

*Workplace Literacy and Essential Skills Initiatives:
Measuring and Legitimizing Success to Expand Access*

Research framework

Project goal: To adapt and test an evaluation model that will measure long-term impacts of workplace LES, convincing employers that this investment pays, and motivating workers and employers to engage in LES in the workplace.

Background

The following definition of evaluation underpins this project.

Evaluation is a systematic investigation to determine the significance, worth or benefits of a policy, programme or measure, using relevant social research methods, criteria, standards and indicators. It is also a developmental process that enlightens specific policies, processes and practices for its stakeholders. It contributes to collective learning and to knowledge production. It reduces uncertainties in decision-making, helps to improve design and implementation of social interventions, while ensuring effective allocation of resources. A characteristic of evaluation, compared with other fields of social research, is its direct links to policy-and decision-making.

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).

http://www.trainingvillage.gr/etv/Upload/Information_resources/Bookshop/408/4042_en.pdf

A 2008 international literature review on workplace learning found that employers in almost every country reviewed tend to avoid evaluation for various reasons. These include lack of requirement ("nobody asked for an evaluation") or of interest, fear of the findings, *cost, lack of appropriate training and time constraints*. For literacy/essential skills training it is also "too easily assumed to produce positive results in and of itself". (Dunberry, 2006; Bélanger and Robitaille, 2008: 64-65).

A recent EU report noted that, "The literature on evaluation methods in literacy and numeracy training is too sparse and diverse to draw generalised conclusions on the most appropriate techniques ..."

Pye, Joe and Caroline Hattam (2008). "Workplace Basic Skills Training Impact Evaluation." Research Report for the Leonardo Da Vinci WoLLNET Project.

<http://www.wollnet.org/files/WoLLNET%20Research%20Report%20Final.pdf>

Despite the lack of widespread evaluation in workplace basic education, there is general agreement on best practices. Some best practices emerge.

Evaluation as collaboration

One best practice is a team approach that involves stakeholder collaboration, including (depending on context and program), managers, supervisors, workers and/or union representatives, instructors, and possibly a representative of the funding agency and an external consultant. The widely accepted model gives voice to people with different perspectives.

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Despite acknowledgment that partnership working can be time-consuming and may slow progress, nevertheless, experts agree the approach is crucial to ensure sustainability.

Evaluation as Part of the Design and Planning Stage

Another best practice is the incorporation of evaluation into the design and planning stage of the program. Integrating evaluation into the design and planning stage promotes the definition of *clear, realistic goals* at the outset of the program and allows allocation of resources to support the evaluation process.

Evaluation as an Ongoing Process

A third is evaluation as an ongoing process and not merely an end-of-program tallying of results. The combination of ongoing and final evaluation built into the reporting framework mirrors experts' recommendation that evaluation take two forms: *formative and summative*.

Levels of evaluation

More than 50 years ago, a model for levels of evaluation was developed by D.L Kirkpatrick.

The Four Levels of Evaluation

LEVELS OF EVALUATION	COMMON PERFORMANCE INDICATORS
<i>Reaction to the program ("smilesheet" — most commonly evaluated level)</i>	<ul style="list-style-type: none"> ➤ Participants were satisfied that program met their needs, goals ➤ Participants were satisfied with the implementation of the program ➤ Participants liked the program ➤ Participants were satisfied with the material (relevant to their work), the curriculum, the pedagogical approach, the instructors, scheduling, facilities ➤ Participants completed the program ➤ Participants would recommend the program to others
<i>2. Learning/knowledge acquisition</i>	<ul style="list-style-type: none"> ➤ New skills were learned — reading, writing, calculating, understanding, problem-solving communicating
<i>3. Learning/knowledge transfer (to many, the "truest assessment of a program's effectiveness")</i>	<ul style="list-style-type: none"> ➤ Learned skills were applied to work situations — better/faster performance of job tasks, better/greater participation in team work, in union activity, enhanced ability to communicate (writing memos, filling out forms, writing reports, taking minutes, doing e-mail, expressing one's self), improved understanding (following oral instructions, understanding fellow workers or supervisors, understanding written material) ➤ Learned skills impacted positively on attitudes in the workplace ("soft" indicators) — better morale, greater self-confidence, more job-satisfaction, readiness to pursue further learning opportunities
<i>4. Impact on the business or productivity (the "bottom line" — least evaluated level)</i>	<ul style="list-style-type: none"> ➤ Productivity improved — less absenteeism, fewer workplace accidents and better health and safety awareness, less wastage, increased employee

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	retention, better sales, cost savings, quality improvements, reduced-re-work, improved customer service, more efficient internal communications, better completion of paper-work, more promotions and wage increases
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Kirkpatrick, D. L. (1994). *Evaluating Training Programs: The Four Levels*. San Francisco: Berrett-Koehler.

The Kirkpatrick model is still widely cited today, but more recently a fifth level has been added: ROI (return on investment) which is increasingly mentioned as a best, although particularly challenging, practice. ROI evaluation seeks to “capture the true monetary value of the program by comparing the monetary benefits with the actual costs of administering the program”.

A recent survey of European employers found 40% evaluated at level one, 38% at level 2, 34% at level 3, but only 21 % at level four. An even smaller percentage evaluated ROI (Pye and Hattam, 2008: 56-63). In Canada, the Conference Board reported that only 8% of member organizations evaluated training in terms of ROI (Bailey, 2007: 23).

The New Zealand initiative

New Zealand has taken a pro-active approach to this challenge. Until 2006, a number of government departments provided funding for various workplace literacy programs, but without clear coordination. That year, the NZ government issued Proposed Foundation Learning Quality Assurance Requirements which list evaluation as one of six practices having a “significant and positive impact on foundation learning, a key element in a model for planned, purposeful practice”.

In March 2006, the Government of New Zealand Cabinet agreed to develop a cross-cutting strategy - *Upskilling the Workforce Initiative*- to upgrade (“upskill” in NZ and in their documents) their workforce, focusing on the literacy, numeracy and language (LLN) skills at the low-skilled end of the workforce. They identified three priority areas for action: Shifting workplace practices, motivating and assisting individuals, and developing the capacity and quality of effective provision. To inform an eventual detailed Plan of Action, The Department of Labour mandated evaluation and research syntheses to gather evidence about the effectiveness of various frameworks and models of provision at home and abroad. Among their initiatives, they commissioned an extensive literature review to inform the work. They also funded the Upskilling Research and Evaluation program to examine NZ programs and answer three key questions:

- What are the most effective and efficient ways to initiate, establish, maintain and complete successful LLN initiatives in New Zealand workplaces?
- What evidence is there that LLN initiatives lead to changes in the drivers of productivity?
- What are the finding implications for future policy development by government?

To find answers, researchers undertook extensive evaluations over three years (2006-2009) of 15 workplace training programs that include diverse program types, industries, learners and locations. Through an *Upskilling Partnership Project* they have created a number of The Centre for Literacy of Quebec, Industry Training Partnerships – Manitoba Competitiveness, Training 3 and Trade, Nova Scotia Department of Labour and Workforce Development, Canadian Council on Learning Updated Spring 2009

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workplace partnerships among employers, industry training organisations, providers, unions, government agencies and community groups. These partnerships have in turn set programs covering a diversity of contexts and learners, “to trial a range of foundation skills approaches and interventions.” The programs incorporate a “comprehensive evaluation” designed to identify the impacts of WEPs, with a specific focus on workplace gains for the employee *and* the employer, as well as the wider industry (Benseman, 2006: 22). Their intensive research led them to develop a model that combined quantitative and qualitative methods of gathering data that include pre- and post-course interviews and assessments of learners supplemented by key stakeholder interviews and course data. An ROI analysis of seven training programs is also being done.

The Canadian experience

Manitoba and Nova Scotia each has twenty years experience developing and supporting workplace LES. Their models reflect all the approaches accepted as “best practice”. They have evaluated WEMSC and WEI on a continuous basis and documented outcomes and impacts in a number of categories, but have largely stayed at levels 1 to 3 of the evaluation model.

Manitoba has demonstrated impacts on **individual participants** — attestations from participants and workplace educators of improved confidence, getting new credentials and further education, passing industrial tests, and increasing leadership responsibilities in the workplace and community; on developing **a culture for workplace literacy and essential skills in Manitoba** and a **joint labour-management process and principles** for implementing workplace literacy initiatives; on developing **practitioner capacity** for workplace literacy through a systematic and developmental focus; on ability to leverage **additional dollars** as a result of the original partnership, including **in-kind contributions from business and labour**; on workplace essentials skills being integrated into government departments across Manitoba, and on **other provincial and regional business labour partnerships** for workplace literacy and essentials skills in Canada using the **WEMSC model** to develop their own.

They have not, however, done systematic analysis of the outcomes over time.

Nova Scotia did a study of the WEI in 1999, ten years after it was created. It concluded that:

the **workplace education delivery model works** and that the Workplace Education Initiative is **increasing the accessibility of essential skills education** to Nova Scotia’s workplaces, that **workers are increasing their essential skills** and that these increases are causing a variety of positive outcomes for Nova Scotians and our workplaces. These outcomes indicate that the Initiative is contributing to the economic and social development of the province as well as to the creation of a life-long learning culture. Kelly, Shannon (1999). “Workplace Literacy Education Works: The Results of an Outcome Evaluation Study of the Nova Scotia Workplace Education Initiative,” Halifax: Nova Scotia: Department of Education.

They developed indicators for short, intermediate and long term impacts on workers and employers. Work outcomes include job performance, productivity, and health and safety.

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Personal outcomes include increased confidence, engagement in further learning and in community activities, reading to and helping children with homework.

The WEI has an evaluation process which is being updated. However, there has been no longitudinal study that documents and compares intermediate and long-term outcomes.

Nova Scotia is currently developing a long-term strategy around workplace learning to expand the Workplace Education Initiative. They are investigating national and international models of workforce development, which include Manitoba's People Skills Performance initiative and the UK's Investors in People which has a well-established evaluation component.

The proposed project will allow both provinces to consolidate past learning and conduct research at new sites using a common framework to identify local and comparative outcomes.

The model for this project

We will ask a Canadian version of the three questions that underlie the NZ study

- What are the most effective and efficient ways to initiate, establish, maintain and complete successful LES initiatives in Manitoba and NS workplaces?
- What evidence is there that LES initiatives lead to changes in the drivers of productivity?
- What are the finding implications for future policy development by government?

The NZ researchers have agreed to share their evaluation and research framework with us to help us adapt their questions and methodology to the contexts in Manitoba and Nova Scotia. If the project is accepted, by the time we begin, they will have completed their three year study which has already shown the strengths and weaknesses of their original plan. We will benefit from that learning. They will also share the literature reviews they completed in 2006 and the ROI research and methodologies they developed. This will significantly reduce the work of our literature reviewer and researchers.

We will bring the literature review up to the present and will review the published and unpublished data from Manitoba and Nova Scotia from the past two decades. We plan to allot most of the first year to gathering the baseline data from the two provinces, including all the tools and instruments they currently use for evaluation. We will study the model used in NZ and adapt as much as possible to our own context to give us a base to compare findings not only between the two provinces, but with NZ as well.

We cannot yet identify the specific methodologies and collection tools because the data collection and analysis plans are among the outcomes of the first 9 months of the project. We accept the NZ principle of gathering input from multiple perspectives and using a combination of qualitative and quantitative methods to capture the complexity of what we trying to evaluate. We will draw our data collection instruments from among ones used/developed in NZ, and ones currently used in Manitoba and NS. The list below includes a range of possible measures from which we will eventually choose.

Combining Qualitative and Quantitative Evaluation

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Current thinking suggests that ideally evaluation in WEPs should be comprised of both a quantitative and qualitative component. The quantitative measures can be based on information gathered from a variety of sources, such:

- in-house records and statistics
- pre- and post- training assessments, including “tests” that are broadly, creatively and fairly defined, i.e. not necessarily standardized tests or traditional tests (can be intimidating to learners) — learning can be assessed through role playing, mock situation demonstrations and informal assessments by instructors, for example
- pre- and post- productivity analyses
- control charts, checklists, punch cards
- benchmarking
- ROI analysis (probably done by a consultant with the relevant expertise to perform the exercise)

The qualitative component of evaluation can draw on multiple sources, such as:

- interviews/focus groups/surveys involving stakeholders and participants
- qualitative assessments by instructors and other feedback
- journals/portfolios/narratives produced by participants
- supervisory reports/feedback
- evaluations done by participants
- meeting minutes
- observation of classroom activities
- observation of workplace behaviour and performance

Choosing the research sites

The choice of 10 sites in each province is also integrated into the plan of activities and is an outcome of collaborative partnerships, some already in place through existing structures and some potentially new. We envisage a competitive process to identify the sites through a Call for Workplace Partners. Like NZ, we will try to include diverse sites—by size of enterprise, sector, work force composition. Manitoba has considerably more diversity in its work sector than does NS. We will adapt to the context. We are looking for a model that will produce some common results regardless of these variations.

Once methods and instruments have been confirmed, samples will be sent to the funder.