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Lessons from Other Countries Regarding Incentives for Employer-Sponsored Training

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Abstract

This research examines government policies, programs and/or initiatives used by other industrialized countries' to encourage the provision of employer-sponsored workplace training.

This paper focuses on describing and analyzing specific policy instruments (rather than programs that may be comprised of a mix of instruments). We use an approach based on that outlined by Pal (2001), which groups policy instruments based on the type of government resources or authority used as follows: inform/engage; spend/tax; regulate; and provide directly.

For each instrument type, we describe the instruments that have been used in the target countries and how they are delivered. We also review the (often limited) evaluation literature, and draw some lessons for Canada.

Key Words

Employer, instruments, government policy, evidence, evaluations, international programs, training, comparison, incentives, policy.

Glossary of Key Terms

- **Employer-sponsored training –** Job-related training is referred to as employer-sponsored training when employers provide and pay for the training.

- **Externalities –** For the purposes of this paper, this generally refers to benefits to society (with respect to incentives to invest in training) that cannot be captured by private actors in the market. For example, when employers help workers acquire skills and knowledge that is potentially transferable to other workplaces, it is difficult for the employer to capture all of the benefits of training, since the worker may choose to switch employers.

- **Formal education and non-formal education/training –** "Formal education is defined as education provided in the system of schools, colleges, universities and other formal educational institutions and that normally constitutes a continuous ladder of full-time education …" "Non-formal education is defined as any organized and sustained educational activities that do not correspond exactly to the above definition of formal education. Non-formal education may therefore take place both within and outside educational institutions, and cater to persons of any age. Depending on country contexts, it may cover educational programmes to impart adult literacy, basic education for out-of-school children, life skills, work skills and general culture. Non-formal education programmes do not necessarily follow the ladder system, and may have a differing duration" (OECD, 2005a: 319-320).

- **Job-related training** – "…The term "job-related" refers to training activities intended mainly for professional reason as opposed to mainly personal or social reasons. That is, the respondent takes part in the activity in order to obtain knowledge and/or learn new skills for a current or future job, increase earnings, improve job and/or career opportunities and generally improve his or her opportunities for advancement or promotion" (OECD, 2005a: 320).

- **Knowledge economy –** The concepts of "knowledge economy" and "knowledge worker" are based on the view that information and knowledge are at the centre of economic growth and development. The ability to produce and use information effectively is thus a vital source of skills for many individuals (OECD, 2000).

- **Lifelong learning –** According to the Organisation for Economic Co-operation and Development (OECD), a lifelong learning framework views the demand for, and the supply of, learning opportunities, as part of a connected system covering the whole lifecycle and comprising *all forms of formal and informal learning* (OECD, 2004a).

- **SMEs** – Small- and medium-sized enterprises may be defined differently in different jurisdictions. According to the OECD,[1] SMEs are non-subsidiary, independent firms which employ fewer than a given number of employees. This number varies across countries. The most frequent upper limit designating an SME is 250 employees, as in the European Union. However, some countries set the limit at 200 employees, while the United States considers SMEs to include firms with fewer than 500 employees. Small firms are generally those with fewer than 50 employees, while micro-enterprises have at most 10, or in some cases five, workers.

  The Government of Canada (SME Financing Data Initiative) defines SMEs, according to the definition used in the *Survey on Financing of Small and Medium Enterprises,* as businesses with fewer than 500 employees, and with annual revenues of less than $50 million.[2]

[1] See OECD Glossary of Statistical Terms, http://stats.oecd.org/glossary/index.htm.
[2] See www.ic.gc.ca/epic/site/sme_fdi-prf_pme.nsf/en/02028e.html.

Executive Summary

Previous research by Canadian Policy Research Networks (CPRN) has found that Canada has been under-performing in workplace learning in comparison with other countries. Less than 30 percent of adult workers in Canada participate in job-related education and training, compared to almost 35 percent in the United Kingdom and nearly 45 percent in the United States. Participation rates in employer-sponsored training in Canada and firms' spending per employee have remained virtually the same in recent years and adult literacy levels in Canada have remained virtually unchanged over the last decade.

Employer-sponsored training is highly concentrated in Canada among younger workers, those with higher education and skill levels, and workers in larger firms. Barriers to additional training include: the costs of training and of lost working time; lack of information about where to get training, how to organize and provide it, and what training is effective; employer skepticism about the return-on-investment of training; and concerns about the "poaching" of workers in whom the employer has invested.

In this report, we examine the government policies, programs and/or initiatives used by selected other industrialized countries to encourage the provision of employer-sponsored workplace training. Our review focuses on countries with a record of above average employer investment in training based on 2005 data from the Organisation for Economic Co-operation and Development (OECD) on participation in non-formal job-related learning: Denmark, Sweden, the United States, Finland, Switzerland, and the United Kingdom. We also provide some information about incentives for employer-sponsored training in Australia, and the Netherlands, and about the use of levy/grant schemes in several countries.

This paper focuses on describing and analyzing specific policy instruments (rather than programs that may be comprised of a mix of instruments) using an approach outlined by Pal (2001) by classifying policy instruments into four types as follows:

- *Inform/Engage*
  Governments may try to influence behaviour by providing information, including research results that would not be (adequately) provided in the market. This type of instrument can also involve efforts to promote commitment through dialogue or persuasion.
- *Spend/Tax*
  This type of instrument includes grants, subsidies, and tax expenditures. It could also include special taxes to fund these expenditures (such as payroll levies).
- *Regulate*
  This would include laws/regulations that specify a level of investment in training and penalize those who do not comply. It would also include processes for accreditation of providers and certification of participants.
- *Provide Directly*
  This involves the provision of the training by a government department or agency.

For each instrument type, we describe the instruments that have been used in the target countries and the (often limited) evaluation literature for that type of instrument.

Our selection criteria for documents to be included in our review were as follows:

- documents on employer-sponsored training published in peer-reviewed journals;
- documents published by well-known international organizations, such as the OECD and the European Union; and
- documents published by independent national research agencies.

Government documents and websites in the target countries were examined for descriptions of relevant policy instruments, but for assessing the performance of these instruments, we looked for evaluations conducted by independent researchers.

With respect to instruments designed to influence workplace training though informing and/or engaging workplace parties, the approach in the United Kingdom focuses on obtaining training commitments from employers (with some recognition or financial incentives for doing so), whereas the United States focuses on providing information. The Nordic countries have a tradition of engagement of the “social partners” (business and labour organizations) in labour market policy. Investment in training in those countries is to a large extent the product of the collective bargaining process, in terms of specific measures at the enterprise level, while national goals and the structure and design of training programs are developed through tripartite processes.

A variety of financial incentives are used in the target countries to stimulate employer investment in training, but there is limited evidence about the effectiveness of different approaches. Most countries examined provide some incentives that are targeted at the less skilled, in addition to more general subsidies or tax credits. The United Kingdom is also targeting small businesses with the use of brokers and assessment tools designed to help them identity and meet skill development needs. There is some evidence of effectiveness of these more targeted approaches.

Other than educational leave, it seems that direct regulation of employers is not much used as an instrument to promote training in the Nordic countries, and it is little used in others as well, except for the “train or pay” schemes found in some countries, such as France and Canada (Quebec). There is an ongoing debate, reflecting mixed evidence, about whether training levies or “train or pay” schemes ought to be part of the policy mix.

The effectiveness of policy instruments are often unclear from the literature examined, and suggestions on their applicability to the Canadian context are uncertain. However, the evidence available suggests there is scope in Canada for engaging labour and business in setting priorities, disseminating information about training programs, continuing to support the development of sectoral labour market organizations, and providing financial incentives targeted to SMEs and less-educated workers. However, as noted above, the evidence base is thin. Canada could help fill this gap by giving priority to, and adequate funding support for, the formal evaluation of instruments used to foster employer investment in training.

Lessons from Other Countries Regarding Incentives for Employer-Sponsored Training

1. Introduction

The need to invest more in our current workforce has never been greater. The demands of the knowledge economy coupled with the transformational nature of information technology mean frequent changes in skill requirements on the job. And most of the people who will be in the workforce in 2015 are in it today, so it is becoming more urgent to make the best use of the workers we have now.

Previous research by Canadian Policy Research Networks (CPRN)[3] has found that Canada has been under-performing in workplace learning in comparison with other countries. Less than 30 percent of adult workers in Canada participate in job-related education and training, compared to almost 35 percent in the United Kingdom and nearly 45 percent in the United States. Moreover, participation rates in employer-sponsored training in Canada and firms' spending per employee have remained virtually the same in recent years. Adult literacy levels in Canada have remained virtually unchanged over the last decade, with over 40 percent of adult Canadians lacking the literacy and numeracy skills they need to function well in today's economy and society (OECD, 2005b).

Employer-sponsored training is highly concentrated in Canada among younger workers, those with higher education and skill levels, and workers in larger firms. Barriers to additional training include (Goldenberg, 2006: 20-24):

- Cost: the costs of training and of lost working time;
- Lack of information about where to get training, how to organize and provide it, and what training is effective;
- Employer skepticism about the return-on-investment of training; and
- Concerns about the "poaching" of workers in whom the employer has invested.

These barriers to training are greater for small- and medium-sized firms, although they tend to do more informal training.

In November 2006, CPRN and the Canadian Council on Learning convened a forum of leaders from the business and labour communities, the colleges, and federal and provincial governments to discuss these issues and to identify steps that should be taken to improve the quantity and quality of employer investment in workplace learning. The ideas that emerged (reported in Saunders, 2007) included the following:

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[3] See Goldenberg (2006: 12).

Financial Incentives

Possibilities include: a training leave program with EI-funded benefits for the participants and a tax-credit for employers investing in training. However, there was no consensus on the use of such instruments, but rather a call for further dialogue about them.

Recognition/Certification of Individuals' Prior Learning

This would help encourage further engagement in learning activity as well as greater utilization of workers' existing skills in the workplace. While there are numerous prior learning recognition systems in place (e.g. at colleges and universities), it would be helpful to establish an ongoing multipartite (business, labour, governments, educators) mechanism to develop standards for prior learning certification.

Accreditation of Training Providers

Identify ways to measure the quality of training providers and develop a standard for accreditation.

Certification of Employer Training Systems

Establish an ISO-type certification system for employers' training activities. Employers would be assessed using independent criteria and those who were deemed to systematically provide high quality learning activities could be certified. The United Kingdom's "Investors in People" program and the United Kingdom's Adult Learning Inspectorate were cited by some participants as possible models.

Collaboration

The sector councils were seen as vehicles for useful collaboration on learning initiatives among employers, labour groups, and training providers. Training partnerships among vertically linked companies should also be encouraged. This could be a vehicle for larger companies to help smaller suppliers develop the skills of their employees.

Leadership

There was a general view that leadership is needed, from both levels of government and from CEOs of major corporations, to champion employer investment in workplace learning in Canada.

Some of the ideas put forward to improve employer investment in training would involve incentives (financial or otherwise) provided by government.

1.1 Countries Examined in This Report

The importance of workplace training to enhance the productivity and competitiveness of employers and the employability and earning capacity of workers is understood in all industrialized countries. In this document, we examine the government policies, programs and/or initiatives used by selected other countries to encourage the provision of employer-sponsored workplace training. Our review focuses on countries with a record of above average employer investment in training based on data from the Organisation for Economic Co-operation and Development (OECD, 2005a) on participation in non-formal job-related learning: Denmark, Sweden, the United States, Finland, Switzerland, and the United Kingdom[4] (see Box 1). We have also included some information about incentives for employer-sponsored training in Australia and the Netherlands, and about the use of levy/grant schemes in several countries.

Box 1.
Selected OECD Countries – Participation in Job-Related Continuing Education and Training

Denmark	46%
Sweden	45%
United States	44%
Finland	44%
Switzerland	41%
United Kingdom	34%
Canada	29%
Austria	24%
France	23%
Germany	14%

Source: *Education at a Glance* (2005).

Descriptions are available of a variety of programs and incentive tools in these jurisdictions. However, for the non-English-speaking countries, it can be difficult to obtain detailed descriptions of the programs in English.

Our selection criteria for documents to be included in our review were as follows:

- documents on employer-sponsored training published in peer-reviewed journals;
- documents published by well-known international organizations, such as the OECD and the European Union; and
- documents published by independent national research agencies.

Government documents and websites in the target countries were examined for descriptions of relevant policy instruments, but for assessing the performance of these instruments, we looked for evaluations conducted by independent researchers.

Our review considers such questions as:

- What kinds of training are covered?
- What are the goals of the policies examined? Do they differentiate between firm sizes? Do they target particular types of individuals?

4 See glossary for the OECD definition of non-formal job-related continuing education and training.

To the extent possible from the available literature (which is thin on formal evaluation and historical context), we also look at such questions as:

- What policy instruments work best and why?
- What were the unexpected undue effects of policies? (Our discussion of levy/grant systems, for example, discusses this.)
- To what extent does policy context impact policy instruments? (Our review looks particularly at the Nordic countries in this regard.)
- How have governments revised their programs to encourage employer-sponsored training?

In the conclusion of the paper, we consider what lessons could be drawn for Canada in terms of government policies, programs and/or initiatives to encourage employer-sponsored training.

Human Resources and Skills Development Canada (HRSDC) staff were consulted at the outset of the project on the selection criteria, the list of countries whose policies were to be studied (referred to below as “target countries”), the questions to be addressed, and the bibliography.

This paper is divided into five sections. Section 2 outlines the framework for analysis used to group the policy instruments described in the paper. Section 3 describes the initiatives in the target countries grouped by instrument type. Section 4 provides a summary of general evaluations of incentives to train, and section 5 provides an overall conclusion to the paper.

2. Framework for Analysis

This paper focuses on describing and analyzing specific policy instruments (rather than programs that may be comprised of a mix of instruments). There have been numerous attempts to classify policy instruments. We use an approach based on that outlined by Pal (2001).

Pal reviews the history of attempts to classify policy instruments, citing, among others, Kirschen (1964), Doern and Phidd (1992),[5] Hood (1984), and Linder and Peters (1989). Kirschen et al. (1964) describe 62 types of policy instruments, and since that work, others have tried different ways of combining them into broader categories. Some, like Pal’s, are based on the type of government resources or authority used; others emphasize goals or impact. In our view, instruments should be classified according to the nature of the tool; to use goals would be to confuse instruments with objectives. Accordingly, following Pal, we use the following classification:

Inform/Engage

Governments may try to influence behaviour by providing information, including research results that would not be (adequately) provided in the market. This type of instrument can also involve efforts to promote commitment through dialogue or persuasion.

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[5] The classification proposed by Doern and Phidd is similar to Pal’s except that it groups taxing with regulation rather than expenditure.

Spend/Tax

This type of instrument includes grants, subsidies, and tax expenditures. It could also include special taxes to fund these expenditures (such as payroll levies).

Regulate

This would include laws/regulations that specify a level of investment in training and penalize those who do not comply. It would also include processes for accreditation of providers and certification of participants.

Provide Directly

This involves the provision of the training by a government department or agency.

For each instrument type, we describe the instruments that have been used in the target countries and how they are delivered. At the end of the inventory of tools for each instrument type, we review the (often scanty) evaluation literature for that type of instrument. Near the end of the paper, we summarize the main findings of some evaluation studies that cut across instrument types.

In the conclusion of the paper, we explore what lessons can be drawn for Canada in terms of government policies, programs and/or initiatives to encourage employer-sponsored training.

2.1 Training and Market Failure

The theoretical case for all of the types of interventions outlined above is rooted in the economics of market failure. For example, there is a public good aspect to the provision of information in a number of areas pertinent to investment in training such as labour market trends, availability of training programs, and the results of research on the effectiveness of different types of training activity. All of these have economies of scale in production and minimal incremental cost in making the information available to an individual or organization once it is produced. As such, one would expect such information to be under-provided by the market. This implies a role for government in producing and disseminating such information.

Financial or regulatory incentives to invest in training, or even direct provision by government, may be justified when there are "externalities" – benefits to society that cannot be captured by private actors in the market. For example, when employers help workers acquire skills and knowledge that is potentially transferable to other workplaces, it is difficult for the employer to capture all of the benefits of training, since the worker may choose to switch employers – or another employer may actively seek to hire worker once trained ("poaching") – and use these skills elsewhere.[6] But workers may also have difficulty in financing such investments because of the difficulty of borrowing with just human capital as collateral. Accordingly, the market is likely to under invest in the provision of training for generic, portable skills. Employers are, in theory, able to capture the benefits of developing new skills that are specific to the workplace, such as how to operate a machine that is unique to the employer. However, in practice, most training has both firm-specific and general elements.

6 On the other hand, to the extent that offering learning opportunities attracts workers to stay with a company, this may offset some of the risks of poaching.

As Schömann and Siarov (2005) point out, underinvestment in training is particularly likely on the part of small- and medium-sized enterprises, and less-educated individuals. Larger firms are better able to pool the risks associated with such investments and better able to avoid poaching by offering opportunities for career development within the firm. Less educated individuals are also less likely to be able to finance their own training, less likely to understand the benefits of training, and more likely to be risk averse about learning investments. They are also less likely to be seen as "trainable" by employers. These considerations may help explain why we see much more investment in structured learning programs by larger firms and by better-educated individuals, and why firms that invest in training tend to disproportionately invest in the training of better-educated employees.[7]

In a report on workplace training in Europe, Bassanini et al. (2005) point out the tension between policy targets in Europe (a desire to increase workplace training levels) and the behaviour of firms (in the level of training they provide). They suggest this tension is well described by Colin Crouch in the following quotation:

> "Business firms are equipped to maximize, not collective objectives, but their own profitability. In doing this they will certainly provide training and retraining for large numbers of employees; there is however no reason why company decisions and market forces should maximize the level of vocational ability for a whole society except through a largely serendipitous fall-out…" (Crouch, 1998: 370).

3. Initiatives by Instrument Type in the Target Countries

In this section we outline recent initiatives in the target countries to foster employer investment in training, classified according to the taxonomy of instruments outlined above. Some programs involve a mix of instrument types, and it is not always possible to disentangle the available information by specific instrument.

We conclude the discussion of each instrument type with an analysis of effectiveness, where such analysis is available in the literature. As noted in van Elk and Gelderblom (2005), evaluation studies instruments in this area are rare and many of the existing studies do not control for other influences (beyond the policy instrument in question) on training investment, which makes it difficult to identify incremental impact.

Bassanini et al. (2005) suggest that even though there is consensus on the importance of training in the economic literature, there is less agreement on whether the levels of training are inefficiently low and, consequently, on the necessity of policy interventions. The authors go on to say that despite the theoretical reasons for under-investment in training, it is difficult to find convincing empirical evidence that workplace training is underprovided. They key reason, they argue, is that training costs and returns, which efficiency evaluations are often based, are not well measured and that many assessments of training incentives provide only descriptive statistics with no assessment of the incremental impact.

[7] For more discussion of market failure related to investment in training, see Trendle and Siu (2005) and Bassanini et al. (2005). The latter explore the implications of imperfect competition in labour markets for the provision of training.

3.1 Inform/Engage

As noted above, governments may try to influence behaviour by providing information, including labour market trends, the availability of training programs in each community or region, and the results of research on the effectiveness of different types of training activity. There is a clear public good component to the provision of such information, which means that it would not be adequately provided in the market. This type of instrument can also involve efforts to promote commitment through dialogue or persuasion, sometimes known as "moral suasion."

Specific instruments within this type may include: print material, hard-copy or on-line; media campaigns; the conduct and dissemination of research; knowledge exchange events such as roundtables that bring together researchers, practitioners, and other stakeholders. The information may be presented in a neutral, matter-of-fact way, or in a persuasive tone designed to change attitudes.

Baker (1994) argues that there is a need for governments to engage in information campaigns to raise awareness of issues and opportunities regarding investment in training.

Denmark, Sweden and Finland

The Nordic countries – we focus on Denmark, Sweden, and Finland, but Norway would be included in this group – have a tradition of engagement of the "social partners" (business and labour organizations) in labour market policy. They also have the highest degree of union membership among industrialized countries.[8] Accordingly, investment in training in those countries is to a large extent the product of the collective bargaining process, in terms of specific measures at the enterprise level, while national goals and the structure and design of training programs are developed through tripartite processes. Some commentators refer to this as the Nordic model of training.

In Denmark, the social partners are represented in: the Vocational Education Training Council (*Erhvervsuddannelsesrådet – EUR*), which advises the Minister of Education on objectives, structures, admission requirements, qualification needs, certification and quality issues; the national Trade Committees that provide sector relevant advice on the content, structure, duration and evaluation of programs and courses; the Local Training Committees, which assist schools in planning the content of programs. They provide advice on all matters concerning training and help strengthen contact between schools and the local labour market (Cort, 2002).

- Through a Tripartite meeting in March 2006, the Danish government and the social partners agreed upon their joint responsibility to strengthen the adult education and training effort. In August 2006, the government and the social partners completed a joint task force focusing on the measurement of the adult education and training effort (Government of Denmark, 2006b).
- Following tri-party negotiations, unions and employers are now incorporating the financing of lifelong learning into the collective wage agreements (OECD, 2008).

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8 For more information on trade union density in OECD countries, see www.oecd.org/document/34/0,3343,en_2649_33927_40917154_1_1_1_1,00.html#union.

Sweden and Finland take a similar approach to the engagement of employers and labour in the development of labour market programs.

Rubenson (2006) notes that in the 1960s, adult education became a distinct public policy area in Nordic countries, with close involvement of business and labour. The provision of education and training was seen as a key part of the welfare state: it helped unemployed and underemployed workers to improve their employability, helped meet skill needs in growth sectors, and, by helping to maintain full employment, it helped keep down costs of income support programs such as unemployment insurance.

In the 1970s and 1980s, post-compulsory education options were introduced in the Nordic countries for adults at the secondary and tertiary levels. In the 1990s, adult education policy was driven by the challenges adapting to the information economy and globalization, including the need to address rising unemployment. An example is the Adult Education Initiative first introduced in Sweden in 1995. Instead of expanding vocational training for adults, the AEI is aiming to raise the general level of education of unemployed adults. A similar emphasis is found in the other Nordic countries.

It is noteworthy that the Nordic countries have a much higher participation rate in adult education and training than do the Anglo-Saxon countries and also than other European countries. They also have less inequality in participation by level of educational attainment.

An example of a focused and targeted campaign at informing and engaging employers and others about investment in training is Finland's National Program on Ageing Workers (OECD, 2004b: 119), which aimed to help workers 45 years old and over stay employed or find work if unemployed. The program included training to improve skills of adults with an incomplete basic education, vocational skills training, tailored training programs for older people and age-management training.

- The program was implemented jointly by the Ministry of Social Affairs and Health, the Ministry of Labour and the Ministry of Education, and ran from 1998-2002. It was funded by the state with a budget of EUR 4.2 million.
- The program used information campaigns to influence the whole population, but especially older people and employers by using easily read information in public areas, newspapers, radio, TV and internet. Two examples of these campaigns are "Experience is a national asset," and the publication "Prime years." The campaign directed at the workplace used peer discussions as its main method for disseminating information where corporate leaders explain the favourable aspects of age-related issues in the workplace to other corporate leaders, while employee representatives talk to workers (OECD, 2004b: 80).
- Evaluations found that 50% of adult Finns were familiar with the program while 20% of all Finns over 50 years old had detailed knowledge of it (OECD, 2004b: 80). However, it was difficult to evaluate the effects of the information campaigns.
- A Statistics Finland Education Survey found that older workers who received training were more likely to respond that it was useful in a number of respects that either prime-age workers or younger workers who received training. For example, older workers reported more frequently that training had helped them to get a higher wage and to keep their job.

Furthermore, one quarter of older workers answered that they had obtained a permanent job as a result of training (OECD, 2004b: 102).

United Kingdom

The *Skills Pledge* in England is a voluntary, public commitment by the leadership of a company or organization to support all its employees to develop their basic skills, including literacy and numeracy, and work towards relevant, valuable qualifications to at least Level 2[9] of the National Vocational Qualification (NVQ).[10] The purpose is to ensure that all staff are skilled, competent and able to make a full contribution to the success of the company/organization.

- The Pledge can be given by the Chief Executive, Chief Operating Officer, owner/manager or other Board member, on behalf of the organization. It is a corporate commitment covering the whole company/organization.
- For those employees who do not already have a full Level 2 qualification, the government will provide funding to help them gain basic literacy and numeracy skills, as well as their first full Level 2 qualification. More than 950 employers have made the Skills Pledge.

Similarly, Wales has developed a *Basic Skills Employer Pledge* to reduce the substantial number of adults in Wales with poor literacy and numeracy skills.[11] It is intended for all private and public sector companies and organizations, whatever their size. To get a Pledge Award the company or organization has to produce an Action Plan which has to:

- be in writing and available to everyone that works for the company;
- say specifically that helping employees improve their basic skills is a commitment of the whole company or organization;
- include an assessment of need;
- have clear and specific aims and objectives;
- include the measures to be taken to help employees improve their basic skills;
- set a realistic, but challenging timescale for achieving the objectives of the Action Plan;
- detail the resources to be devoted to the Action Plan, including staff time and finance;
- say who in the company or organisation is responsible for producing and implementing the Action Plan; and
- describe how the Action Plan is to be monitored and evaluated.

9 There are five levels of NVQ ranging from Level 1, which focuses on basic work activities, to Level 5 for senior management. Level 2 includes competence that involves the application of knowledge in a significant range of varied work activities, performed in a variety of contexts. Some of these activities are complex or non-routine and there is some individual responsibility or autonomy. Collaboration with others, perhaps through membership of a work group or team, is often a requirement. See http://en.wikipedia.org/wiki/National_Vocational_Qualification.

10 See Skills Pledge: www.traintogain.gov.uk/Helping_Your_Business/ttgincontext/Skills_Pledge_and_Train_to_Gain/.

11 See Basic Skills Cymru: www.basic-skills-wales.org/bsastrategy/en/post_16/employer_pledge.cfm.

Sector Skills Councils in the United Kingdom are employer-led, independent organizations, covering each of the major sectors of the United Kingdom economy (Government of the UK, 2008). SSCs have been given the leading role in the reform and development of vocational qualifications for their sector. They are being reformed to focus on articulating the future skills needs of their sector, to ensure that the supply of skills and qualifications is driven by employer needs, and raises employer ambition and investment in skills.

Investors in People was established in the United Kingdom in 1990 by the National Training Task Force in collaboration with the Confederation of British Industry, the Trades Union Congress and the Institute of Personnel and Development, to encourage companies to invest in training. Company performance is measured against a set of 12 indicators before being awarded the label. In England, the program is administered by the regional branches of the Learning and Skills Council (LSC) and the Small Business Services (SBS).[12]

United States

CareerOneStop in the United States is an integrated suite of national websites sponsored by the US Department of Labor that help businesses, job seekers, students, and workforce professionals find employment and career resources.[13] It includes three core products:

- *America's Career InfoNet* – national, state and local career information and labour market data using unique career tools, career reports, videos, a career resource library and other innovative web-based tools.
- *America's Job Bank* – the nation's largest online labour exchange. Businesses post job listings, create customized job orders, and search resumes. Job seekers post resumes and search for jobs that fit their career goals.
- *America's Service Locator* maps customers to a range of local services including workforce centers, unemployment benefits, job training, education opportunities, and other workforce services.

Services are tailored to Job Seekers/Workers; Business/Human Resources; Students/Learners and Workforce Professionals. An online "coach" tailored again to specific audience is provided, as well as user support by email or call centre.

In summary, with respect to instruments designed to influence workplace training though informing and/or engaging workplace parties, it would seem that the approach in the United Kingdom focuses on obtaining training commitments from employers (with some recognition or financial incentive for doing so), whereas the United States focuses on providing information, but neither engages the social partners in the process of developing labour market policy in the regular and thorough way found in the Nordic countries. All have achieved above average rates of participation in non-formal job-related training (OECD, 2005a: 310).

12 See OECD (2003a: 137) and www.investorsinpeople.co.uk.
13 See www.careeronestop.org/

3.2 Spend/Tax

Instruments in this category of incentives to foster employer investment in training include grants, subsidies, and tax expenditures. They are designed to alter the cost-benefit calculus for the employer: investment that would not have been seen as worthwhile is made attractive when the government covers part of the cost. As noted earlier, such expenditure by government may be warranted when some of the benefits to training activity cannot be captured by the individual firm or worker. This is particularly likely for training that imparts general skills – skills that are readily transferable from one workplace to another. However, as Bassanini et al. (2005) point out, subsidy schemes must reduce the cost of incremental training (rather than focus on the cost of training that was already occurring) in order to change behaviour.

European Union (EU)

The European Social Fund (ESF) plays a sizeable role in fostering investment in human capital. The ESF has 77 billion euros available for 2007-2013 for a wide range of objectives, including increasing the adaptability of workers and enterprises, improving access to employment, combating discrimination and facilitating access to the labour market for disadvantaged people, improving education and training systems, and developing institutional capacity in disadvantaged regions (Europa, 2007). The European Union has allocated seven billion euros to lifelong learning in the period 2007-2013. Two of the main program strands are:

- **Leonardo da Vinci**: vocational training, particularly placements for young workers and trainers in enterprises outside their own country, and cooperation projects linking vocational training institutes and enterprise.
- **Grundtvig**: funds adult education programs, particularly transnational partnerships, networks and mobility.

The European Union also provides funding to promote policy cooperation, language learning, e-learning and dissemination, and exchange of good practice (Europa, 2007).

Denmark

In Denmark, participants in Adult Vocational Training Programs (*arbejdsmarkedsuddannelserne* or AMU) are entitled to a fixed allowance financed by the state. Companies paying regular wages to employees participating in adult vocational training programs are entitled to a state grant similar to the allowance corresponding to the maximum unemployment benefit rate. Expenditures for the allowances are mostly covered by training levies on employers (Government of Denmark, 2006c).

- The AMU are structured, short (between half a day to six weeks) vocational training programs mainly for low skilled and skilled workers in the labour market leading to nationally recognized certificates.
- There are approximately 2,500 different programs and 300 single subject courses from the mainstream vocational training and education programs, all of which can be combined.
- One OECD study of the Danish program found that the possibility of receiving subsidies was a decisive factor in permitting workers to partake in education and training. Without funding education and training would only take place on a small scale. However, delays in payment of the subsidies were seen as a major problem (OECD, 2006).

Finland

The Government of Finland pays up to half the cost of training used for recruiting new personnel, trying to retain existing jobs or developing employees' vocational know-how (Government of Finland, 2005b). The company and the Labour Administration work together to plan, finance and implement the joint purchase training with a selected training provider. The training program is designed based on the company's needs and implemented in a flexible manner that is suited to the company's current situation (Government of Finland, 2006). The duration of the training may vary according to its objectives and the training needs of the staff. Typically, its duration is a minimum of 10 days/person.

Sweden

The Swedish government provides training grants to employers in certain circumstances.[14] Grants may amount to 50 percent maximum, but not more than SEK 55,200 per employee (about $9,500 Canadian) over a two year period. If the training of the employee is considered specific for the company, grants up to 25 percent of the total costs can be paid out. The training must follow a plan, which states its purpose, target group and contents, and it must be approved by the County Labour Board (*Länsstyrelsen*). To receive grants, the employer must either be the one to defray cost of training for employees or hire a person who is unemployed or risks being unemployed. Costs for teacher salaries, training equipment, travel, salaries for employees, and costs of job guidance in connection with the training may all be compensated.

Rubenson (2006) notes that all Nordic countries provide targeted funding for training/education of disadvantaged groups

England

Through the *Train to Gain* program in England, employers can access government funding to match employer funding; receive advice from skills brokers (described further below); get help identifying and sourcing the training and qualifications that best meet their needs; and take advantage of vocational skills training from a wide range of education providers.[15] This program, like some of the Scandinavian training programs, has elements of direct provision (such as the Skills Brokers service) as well as financial levers. The government funds training to help employees gain their first full Level 2 qualification and Skills for Life first numeracy and literacy qualification. It also provides wage replacement compensation for companies with less than 50 employees. *Train to Gain* is the Government's flagship service to support employers in England of all sizes and in all sectors to improve the skills of their employees. It was rolled out in 2006 and since then nearly 70,000 employers have engaged with Train to Gain.

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[14] See Invest in Sweden Agency (ISA). *Fact Sheet: Financial Incentives.* www.uppsala.se/upload/InvestInUppsala/Dokumentarkiv/InvestorsGuide/Financial_Incentives.pdf.

[15] See Train to Gain: www.traintogain.gov.uk/.

Train to Gain followed the Employer Training Pilots initiative, which involved incentives for employers to give low-skilled employees paid time off to take training courses. Employers decided which type of training workers need to improve the performance of the business. The government covered the cost of the training. Van Elk and Gelderblom (2005) report that the program received a high degree of support from both employers and training participants.

Holden et al. (2006) describe two pilots designed to facilitate a more demand-led training system, focused on the needs of employers. One initiative, involving small business in the steel and metals sector, used a training broker to stimulate demand. The other used two instruments to look at ways in which trainers who provide workforce development for small business might be able to increase demand of relevant training:

- the Business Improvement Tool for Entrepreneurs (BITE) a free self-assessment tool to enable firms to evaluate and understand their own staff's development needs; and
- the Building Excellence (BE) survey to identify learning preferences that support or hinder personal productivity.

Holden et al. find that both initiatives enhanced demand for training in virtually all companies involved. Their research suggests that Brokers, BITEs, and BEs can play a key role in developing a relationship between demand for training in small business. However, there is still a concern that some grants are being used for training that would have been undertaken anyway.

United States

In the United States, incentives for investment in training are often operated at the state level. Two specific examples are as follows:

- Since 2001, employers in Arizona have been paying a *Job Training Tax* of 0.10% on taxable wages.[16] The Job Training Tax funds the Arizona Job Training Program administered by the Arizona Department of Commerce. The Arizona Job Training Program supports the design and delivery of training to meet industry standards and challenges.
- Rhode Island offers a suite of employment and training tax credits and grants through a partnership between the Rhode Island Department of Labour and Training, the Economic Development Corporation, Regional Employment and Training Boards, the Governor's Workforce Board and the Division of Taxation.[17]
    - The *Rhode Island Jobs Training Tax Credit* encourages businesses to upgrade the skills of their existing workforce by offering credits of up to $5,000 per employee over three years.
    - The *Rhode Island Adult Education Tax Credit* offers up to $5,000 for employer-funded GED (certification of high school-level academic skills) preparation or basic education classes.
    - The *Rhode Island Employers' Apprenticeship Tax Credit for Machine Tool/Metal Trade and Plastic Process Technicians* issues a credit of up to $4,800 for new apprentices in these fields.

[16] See https://www.azdes.gov/esa/uitax/trngtax.asp
[17] See www.dlt.ri.gov/lmi/business/grants.htm

Van Horn and Fitchner (2003) look at the question of whether state-subsidized, firm-based training is an effective strategy for governments hoping to assist businesses to upgrade the skills of their employees. They note that, in 1999, 47 of the 50 states provided cash-assistance totalling $600 million to employers to assist them in employee skill upgrading. Van Horn and Fitchner examine an evaluation of one such initiative, the New Jersey Workforce Development Partnership Program (WDPP). The two year evaluation, using multiple methodologies,[18] found that the program did indeed benefit business, governments, and employees. New Jersey benefited from firms who remained competitive or remained in the state because of program. Most employees experienced increases in their earnings and nearly half attributed this to training. Many firms experienced increased in productivity and in market share that they attributed to the grant. They noted, however, that grants work best in firms when combined with a strong company commitment to employee training.

Van Walraven (2005) examines an inventory of government incentives for employer-sponsored worker training in Canada and the United States and compares the relative fiscal sizes of these public policy initiatives to determine if these may be a factor in Canada's weaker performance in employer-sponsored training. Van Walraven (2005) notes that government incentives for employer-sponsored worker training have been more prevalent in the United States, with 45 states providing worker training programs in 1998-1999. In comparison, training programs in Canada for actively employed workers have only been offered at the provincial level, and only in four provinces in 2002. Among various types of government cost-sharing measures for worker training that exist, four of them (grants, levy-grants, corporate tax reductions, bond financing) were used in the United States. In Canada, only three cost sharing measures were used (grants, levy-grant schemes and train-or-pay scheme).

Van Walraven finds that, in both countries, the size of the incentives was too small to have any significant impact on private training costs and ultimately on worker training outcomes. Similarly, the differences in Canada and the United States in the size of expenditures allocated to these incentives are unlikely to explain Canada's under-performance in workplace training compared to the United States.

The Netherlands

In 1998 the Dutch government implemented a new tax law that introduced three tax deductions for firms' expenditures on work-related training. The first is a general deduction that gives all firms an extra deduction of their training expenditures from their taxable profits. The second deduction gives all firms spending less than a specified amount on worker training an additional deduction of their training expenditures. Finally, the third deduction applies to training costs made specifically for employees ages 40 years or older (firms are allowed to deduct an additional 40 percent of these costs). The first deduction is meant to stimulate training participation in general, the second intends to stimulate worker training in small- and medium-sized firms, while

[18] The two-year evaluation included: analysis of administrative data by the New Jersey Department of Labor; telephone interviews with decision makers at 114 firms that received customized training grants and 30 individuals who participated in on-the job training funded by the state training grant; and employer-collected wage data used to construct wage histories for the almost 5,000 individuals who had received on-the-job training from the firms that received the grants.

the purpose of the third deduction is to enhance training participation of older workers (Leuven and Oosterbeek, 2004).[19]

Leuven and Oosterbeek (2004) specifically examined the third tax law on deductions for training of workers 40 years or older. Although they find that the training rate of workers over 40 is 15 to 20 percent higher than workers under 40, they suggest that this is a result of the postponement of training to take advantage of the program rather than a stimulative effect of the tax instrument. They conclude that the results of their study are discouraging for policy makers interested in stimulating training participation for older workers (40 and over) via a tax subsidy for this specific demographic group.

Although Leuven and Oosterbeek (2004) did not examine the first two tax training laws (the general deduction and the one aimed at smaller firms), they cite work by Holzer et al. (1993) who suggests that training subsidies are not particularly effective and simply result in a substitution of public funds for private (employer) spending that would likely have taken place anyway.

Australia

The Government of Australia provides funding to organizations to train workers in English language, literacy and numeracy skills with the Workplace English Language and Literacy (WELL) Program. According to Hammond (2007), funding is available to organizations for language and literacy training linked to job-related workplace training and its goal is to help workers meet current and future employment and training needs.

Learning Accounts

One particular form of incentive in the "spend" category of instruments is the establishment of programs to subsidize savings for learning (typically as part of a broader program to facilitate asset formation among low-income families). While this instrument is directed to individuals, not employers, it may include the possibility of employer contribution to learning accounts and thereby indirectly involve employer investment in training.

England

England's *Individual Learning Accounts* program, now discontinued but recently re-launched as a pilot, involved tax-sheltered saving accounts that could only be used for adult learning activities. Various stakeholders, including individual adults, firms, sectoral/regional institutions and the government were able to contribute to the account (OECD, 2005c: 65). Aid from the government or the company consisted of contributions to match those of the individual. Also, employers that deposited funds in an employee's learning account received a tax deduction (OECD, 2003a: 140).

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[19] Hammond cites examples of a similar approach to tax deductions for training in Austria and Italy, where employers can deduct amounts exceeding 100 percent of continuous vocational training costs when computing taxable income. She also notes that tax incentives may encourage business to upgrade the skills of their existing workforce by offering a certain number of credits per employee (within a specific timeframe) that can be targeted at specific apprenticeships or disadvantaged groups (e.g. United States state tax credits for worker training).

- Individual learning accounts (ILAs) were launched in England in September 2000. By October 2001, 2.5 million members had registered as eligible to undertake subsidised learning. In November 2001, the program was shut down due to serious allegations of potential fraud and theft.[20] Moreover, deadweight losses were fairly large, with 53% of account holders indicating that they would have undertaken training even in the absence of the scheme (OECD, 2005c: 65).
- ILAs have been successful in Scotland and Wales, and Learner Accounts were re-launched in England as a pilot program in the fall of 2007 (Government of the UK, HM Treasury, 2006).

United States

The United States has an active Individual Development Accounts (IDA), program.[21] These saving accounts are mainly offered to low and medium-income households, which can be used, among other purposes, to fund post secondary education, training, or starting a small business. The match incentive is provided through a variety of government and private sector sources. Organizations that operate IDA programs often couple the match incentive with financial literacy education and case management.

Lin and Tremblay (2003) suggest that if employee demand for training is an important determinant of training outcomes, then policies to promote training need to focus on this as well. They note that individual learning accounts and training leave schemes are two such policy options that are used in a number of countries to increase employee demand for training. However, they also note that that little empirical evidence about their effectiveness is available.

Leave Schemes

Leave schemes guarantee workers the right to return to their jobs after training spells.[22] According to Bassanini et al. (2005), forgone income (while on training leave) may decrease employees' incentives to participate in unpaid training leaves, and they suggest these schemes are more effective when accompanied by subsidies covering living expenses and replacing foregone income.

In summary, a variety of financial incentives are used in the target countries to stimulate employer investment in training, but there is limited evidence about the effectiveness of different approaches. Most countries examined provide some incentives that are targeted at the less skilled, in addition to more general subsidies or tax credits. England is also targeting small businesses with the use of brokers and assessment tools designed to help them identity and meet skill development needs. There is some evidence of effectiveness of these more targeted approaches.

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[20] See www.dfes.gov.uk/ila.
[21] See OECD (2001: 46); see also CFED at www.cfed.org/focus.m?parentid=31&siteid=374&id=374.
[22] For a discussion on these, see OECD (2003b).

3.3 Regulate

"Regulatory instruments are used to define norms, acceptable behaviour, or to limit activities in a given society. The law, backed up with the threat of sanction, represents the 'stick' used to prescribe or prevent certain types of human behaviour" (Lemaire, 1998: 59, as cited in Pal, 2001: 144). In the context of policy regarding workplace training, regulatory interventions include laws/regulations that specify a level of investment in training and penalize those who do not comply. (The latter aspect means that there is some overlap between this category and that of "spend/tax.") They also include processes for accreditation of providers and certification of participants.

Finland

In Finland, *Act 725/1978* on Cooperation within Undertakings requires enterprises with at least 30 employees to draw up annual training plans and to update them whenever they reduce the number of employees. The *Employment Contracts Act 55/2001* imposes an obligation on employers to provide training in situations where termination of employment can be prevented by means of further vocational education and training. The *Study Leave Act* (1979) entitles a worker whose full-time employment relationship with the same employer has lasted overall for at least one year in one or more periods to up to two years of study leave over altogether five years in the same employer's service.[23] Entitlement to study leave applies to employees, public servants in central and in local government. The study must either take the form of government sponsored training in Finland or abroad, or be a course of training organised by a trade union. Study leave is **unpaid**, unless agreed otherwise separately with the employer (Government of Finland, 2008).

Sweden

Sweden's *Educational Leave Act* (1974) gives all employees the right to individual educational leave in any form of organized adult education (Sohlman, 2005). According to the law, every employee has a right to leave from their employment for education offered both inside and outside the official system. But according to the *Study Support Act* (1973: 349), study assistance is available only for studies provided within the official system, under the auspices of public authorities. The education and training courses are free of charge. Although there is no special type of study assistance for those using Educational Leave, almost all students are entitled to study assistance of some sort financed by the state. The educational needs of an individual determine what type of assistance the individual is entitled to.[24]

Other than educational leave, it seems that direct regulation of employers is not much used as an instrument to promote training in the Nordic countries. The Nordic model relies more heavily on engaging business and labour in policy development, and on providing training grants to employers.

[23] Government of Finland (2001). The Ministry of Labour has been merged with the Ministry of Employment and the Economy.

[24] See www2.trainingvillage.gr/etv/library/educationalleave/country/sw.asp#Introduction

Switzerland

According to Switzerland's *Vocational Training Act*, funds for vocational training are supplied by each industry through payments by companies into a solidarity fund or through contributions to the costs of training organized by professional associations.[25] The government may declare participation in a fund for vocational training compulsory for all firms in the industry.

Switzerland also maintains a process for certifying providers of continuing education. EduQua, created in 2000, is a certificate that continuing education institutes must obtain to be able to receive public funds in an increasing number of cantons. The eduQua label sets and checks minimum requirements with regard to the quality of the continuing education providers.[26]

Training Levies

Although training levies are not common in the countries that we focus on in this report, we include a note on this instrument in light of the ongoing debate in Canada about its effectiveness, sparked in part by the use of a levy-type system in Quebec.

Bélanger and Robitaille (2008) examine the impact of the *Act to Foster the Development of Manpower Training* ("Bill 90") on employer-sponsored education and training in Quebec. Bill 90 initially took effect in 1996 but has been amended subsequently. Its most well-known provision is the requirement for employers to invest 1 per cent of their payroll in education and training for their employees. Companies that fail to do so must pay the shortfall into a fund that is managed the *Commission des partenaires du marché du travail*, which includes representation from government, business, and labour. Monies in the fund are used to finance innovations or initiatives or research that promotes work-related learning. Since 2004, firms with a payroll under $1 million have been exempt from the obligation to invest one percent of payroll in training or pay into the fund. Recent amendments that came into force in January 2008 include provisions for funding collaborative training arrangements among small- and medium-sized enterprises and for and expansion of the framework for recognizing the skills and competencies of Quebec workers.

Bélanger and Robitaille examine the empirical evidence on the effects of Bill 90 on the quantity of workplace-based training in Quebec and conclude that, while the evidence on causality is not definitive, it does appear that the legislation has had this effect. They cite, for example, evidence from the *Adult Education and Training Survey* that participation by workers over age 25 in work-related learning in Quebec rose much faster than for Canada as a whole between 1997 and 2002, almost closing the wide gap that had existed. On the other hand, they note inconsistency over time in survey questions on training in Quebec and mixed evidence on the level of spending by Quebec employers on work-related learning between 1996 and 2003, with the investment as a percentage of payroll actually falling among firms with more than $1 million in total payroll. However, they also point to the likelihood that Bill 90 has improved the quality of investment, through its strengthening of multi-partite sectoral and regional labour market structures and it's fostering more systematic approaches to training at the company level and in collective bargaining.

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25 Government of Switzerland (2008a). Translated from French. The website is not available in English.
26 See the Swiss continuing education website at www.educa.ch/dyn/153043.asp.

Billett and Smith (2003) report that training levies are found in Singapore, Malaysia, France, and South Korea. In all of these cases, firms pay the levy into a training fund. The Training Guarantee Scheme (TGS), a national training levy implemented in Australia in the early 1990s, now defunct, mandated spending a minimum level on training or having to pay the shortfall as a tax, similar to the Quebec system. According to Smith (2003), the TGS required employers with payroll costs in excess of $200,000 (Australian dollars) to spend 1.5 percent of their payroll on "structured" training. Opposition to the scheme from small business contributed to its demise. Smith notes that the effect of the demise of the TGS is contested in the literature, with some studies indicating a significant fall in employer training and others disputing this. Recent reforms to the Australian system have been driven by desire of governments at the federal and state level to bring vocational education and training (VET) more closely into line with expressed needs of employers.

Billet and Smith argue that the Australian levy served to highlight the cost of training, not to persuade firms that expenditure on training was a good investment. They also cite the conclusion of Giraud (2002) that the under the levy system in France, firms are reluctant to spend beyond the minimum required by the levy. Giraud also finds that the French levy has not been able to influence how training funds are spent within enterprises – it does not affect the distribution of training between better and less-educated workers. Bassanini et al. (2005), citing empirical evidence in Veeken (1999), come to a similar conclusion.

Another assessment of the training levy in Australia (OECD, 2001) suggests that it had increased spending on training, but have not been effective in doing so in SMEs.

An OECD paper by Ok and Tergeist (2003) includes a review of levy systems in various countries. It notes that nine countries have national or widespread sector training levies, or social security contributions that are earmarked for continuous training. France introduced their "train or pay" levy in the early 1970s, with a rate first of 0.8 percent, now 1.5 percent of total wage bill. In Spain, there is a grant/levy system where every company pays a 0.7 percent of payroll, but can recuperate part of this through applications for grants to fund training efforts (which require consultations with worker representatives/trade unions). Denmark and the Netherlands focus on levies at the sectoral level set by collective agreement, which are supplemented by government grants.

The OECD paper notes that levies and compulsory investment schemes have been criticized because they may encourage inefficient and inappropriate training and the contribution levels and company sizes thresholds in levy schemes are somewhat arbitrary, though we know that large firms with established human resource management functions tend to benefit disproportionately. The limited number of evaluations of these schemes makes it difficult to assess the extent to which they have been successful in increasing continuous training activity.

Greenhalgh (2002) examines whether or not a training tax levy, like in France, would work well in Britain. She notes a levy would increase training among firms that now invest little, such as smaller firms, and that initiatives that rely on investment by individuals have had low take up. However, she also suggests that a British levy system should be based on profits, rather than payroll (as is the case in France), which could then remove a cost burden on smaller firms and start-ups. Greenhalgh also suggests requiring firms to devote a share of their training expenditure to their less skilled workers. She concludes by suggesting that any increase in training investment will only be effective with adequate control of the quality of training, and that this is the most difficult challenge facing any national system of skills investment.

Interestingly, general state-run training levies are not common in the Nordic countries. Rubenson (2006) argues that the state in Nordic countries has been reluctant to regulate employer-sponsored training, leaving this for the collective bargaining table. This is in a context of the highest rates of union density among industrial societies. Both unions and employers are organized into large confederations or associations with representation at the national and local levels. This may also help to explain the high rate of participation in adult education of blue collar workers in Nordic countries.

Bassanini et al. (2005) note that levy schemes, such as the "train or pay" scheme found in Quebec and France, leave full autonomy to employers on training decisions, and may provide less opportunity for the development of national or sectoral training policies. The authors go further to note that in spite of the diffusion of tax arrangements and levy-grant schemes in various countries they examined in Europe, that "rigorous evaluations of their effectiveness are uncommon" (Bassanini et al., 2005: 168).

3.4 Provide Directly

Another way governments can increase the amount of worker training is to directly provide training services through government departments or agencies (free or at a cost below what would otherwise be available in the market). Governments can also act as brokers by providing services that help employers connect to programs offered in the private sector or by community organizations.

United Kingdom

The *Learning and Skills Council* (LSC) works with employers in England to develop skills of their workforce. It is an arms length company set up by the government in 2001, responsible for planning and funding high quality education and training for everyone in England other than those in universities.[27] The Council runs the *Train to Gain* program and the *Skills Pledge* through their local offices around the country. Through *Train to Gain,* the LSC provides a network of independent Skills Brokers, trained by the LSC that provide advice on how to determine training needs, identify suitable providers, find available funding (as some training costs are funded by government), and review progress. This advisory/brokerage service is provided at no cost to client businesses.

27 See LSC: www.lsc.gov.uk/?WT.mc_id=ttgho760&WT.mc_ev=click.

United States

Nilsen (2004) conducted a study for the United States General Accounting Office (GOA) to examine how many states used employer taxes to fund their own employment placement and training programs, what services were provided by these programs, the extent to which the state programs were coordinated with federal programs, and how the respective states assessed the performance of these programs.

Nilsen found that 23 states reported using a variety of employer tax revenues to fund their own employment placement and training programs, and most often these programs provided job specific training for workers (e.g. instruction on computer programs and new production methods). States reported spending $278 million to address state-specific workforce issues, which included a variety of industries, with manufacturing being the most frequently targeted. States were less likely to provide training services for general training such as team building and conflict resolution.

Nilsen notes that while 22 of the 23 states reported assessing the performance of their programs in 2002, that none have used sufficiently rigourous research designs to allow them to make conclusive statements about the impact of their programs, such as their effect on worker wages or company performance. He concludes that, although these state programs have the potential to provide workforce development services to meet employers' needs for skilled workers, that the impact of these programs is unknown because states have not adequately studied them.[28]

Krizner (2004) notes that workforce training can have a direct impact on competitiveness of companies and is why states offer to be partners with companies in workforce training programs. In some cases, workforce training can be a determining factor whether a company expands in a certain state. Krizner notes, "some programs may theoretically have a high value but are of little practical use to most companies. Likewise, some programs may be both useful and valuable, but are so wrapped up in red tape requirements that they are extremely difficult to actually use."

An example of a state-run program is the one in North Carolina that offers free, customized job training through the North Carolina Community College System for new and expanding businesses.[29] Companies are eligible for the *New and Expanding Industry Training* (NEIT) Program when they create 12 or more new jobs during a year in a North Carolina community, over and above their previous three-year maximum employment level, and they fall in one of the following industry categories:

- manufacturing
- technology intensive (software production, Internet services supporting areas outside North Carolina, bio-tech)
- regional or national warehousing or distribution centers
- regional or national customer service or data processing centers, or units of a central administrative office
- air courier services

[28] See Nilsen (2004) for specific details on the state programs reviewed, their budgets, scope, assessments, etc.
[29] See www.ncccs.cc.nc.us/Business_and_Industry/CustomizedTraining.htm

NEIT offers a suite of services for all phases of the business cycle, from pre-employment training for potential employees, to free job analyses services to training for managers and others who will conduct the job interviews. Through state-wide partnerships with several leading programs for teamwork, leadership and workforce development, NEIT can offer these programs to clients, and customize them as necessary to meet their specific needs, even meet with equipment vendors or other third-party resources to assist with and/or provide the training. NEIT instructors can conduct the training; co-facilitate with in-house trainers or provide train-the-trainer development and support.

Other examples of state-run training programs in the United States include the following:

- Kentucky Bluegrass State Skills Corporation (BSCC) administers and funds industry specific training.
- Alabama Industrial Development Training (AIDT) helps new and expanding countries recruit and retain workers. AIDT has provided training to over 100,000 workers in 1,100 companies.

Lin and Tremblay (2003) question the appropriateness of direct provision of training by government to workers, since government is not likely to be better informed than firms about the type of training needed by their workers. They go further to say that empirical literature on the evaluation of public (i.e. directly provided by government) training programs generally finds that such programs are not very effective at improving the skills of economically disadvantaged workers and that most evaluations typically find modest positive effects at best.

4. General Evaluations of Incentives to Train

As we have noted, formal evaluations of instruments used by governments to foster employer investment in training are scarce. Evaluations that pertain to particular instruments in the target countries have been noted above. Here we report on some evaluation studies that look at a range of instruments or a collection of programs.

Görg (2005) examines whether financial assistance provided by government induced firms in Ireland to spend more of their funds on training expenditures. He looks at plant level data comparing domestic owned establishments to foreign-owned plants in Ireland. Görg finds that government grants did stimulate training in private expenditures on training at the plant level, at least for domestic owned establishments. He speculates that the lack of a relationship between government grants and private spending expenditure in foreign owned plants is that they are often part of multi-national organizations, and hence do not have financial constraints (around training). He also suggests that domestic owned firms may have a greater need for general training.

Billet and Smith (2003), drawing on a review of international literature and key informant interviews, find that the main drivers for investment in training by employers are internal, such as organizational change and the introduction of new technologies, rather than direct government incentives. A key factor is the relationship of training to the firm's business strategy. "[A]ttempts to encourage employers to make greater investments in training will need to appeal to the strategic interests of enterprises if they are to succeed" (Billet and Smith, 2003: 283).[30] They also note the importance of social institutions in influencing attitudes towards training. "In Scandinavia, there is a long-standing social consensus on the value of training to business and on the rights of workers to receive training from their employers throughout their working life" (Billet and Smith, 2003: 294).

Billet and Smith conclude that mandated approaches to improve employer investment in training, such as levies, tend to be resisted or complied with superficially and do not necessarily improve access to training for low-skilled workers. An exception is Singapore, where the levy, and the expenditures from the training fund, apply only to low-skilled workers. They note that the French experience suggests firms are more accepting of sectoral or regional levies than a broad national levy, particularly where firms have representation on the sectoral or regional bodies that disperse the training funds.

On the other hand, Billet and Smith note that there is a role for government in funding training that meets general needs of the economy, leaving it to firms to sponsor training that is specific to the needs of the enterprise. This loosely corresponds to economic theory of externalities outlined near the beginning of this report. The difficulty, as the authors here acknowledge, is that in practice training often mixes firm-specific and general elements. They note, but do not much analyze, the option for partial subsidization of training by governments.

Billet and Smith clearly see a role for governments to champion the importance of skill development, foster the establishment of trade associations (that can be advocates for training), and seek advice of employers in shaping curriculum development and credentialing systems.

Van Elk and Gelderblom (2005) examine evaluations of policy instruments in 15 EU member states to promote structured training of the employed, focusing policies directly targeting employers and/or employees. They identify 94 policy instruments in use in these countries. Seventy of the identified instruments provide financial incentives; 18 involve "promotional" activities. Financial incentives are evenly targeted towards employers and employees. Most instruments were open to all employees, but some were targeted, especially to less-educated workers and those with a high risk of unemployment.

Evaluation studies are identified for only 34 of the 94 instruments and only part of these pay attention to the main goal of the instruments which is additional participation in training. Often evaluations only compare the volume of training before and after a specific instrument, and do not control for other influences on training. The few studies that attempt to identify the incremental effect of the instrument mainly use subjective information (asking participants).

Van Elk and Gelderblom conclude from the thin evaluation evidence available that most instruments do help increase participation in training. However, they find that the incremental effect of levies is small and that both levies and tax incentives have a high "deadweight" component, meaning that most of the training would have occurred in the absence of the

[30] Billet and Smith point out that while the methodology exists to measure returns on investment in training can be quantified, few employers make the effort to do so, but rather rely on perceptions of the likelihood that training will contribute to strategic goals.

instrument. The deadweight is lower for training subsidies that are targeted to disadvantaged groups, such as SMEs or less-educated workers, though such instruments are more complex to administer and the incentives have to be substantial to make a difference. Van Elk and Gelderblom find that it is difficult to generalize about the effects of publicity campaigns, as measures are heterogeneous and difficult to compare. They note some evidence of success for the Investors in People program in the United Kingdom.

Like Billett and Smith, Van Elk and Gelderblom note that the involvement of social partners seems important in several of the countries examined. It also helps to have a system of accreditation of training providers and one for the recognition of training outcomes.

Bassanini et al. (2005) provide an extensive review of the main training policies adopted in OECD countries. The policies they examine mostly fall under the spend/tax and regulate instrument types (based on the Pal framework). However, most of their discussion is of the considerations that arise from economic theory, with occasional references to the (limited) evaluation literature on broad policy types.

5. Conclusion

We have reviewed the use and (where available) evaluation of instruments to foster employer investment in training in countries with a record of above average employer investment: Denmark, Sweden, the United States, Finland, Switzerland, and the United Kingdom. We have also included some information about incentives for employer-sponsored training in Australia and the Netherlands, with occasional references to initiatives in other countries.

A variety of instruments are in use, across all four instrument types of the Pal framework: inform/engage; tax/spend; regulate; provide directly.

From the description of instruments (largely from national sources) and the cross-country comparative literature, some differing philosophies are apparent regarding government policy in this area.

The Nordic countries have a tradition of engagement of business and labour organizations in labour market policy. They also have the highest degree of union membership among industrialized countries. Accordingly, investment in training in those countries is to a large extent the product of the collective bargaining process, in terms of specific measures at the enterprise level, while national goals and the structure and design of training programs are developed through tripartite processes. Those national policies typically include some subsidization of training, particularly for improving the general level of skill for less-educated employees, but limited direct regulation of employer behaviour. The provision of education and training has long been seen as a key part of the welfare state in the Nordic countries, helping unemployed and less-skilled employed workers to improve their prospects in the labour market, while helping employers meet skill needs.

The United Kingdom and the United States have more market-oriented approaches. While the United Kingdom had experimented (unsuccessfully) with individual accounts, the approach there now focuses on employers: obtaining “pledges” from them; helping employers assess needs, connecting employers to training services, and subsidizing training, particularly when it involves upgrading the skills of low-skilled workers.

Programs in the United States focus on both employers and individuals. The United States provides information to workplace parties, offers training grants or tax benefits to employers at the state level, and offers individual development accounts, focused on low and medium-income households, which can be used to fund post secondary education, training, or starting a small business.

Most countries examined provide some incentives that are targeted at the less skilled, in addition to more general subsidies or tax credits. The United Kingdom is also targeting small businesses with the use of brokers and assessment tools designed to help them identity and meet skill development needs. There is some evidence of effectiveness of these more targeted approaches.

Other than educational leave, it seems that direct regulation of employers is not much used as an instrument to promote training in the Nordic countries, and it is little used in others as well, except for the “train or pay” schemes found in some countries, such as France. There is an ongoing debate, reflecting mixed evidence, about whether training levies or “train or pay” schemes ought to be part of the policy mix.

5.1 Lessons for Canada

The set of institutions and attitudes that characterize the Nordic model would not be easily replicated in Canada, though pockets of tripartism can be found, especially in Quebec. However, there is the opportunity, at the very least, for more provinces to regularly engage business and labour in the development of labour market policy. Indeed, the work of Bélanger and Robitaille (2008) suggests that the clearest gains flowing from Quebec’s Bill 90 have not been on the quantity of investment arising from the levy, but rather the quality of investment arising from the strengthening of multi-partite sectoral and regional labour market structures and the fostering of more systematic approaches to training at the company level and in collective bargaining.

There are countries with a good record in terms of employer-investment in training that rely on a more market-driven approach to policy, though, in some cases, with considerable government funding to subsidize training or provide service to employers. The United Kingdom is an example of this approach, where the focus is on “demand-led” training that meets the needs of the employer, but also provides enhanced incentives for training of less-skilled workers. This focusing of subsidies on the less-skilled seems common to both the Nordic and United Kingdom approaches. Moreover, as Van Elk and Gelderblom (2005) point out, the (limited) evaluation literature suggests that the deadweight loss is lower for training subsidies that are targeted to disadvantaged groups, such as SMEs or less-educated workers. Accordingly, Canada might wish to consider focusing any training subsidies/tax incentives on such groups.

There is also a clear market failure with respect to the provision of information about labour market conditions and training opportunities, and a clear case for government intervention in this area. The UK's Skills Brokers and the Career One Stop portal in the United States are examples of such interventions. As noted in Brisbois et al. (2008), Canada ought to undertake an evaluation of the provision and use of labour market information.

There is an ongoing debate, reflecting mixed evidence, about whether training levies (or the type of "train or pay" scheme found in Quebec and formerly in Australia) ought to be part of the policy mix. Bélanger and Robitaille (2008) find that the Quebec train or pay law did increase the rate of worker participation in structured, employer-sponsored training, but it is not clear that the overall level of investment by employers has increased. Billet and Smith (2003) argue that training levies can make employers focus on costs instead of opportunities, although they suggest that sectorally focused levies may be more successful.

Sectoral arrangements of various sorts are common in the countries examined. This may include levy systems run by sectoral organizations, as in Switzerland. Sectoral groups are also vehicles for a two-way flow of information: to members, about training opportunities; from members, about skill needs. The Sector Council Programs (SPS) in Canada is an example of a sectoral approach to enhancing employer supported training. There are over 30 Sector Councils in key sectors of the Canadian economy, including automotive, aviation, biotechnology, mining, petroleum, policing, and trucking, which work to address human resources and skills issues to benefit their respective sector. The Sector Councils (supported by the Government of Canada) are national partnership organizations that bring together business, labour, and educational stakeholders (from within a particular sector), with an aim of increasing employer investments in skills development and promoting workplace learning.[31]

In summary, the evidence available suggests there is scope in Canada for engaging labour and business in setting priorities, disseminating information about training programs, continuing to support the development of sectoral labour market organizations, and providing financial incentives targeted to SMEs and less-educated workers. However, the evidence base is thin. Canada could help fill this gap by giving priority to, and adequate funding support for, the formal evaluation of instruments used to foster employer investment in training.

[31] For more information on the Government of Canada Sector Councils Program see www.hrsdc.gc.ca/eng/workplaceskills/sector_councils/information.shtml.

Bibliography

Baker, Meredith. 1994. "Training Down Under: An Overview of the Australian Experience." *International Journal of Manpower*.

Bassanini, Andrea, Alison Booth, Giorgio Brunello, Maria De Paola, and Edwin Leuven. 2005. *Workplace Training in Europe.* Institute for the Study of Labour (IZA), Bonn, Germany.

Bélanger, P., and M. Robitaille. 2008. *A Portrait of Work-Related Learning in Quebec*. Ottawa: Canadian Council on Learning.

Billett, Stephen, and Andrew Smith. 2005. "Myth and Reality: Employer Sponsored Training in Australia." *International Journal of Training Research* Vol. 3, No. 2: 16-29.

__________. 2003. "Compliance, Engagement and Commitment: Increasing Employer Expenditure in Training." *Journal of Vocational Education & Training* Vol. 55, No. 3: 281-299.

Brisbois, R., L. Orton, and R. Saunders. 2008. *Connecting Supply and Demand in Canada's Youth Labour Market.* Ottawa: Canadian Policy Research Networks.

Cort, Pia. 2002. *Vocational Education and Training in Denmark – Brief Description.* Cedefop Panorama Series. www.deafvoc.fi/pages/products/Survey/Supplement/Denmark/Documents/Annex1_Vocational_education.pdf.

Crouch, C. 1998. "Skills-Based Full Employment: The Latest Philosopher's Stone." *British Journal of Industrial Relations* Vol. 35, No. 3: 367-291.

Doern, G.B., and R.W. Phidd. 1992. *Canadian Public Policy: Ideas, Structure, Process.* Toronto: Nelson.

Europa. 2007. *Overview of the European Union Activities – Employment and Social Affairs.* http://europa.eu/pol/socio/overview_en.htm.

Giraud, O. 2002. "Firms' Further Training Practices and Social Exclusion: Can Industrial Relations Systems Provide Greater Equality? Theoretical and Empirical Evidence from Germany and France." In Schoman, K. and P.J. Connell (eds.). *Education, Training and Employment Dynamics: Transitional Labour Markets in the European Union.* Cheltenham: Edward Elgar.

Goldenberg, Mark. 2006. *Employer Investment in Workplace Learning in Canada.* Ottawa: Canadian Policy Research Networks.

Goldstone, Carol and Laurette Douglas. 2005. *Research Brief: Evaluation of the Employer Training Pilot Skills for Life Interventions Programme.* www.dcsf.gov.uk/research/data/uploadfiles/RBX01-05.pdf.

Görg, H., and E. Strobl. 2005. *Do Government Subsidies Stimulate Training Expenditure? Microeconometric Evidence from Plant Level Data.* IZA Research Paper #1606.

Government of Denmark. 2006a. *A Comprehensive Integration Initiative – and Better Integration.* *www.nyidanmark.dk/en-us/Integration/a_comprehensive_integration_initiative/a_comprehensive_integration_initiative.htm*.

__________. 2006b. *Denmark's National Reform Programme. First Progress Report.* Contribution to EU's Growth and Employment Strategy (The Lisbon Strategy). http://ec.europa.eu/growthandjobs/pdf/nrp/DA_nrp_en.pdf.

__________. 2006c. *Fact Sheet: Adult Vocational Training in Denmark.* Ministry of Education. http://eng.uvm.dk/Fact%20Sheets/Adult%20education%20and%20continuing%20training.aspx.

Government of Finland. 2008. *Flexible Arrangements and Leave*. Ministry of Employment and the Economy. www.tem.fi/?l=en&s=2314.

__________. 2007. *EU Commission Approves Finland's ESF Programme for 2007-2013*. Employment Office. Ministry of Employment and the Economy. www.mol.fi/mol/en/01_ministry/06_press/2007-11-07-01/index.jsp.

__________. 2006. *Joint Purchase Training*. Ministry of Labour. www.mol.fi/mol/en/99_pdf/en/92_brochures/joint_purchase_training_brochuretext.pdf.

__________. 2005a. *An Overview of Vocational Development Services 2005*. Ministry of Labour. www.mol.fi/mol/en/99_pdf/en/90_publications/amke2005english.pdf.

__________. 2005b. *Employer Services*. Ministry of Employment and the Economy, Employment Office. www.mol.fi/mol/en/02_working/03_employer/index.jsp.

__________. 2002. *Education and Training in Finland – Virtual Finland*. Ministry of Foreign Affairs.

__________. 2001. *Study Leave Act*. Ministry of Labour. www.finlex.fi/pdf/saadkaan/E9790273.PDF.

Government of Northern Ireland. 2008. *The Northern Ireland Skills Monitoring Survey 2005: Sector Skills Councils Summary Report.* Northern Ireland Executive, 15 February 2008. www.northernireland.gov.uk/news/news-del/news-del-150208-monitoring-survey-results.htm.

__________. 2006. *Success through Skills: The Skills Strategy for Northern Ireland*, Northern Ireland Executive. www.delni.gov.uk/index/skills-strategy-ni.htm.

Government of Scotland. 2007. *Skills for Scotland: A Lifelong Skills Strategy*. September. www.scotland.gov.uk/Publications/2007/09/06091114/7.

Government of Sweden and the Swedish Agency for Advanced Vocational Education. *Advanced Vocational Education and Training.* www.sweden.gov.se/sb/d/6997/a/67941; www.ky.se/engelska/home.4.ec54705116620ddcef80001432.html.

Government of Switzerland. 2008a. *The Vocational Training Act*. Federal Office for Professional Education and Technology (OPET). (Website not available in English.) www.bbt.admin.ch/themen/berufsbildung/00104/00357/index.html?lang=fr.

__________. 2008b. *Vocational Education and Training in Switzerland: Facts and Figures.* Federal Office for Professional Education and Technology (OPET). www.bbt.admin.ch/themen/berufsbildung/index.html?lang=en.

Government of the UK. 2008. *Ready to Work, Skilled for Work: Unlocking Britain's Talent.* Department for Work and Pensions, and the Department for Innovation, Universities and Skills, England. www.dius.gov.uk/publications/ready_to_work.pdf.

Government of the UK, HM Treasury. 2006. *Leitch Review of Skills: Prosperity for All in the Global Economy – World Class Skills. Final Report.* www.hm-treasury.gov.uk/d/leitch_finalreport051206.pdf.

Government of the United Kingdom Websites

Department for Business, Enterprise and Regulatory Reform: www.berr.gov.uk/index.html

Department of Innovation, Universities and Skills (DIUS): www.dius.gov.uk.

Education and Learning: www.direct.gov.uk/en/EducationAndLearning/index.htm.

Investors in People: www.investorsinpeople.co.uk.

Learning and Skills Council (LSC): www.lsc.gov.uk/?WT.mc_id=ttgho760&WT.mc_ev=click.

Skills Pledge and Train to Gain: www.traintogain.gov.uk/Helping_Your_Business/ttgincontext/Skills_Pledge_and_Train_to_Gain/.

Greenhalgh, Christine. 2002. "Does an Employer Training Levy Work? The Incidence of and Returns to Adult Vocational Training in France and Britain." *Fiscal Studies* Vol. 23, No. 2: 223-263.

Hammond, Karen. 2007. *Government/Employer Partnerships.* Submitted to Alberta Employment, Immigration and Industry, Hammond & Associates Inc.

Holden, Rick, Ghulam Nabi, Jeff Gold, and Martyn Robertson. 2006. "Building Capability in Small Businesses: Tales from the Training Front." *Journal of European Industrial Training* Vol. 30, No. 6: 424-440.

Hood, C. 1984. *The Tools of Government.* London: Macmillan.

ILO [International Labour Organization]. 2003a. *Chapter IV. Learning and Training for Work in a Lifelong Perspective.* Learning and Training for Work in the Knowledge Society. www.ilo.org/public/english/employment/skills/hrdr/report/ch_4.htm.

__________. 2003b. *New Adult Vocational Training Concept – Placing the User in the Centre – Denmark*. www.ilo.org/public/english/employment/skills/hrdr/init/dnk_11.htm.

Invest in Sweden Agency (ISA). *Fact Sheet: Financial Incentives*. www.isa.se/upload/english/factsheets/financial_incentives.pdf.

Kirschen, E.S. et al. 1964. *Economic Policy in Our Time.* Amsterdam: North-Holland.

Krizner, Ken. 2004. *Work Force Training: Providing a Competitive Advantage for Expanding Companies.* Expansion Management. www.expansionmanagement.com/smo/articleviewer/default.asp?cmd=articledetail&articleid=16087&st=2.

Kyro, Matti. 2006. *Vocational Education and Training in Finland – Short Description.* CEDEFOP Panorama Series; 130. Luxembourg: Office for Official Publications of the European Communities. www2.trainingvillage.gr/etv/publication/download/panorama/5171_en.pdf.

Lemaire, D. 1998. "The Stick: Regulation as a Tool of Government." In Bemelmans-Videc, M.-L., et al. (eds.). *Carrots, Sticks and Sermons: Policy Instruments and their Evaluation.* New Brunswick, NJ: Transaction Publishers.

Leven E. and H. Oosterbeek. 2004. "Evaluating the Effect of Tax Deductions on Training." *Journal of Labor Economics* Vol. 22, No. 2: 461-488.

Lin, Zhengxi, and Jean-Francois Tremblay. 2003. *Employer-Sponsored Training in Canada : Policy-Research Key Knowledge Gaps and Issues.* Ottawa: Industry Canada.

Linder, S.H., and B.G. Peters. 1989. "Instruments of Government: Perceptions and Contexts." *Journal of Public Policy* Vol. 9: 35-58.

Nilsen, Sigurd R. *Workforce Training: Almost Half of States Fund Employment Placement and Training through Employer Taxes and Most Coordinate with Federally Funded Programs.* Report to Congressional Requesters. GAO-04-282. United States General Accounting Office, Washington, DC. www.gao.gov/new.items/d04282.pdf.

OECD Publications

OECD. 2008. *Policy Brief: Economic Survey of Denmark, 2008.* www.oecd.org/dataoecd/13/42/40101460.pdf.

OECD (Thomas Liebig). 2007. *The Labour Market Integration of Immigrants in Denmark.* OECD Social, Employment and Migration Working Papers. www.oecd.org/dataoecd/8/28/38195773.pdf.

OECD. 2006. "Chapter 3: Education and Training for the Low-skilled in Denmark: Linking Public Policy to Workplace Needs and Practice." *Skills Upgrading, New Policy Perspectives.*

__________. 2005a. *Education at a Glance.*

__________. 2005b. *Learning a Living: First Results of the Adult Literacy and Life Skills Survey*.

__________. 2005c. *Promoting Adult Learning.*

__________. 2004a. *Policy Brief: Lifelong Learning.* www.oecd.org/dataoecd/17/11/29478789.pdf.

__________. 2004b. *Ageing and Employment Policies: Finland.* http://213.253.134.43/oecd/pdfs/browseit/8104031E.PDF.

__________. 2003a. *Beyond Rhetoric: Adult Learning Policies and Practices.*

__________. 2003b. *Upgrading Workers' Skills and Competencies*, Chapter 5, Employment Outlook, Paris.

__________. 2001. *Labour Market and Social Policy*, Occasional Papers No. 50, Knowledge, Work Organisation and Economic Growth.

__________. 2000. *Knowledge Management in the Learning Society*. CERI, Paris.

__________. 1998. *The Financing of Lifelong Learning – Finland's Country Report for the OECD*. www.oecd.org/dataoecd/0/38/1916940.pdf.

Ok, Wooseok, Peter Tergeist, and Organisation for Economic Co-operation and Development. 2003. *Improving Workers' Skills : Analytical Evidence and the Role of the Social Partner*. Paris: OECD.

Pal, Leslie A. 2001. *Beyond Policy Analysis: Public Issue Management in Turbulent Times.* Toronto: Nelson Thomson Learning.

Rubenson, K. 2006. "The Nordic Model of Lifelong Learning." *Compare* Vol. 36, No. 3: 327-341.

Schömann, Klaus, and Liuben Siarov. 2005. *Synthesis Report – Correcting for Labour Market Failure in Lifelong Learning.* Mutual Learning Programme of the European Employment Strategy. www.mutual-learning-employment.net/SynthesisReports.

Schuetze, Hans. 2007. *Individual Learning Accounts and Other Models of Financing Lifelong Learning*.

Smith, Andy. 2003. "Recent Trends in Australian Training and Development." *Asia Pacific Journal of Human Resources* Vol. 41, No. 2: 231-244.

Sohlman, Asa. 2005. *The Culture of Adult Learning in Sweden*. The Commission for Adult Learning Sweden. www.ed.gov/pubs/HowAdultsLearn/Sohlman.pdf.

Swiss Education System. *Continuing Education: What Is New?* www.educa.ch/dyn/153043.asp.

Trendle, B., and J. Siu. 2005. *Investment in Training and Public-Policy – A Review*, Labour Market Research Unit, Department of Employment and Training, Working Paper #35.

United States Federal and State-Wide Program and Policies Websites:

Arizona Job Training Tax: www.azdes.gov/esa/uitax/trngtax.asp.

California Workforce Development Community – Capacity Building Unit: www.edd.ca.gov/jobs_and_training/CBU_Training_and_Services_Overview.htm.

Customized Training Program, North Carolina Community Colleges: www.ncccs.cc.nc.us/Business_and_Industry/CustomizedTraining.htm.

Idaho Workforce Development Training Program: www.eitc.edu/aca/wftgrants.cfm; http://labor.idaho.gov/publications/workforce_training_fund.pdf.

Laborers Trusts Funds for Northern California: www.norcalaborers.org/About/History.htm.

Rhode Island Employment and Training Tax Credits and Grants: www.dlt.ri.gov/lmi/business/grants.htm.

USA CareerOneStop: www.onestopcoach.org/.

Vermont Training Program: thinkvermont.com/Programs/WorkforceTraining/VermontTrainingProgram/tabid/187/Default.aspx.

Van Elk, K., and A. Gelderblom. 2005. *Lifelong Learning and Employer Provided Training*. Available at http://pdf.mutual-learning-employment.net/pdf/thematic%20reviews%2005/september%2005/Koos%20van%20Elk_EN.pdf.

Van Horn, C.E., and A.R. Fitchner. 2003. "An Evaluation of State-Subsidized, Firm-Based Training: The Workforce Development Partnership Program." *International Journal of Manpower* Vol. 24, No. 1: 97-110.

Van Walraven, Jack. 2005. *Skills Research Initiative: An Inventory of Government Incentives for Employer-Sponsored Working Training in Canada and the United States*. Human Resources and Skills Development Canada, Industry Canada, Social Sciences and Humanities Research Council.

Veeken, N. 1999. *Industrial Social Funds in the Netherlands.* Paper for the ILO, Geneva.

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