_workplace_learning.htm

Canadian Council on Learning/CCL (2007a). "Unlocking Canada's Potential: The State of Workplace and Adult Learning in Canada." Report. Retrieved 17 April 2009:
[cca.ca/CCL/Reports/StateofLearning/UnlockingCanadasPotential.htm](http://www.ccl-cca.ca/CCL/Reports/StateofLearning/UnlockingCanadasPotential.htm)

The Centre for Literacy of Quebec (2009). "Evaluation in Workplace Literacy/Essential Skills Programs: Public Sector — A Review of the Literature." Unpublished Literature Review prepared by The Centre for Literacy of Quebec for the Canadian Association of Municipal Administrators (CAMA) and the Canadian Union of Public Employees (CUPE) [cited with permission].

Coughran, Jen (2009). "COAG Decision on Adult Literacy Funding – A Commonwealth Government Perspective." *Literacy Link* (29/1): 13. Retrieved 15 May 2009.
http://www.acal.edu.au/publications/newsletters/LL2009/0903_v29n1LitLink_www.pdf

Council for Adult and Experiential Learning/CAEL (2006). “Building Blocks for Building Skills: An Inventory of Adult Learning Models and Innovations.” Report Prepared for the Department of Labour (WIRED Initiative), Government of the United States. Retrieved 17 April 2009:

http://www.cael.org/pdf/publication_pdf/BuildingBlocksforBuildingSkills.pdf

Daniau, S. and P. Bélanger (2008). “Synthèse des publications en langue française sur l'évaluation formative de la formation de base en milieu de travail.” In *L'enseignement, l'apprentissage et l'évaluation des adultes: Pour de meilleures compétences de base*. Éditions OCDE. Retrieved 17 April 2009:

<http://ocde.p4.siteinternet.com/publications/doifiles/962008011P1T009.pdf>

Descy, P. and M. Tessaring (2005). “The Value of Learning: Evaluation and Impact of Education and Training.” Third Report on Vocational Training Research in Europe. Executive Summary. Luxembourg: EUR-OP (Cedefop Reference Series). Retrieved 7 May 2009:

http://www.cedefop.europa.eu/etv/Upload/Information_resources/Bookshop/408/4042_en.pdf

Dunberry, Alain (2006). *Analyse des pratiques d'évaluation de la formation et de son rendement dans des entreprises performantes*. Montreal: UQAM/CIRDEP. Retrieved 14 May 2009:

http://www.cpmt.gouv.qc.ca/publications/pdf/RECHERCHE_T3_Dunberry.pdf

Dunberry, Alain and Céline Péchard (2007). “L'évaluation de la formation dans l'entreprise: État de la question et perspectives.” Report. Montreal: UQAM/CIRDEP. Retrieved 17 April 2009:

http://www.cpmt.gouv.qc.ca/publications/pdf/RECHERCHE_T3_Dunberry_Pechard.pdf

European Centre for the Development of Vocational Training/Cedefop (2009). “Continuity, Consolidation and Change: Towards a European Era of Vocational Education and Training.” Report. Luxembourg (Cedefop Reference series, 73). Retrieved 17 April 2009:

http://www.cedefop.europa.eu/etv/Upload/Information_resources/Bookshop/528/3055_en.pdf

Folinsbee, Sue (2007). “International Workforce Literacy Review. Canada.” Report Prepared for the Department of Labour, Government of New Zealand. Retrieved 17 April 2009:

<http://dol.govt.nz/PDFs/upskilling-2007-canada.pdf>

Goldenberg, Mark (2006). “Employer Investment in Workplace Learning in Canada.” Discussion Paper. Canadian Council on Learning. Retrieved 14 April 2009:

http://www.cprn.com/documents/45354_en.pdf

Gray, Alison (2006). “Upskilling through Foundation Skills. A Literature Review.” A Report Prepared for the Department of Labour, Government of New Zealand. Retrieved 13 April 2009:

<http://www.dol.govt.nz/PDFs/upskilling-through-foundation-skills.pdf>

Gray, Alison and Alison Sutton (2007). “The Workplace Literacy Fund. A Review.” A Report Prepared for the Department of Labour, Government of New Zealand. Retrieved 28 April 2009:

<http://www.dol.govt.nz/PDFs/workplace-literacy-fund-august-2007.pdf>

Hinman, Judith and Mick Fletcher (2008). “Developing Models of Flexible Delivery of Skills for Life Provision.” Report of the Project undertaken as Part of the Skills for Life Improvement Programme. UK: Quality Improvement Agency/Skills for Life Improvement Program. Retrieved 28 April 2009:

<http://www.sflip.org.uk/PDF/Flexible%20Models%20of%20Delivery%20final%20report.pdf>

Jurmo, Paul (2004). “Workplace Literacy Education. Definitions, Purposes, and Approaches.” *Focus on Basics. Connecting Research and Practice*. Vol. 7, Issue B: 22-26. Retrieved 8 May 2009:

http://eric.ed.gov:80/ERICDocs/data/ericdocs2sql/content_storage_01/0000019b/80/1b/a9/8d.pdf

Literate Cities 2002: Municipal Excellence through Partnerships and Education. Conference Reports (Richmond, BC, September 29-October 2, 2002, Kingston, ON, November 6-8, 2002). Conference Partners: Canadian Association of Municipal Administrators, City of Richmond, BC, City of Kingston, ON, Canadian Union of Public Employees, National Literacy Secretariat, Human Resources Development Canada. Retrieved 7 May 2009:

<http://www.nald.ca/library/research/lc2k2rep/lc2k2rep.pdf>

Lowe, Graham (2007). “21st Century Job Quality: Achieving What Canadians Want.” Report. Canadian Policy Research Networks. Retrieved 17 April 2009:

http://www.cprn.org/documents/48485_EN.pdf

Merrifield, Juliet (2007). “International Workforce Literacy Review. England.” A Report Prepared for the Department of Labour, Government of New Zealand. Retrieved 28 April 2009:

<http://dol.govt.nz/PDFs/upskilling-2007-england.pdf>

Murray, T. Scott et al (2008). “Reading the Future: Planning to Meet Canada’s Future Literacy Needs.” Research Report. Canadian Council on Learning. Retrieved 29 April 2009:

<http://www.nald.ca/library/research/ccl/future/future.pdf>

Myers, K. and P. de Broucker (2006). “Too Many Left Behind: Canada’s Adult Education and Training System.” Research Report. Canadian Policy Research Networks. Retrieved 28 April 2009: http://www.cprn.org/documents/43977_en.pdf

Noel, Alison (2005). “Embedding Literacy, Language and Numeracy in London Local Authorities.” Project Guide (to Phase 1). London: Basic Skills Agency. Retrieved 15 April 2009.

<http://archive.basic-skills.co.uk/content/documents/?FileID=1278908036>

Parker, James T. (2007). “Workplace Education: Twenty State Perspectives.” Policy Brief. US National Commission on Adult Literacy. Retrieved 28 April 2009:

<http://www.nationalcommissiononadultliteracy.org/content/parkerpolicybrief.pdf>

Plett, Lynette (2007). “Literacy Programs in the Workplace: How to Increase Employer Support.” Report. Canadian Council on Social Development. Retrieved 14 April 2009:

http://www.ccsd.ca/pubs/2007/literacy/Workplace_Literacy_Programs.pdf

- Pye, Joe and Caroline Hattam (2008). "Workplace Basic Skills Training Impact Evaluation." Research Report for the Leonardo Da Vinci WoLLNET Project. Retrieved 29 April 2009: <http://www.wollnet.org/files/WoLLNET%20Research%20Report%20Final.pdf>
- Roberts, Paul and Rebecca Gowan (2007). "Workplace Literacy. Canadian Literature Review and Bibliography." Working Paper. Canadian Council on Social Development. Retrieved 14 April 2009: http://www.ccsd.ca/pubs/2007/literacy/Canadian_Literacy_Literature_Review.pdf
- Rosen, David J. (2008). "International Workforce Literacy Review. United States." A Report Prepared for the Department of Labour, Government of New Zealand. Retrieved 28 April 2009: <http://dol.govt.nz/PDFs/upskilling-2007-united-states.pdf>
- Saunders, Ron (2009). "Employer Investment in Workplace Learning: Report on the Edmonton Roundtable." Canadian Council on Learning. Retrieved 29 April 2009: http://www.nald.ca/library/research/ccl/edmonton_en/edmonton_en.pdf
- Saunders, Ron (2008). "Employer Investment in Workplace Learning: Report on the Toronto Roundtable." Canadian Council on Learning. Retrieved 29 April 2009: <http://www.ccl-cca.ca/NR/rdonlyres/98052FCD-E99D-49FE-91C2-FC14EBECFA2B/0/20080403TorontoRoundtableReportEN.pdf>
- Saunders, Ron (2007). "Moving Forward on Workplace Learning: Report on the Forum on Employer Investment in Workplace Learning." Canadian Council on Learning. Retrieved 4 May 2009: http://www.cprn.org/documents/46861_en.pdf
- Sticht, Thomas G. (2007). "Integrated Literacy Works! Making Workforce Development Efficient and Effective in Industrialized Nations." Consultation Report. Retrieved 29 April 2009: <http://www.nald.ca/library/research/sticht/07feb/inlitwor.pdf>
- Tamkin, P., M. Cowling and W. Hunt (2008). "People and the Bottom Line." UK: Institute for Employment Studies. Retrieved 14 April 2009: <http://www.investorsinpeople.co.uk/Documents/Final%20full%20report%20inc%20appendices.pdf>
- Taylor, Maurice, Karen Evans and Alia Mohamed (2008). "The Value of Formal and Informal Training for Workers with Low Literacy: Exploring Experiences in Canada and the United Kingdom." Ottawa: Partnerships in Learning. Retrieved 5 May 2009: <http://www.nald.ca/library/research/interplay/value/value.pdf>
- Townsend, Ray and Peter Waterhouse (2008). "Whose Responsibility? Employers' Views on Developing their Workers' Literacy, Numeracy and Employability Skills." Report. Australia: National Centre for Vocational Education Research. Retrieved 28 April 2009: http://www.wli.com.au/Publications/Whos_Responsibility_Full_Report_nl05003.pdf

“WELL 2006 Evaluation - Study of WELL Projects”/WELL (2006). Final Report. Department of Education, Science and Training, Government Of Australia. Retrieved 7 May 2009: http://www.dest.gov.au/NR/rdonlyres/3A6C2D5F-4356-467D-A4D5-8B5F244DF57F/16042/CopyofWELL_2_.pdf

Wolf, Alison (2008). “Adult Learning in the Workplace: Creating Formal Provision with Impact.” Enhancing 'Skills for Life': Adult Basic Skills and Workplace Learning Project (2003-2007). Research Briefing 1, No. 59. Retrieved 29 April 2009: <http://www.Wolf2008.org/dspace/retrieve/3704/Wolf2008RB59final.pdf>

Wolf, Alison (2005). “Basic Skills in the Workplace: Opening Doors to Learning.” Report. London: Chartered Institute of Personnel and Development. Retrieved 15 April 2009: <http://www.cipd.co.uk/NR/rdonlyres/D00191EC-8FEE-4E1E-BC5E-333AC1B8EB2C/0/basicskills0105.pdf>

Workbase Training (1996). “Research into Employees Training and Learning Needs undertaken by Workbase Training.” Unpublished Report [cited with permission].

Workforce Development Board and Literacy Ontario Central South/WfDB (2007). “Want the Competitive Edge? Literacy in the Workplace.” Retrieved 28 April 2009: <http://ww1.prweb.com/prfiles/2007/03/25/514162/ResourceManual2007.pdf>