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SECTOR COMPETITIVENESS FRAMEWORKS

EDUCATION AND TRAINING SERVICES PART 1 – OVERVIEW AND PROSPECTS



**Industry
Sector**
*Service Industries
and Capital Projects*

**Secteur
de l'industrie**
*Secteur des services
et grands projets*

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EDUCATION AND TRAINING SERVICES

PART 1 — OVERVIEW AND PROSPECTS

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PREPARED BY:

**SERVICE INDUSTRIES AND
CAPITAL PROJECTS BRANCH**

This *Overview and Prospects* is the first of two companion documents on the Canadian education and training services industry in the **Sector Competitiveness Frameworks** series, which is being produced by Industry Canada in collaboration with Canada's key stakeholders in the industry. *Part 2 — Framework for Action* will be prepared in coming months, based on discussions with major industry stakeholders, following study and review of the *Overview and Prospects*.

The **Sector Competitiveness Frameworks** series focusses on opportunities, both domestic and international, as well as on challenges facing each sector. The objective is to seek ways in which government and private industry together can strengthen Canada's competitiveness and, in doing so, generate jobs and growth.

Part 1 — Overview and Prospects is being made available for distribution in printed as well as electronic forms. In all, some 30 industrial sectors are being analyzed.

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FOREWORD

The new Canadian marketplace is expanding from national to global horizons and its economic base is shifting increasingly from resources to knowledge. These trends are causing Canadian industries to readjust their business approaches, and government must respond with new tools to help them adapt and innovate. Industry Canada is moving forward with strategic information products and services in support of this industry reorientation. The goal is to aid the private sector in what it is best qualified to do — create jobs and growth.

Sector Competitiveness Frameworks are a series of studies published by Industry Canada to provide more focussed, timely and relevant expertise about businesses and industries. They identify sectors or subsectors having potential for increased exports and other opportunities leading to jobs and growth. They cover 30 of Canada's key manufacturing and service sectors.

While they deal with "nuts and bolts" issues affecting individual sectors, the Sector Competitiveness Frameworks also provide comprehensive analyses of policy issues cutting across all sectors. These issues include investment and financing, trade and export strategies, technological innovation and adaption, human resources, the environment and sustainable development. A thorough understanding of how to capitalize on these issues is essential for a dynamic, job-creating economy.

Both government and the private sector must develop and perfect the ability to address competitive challenges and respond to opportunities. The Sector Competitiveness Frameworks illustrate how government and industry can commit to mutually beneficial goals and actions.

The Sector Competitiveness Frameworks are being published sequentially in two parts. An initial *Overview and Prospects* document profiles each sector in turn, examining trends and prospects. The follow-up *Framework for Action* draws upon consultations and input arising from industry-government collaboration, and identifies immediate to medium-term steps that both can take to improve sectoral competitiveness.

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In the emerging global knowledge-based economy, intellectual capital has displaced natural resources as a primary determinant of economic strength and competitiveness. Canada's education and training services industry can play an important role in helping Canadians acquire the knowledge and skills needed to find jobs in this new economy. This Overview of the education and training services industry gives a general picture of the strengths, weaknesses and prospects of this industry sector so that providers and governments can develop practical approaches to strengthen the industry.

1.1 Characteristics

The education and training services (ETS) industry is a heterogeneous sector comprising many specialized small and medium-sized enterprises (SMEs), training arms of companies in other sectors (such as equipment suppliers and consulting engineering firms), and training supplied by public colleges and universities on a contractual basis. It has developed historically to respond to the supplementary skills training needs of businesses and individuals.

Very little comparable data exist on this sector, particularly on private ETS suppliers. Since more than 55 percent of known firms have been established since 1984, the industry is still considered young. A 1992 Industry, Science and Technology Canada profile indicates that among the 3 000 or more ETS suppliers, almost two thirds have five or fewer employees. Most of the private suppliers have headquarters in Ontario, British Columbia or Quebec. Because of the sector's focus on job-related training and skills upgrading, its services are highly marketable both at home and abroad. The main areas of expertise include executive and management development training, computer related training, and supervisory, communications, sales and marketing and professional technical training. There are no reliable estimates of overall industry revenues, but it appears that almost half the private suppliers export their services (46 percent), mainly to the United States and Europe.

Although the sector has world-class expertise in training delivery and product development, the many small firms predominating in the industry often lack sufficient capital to make large or long-term investments in product and staff development. In addition, the sector tends to have little expertise in business, marketing and distribution.

1.2 Trends and Issues

The basic tools of the industry are undergoing a radical change with the development of new media learning materials (NMLM), which encompass computer software and courseware content, including multimedia and interactive programs, applied to computer-based training. The flexibility and potential for timeliness inherent in NMLM open new markets for suppliers. These new tools enable what can be called just-in-time training, allowing training suppliers to supplement their traditional classroom and module-based programs with individually targeted packages whose interactive capabilities can give trainees and learners greater control over their learning and faster access to the materials they need. NMLM adds considerable power and value to education and training programs offered through distance education and the Internet.

Education and training services firms, particularly SMEs, find it difficult to attract capital and to secure loans and lines of credit. The banking and investment communities have been uncertain about how to value the intellectual assets represented by courses, curriculum packages and software. Solid sales records and successful strategic alliances among education and training providers are helping educate the financial community.

Because most Canadian SMEs cannot afford to hire training staff, and because of the proliferation of new skills requirements at all levels from equipment maintenance and operation to organizational management, the market for independent suppliers is growing. Foreign education and training services suppliers and international demand for training have sharpened competition. As a result, specialized education and training services firms have begun to develop strategic links with other industry sectors and to enter into strategic alliances in order to gain more effective market presence.

Clients both in Canada and abroad find it difficult to identify with confidence who speaks reliably for the sector from a national perspective, or which suppliers provide consistent, high-quality services. They must rely on individual contacts and experience for their information. Australia, France and the United Kingdom in contrast have definite strategies, policies and industry associations that provide a framework for the industry, and particularly for international marketing. U.S. providers exist in a less structured environment. They nevertheless operate in a more strategic fashion, and have strong coordinated marketing support. Better organization of the sector in Canada is a challenge that needs to be addressed.

Internationally, demand for education and training will continue to grow, especially in the primary, secondary, technical/applied skills and informal markets. The Canadian International Development Agency (CIDA), the international financial institutions (IFIs, which include the World Bank and the other multilateral development banks) and the European Commission have committed billions of dollars to training, retraining and education. Ten percent of World Bank lending (\$2.9 billion in 1995), for example, now goes toward education and training. Canadian firms have benefited from some of these investments, often as subcontractors, but increasingly as partners in consortia and strategic alliances bidding for principal project contracts. This trend should continue for the foreseeable future.

The sector is of critical importance in Canada's transition to a knowledge-based economy. A strong and vibrant training sector will play a key role in the transfer of knowledge and expertise to Canadian industry. By exporting its services, it will also make a significant contribution in helping meet the skills needs of emerging economies, and help them reach their own jobs and growth objectives.

1.3 The Bottom Line

The following issues must be addressed by government and industry:

- An acknowledgment of the value of cooperation in doing business at home and abroad is necessary. Education and training firms must work together in a more coordinated fashion and adopt more effective and cost-efficient approaches to doing business. Firms will greatly benefit from an increase in strategic alliances and partnerships. Small firms will need to combine their resources and expertise with those of other organizations, including the public sector. Success will depend on more effective consortia-building based on stronger linkages with a number of key sectors, including the financial sector.
- Continued and concerted efforts by various levels of government and by industry must be undertaken to develop better systems or indicators to provide a reliable measure of quality. A system of quality assurance will be essential to build credibility for the industry in both domestic and international markets.
- Canadian firms must keep at the leading edge in their application of advanced training technologies. They will need to ensure that the skills they provide to their clients are keeping pace with technological developments. The industry's ongoing growth will depend to a large extent on its ability to use new technologies in the delivery of training services.
- Trainers need to concentrate on the development of their business skills, and will need to have a thorough knowledge of the issues faced by their clients. Business skills are necessary to the development of a solid client base and to educating purchasers about the value and benefits of investing in human capital.
- Additional research and data are needed to provide support to government policies and products intended to help foster the growth of the education and training industry. Statistics Canada must continue to improve its collection and reporting of the education and training industry data. Data and information on the sector are critical to demonstrating the importance of the sector as a contributor to Canada's economic growth.

2 KEY POINTS ABOUT THIS INDUSTRY

The education and training services (ETS) industry consists of establishments and organizations engaged in the delivery of education and training services mainly on a fee or contract basis for profit. These services include the commercial activities of public institutions and community-based organizations, which often operate on a cost-recovery basis. There are four general components within the industry:

- firms specializing in education and training programs and their accompanying products and services such as courseware, curriculum design, train-the-trainer programs and training needs assessments
- businesses in other industrial sectors (for example, accounting, engineering, management consulting and telecommunications) that provide education and training services either as a supplement to their main product or service line or on a stand-alone basis
- private schools and training institutions
- commercial activities of public education institutions such as colleges, universities and Collèges d'enseignement général et professionnel or CEGEPs (as opposed to the degree and diploma-granting activities of the public education sector, which are beyond the scope of this document).

The industry focusses its efforts on providing job-related training and skills upgrading, such as management and executive development, as well as language training and computer and professional technical training. Trainees include predominantly management, professional and technical staff and some clerical and office workers.

Statistical data are lacking on the Canadian education and training services industry on both the supply and demand sides. Unlike most other service industries, the ETS industry does not benefit from an annual statistical survey, and collection of other data is very limited. While statistical data cover educational services at the aggregate level and numbers may point to certain trends, it is never clear whether these apply across-the-board to all types of educational providers including private sector firms. For example, Statistics Canada data show that the educational services industry — defined by Statistics Canada to include primary, secondary, university and non-university education — provided jobs to almost 930 000 people in 1996, with a total payroll of more than \$34 billion. But because the lion's share of educational services is held by the public education system and because Statistics Canada in its reporting of data does not distinguish between private and public establishments, it is difficult to estimate the true economic importance of the private education and training services providers.

**Commercial ETS focus
on human resources
development**

**Industry survey data
are limited**

The analysis for this Overview therefore had to look outside traditional sources like Statistics Canada to gather a workable description of the industry. Inherent in this process are the sometimes inconsistent results among sources, depending on the assumptions made and their method of data collection. This is further compounded in foreign publications by their lack of a Canadian focus.

Alternative data sources
are being sought

This lack of data and the necessity for alternative data sources are not unique to the training industry, but are prevalent in many service industries. Recognizing the need for timely, complete and accurate statistical data to assess industry competitiveness, Industry Canada and Statistics Canada are continuing their efforts to improve the availability of services industry data.

2.1 Global Context

Global Demand for Education and Training Services

ETS make major
contribution to
knowledge economy

The transition to a knowledge-based economy is a global phenomenon. To remain competitive, countries must enable their labour forces to acquire and upgrade the skills necessary to work with the ever-changing technologies being used in the production of goods and services. Technological developments are creating new jobs, markets and business, and consequently are increasing the demand for continuing education and training.

Knowledge is
intangible investment
in productivity

A five-nation case study by the Organisation for Economic Co-operation and Development (Oliver Bertrand, *Human Resources and Corporate Strategy*, Paris: OECD, 1988) provides a good illustration of this new work environment. This study reports general acceptance of the idea that the competitiveness of a nation is inextricably linked to labour productivity, which cannot be achieved without a more trained and flexible labour force. It notes a rapidly rising level of investment by firms in human resources, with increasing amounts being directed to in-house training. The OECD views human resources and skill formation as one form of "intangible investment" that contributes to organizational productivity. Continuous education and training provides employees with the skills and knowledge that permit companies to respond positively and innovatively to changing markets, changing competition and evolving technologies.

MDBs target unfilled
training needs in
Third World

The important training requirements of developing nations, however, remain largely unserved, mainly because of inadequate technology infrastructure and insufficient financing. As a result, the development banks have made education and training a priority; they currently have projects totalling an estimated \$15 billion in educational financing at different stages of development. Adriaan Verspoor, World Bank Education Division Chief, emphasizes the importance

accorded to education and training by multilateral development banks (MDBs): "The success of economic policies promoting international competitiveness and sustained development hinge to a large extent on the existence of a well-educated labour force. General education and vocational training play a role in this regard" (Adriaan Verspoor, *Finance and Development*, Washington, D.C.: International Bank for Reconstruction and Development, March 1990).

This emphasis on human resources development translates into an escalating demand for education and training services both nationally and worldwide. Increasingly, these services are being delivered through advanced technologies as suppliers integrate computers, video and audio technologies and link these with telecommunications systems to provide distance education services. Suppliers need to develop state-of-the-art information technologies and mechanisms to support global marketing efforts. Those countries that have already developed educational content and also have access to new technologies will be able to export their products and services around the world.

Global Competition among Suppliers

Canada has enormous opportunity — and the capability — to establish leadership as a world-class supplier of education and training services. In particular, Canada has an international reputation in providing second language training (both English and French as a second language), petroleum industry training, management development, public administration, consulting engineering and telecommunications. Historically, however, Canadian suppliers have tended to bid on projects that have already been identified and put up for tender, rather than to work actively to develop new international markets.

On-site presence in foreign countries, combined with a more coordinated industry approach to the international market, is becoming necessary for countries wishing to increase sales of their education and training services. Canada's major competitors (Australia, the United Kingdom, France, and the United States) have adopted nationally coordinated and aggressive international marketing strategies. The United States Information Service has 211 offices in 147 countries to promote U.S. education and training services. Australia operates more than 30 overseas education offices, and in 1996 the Australian government launched a \$700 000 promotional campaign in key Asian markets, and committed \$18.5 million to promote its education and training services internationally. The coordinated, on-site, central approach to the international marketplace has been most successfully practised by the British Council, which has encouraged international trade in British education and training services. With 228 offices and 95 teaching centres abroad, the British Council has representation in 109 countries. It has been estimated

Advanced technologies support ETS at home, assist marketing abroad

Canadian strengths are languages, oil industry, management, technologies

Canada's competitors have strong marketing campaigns abroad

that United Kingdom education and training exports already account for 4 percent of invisible exports. As for France, the Alliance Française, with 1 058 associations in 132 countries, acts as an indirect marketing channel for French education and training services.

**Canadian Education
Centres established
worldwide**

Elements of these approaches have been formally adopted by Canada in the Asia Pacific and Latin American markets. Within these regions, the Government of Canada and the Asia Pacific Foundation have established a network of Canadian Education Centres (CECs) to promote Canadian education and training services actively in an increasingly competitive marketplace. The CECs are mandated to gather market intelligence, identify corporate and group training opportunities, and negotiate contracts. They have been instrumental in raising Canada's profile worldwide. CECs have been established in Taiwan, Republic of Korea, Malaysia, Indonesia, Thailand, Hong Kong, Singapore, India, Mexico, China, Australia, Brazil, Argentina and Chile. Outside the CEC Network, Canadian resource and marketing centres have been established in Greece, the United Arab Emirates and Venezuela.

2.2 North American Context

Canada

**Technology investment
will make Canadian
suppliers more
competitive**

In a competitive industrial environment, Canadian companies will need to invest in new technologies requiring a knowledgeable, highly skilled and flexible work force if they are to prosper. Greater access to high-quality education and training programs for workers and managers, combined with innovation and new technologies, will help make Canada more competitive in the international marketplace.

**Canada is 1st in ETS
enrolment, 5th in
expenditure, but 17th
in company training**

The *1997 World Competitiveness Yearbook* (Lausanne, Switzerland: International Institute for Management Development) ranks Canada first in terms of higher education enrolment, and fifth in terms of public expenditure on education, indicating that training is being increasingly recognized as a key element of Canada's ability to prosper in the new economy. However, the report does show that Canada trails other countries when comparing levels of corporate training. The report ranks Canada 17th in terms of in-company training, behind Ireland, Belgium and Luxembourg.

**Spending on ETS
is rising . . .**

Progress is nonetheless being made, as indicated by studies reporting that the Canadian level of corporate training is increasing. A 1993 Conference Board of Canada survey of 275 large to medium-sized organizations (David McIntyre, *Training and Development 1993: Policies, Practices and Expenditures*, Ottawa: The Conference Board of Canada, 1994) indicates that spending on training in 1993 increased in both absolute and real terms. Average per capita training and development expenditures increased from \$659 in 1992 to \$849 in 1993. Almost

80 percent of responding organizations indicated that, adjusting for inflation, their training budgets had either remained constant or increased over the previous two years. A 1996 survey of 219 respondents (Jean-Pascal Souque, *Focus on Competencies: Training and Development Practices, Expenditures and Trends*, Ottawa: The Conference Board of Canada, 1996) reports that training budgets per employee had remained virtually constant since 1993. A large number of respondents (43 percent) expected their training expenditures to increase for the next fiscal year. The strongest signals indicating a readiness to increase commitment to training and development during 1997–98 come from the oil and gas, manufacturing, wholesale and retail trade, financial and services sectors.

The Canadian Labour Market and Productivity Centre's 1991 *National Training Survey* (Ottawa: CLMPC, February 1993) of more than 17 000 Canadian organizations reports that 70 percent of private sector organizations represented in the sample provided structured training to their employees during their most recent fiscal year. Organizations that could provide detailed figures on training expenditures spent a total of \$2.7 billion on training. With almost half this expenditure attributed to employee wages while on training, the balance represents a sizable market for Canadian training suppliers.

Human Resources Development Canada's (HRDC) establishment of the Sectoral Partnerships Initiative to help industry sectors identify their human resources and training needs demonstrates an increased emphasis by government on promotion of training. The specific training needs defined by the 23 Sector Training Councils under the HRDC initiative will provide concrete market targets for Canadian training suppliers. The establishment of the Canadian Labour Force Development Board (CLFDB) to address training and labour market concerns demonstrates equal commitment from players outside government. The CLFDB is composed of more than 90 national organizations representing business, labour and training organizations. In Quebec, 20 sectoral committees promote continuing education in industry and business.

The United States

The United States is a key market for Canadian training companies, with 66 percent of exporters selling their products or services there. Since 1983, the amount that U.S. employers spend on formal training for their employees has risen by nearly 20 percent, but has not kept pace with the rising number of workers. Using U.S. Bureau of Labor Statistics data, the American Society for Training and Development (*National Report on Human Resources*, Washington, D.C.: ASTD, September 1996) estimates that in 1995 U.S. employers spent US\$55.3 billion on training. Of that amount, US\$26.4 billion was spent on direct training costs, and US\$28.9 billion was spent on indirect costs including wages, salaries and fringe benefits of persons being trained while away from their job. Expenditures by the private sector accounted for the vast majority

... with expectations
of continuing

Private sector demand
for training presents
sizable market

Suppliers target
specific markets in
private industry

U.S. presents major
market for Canadian
suppliers

of costs: US\$25.2 billion on direct training costs and US\$27.1 billion in indirect costs. In 1995, U.S. federal government agencies spent an estimated US\$1.2 billion on direct training costs and an estimated US\$1.8 billion on indirect costs.

A 1994 study for the Canadian Embassy in Washington ("U.S. Market Report: Commercial Education and Training Services: A Guide for Canadian Firms Doing Business in the Mid-Atlantic U.S.," Washington, D.C.: April 1996) estimates that the U.S. market for education and training products that year was US\$52 billion. Of this amount, commercial firms spent almost 20 percent (US\$10.3 billion) on consulting training and education including seminars, computer-based training and packaged training programs. This represents a 4-percent increase over the previous year's level in training purchased from consulting education and training firms.

**NAFTA eases movement
of ETS trainers among
member countries**

The U.S. market offers considerable opportunities for Canadian suppliers to sell traditional training services, as well as multimedia educational products. The North American Free Trade Agreement (NAFTA) among Canada, the United States and Mexico, implemented in 1994, permits temporary movement of service providers between Canada and the United States, allowing trade in training services to flow more freely between the two countries.

**Canadian software
developers eye niche
in U.S. market**

U.S. software developers have not paid much attention to the educational marketplace, and American schools continue to rely on traditional texts. This opens the way for considerable opportunities for Canadian firms. Rob McLean, executive director of the Toronto-based International Federation of Institutes for Advanced Study (cited in Jerry Zeidenburg, "The Education Market," *Computer Dealer News*, January 25, 1996), states: "If we decide to, Canada can dominate this market niche. . . . Our market is big enough to form a critical mass, and then we can move out into the United States and worldwide."

Education and training providers can sell their products and services through a number of different avenues such as direct marketing, distribution channels and partnering. The most promising targets for direct marketing are companies which outsource their training requirements. Canadian education and training firms entering the U.S. market can choose from a number of distribution channels. Partnering is an effective way for Canadian firms to enter the U.S. marketplace. Canadian firms that partner with local firms can expand their client base, make contacts and get access to local training opportunities.

**Finance,
manufacturing,
business are key
sectors for ETS**

Business sectors offering particular opportunities include finance, insurance, banking, manufacturing and business services. Nationally, the largest training expenditures are in the transportation, communications and utilities sectors. By contrast, the health services industry reports the greatest decline in spending on training.

The U.S. federal government contracts for a variety of education and training services, ranging from post-secondary education for federal prisoners to training in weapons installation, use and repair. Federal agencies look for education and training contractors from a variety of sources, and the government procurement process, with certain restrictions, does allow for the participation of Canadian firms. For example, Sterling Performance Corporation of Markham, Ontario, has had significant success on the U.S. market. The company has taught U.S. workers such diverse subjects as sales, customer service and presentation skills. The firm has even developed a program to train airline employees to load thoroughbred horses onto planes. Company President Alan Brisco says U.S. corporations have been supplying him with large amounts of business in recent years. Past customers include Merck and Co. Inc., Ralston Purina Co., and American Airlines Inc. In 1997, he expects to sell more than \$2 million worth of training materials in the United States.

Mexico

In Mexico, the market for education and training services is growing rapidly. About half the population is under the age of 20, creating a large potential market for learning systems. Within the public education system, efforts will focus on making education more accessible in regional areas and on training programs for primary and secondary school teachers. The public schools, however, are generally poorly funded and offer only limited, short-term opportunities for training suppliers. There is some potential here for companies offering innovative products that respond to a growing need for cost effectiveness as enrolments continue to grow and limited resources are stretched.

Private schools, on the other hand, have more financial resources and have a reputation for offering a better quality of education. Many target their programs to industry needs. As a result, they represent a growing market for advanced education and training programs and technologies. Computer-based training is gaining in popularity.

By law, all companies in Mexico must provide job training to their employees. The combination of an employed labour force of more than 30 million, free trade, privatization and deregulation has created an unprecedented need for skills upgrading. Business education is growing rapidly, especially in management and technical training. The best prospects are in management, total quality, advanced production techniques, human resources administration, safety and security, and training in English as a second language (ESL).

**U.S. government is key
ETS purchaser**

**Mexico is rapidly grow-
ing market for innova-
tive products . . .**

**. . . especially
computer-based
training . . .**

**. . . business and
technical training**

There is need for
training in health
and safety and
environment protection

Within the industrial sector, companies are starting to invest in employee education and training at all levels. With the implementation of the NAFTA and the opening of the Mexican market to competitive products, industry is making greater efforts to attain high levels of productivity and competitiveness, thus increasing the demand for training in advanced technologies and management. The two "side agreements" implemented under the NAFTA will likely have a direct impact on training trends. The agreement on labour standards means more attention to occupational health and safety. The agreement on environmental standards is expected to lead to the use of new equipment and technologies to reduce pollution, which in turn will create a need for environmental training.

Canada has small
share (3%) of
Mexican ETS market

The market for training services in Mexico grew 70 percent from US\$26.4 million in 1991 to US\$44.8 million in 1993 (the most recent year for which these data are available). Domestic companies provide approximately 70 percent of the value of training services in Mexico, but the high demand for advanced technologies and modern management systems has allowed foreign suppliers to gain a larger market share. Imported training services are mainly used to train trainers, executives and advisors, which is normally the most expensive training. In 1993, the import market represented US\$13.4 million. The United States held 75 percent of the import market, mainly with training in management, languages, environmental protection, biotechnology and analytical chemistry. Japan was second at 15 percent, mainly in total quality and productivity. Canada was third at 3 percent, mainly in food processing and water treatment.

The main competition comes from Mexican firms, many of whose specialists trained in the United States. They provide services in Spanish and know the market, but most lack the modern technical systems, specialized management know-how, and financial support to create the necessary infrastructure to increase supply in the shorter term. The best prospects for Canadian organizations are for specialized programs, especially if they can be marketed through licensing or partnerships with Mexican training companies and universities.

Chile

Chile opens new
avenue for potential
Canadian suppliers

Canadian education and training services exporters will benefit from the provisions of the Canada-Chile Free Trade Agreement, an extension of the NAFTA. While the Chilean reservation on public education could impose limitations on cross-border activities in this sector, the reservation does not cover the provision of services related to second language training, corporate, business and industrial training and skill upgrading. These services include consulting services relating to technical support and advice, and to curriculum and program development in education.

2.3 Canadian Industry Snapshot

Given the very limited data available on Canada's education and training industry, the numbers that do exist are the result of various independent surveys dealing with various subcomponents of the education and training sector. Because of differing methodologies and definitions, data are fragmented and are not always easily comparable. Nonetheless, a general picture of the activity occurring in the Canadian education and training services sector does emerge from these studies.

The most comprehensive source of information on the private suppliers within the education and training services sector is a 1992 profile of private education and training companies undertaken for Industry, Science and Technology Canada (Coopers & Lybrand Consulting Group, *Final Report of the Commercial Education and Training Services Industry Consultations and Survey*, Ottawa: ISTC, March 1992; the data were further analyzed by Statistics Canada in *Commercial Education and Training: Profile of Canadian Suppliers*, Ottawa: October 1992). In this profile, only private companies offering education and training services were surveyed; private career colleges were excluded, as were commercial activities of public education institutions. The survey results indicate that the sector is composed mainly of small firms (almost two thirds having five or fewer employees) and that, with more than 55 percent of the firms established after 1984, the industry is still considered young. A 1995 study of the British Columbia education and training sector (Coopers & Lybrand Consulting Group, *A Detailed Profile of the British Columbia Commercial Education and Training Sector*, Victoria: B.C. Ministry of Employment and Investment, B.C. Ministry of Education, Industry Canada and B.C. Trade Development Corporation, 1995), corroborates this finding. The study shows that the British Columbia education and training sector also consists of young and growing firms, with most (69.5 percent) being less than 10 years old. More than 84 percent of training firms in the province were small and medium-sized enterprises (SMEs) employing from one to 25 employees. Of those, 54.5 percent had only one to five employees. While the vast majority of Canadian suppliers were very small in numbers of full-time employees, many of them had great capacity to deliver on many projects around the world. This was because companies in the sector maintained a roster of professionals as associates who could be assembled into teams to fit specific project requirements.

Almost two thirds of the 3 200 firms surveyed in the 1992 profile reported education and training services as their sole source of revenue. These firms, referred to as specialists, employed 16 000 to 20 000 people and trained roughly 85 percent of all clients. The remaining clients were

Data sources vary . . .

. . . reveal industry composed of young firms, mainly SMEs, augmented with many associates

Some 2 000 specialist firms employ almost 20 000 people

trained by non-specialists offering education and training as part of the sale of their equipment or services. Small firms were predominantly specialists (68 percent), while large firms of 200 or more employees were mostly product-related firms in other industrial sectors. A typical education and training supplier was a small specialist with 10 employees or fewer.

**Most firms have small
client base . . .**

Although no information exists on revenues generated by education and training firms, the total number of individuals trained per year by these firms may be used as a proxy for assessing their economic importance. The 1992 profile undertaken for ISTC concludes that not only did training firms have few employees, but also they had a small client base. Only 2 percent of firms reported training 10 000 individuals or more. Most firms (63 percent) trained fewer than 500 people during the same period. Other studies draw similar findings. A 1992 Statistics Canada survey (Sylvie Grenier, "Survey of Private Training Schools in Canada, 1992," *Educational Quarterly Review* 2 (3) [Fall 1995], Statistics Canada Catalogue No. 81-003) of vocational schools registered under provincial legislation and/or recognized by Human Resources Development Canada as certified private educational institutions finds them small, with more than half enrolling fewer than 100 students. The British Columbia survey reports that in 1995 close to 50 percent of firms trained between 50 and 350 people while almost 28 percent sold their services to fewer than 50 clients. In total, more than 80 percent of respondents trained fewer than 500 people. A 1995 study of the education and training industry in Atlantic Canada indicates that, there also, firms trained a relatively small number of people; the average number trained in 1994 was 614. The demand for training in the Atlantic region increased significantly, as the number of people trained grew at an annual average rate of 55 percent.

**. . . earn less than
\$500K, higher
in Atlantic**

Revenue figures from the British Columbia study show that more than 40 percent of training firms reported revenues between \$100 000 and \$500 000 while close to 12 percent had incomes of more than \$1 million. Roughly 30 percent earned less than \$100 000. The Atlantic Canada study indicates that 34.5 percent of survey respondents had gross revenues in the \$100 000 to \$500 000 range, findings somewhat similar to those of the B.C. study. However, results in Atlantic Canada differ for the higher and lower revenue ranges. Close to 30 percent of respondents reported earnings of more than \$800 000, while only 12 percent declared incomes of less than \$100 000.

**Clients include
manufacturing,
public sector, services**

The industry groups most commonly served by the education and training sector at the time of the 1992 profile included manufacturing (other than automotive and electronics), public administration, business and personal services, as well as educational institutions. The sector focussed on providing job-related training and skills upgrading, most often executive and

management development training, followed by computer-related, supervisory, communications, sales and marketing, and professional technical training. Trainees include predominantly management, professional and technical staff, and some clerical and office workers. Few firms train workers in construction, primary industries, transport equipment operation and materials handling.

Results from Statistics Canada's 1992 survey of private training schools are similar, but show that non-work-related training was also in demand. The survey results indicate that in most regions the majority of students were enrolled in business programs. Community services training was second in importance in most regions of the country, except in Ontario where technology and trades ranked second. Only 13 percent of these institutions provided training in more than one field of study. The rest were specialized either in business (26 percent), technology and trades (20 percent), community services (17 percent), personal care (11 percent), hospitality and tourism (2 percent) or other fields (11 percent). Most of the teaching staff hired by these institutions worked part time (78 percent), while only 2 percent taught full time.

Virtually all of the firms (97 percent) surveyed for ISTC in 1992 had their headquarters in Canada, with 56 percent and 41 percent of the firms located in Ontario and Quebec, respectively. While most suppliers (83 percent) had offices located in one province only, close to two thirds of them (64 percent) carried out activities in more than one province. Most of the activity occurred in Ontario and Quebec, followed by British Columbia and Alberta. Findings from the provincial studies of training firms are similar to those of Statistics Canada's 1992 survey of private training schools, which reports that most of the private providers were located in Ontario (33 percent), British Columbia (23 percent) and Quebec (21 percent).

At the time of the 1992 profile, almost half (46 percent) of commercial firms selling training services were active in international markets. Of these firms, 66 percent exported their services mainly to the United States, and 44 percent to Europe. This level of dependence on the U.S. market was comparable with that of commercial services exports, 60 percent of which were going to the U.S. market. This dependence reflected both similarities in language and culture, and the proximity of the U.S. market to Canada. Asia and Africa were also popular export destinations, with 28 percent and 23 percent, respectively, of exporters selling their services to these regions. Education and training was channelled to Asia and Africa through aid and development projects supported by the Canadian International Development Agency (CIDA).

**Popular courses are
business and
community services**

**Most training offices
and activities are in
Ontario, Quebec**

**U.S., Europe are major
foreign customers**

**Export markets vary
by province**

Although data on foreign markets by province are available solely for firms having only one location, they do show regional differences in location of their export markets (Table 1). Firms in Quebec were most likely to serve the European, African and Latin American markets. Ontario firms were the most likely supplier to the U.S. market, while those in British Columbia most often supplied the Asian and Australian markets. Companies in the Atlantic and Prairie provinces supplied training services almost equally across major world markets.

Table 1. Distribution of Provincial Private Education and Training Services to Foreign Markets, 1992^a

	Europe	Asia	Australia	Latin America	Africa	United States
	(Percent)					
Atlantic	19	19	10	14	19	19
Quebec	29	9	4	20	19	20
Ontario	18	11	7	17	8	39
Prairies	15	19	7	17	16	27
British Columbia	17	20	15	15	5	29
Yukon and Northwest Territories	50	—	—	—	—	50

^a Based on suppliers involved in export markets and operating from one province in Canada.
Source: Statistics Canada, *Commercial Education and Training: Profile of Canadian Suppliers* (Ottawa: Statistics Canada, October 1992), p. 17.

**Data show
commitment
of Canadians to
developing their
skills . . .**

Some existing data do not concentrate on the training industry, but on the activity of education and training itself. Although these data do not describe activity in the sector as fully as do targeted studies, they provide an indication of the extent of demand for training in general and its overall importance. For example, a 1994 *Adult Education and Training Survey* (Ottawa: Statistics Canada for Human Resources Development Canada, 1994) reports that more than 5.8 million people received training in 1993. This level of activity clearly indicates the commitment of Canadians to developing new competencies or to upgrading their skills. The survey also reports that commercial suppliers and consultants were responsible for providing 20 percent of all adult education and training in 1993 (the remainder of the adult education and training was provided by educational institutions, employers, and others). This finding is evidence of the contribution of the education and training services sector to skills development in Canada. By contrast, a 1996 survey, jointly released by Human Resources Development Canada and la Société québécoise du développement de la main-d'œuvre (*Survey of the Characteristics*

of Labour Demand in Quebec, Quebec City: September 1996) reports that 63 percent of companies in Quebec provided on-the-job training to their employees. While 85 percent of companies had their own staff conduct training, 29 percent used consultants or private trainers.

Statistics Canada's 1994 adult education and training survey also reports that employers financed more than half of the 9.4 million adult education and training activities. And, while educational institutions (34 percent) and outside consultants (25 percent) provided most of the training, larger firms tended to rely more on their own internal training departments than did smaller firms. People working for SMEs received more training from outside suppliers (37 percent versus 29 percent for firms having more than 500 employees). As in other studies, commerce, management and business administration was the most popular field of study. This was closely followed by engineering/applied sciences technologies and trades and by health professions, sciences and technologies.

In Quebec, traditional training methods were still preferred as late as 1993, and they were used in 98 percent of cases. Only 31 percent of training activities used non-traditional methods. Both methods were used in roughly 30 percent of cases. Of the non-traditional methods, audio/video cassettes represented the most popular tool (64.5 percent) and educational software came in second (39 percent). There are, however, many indications that technology-based training is becoming an important component of the education and training services sector. For example, a 1995 study of the Quebec educational software industry estimates the Quebec market for educational software at between \$15 million and \$25 million. About \$10 million in sales were made to individuals as educational/cultural software, while the market for computer-assisted training was evaluated at between \$5 million and \$10 million. The public school market was limited to \$1 million. Firms selling educational software were experiencing acceptable success, with average revenues ranging between \$500 000 and \$1 million. The domestic market accounted for about 87 percent of software sales, exports making up only 13 percent.

2.4 Performance

Little is known about the revenues generated by this market. Traditionally, education and training companies have been reluctant to report on revenues, as evidenced by the 1995 British Columbia survey mentioned above. Although 79.1 percent of respondents declined to report on export revenue, half of the 20 percent who did respond indicated growth rates of up to 30 percent between 1992 and 1994. Nearly 15 percent reported a three-year growth of 100 percent or greater. These figures hardly offer a national picture, but do give some indication of the growth potential of this industry.

. . . half paid for
by employers

Educational software is
recent addition to
teaching methods, with
use increasing rapidly

Industry seems to
have high growth
potential . . .

... based on
anecdotal evidence

Despite the lack of data on export revenues, anecdotal evidence suggests an industry with good growth potential. For example, a small Canadian firm with six full-time staff specializing in educational software has developed a product that is selling very well in the United States, with \$1–2 million in exports returned to the local economy.

Canadian IFI contracts
are lagging ...

Historically, organizations such as CIDA and the World Bank have been major catalysts for international market development in this industry. IFIs offer a gateway into the fastest-growing education and training markets of the next century. Canada, however, does not fare well in competing for IFI projects. Although Canada has long been a contributor to the IFIs, providing an average of \$425 million annually since 1991, our IFI commercial record remains below potential. Between 1991 and 1994, Canadian firms on average received \$363 million from all IFI contracts, representing 1.7 percent of total foreign procurement or 86 cents for every dollar contributed by Canada (no separate figures for ETS-related contracts are available). Canada placed tenth to twelfth among OECD countries in overall IFI procurement. Nevertheless, solid gains have been made in the past few years, and Canadian contract awards at every IFI were at record highs in 1994.

... impeded in part
by small firm size, lack
of networking

Because of their small size, training firms often compete for foreign business by forming partnerships and alliances and by relying on contract associates. The lack of a national association representing the diverse subsectors of the Canadian education and training industry, and the absence of a formal mechanism to ensure networking across existing industry associations, impedes the formation of domestic consortia for bidding on major projects, although a number of firms have successfully overcome this constraint. In addition, while there is still considerable competition between private companies and public institutions, recognition of the need for better collaboration in order to maximize export opportunities is increasing.

Foreign students
spent nearly \$300M on
English language
training in 1996 ...

While many career colleges and private schools were established to serve local markets, they are increasingly turning to international markets, especially in second language training. The Private English Language Schools Association of Canada (PELSA) estimates that a total of 77 472 students in 96 institutions across Canada spent \$297 957 312 during their 1996 period of study.

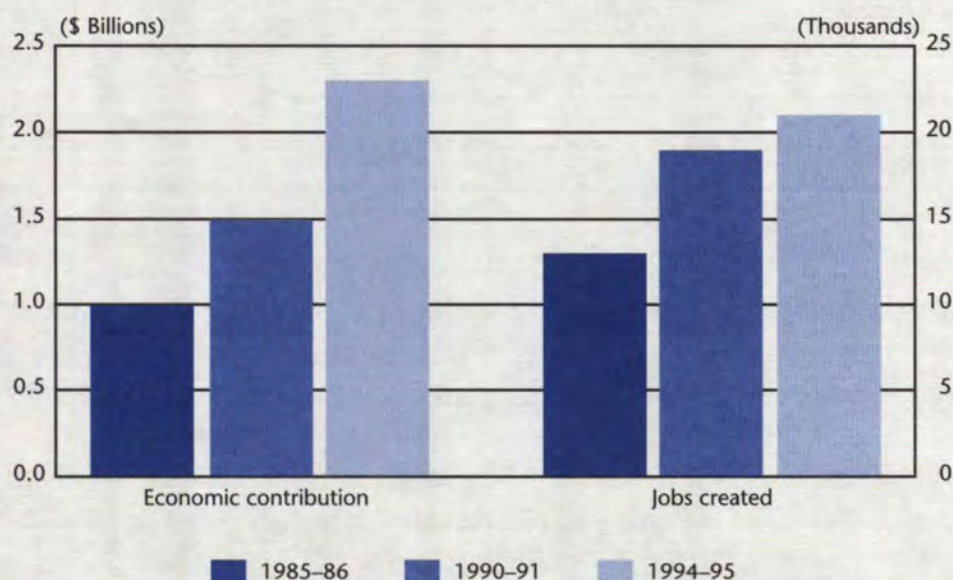
... enhancing
Canada's trade
relationships ...

Many public education institutions are well established in the international marketplace. Colleges and universities bid on international training contracts and also place considerable emphasis on recruiting international students. This is an important component of educational services exports and enhances Canada's potential to develop long-term trade relationships with

sending countries, generating considerable economic benefits. A study commissioned by the Department of Foreign Affairs and International Trade (*International Student Data Project Report*, Ottawa: Paradigm Communications, October 1995) estimates that 84 000 international students in 1994–95 contributed \$2.3 billion in foreign exchange earnings to Canada's economy and helped generate 21 000 jobs. As Figure 1 illustrates, this represents overall growth in economic contributions over the past 10 years. However, as reported by the Canadian Bureau for International Education (*The National Report on International Students in Canada 1996/7*, Ottawa: Canadian Bureau for International Education, 1997), international student enrolment at the university graduate level continues to decline, experiencing an 18.5 percent decrease since 1992–93. Between 1985–86 and 1996–97, international student enrolment in Canada increased dramatically at all levels, except the university level. Significant growth has occurred at the elementary/secondary and the college/trade levels. The bulk of the increase is attributable to private education providers, who are becoming increasingly active in recruiting students in areas such as language training, technical, business and health programs. The decline at the university level can be attributed to a number of factors, including increased competition from other countries, a trend toward studying at home and lengthy Canadian immigration procedures (to address this last issue, the Canadian government now is piloting a streamlined medical examination process for international students in the Republic of Korea, Malaysia, Mexico, Taiwan and Thailand).

... and job creation
at home

Figure 1. Economic Impact of International Students in Canada



Source: Department of Foreign Affairs and International Trade, *International Student Data Project Report*, 1995.

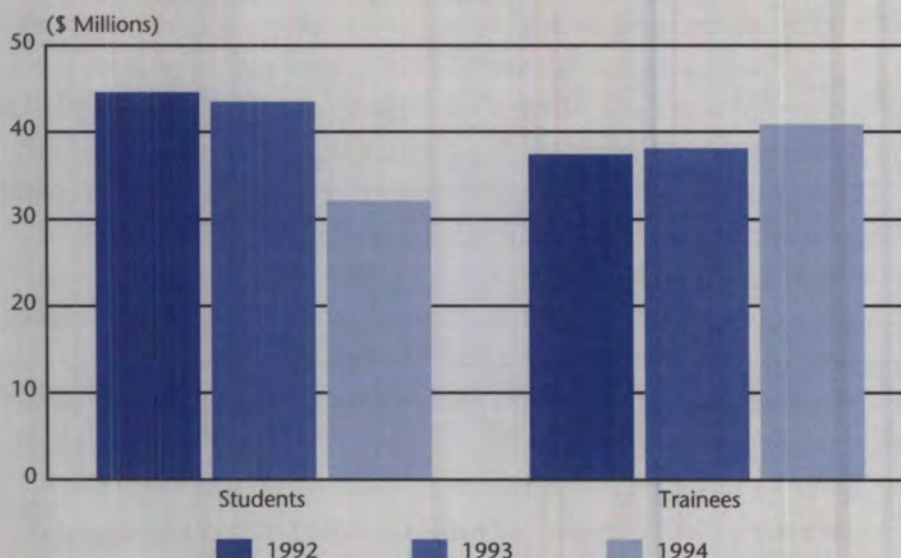
"It is alarming to note that Canada is the only major receiving country consistently reporting declines in international student numbers at its universities."

— CBIE, October 1996

Recent loss of students sparks recruiting drive

For three consecutive years (1992–94) the number of full-time students financed by CIDA decreased, with a noticeable decrease of 22 percent in 1994. On the other hand, the number of trainees remained stable in 1994, and disbursements for trainees increased slightly from \$38.1 million to \$40.9 million in 1994, maintaining the trend toward increased support for short-term training activities. As Figure 2 shows, the gap continues to widen between disbursements for the more "traditional" students and disbursements for trainees.

Figure 2. Disbursements by CIDA for Students and Trainees



Source: Canadian International Development Agency, *Report on Technical Cooperation* (Ottawa: CIDA, October 1995), p. 8.

This downward trend in international student and trainee enrolment has caused considerable concern among industry stakeholders such as the Canadian Bureau for International Education (CBIE).

In the global marketplace, Canada historically has been host to the world's sixth largest population of international students, ranking behind major competitors such as the United Kingdom, France and the United States. The recent decline in the number of traditional degree and diploma program students from abroad has prompted many colleges and universities to mount vigorous recruitment and marketing efforts, and to provide educational services overseas. More than 50 education and training suppliers participated in the January 1997 Team Canada mission to Asia and another 52 in the January 1998 Team Canada mission to Latin America.

In 1992, Canadian universities were involved in more than 525 international development projects worth more than \$120 million in official development assistance (ODA), with an additional \$50 million coming from other sources, including Canadian and developing-country universities. The CUPID (Canadian University Project in International Development) database, developed by the Association of Universities and Colleges of Canada (AUCC) lists more than 2 000 Canadian university projects in international development since 1983. One example is a \$30-million contract between Dalhousie University in Halifax, Nova Scotia, and the Government of Kuwait to apply Dalhousie expertise to establish a Centre of Excellence in Physiotherapy and Rehabilitation in Kuwait.

Non-governmental organizations such as CBIE and World University Service of Canada (WUSC) have also managed education and training projects around the world. An example is the CBIE-managed Public Service Reform Project in Ukraine. Funded by CIDA, this \$2.4-million project aims to advance the reform process in Ukraine by creating a critical mass of Ukrainian public servants with the capacity to develop and implement reform-driven policies and programs. It involves the expertise and services of nine Canadian organizations and is being carried out in partnership with the Ukrainian Academy of Public Administration.

Since 1979, the Association of Canadian Community Colleges (ACCC) has implemented and managed more than 300 development projects in more than 70 countries. For example, the ACCC in 1993 acted as the training agent in Northern Telecom's bid to supply equipment and operating systems to Grupo Iusacell, a young cellular company in Mexico City. As part of the bid, the ACCC developed a training plan with Iusacell staff to support the systems acquisition from NorTel. The plan included both short-term upgrading of existing staff and training for the long-term supply of technical and professional workers. Northern Telecom won the US\$700 million contract. The project's six training elements, worth \$2.6 million, have been delivered by Canadian colleges, Northern Telecom, a university and a private sector interactive training technology firm.

Many Canadian institutions are involved in training as development assistance abroad

Training can extend to government reform

Training can accompany firms' equipment supply

3 CHANGING CONDITIONS AND INDUSTRY RESPONSE: KEY ISSUES

3.1 General

Outsourcing

Outsourcing of
training by corporations
presents opportunities
for suppliers . . .

As corporate training departments are asked to do more with less, they can no longer maintain a fully staffed permanent training function within the organization. In order to save resources and improve efficiency, most corporate training departments are combining internal and external training expertise. Increasingly, internal training professionals are focussing on creating an organizational learning environment that will improve employee productivity and thereby contribute positively to the bottom line. They contract with external suppliers to assist with program design, development, and delivery of specific training services as needed.

. . . in both Canada
and U.S.

The tendency toward outsourcing is evident in both Canada and the United States, with about 30 percent of the annual expenditure for training in the United States going to outside providers. Companies are experimenting with a number of outsourcing strategies, such as keeping training design inside and outsourcing development and delivery, using cost-benefit analysis to select training providers, forming alliances with junior colleges, universities and training companies, pooling training resources across companies, and forming partnerships with a vendor to share resources. As they seek outside assistance to manage these external activities, some U.S. companies report that they are even outsourcing the outsourcing function. This trend presents considerable opportunities for Canadian training suppliers.

Outsourcing provides
fast access to
specialized training
requirements

A 1996 Conference Board of Canada study (David McIntyre, *Getting the Most from Your Training Dollar: Outsourcing Trends in Corporate Training*, Ottawa: The Conference Board of Canada, 1996), sponsored by Industry Canada, reports that almost 40 percent of all corporate training activity is being provided by external suppliers. "Highly specialized needs" is cited as the number-one reason for outsourcing training. Organizations find it more useful to have outside suppliers provide specialized training rather than undertake the expensive alternative of developing programs in-house. The Conference Board study also reports that saving money was not a major factor in deciding whether to outsource training. Once the decision to outsource has been made, however, cost becomes an important factor in identifying and choosing external suppliers. In addition, buyers are looking for more than the simple delivery of training services. Rather, they are seeking partners to assist them in developing a high-performance workplace

that recognizes the integration of learning into the corporate culture. The report also states (page 8): "External suppliers must also understand and analyze key processes in prospective client organizations. In order to take advantage of opportunities, commercial education and training suppliers must understand the process management and re-engineering strategies of the business vis-à-vis training and development."

The following list ranks the criteria most important to the survey participants in identifying and choosing external suppliers:

- | | | |
|----|-------------|---|
| 1. | Content | actual program |
| 2. | Results | outcomes of training |
| 3. | Cost | offers a desirable product at a reasonable rate |
| 4. | Philosophy | values, beliefs, approaches, etc. |
| 5. | Experience | has worked with a number of clients/reference checks |
| 6. | Credentials | certification or documentation that validates expertise |
| 7. | Delivery | teaching methods, knowledge of adult learning theory. |

Feedback from this research indicates that choosing external suppliers can be a frustrating experience in the absence of any formal certification or accreditation processes. Purchasers of external training want a reliable way of assessing the *bona fides* and expertise of suppliers. To maintain competitive advantage, commercial training suppliers must look more closely at the notion of a portable credential that would be recognized by buyers and vendors alike.

Competition

As the public education sector experiences cuts, many out-of-work teachers and professors are setting up their own training companies to sell the expertise they developed in the public education system. This increase in the number of training companies is expected to have a noticeable effect on the level of competition in the industry. In order to remain competitive, training firms will have to provide training packages using the latest technologies to meet the skills development needs of the corporate world.

An additional source of competition for training firms are organizations in other industrial sectors that are increasingly marketing their internal training expertise to outside customers and suppliers. The Conference Board study mentioned above demonstrates how businesses such as Canadian Airlines International Ltd. and 3M Canada Inc. have begun to capture market share for outsourced corporate training activities.

Users identify supplier criteria

Downsized educators
open own shops

Trainers in other industries
are adapting
courses to serve
outsourcing market

**Organizations set up
dedicated training
facilities**

A growing number of Canadian organizations have established large, stand-alone training or learning centres. Canadian banks are on the leading edge of this trend. The Canadian Imperial Bank of Commerce has set up a Leadership Centre, while the Bank of Montreal has invested \$50 million to build an Institute for Learning with centres in four locations. More than two thirds of the Bank of Montreal's 35 000 employees (about 14 000 each year) have taken courses at the institute since it opened in early 1994. To build its capability to operate globally, the Bank of Montreal, through the Institute of Learning, is building alliances with other learning institutions such as the University of Western Ontario and Northwestern University in Evanston, Illinois.

"I see a lot more CEOs
talking about learning
in intelligent ways,
as being vital to the
business, as an invest-
ment in the future."

— Corey Jack,
Vice President, Bank
of Montreal's Institute
for Learning, 1997

The learning outlook appears to be spreading among organizations. For example, Ontario Hydro's Corporate College conducts executive development programs. At Bell Canada, almost all training will be done at specialized training institutes, with the Bell Institute for Professional Development acting as a consultant to the 47 000 employees. These facilities demonstrate the important role of education and training in businesses, and signal major challenges for traditional education and training suppliers by very large, well-managed and credible organizations competing for market share. If education and training suppliers do not position themselves to work effectively with these larger players, they may find themselves outpaced by organizations for whom training is not the main line of business.

Partnering/Consortium Mechanisms

**Firms combine
resources . . .**

Entering into partnerships and alliances allows Canadian training firms to combine their resources and to compete more effectively. Initiatives have been put in place to help firms enter into partnerships and take advantage of market opportunities both here and abroad.

**. . . in groups and
coalitions**

New Brunswick offers one model for alliances to capitalize on the industry's enormous opportunities. It has established New Brunswick Training Group Inc., a 51-member group representing courseware developers, second language specialists, human resources practitioners, engineering consultants, communications companies, colleges, universities and government agencies. The group has developed a business plan and marketing strategy to position itself in domestic and international markets offering turnkey training solutions to prospective clients.

The Canadian Business Networks Coalition (CBNC), composed of nearly 100 Canadian organizations, has been providing funding incentives for the formation of flexible business networks under an Industry Canada-sponsored National Demonstration Program. Bringing together a group of companies to collaborate on both short- and long-term projects to achieve what no single company could accomplish on its own has worked well in other trading nations. It is a model that the CBNC hopes will flourish in Canada. Getting small firms to cooperate allows

them to pool resources and react to market opportunities normally unavailable to small firms. As of November 1996, the CBNC had approved the following education and training networks under the National Demonstration Program:

- The Breakwater Educational Consortium, a group of four Newfoundland companies, is collaborating to develop multimedia CD-ROM and on-line resources for the secondary school market.
- The Calgary Centre for International Training consists of five Alberta companies or institutions engaged in providing training for major public infrastructure projects in developing countries.
- The Canadian Showcase Consortium is a group of educational institutions in four provinces which is cooperating to attract Persian Gulf students to Canadian universities.
- In Alberta, four companies comprising Creative Communications International are exporting hospitality education and training to Central America.

3.2 Technology

Technological developments have the potential to change profoundly the delivery of training. Desktop computers now can process and store increased quantities of data and run more complex systems, while developments in connectivity have facilitated the movement of information. In computer-based training (CBT), text-based training software is giving way to new media learning materials, which have the capacity to combine various media such as text, graphics, pictures, animations, audio and video and apply them to a host of electronic-based training products. These materials provide trainers with classrooms without walls, and provide learners with access to training on demand, allowing them to work through modules at their own pace.

A wide array of different technology-based training tools now is available. They range from the established video format to basic computer-based training, to Internet-based tools, CD-ROMs and satellite-based training. Training on the Internet has significant potential. Once bandwidth and digital compression issues are resolved, the Internet is expected to move from being a largely static repository of information to being a truly interactive and highly dynamic training tool, with features such as real-time video and audio. Features to come include simultaneous, world-wide updating of content, document sharing and conferencing. In contrast to CD-ROMs, which appear to be better suited for static material such as reference and archival data and information, this medium allows for just-in-time release of training and quick updating of training modules.

**Education networks
extend reach to
markets abroad**

**New media learning
materials change tradi-
tional teaching . . .**

**. . . with
interactive tools
available electronically**

The Software Human Resources Council (SHRC) has identified a critical shortage of training for Canadian computer professionals who must update their skills in client/server computing. To address this problem, the SHRC, in collaboration with Digital Equipment of Canada, has introduced a distance learning service called Mentys — The Internet Computer Institute. Mentys is an effective, relatively quick and low-cost training medium. It provides training services and interactive courses via the Internet's World Wide Web. Courses include a selection of technical courses in client-server concepts, tools and operating systems.

New venues widen
access to training
materials . . .

Cable modems and other technological communications alternatives — fibre optics, wireless systems, satellites and so forth — transmit more information at much faster speed than do current telephone modems. Many telecommunication, cable and satellite companies therefore are competing for Internet traffic and looking for ways to encourage clients to use their systems. One area where they see growth potential is education and training. Vidéotron, the largest cable distributor in Quebec, has launched an initiative aimed at the distance education and training market, known as InfiniT, with the aim of becoming a central “transporter” of education and training products. InfiniT provides search capabilities, and offers Canadian training companies ways to distribute their computer-based training products to markets not previously available.

. . . as more SMEs
become linked up
through computers,
Internet

In the medium term, new media learning materials are not expected to displace so much as complement traditional classroom-based training. The user-friendliness and decreasing costs of these new technologies, however, make them more attractive to users. Many companies already have all or nearly all the technological capabilities to allow for internal delivery of this type of training. A Canadian Federation of Independent Business survey (*Technologies in Small and Medium-sized Firms*, Ottawa: CFIB, February 1996) states that 84 percent of SMEs surveyed are using computers, and 25 percent of firms have multimedia computers with CD-ROM drives. Growth in use is expected to be substantial. While only 13 percent of SMEs now are connected to the Internet, the number is expected to more than double within the year.

3.3 Trade

Much training software
is imported, especially
from U.S.

There is a great deal of international trade in education and training services, but statistical systems are only beginning to capture trade data. Fewer than half (46 percent) of Canadian education and training suppliers now are active in export markets, and much of the Canadian market has been served by imports. With the exception of Quebec, 80 percent of courseware used in Canadian schools comes from the United States.

There are at least three factors contributing to increased international trade in education and training services: trade agreements, technological change and priorities of multilateral development organizations. Under the NAFTA, for example, the market in Mexico has become of much greater interest to Canadian suppliers. Technology has provided foreign suppliers with the capability of greater penetration into the Canadian distance education market. At the same time, efforts are being undertaken in government and within the teaching profession to increase Canadian content. Canadian suppliers of school courseware have extensively increased their supply capability, with resulting export and import replacement opportunities.

**NAFTA facilitates trade
in ETS**

International demand for education and training services is shifting, particularly within the international financial institutions. The IFIs in the past have defined human resources development (HRD) and education and training (E&T) as specific project sectors, but now they also tend to consider them as components of other industrial sectors. To best meet their international clients' needs, HRD and E&T and suppliers will have to link up with firms in other industrial sectors, such as engineering, aviation, financial services and tourism, to sell services that go beyond stand-alone E&T and that include capacity and infrastructure development in a broad range of industrial sectors. Canada has a good international reputation in many sectors, such as banking, transportation, environmental services, telecommunications, and consulting engineering. HRD and E&T firms will benefit from marketing partnerships or product coupling with Canadian companies already supplying international markets. This should enhance larger export packages and lead to early sales for HRD and E&T firms.

**Marketing partnerships
also are needed for
sales abroad**

A unique aspect of trade in this sector is that thousands of foreign "customers" come to Canada to receive educational services. This produces a major component of Canada's export revenues, and in this subsector undoubtedly produces a trade revenue surplus, since there is less tendency for Canadians to take full-time studies abroad. Some Canadian companies send staff to specialized courses in the United States and elsewhere, but this constitutes a modest amount of imported education services.

**ETS bring trade
revenue surplus for
Canada**

International enrolments in traditional degree and diploma programs may continue to decline or at best maintain their current level. The market for short-term, mid-career upgrading at corporate or institutional facilities, however, is growing strongly. The pattern of CIDA disbursements for international students and trainees reflects this trend, which presents considerable opportunities for suppliers who are able to package, customize, broker and deliver this type of training. Content specialists and training brokers will need to join forces to explore these new markets.

**Career upgrading
replaces traditional cer-
tificate programs**

3.4 Investment and Financing

Although most training firms by far are SMEs, the North American market is also served by some large, well-established companies. Some publicly traded training companies in the United States are earning significant profits and are experiencing sizable increases in share prices. There are only two publicly traded Canadian education firms: ITI Education Corp. and International Business Schools Inc., the latter trading in the United States only. The Toronto-based Academy of Learning is considering going public.

ETS firms invest heavily
in human capital
and R&D . . .

Education and training services companies invest more heavily in human capital than in hard assets such as machinery and equipment. As key players in the evolving knowledge-based economy, their competitive edge lies in the know-how of their employees and associates, specifically, in their ability to manage development of new training materials consistent with the newest technologies and to market these to a clientele that increasingly demands results-oriented training. Training companies tend to invest a significant portion of their revenues on R&D (up to 80 percent) and on market expansion.

. . . assets on which it
is hard to raise capital

The value of intellectual assets such as courses and curriculum packages has not readily been recognized by the banking community as collateral for obtaining either short- or long-term financing. Canada's commercial banks traditionally have offered financing for qualified manufacturers of hard products, where capital assets involved in plant and processing equipment and machinery are used to secure loans and lines of credit. The sheer scale and pervasive impact of the information technology revolution has required the banking community to gain a better understanding of knowledge-based businesses. Despite the difficult transition from hard asset valuation to intellectual asset valuation, the banks appear to be making some progress.

Financing agencies are
beginning to support
export of knowledge-
based activities

In November, 1996, the Canadian Imperial Bank of Commerce and the Export Development Corporation teamed up to announce a \$20-million program to support the export activities of knowledge-based businesses. The CIBC/EDC Grow Export program provides working capital loans to finance the costs of delivering goods and services to foreign buyers. A solid track record and strategic alliances are major, positive factors taken into consideration by financing agencies.

3.5 Human Resources

The 1992 profile prepared for ISTC mentioned above on the education and training sector reports that in the early 1990s most training suppliers were using traditional classroom teaching methods, such as print (87 percent of suppliers) seminars and workshops (80 percent) or lectures and demonstrations (79 percent). In addition, Statistics Canada's 1994 adult education and

training survey reports that only 12 percent of training activities were delivered using educational software. A Conference Board report (*Training and Development 1995-96*, Ottawa: The Conference Board of Canada, 1996) states, however, that two thirds of trainers plan to use more computer-based training, computer-assisted self-study, multimedia, distance learning via computer and videoconferencing. Training providers realize they must use more sophisticated training tools to deliver their services if they are to remain competitive as the sector becomes increasingly technology-intensive. But, because many trainers do not know how to use the new multimedia technology, firms without personnel skilled in the use of these training tools may well lose the battle for clients against firms providing more technologically sophisticated training services.

In light of this issue, the 1995 final report of the Information Highway Advisory Council (*The Challenge of the Information Highway: Final Report of the Information Highway Advisory Council*, Ottawa: IHAC Secretariat, p. 64) states: "The current generation of trainers, educators, librarians and school administrations were trained for learning and training in traditional institutions and need to be retrained for the new communications environment. They need to understand and use the technologies, so that they, in turn, can facilitate learning on the Information Highway."

Faced with shrinking budgets and limited resources, Canadian businesses cannot afford to invest in training without evidence of its cost effectiveness and influence on productivity and performance. Training firms cannot limit themselves to the simple provision of training services. Trainers must know how to present a business case as well as a business plan. One observer (Philip Darling, *Training for Profit: Developing a High Performance Workforce*, London: British Association for Commercial and Industrial Education, 1990) writes: "For the trainer, an awareness of business finance is vital, because it provides a sharp and credible base from which to argue the case for training investment, training design and implementation." Trainers who intend to expand their expertise and develop the analytical and business skills necessary to give companies the financial rationale for buying training will need to demonstrate the return on investment in training as well as demonstrate the problem solving and opportunities offered by their services in addition to cost savings, expected improvements and payback. An Industry Canada report (*Market Assessment Study of New Media Learning Materials*, Ottawa: Industry Canada, January 1996, p. 20) states: "The development of flexible and credible business case and return on investment analyses for NMLM will be key factors in the adoption of the technology by industrial users and will be important tools in the creation of clients for the NMLM industry."

**Mastery of technology
is key to education
sales**

**Trainers must become
more adept at
"business of training"**

Professionalization

While there is no national or umbrella association representing the sector in Canada, there have been some positive developments, signalling a will on the part of ETS providers to work more closely together to achieve higher levels of professionalism and thereby achieve greater success in training markets. Increasingly, the diverse players within the sector are acknowledging the value of cooperation, as opposed to competition. Networking can promote and protect industry interests so that training suppliers can work together in a more coordinated fashion and adopt more effective and cost-efficient approaches to doing business, such as joint ventures or strategic partnerships.

ETS providers
develop networking
opportunities

In 1995, a working group of education and training providers formed from the membership of the National Education Organizations Committee began examining how a national Education/Training Provider Network could be formed to promote better coordination and preparation for change in the sector. Such a network, structured on the model of the HRDC sector councils, could promote networking, and information exchange by quickly connecting clients with potential providers of various training services. It could also address the human resources development needs of the ETS sector itself by providing a continuous learning environment for its members, and by developing strategies and opportunities for introducing new learning technologies into members' work. The group has prepared a report for discussion, which is available on the World Wide Web at <http://www.3waystreet.com/etpn/>. Since 1995 the Network has met on various occasions and has formed subcommittees to examine key issues such as learnware quality, professional development, partnering and international marketing.

Industry certification
standards are being
developed

The Ontario Society for Training and Development (OSTD) has developed the Certified Training and Development Professional (CTDP) designation as a professional designation for trainers in Canada. Much like the designations available to accountants and management consultants, the CTDP designation is meant to document the basic to mid-level skills and knowledge that the society believes an individual should possess to perform competently as a training professional. Trainers seeking the designation will undergo a three-stage process that will include measurement against a two-part Training Competency Architecture (TCA), which the society released in early 1996. Certification will be open to trainers with at least five years of experience (three years if they have relevant formal education), and the certification will be valid for five years. The OSTD believes that they can make this the *de facto* Canadian standard.

The National Accreditation Commission (affiliated with the National Association of Career Colleges) offers an accreditation process to institutions that have been in business for at least two years and that have graduated at least one class of students from their longest program. This process includes self-evaluations, an on-site visit by a team of evaluators, and an examination

of admission procedures, faculty expertise, program features, student services and business practices. Accreditation is valid for five years, during which time the school must submit annual reports on enrolments, placements and other relevant data. The organizations that so far have gone through the process report it has made them better schools.

3.6 Regulation and Standards

Because education and training are a provincial government responsibility, there are no federal regulations for this industry. Most provincial regulations deal with trades-related training (plumbing and so forth), while some standards for apprenticeship programs are coordinated within designated trades. For the most part, regulation of non-trades training tends to focus on the structural activities of training firms (curricula and admissions policies, for example), and pays scant attention to the qualifications of trainers. However, measures are being implemented in some provinces to help overcome the lack of national standards and regulation.

In Alberta, career colleges are bound by the Department of Advanced Education and Career Development's *Private Vocational Schools Act* and its system of graduate reports. In place since 1990, this accountability model requires career colleges to submit statistics that track student retention and post-education placement (whether they found employment in the area of training). These retention and placement statistics are verified and then made available to both prospective students and other career colleges. This system provides students with information on the value of school offerings and provides schools with the basis of a benchmark for their activities.

In British Columbia, all private post-secondary educational institutions offering academic or employment-related training to persons over age 17 are required by law to register with the Private Post-Secondary Education Commission (PPSEC). In general, the PPSEC deals with operational areas such as proper arbitration procedures and student refunds. The commission also offers an extensive voluntary accreditation process that is open, for a fee, to any institution that has been registered for at least one year. The four-stage process can be costly (starting at about \$1 500 for a small firm with only one office) and includes a great deal of self-study by the firm and an on-site visit by a team of auditors.

In Quebec, the June 1995 *Loi favorisant le développement de la formation de la main-d'œuvre* (*An Act to Foster the Development of Manpower Training*) requires businesses and public organizations such as hospitals whose annual payroll exceeds a certain threshold to spend the equivalent of at least 1 percent of payroll costs on employee training. The threshold

**Student tracking helps
set quality benchmarks**

**Quebec initiates
measures for
employee
development**

was \$1 million in 1996, \$500 000 in 1997 and will drop to \$250 000 in 1998. These provisions will affect only about 13.7 percent of Quebec businesses, but will cover 84.6 percent of the total declared payroll in Quebec. The act also provides for the recognition of training provided by established educational institutions and by other training organizations or in-house training departments or instructors accredited by la Société québécoise du développement de la main-d'œuvre (SQDM), and for training organized by professional orders, which are governed by the Quebec Professional Code. The regulations implementing the act specify conditions that trainers must meet in order to conduct business. The act and its regulations are administered by the SQDM.

**Quality standards are
being considered
and evaluated**

The Canadian Labour Force Development Board (CLFDB) has elaborated 17 points it believes define reasonable standards for what purchasers should expect from training firms. These points cover subjects from defining needs and recruiting participants to assessing the effectiveness of the training provided.

On the federal scene, Public Works and Government Services Canada has begun an in-depth evaluation of off-the-shelf, directed learning products for its own use. In an unrelated exercise, private researchers are field-testing *Quality Guidelines for Selecting Computer-Based and Multimedia Programs for Training* (see *The Training Technology Monitor* 4 (2), November 1, 1996, pp. 6–7), and may eventually form a quality council for such products.

Some of the national sector councils have spent a great deal of time investigating the specific training needs of their industries and have worked to establish standards for training. Some groups, such as the Canadian Society for Nondestructive Testing Inc., will issue certificates of accreditation to instructors, and certificates of authorization to organizations wishing to offer courses in their specific, highly technical areas. The Training Broker, a Canadian company, maintains a database of trainers whom it believes to be reputable and professional. For a fee, it will perform an in-depth search of its database and make recommendations on a small list of companies it feels will best suit the needs of the client.

**Some suppliers
are ISO 9000
certified**

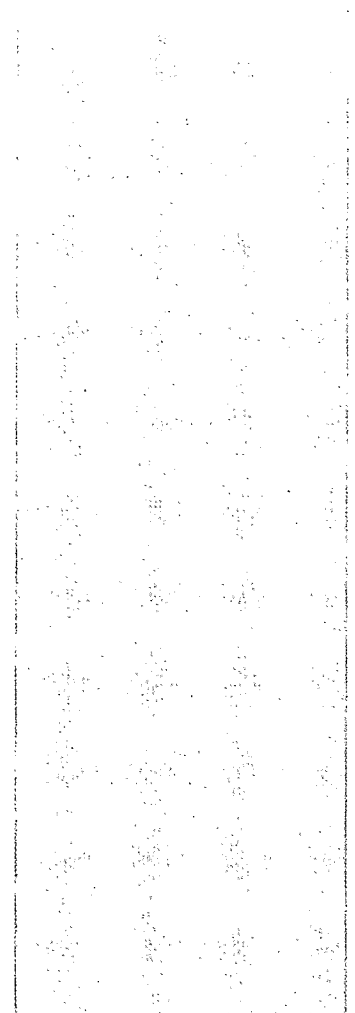
Increasingly, clients in Canada and abroad are requiring that their services suppliers be registered to an ISO 9000 standard, recognized by the International Organization for Standardization, in order to ensure that suppliers have designed a quality assurance system to recognized international specifications. Training suppliers, particularly those offering courseware and other NMLM packages, have responded by becoming ISO 9000 certified. In April 1996, St. Lawrence College became the first college in Canada to register its entire organization to ISO 9001. The ACCC Secretariat obtained ISO 9002 (1994) certification early in 1997.

Certification will raise the profile of ACCC's international operations and will ensure membership and partners around the world that the secretariat is operating at a world-class standard of quality. Preparation for the ISO 9000 process can be complex and time consuming, particularly for small service firms. In order to assist such firms in preparing for this process, Industry Canada has produced an *ISO 9000 Workbook for Small Professional Services Firms*.

3.7 Sustainable Development

The domestic and international markets for environmental education and training are vast, ranging from technician training to education on the development and application of laws and regulations to training monitoring and inspection personnel. In addition to the opportunities opened by the NAFTA side agreement noted above in a previous section, education and training firms will find opportunities to work with consulting engineering and environmental services firms to develop and deliver specific training packages. Further opportunities will undoubtedly be identified through the work of organizations such as the Canadian Council for Human Resources in the Environmental Industry, which identifies training requirements within the environmental industries sector.

**Environment offers
major subject area for
training courses**



4 GROWTH PROSPECTS FOR THE INDUSTRY

4.1 Demand Outlook

Demand for skills
upgrading makes
future bright for ETS

Growth prospects for the training industry appear highly favourable both domestically and abroad. Adults are increasingly upgrading their skills to increase their marketability and, as more firms contract out their training activities, opportunities for training companies to sell their services to the corporate world are growing. As noted by the Conference Board of Canada (David McIntyre, *Getting the Most From Your Training Dollar: Outsourcing Trends in Corporate Training*, Ottawa: The Conference Board of Canada, 1996), an estimated 40 percent of all corporate training is provided by external suppliers. This fact points to the growth of a culture that Canada's private trainers can readily exploit. In fact, the expertise they develop through the national market will provide them with a springboard to large and rapidly growing international markets.

Technological Change

"An adequate supply
of appropriately
educated and trained
personnel is one
of the critical
factors in creating and
diffusing technology."
— Technology and the
Economy: The
Key Relationships
(Paris: OECD,
Technology/Economy
Programme, 1992)

Another factor having a significant impact on the demand for training is the use of advanced technologies by industry. A key to Canada's success in the global economy will be the ability of the Canadian labour force to acquire and upgrade the skills to work with these continuously changing technologies. Companies that invest in their employees' skills are less likely to experience skills shortages. By upgrading workers' skills, they can ensure that the productivity potential of the new technologies they adopt will be fully exploited. The OECD reports (*The OECD Jobs Study: Facts, Analysis, Strategies*, Paris: OECD, 1994) that technological developments are creating new jobs, new markets and new business, and these changes are making educated and skilled labour more valuable and unskilled labour less so. A new study prepared by Canadian Policy Research Networks (cited in *The Globe & Mail*, January 15, 1997, p. B3) illustrates this phenomenon; the study concludes that the spread of computers in the workplace is having a negative impact on job opportunities for unskilled workers who, while they accounted for 22.9 percent of the new jobs created by computers, were the targets of 60 percent of the job types eliminated. It has also been established that regions benefiting from pools of highly qualified workers are more attractive to potential high-tech investors. A document prepared by the Conference Board of Canada for Technopolis '97, an Ottawa conference held in September 1997 focussing on how to encourage local high-tech growth, states that a skilled work force is one of the major factors influencing the location of new high technology companies, more so than low taxes and fiscal incentives such as government grants.

By ensuring that the skills they provide to learners are always up to date, the education and training sector can assist the labour force in becoming effective users of new technologies, can participate in retraining workers displaced by technological change, and can also help them adjust to new technologies. The sector can thus play an important role in contributing to economic growth by providing Canadian industry with the skills it needs to be competitive on the global market.

Lifelong Learning

As skills requirements follow the pace of technological change, lifelong learning becomes a necessity. In today's economy, skills requirements are higher, and jobs are more complex. Workers are expected to be flexible and their skills wide-ranging and up to date. The 1992 OECD study mentioned above states: "A dynamic economy requires lifelong education and retraining. Learning is increasingly becoming a lifelong occupation as the nature of demand for skills changes ever more frequently."

Many Canadians are in need of retraining, as most new jobs created in Canada are short-term. Of the jobs begun between 1991 and 1994, 64 percent lasted less than 12 months. This is particularly troubling for middle-aged workers since, between 1991 and 1994, only 31 percent of new jobs obtained by Canadians between the ages of 45 and 54 lasted more than a year. The proportion decreased to 21 percent for people in the 55–64 age range. This suggests that older displaced workers may well be left with skills not in demand and few employment prospects.

Canadians of all ages need training in order to find new jobs. Many people who are juggling work and family responsibilities require learning opportunities in a learning environment that has the flexibility to let them learn at their own pace, on their own schedule and, if necessary, in their own home. Over the next few years, these workers are expected to represent a significant share of the demand for training, including technology-based training and distance learning.

Problems of skills acquisition affect young people as well as older workers. Approximately 60 percent of young people enter the work force directly from high school, with no additional structured education or training. Many leave school ill-prepared for the workplace, and have difficulty making the transition from school to work.

The education and training sector has the opportunity and the tools available to address the demand by older workers, the young and the unemployed for training that is relevant to the workplace. Because training firms and private career colleges develop their curricula with

ETS can be a major contributor to economic growth

Flexibility in skills requires lifelong learning . . .

. . . especially to fill new, short-term jobs . . .

. . . and on one's own time, at one's own pace

Skills training courses are being tailored to market needs

the employability of their clients in mind, they are very responsive to the skills needs of Canadian industry. Monitoring the needs of the job market allows them to design their courses accordingly and provide their clientele with the skills essential to job placement.

International Markets

**World ETS market
offers scope for
Canadian providers**

The world market for education and training services is growing. Canada's reputation for professional, high-quality services combined with an increasingly multicultural society offers Canadian companies the potential to become major players in the international market.

**U.S. business culture
is close to Canada's**

The North American market offers great potential because Canada's culture (business and otherwise) is similar to that of the United States, and the exchange rates make Canada's services cost-competitive. Training firms that sell to local subsidiaries of U.S. companies may be able to leverage this experience to generate business from the head office or other branches. Despite occasional hiccups, the NAFTA has made the process of selling training services into the United States and Mexico more stable and predictable.

**Canadian suppliers
aim for portion of
\$8.5B European
ETS fund . . .**

In Europe, the European Commission has allocated approximately 5 billion European Currency Units or ECUs (worth about \$8.5 billion) to the European Social Fund, which focusses on human resources development by funding training, retraining and job creation. In addition, many European Union (EU) member states have their own HRD funding schemes and policies that favour growth in demand for training services. In France, for example, a 1972 law requires companies with more than 10 employees to spend at least 1.5 percent of payroll on specified training activities; organizations with fewer than 10 employees are required to spend only 0.15 percent of payroll. Companies that fail to invest the minimum required pay a special training tax or surcharge. This legislation helped increase investment in employee training by organizations with more than 10 employees from 1.35 percent of payroll in 1972 to 3.2 percent by 1993. This level has remained constant despite a Europe-wide economic slump. In total, over 130 billion francs (worth about \$36 billion) were invested in labour force training programs by both the state and employers in 1995.

**. . . and of \$1.2B
annual NMLM
market in Europe**

There has been significant investment in Europe to support the development and application of flexible and distance learning technologies, including NMLM. The 1996 Industry Canada report on NMLM mentioned above reports that the European market size for NMLM alone was estimated at \$1.2 billion in 1994 and is expected to grow modestly but constantly through to the year 2000. Canada is well positioned to enter the European marketplace. Unique among non-European countries, Canada has established a working relationship with the EU under the framework of the EU-Canada Forum on Distance Education.

In the former Soviet Union and in central and eastern Europe, HRD is an important component in promoting a stable transition to democracy and market-based economies. These markets are paying particular attention to infrastructure development and generic skills training. Training is required in using software, writing letters and documents in English and operating computerized cash registers. Previously, Russian businesses had not made the link between customer satisfaction and profit. Now, "smile training" and telephone etiquette are in big demand. Companies need to understand basic marketplace economics including cost management and the laws of supply and demand. Other key development areas include teamwork, systems thinking, planning and organizing skills, and training in western management skills. Partnerships with western European firms can be an advantage in approaching these markets.

The Asia Pacific market as a whole offers significant business potential to training suppliers. Asia's changing economies are taxing their countries' educational, training and human resources infrastructures to the limit. To meet the demands of their economies, Asian countries must increase their supply of professional, technical and management work forces. All levels of education are needed, from graduate-level degrees to short-term technical training and English as a second language, delivered both in Asia and abroad. Considerable opportunities exist for training suppliers who can deliver custom-designed training programs, as well as for institutional twinning and credit transfer programs. However, they must establish a strong and sustained local presence if they wish to capture a significant share of this market.

Opportunities for Canadian trainers also exist in Malaysia's "Vision 2020." This plan, which aims for the country to be a fully industrialized nation in every aspect by the year 2020, includes education as one of its top priorities. Education represents the third largest area of development expenditure, after transport and defence. Nevertheless, the current supply of education cannot meet the huge demand.

Other geographic areas with good market potential, particularly over the longer term, include the Middle East and Latin America. For example, in Saudi Arabia, higher education and labour force training continue to have a high priority. Each year, a growing number of young Saudis (currently around 100 000 per year) enter the job market, needing additional training to complement their education. There is clearly a market for training suppliers who are prepared to be innovative and flexible in program design to provide the necessary expertise and who have the resources necessary for a sustained marketing effort. Latin America represents another emerging market, and offers good opportunities in areas such as English as a second language, French as a foreign language, curriculum development for vocational and technical programs, university studies, educational films and videos, and corporate in-house training programs.

**Move toward
democracy creates new
training needs**

**Asian clients need
custom-designed
courses . . .**

**. . . especially in
Malaysia . . .**

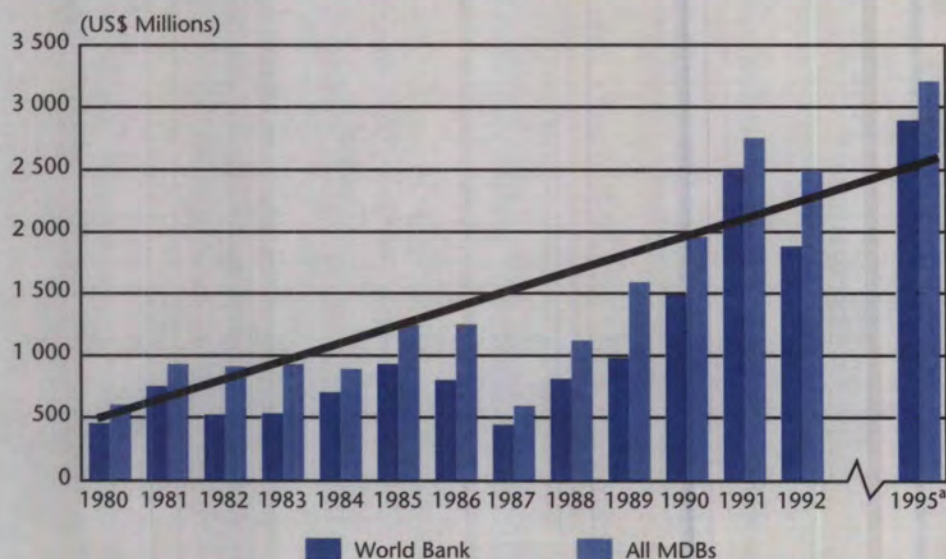
**. . . also clients in
Middle East and Latin
America**

**MDB aid to finance
education more
than doubles**

More detailed international market information, by region, may be found on the Web site of the Department of Foreign Affairs and International Trade at <http://www.dfait-maeci.gc.ca>. At the time of writing, education marketing reports were available on the following geographic regions: Argentina, Australia, Brazil, Colombia, Germany, Mexico, Norway, Russia, Saudi Arabia, South Africa, the United Kingdom, the United States (New England).

The multilateral development banks (MDBs) have had a rapidly expanding education lending program. During the late 1980s, it was running at about \$1.2 billion for 30 education projects annually, covering almost every type of educational need, from primary school through vocational colleges to universities. By the end of the 1980s, in numbers of MDB projects, education came to rank third after highways and power as an individual lending category. In 1990, education lending covered 38 projects at \$1.9 billion. In 1991 the figure jumped to more than \$2.8 billion for 46 projects; in 1992, it was about \$2.5 billion. Figure 3 illustrates the trends of MDBs in education since 1980.

Figure 3. Education Lending by Multilateral Development Banks



^a1993–1994 data not available.

Source: Development Bank Associates, *The Development Bank Business Market* (Washington, D.C.: Development Bank Associates, 1993), pp. 139 and 141 for 1982–92; and Industry Canada estimates based on data provided by the World Bank for 1995 and MDB total.

The World Bank dominates education lending; in 1995 alone, the World Bank approved \$2.9 billion in loans for projects in education and training. The World Bank (*Priorities and Strategies for Education: A World Bank Review 1995*, Washington, D.C.: International Bank for Reconstruction and Development, 1995) states: "Education is a major instrument for economic and social development. It is central to the World Bank's strategy for helping countries reduce poverty and improve living standards through sustainable growth and investment in people." The World Bank currently has 202 education projects in 88 countries, representing 10 percent of its lending, up from 4 percent a decade ago.

Vocational and technical skills were once considered the key to modernization. The current MDB view, however, is that education is itself a basic human need, a means of meeting other basic needs, and an activity that in itself sustains and accelerates overall development. Future lending in the educational sector is expected to show a marked upturn at the primary and secondary levels, with a corresponding downturn in other categories such as specific higher education lending.

Overall, the narrow project focus of the past is giving way to a broad sectoral approach. MDB-supported projects will focus more on institutional development, including strengthening educational administration and the regulatory framework for education, with emphasis on the integration of education within economic reform programs. Education projects are taking more account of outcomes, with greater attention being given to areas such as project monitoring and evaluation, effectiveness indicators, and cost-benefit analyses. At all levels, greater attention is being given to the education of young women as well as women in the work force.

4.2 Current Industry Strengths

Canadian firms have the ability to offer a wide variety of flexible quality training services and the expertise to develop new services as the market changes. As they are mainly small companies, flexibility has been the key to their survival; most offer the option of tailored programs and training in the workplace, often after normal working hours. In some cases, these services are offered in more than just the two Canadian official languages.

Canada has achieved international recognition for its capabilities in distance education and technology-based training. It is recognized worldwide for the quality of its public service, and has delivered public sector management training in overseas markets. Canadian trainers have developed competencies in many fields, including executive and management development training, computer-related training, supervisory, communications, sales and marketing, and professional technical training. Canada is also an international leader in research into second

Education goals widen

Scope of future training will be much broader

Small Canadian firms have the flexibility to compete internationally . . .

. . . especially in distance education, technical training and languages

**Canadian trainers
export language skills**

language acquisition, and Canadian trainers have developed considerable expertise in providing second language training — both English and French as a second language — for corporate and international student markets worldwide.

Canadians are already finding a strong market in English and French as a second language training. For example, estimates by the Canadian Embassy in Seoul, Republic of Korea (cited in the *Financial Post*, July 25, 1996, p. 16) indicate that in 1996 some 89 Canadians trained in English as a second language instruction had been hired in the Republic of Korea, with a further 1 500 Canadians finding work as English language teachers in that country's private institutes and cram schools. The potential exists to "package" this language training expertise with other businesses, like tourism, to develop new markets. To take full advantage of these strengths, however, Canadian companies will need to meet at least some of the challenges noted in the following section.

4.3 Current and Anticipated Competitiveness Challenges

**Challenges hinder
immediate expansion**

The success of Canada's education and training industry in both domestic and international markets is hindered by the following factors:

- need for a more cohesive, industry-wide domestic marketing and promotion strategy to generate demand by educating industry on the value and significance of training, and on the benefits of investing in human capital
- lack of a national or umbrella association
- lack of a national accreditation process and quality standards on the supply side
- need for more partnering and consortium initiatives, including strategic alliances, joint ventures and hard business networks
- lack of technological sophistication of users
- competition from Canadian subsidiaries of foreign parents that purchase or are provided training developed by the parent company
- lack of good data and solid research
- insufficient international marketing skills
- poorly developed relationships with other industrial sectors, including manufacturing and consulting engineering, the learnware sector, as well as the banking and financial communities
- limited partnering between public and private sector training providers
- lack of international experience and know-how
- competition from subsidized government organizations or public institutions in the international market.

Generating Demand

While industry recognizes the benefits of training in general, these benefits are seldom viewed in specific company terms, with the result that decisions to invest in human capital are generally put off as least important. Collective ETS industry efforts are required to mount aggressive marketing and promotional campaigns illustrating such benefits, using solid research, performance indicators and testimonials from respected user firms.

Canadian education and training suppliers must hone their marketing skills or find alternative ways to bring their learning products to the marketplace. Marketing practices and relationships that are key to services will be somewhat modified when selling training products such as NMLM. A marketing and distribution process will be required, as opposed to a strict service orientation. Such elements as channel management and logistics become very important to success.

National or Umbrella Association

Canadian training firms lack a national or umbrella association, unlike in other OECD countries, where private suppliers are key players in the development of national training strategies. For example, in the United States, private sector trainers have a sizable market share and public prestige. Their visibility is heightened by large national organizations such as the American Society for Training and Development. The Institute of Personnel and Development plays a similar role in the United Kingdom.

While no national association represents the entire industry sector, there are many associations specifically concerned with human resources development and training. A survey done in the late 1980s by the CCH Publishing House lists more than 60 such organizations in Canada. However, most focus primarily on the professional development of members; few have a strong business development mandate.

Supply Standards

Because there are no certification standards for entry to the education and training sector, training purchasers have no reliable method of identifying credible education and training firms. They have voiced concerns about how to assess the quality of training provided by private sector suppliers. This fact continues to hurt the sector's credibility, both domestically and especially internationally. The suppliers themselves acknowledge that the absence of widely recognized standards for trainers and training programs makes it difficult to ensure consistent service

**ETS industry requires
collective efforts**

**Marketing and distribu-
tion are needed to
complement service**

**Little coordination
exists in promoting
education business
development**

**Certification standards
are needed to improve
credibility of suppliers**

delivery. While establishing a single set of standards or a central accrediting body may be difficult, the industry and profession must develop some measurable indicators to which prospective clients can refer. The industry must attempt to address this matter if Canada is to increase the number of exporters in the training sector.

Partnering/Consortium Mechanisms

Interfirm cooperation
can help small firms
accomplish large
objectives

A 1992 report on strategic alliances (Prospectus Publications Ltd., *How to Form and Manage Successful Strategic Alliances*, Ottawa: Industry, Science and Technology Canada, December 1992) reports: "More and more firms are realizing that they must enter foreign markets if they are to grow and prosper. But many small and medium-sized enterprises do not have the skills or resources needed to take advantage of international opportunities. . . . Strategic alliances enable firms to focus on what they do best, while cooperating with other firms to get the job done." In fact, smaller companies need to work with larger firms for partnerships in development and distribution, while large companies benefit from alliances with small independents because of their creative material.

Partnering needs
to be increased

Public-private partnering needs to be increased. As the public education system is constantly faced with budget cuts, public-private partnerships are increasingly being considered as a viable way of delivering up-to-date and flexible curricula to meet the work force's ever changing skills requirements.

Networks and alliances
allow firms to capitalize
on their flexibility

A study of the best practices of 14 Canadian education and training firms (Hill Sloan Associates Inc., *Commercial Education and Training Services Sector Campaign: Best Practices Project*, Ottawa: Industry, Science and Technology Canada, 1992) indicates that the business growth strategies of these firms reflect "their organizational flexibility through participation in networks and alliances" among other key successful growth factors. Alliances enable smaller companies to compensate for their lack of the capital and accumulate know-how needed to prepare and submit tendered bids and to finance resulting projects.

Lack of Technological Sophistication of Users

Although the supply of learning tools available on the market is expected to increase, Industry Canada's 1996 market assessment study for NMLM mentioned above reports that the level of technological knowledge of workers, trainers and managers significantly hinders their adoption. Some industries that could represent large potential markets for NMLM still lack both the equipment and familiarity with computer-based technologies. The up-front costs of automating

and transferring course content to new technologies, combined with the difficulties in obtaining capital for investing in courseware, are further barriers to the use of NMLM for many companies. Potential clients may also be hesitant due to a lack of awareness of the benefits of multimedia training. Raising awareness of the benefits of new media-based training both with trainers and learners will be crucial in fully exploiting the possibilities offered by the technology.

Foreign Competition

Increasingly, U.S. suppliers are delivering their products and services in Canada, through either establishing offices, buying out local firms or investing in joint ventures. This is particularly evident in the area of technology-based training, as rapid changes in technology facilitate delivery of education and training services. For example, as training authoring systems are becoming more widely available, and because entry costs to the Internet are minimal, training firms are gaining access from their desktops to worldwide markets. Canadian firms now operating in the virtual marketplace have to compete with well-known firms and institutions from all over the world. Strong name recognition, combined with the use of NMLM can give suppliers an enormous advantage on world markets. An example is the Interactive Manager Series on CD-ROM by Harvard Business School Publishing.

In order to survive the intense competition, Canadian training companies will need to differentiate their products, ensure their user-friendliness, find niche markets or form alliances with firms to compete successfully. Traditional classroom-based training companies wishing to provide training services on the Internet not only will have to adapt to unfamiliar technology-based delivery mechanisms, but also will have to make significant initial investments to buy the necessary technology, retrain existing employees or find new staff with the right skills.

Data and Research Gaps

The 1992 profile for ISTC mentioned above represents the first attempt to report information on the size and characteristics of this sector. More recent and current information now is needed on performance over time, sales, revenues, employment creation and export activity. Very little work has been done to research, document, analyze and communicate the contribution of training to productivity, profitability, competitiveness, the performance of business and employees, and the integration of training into organizational strategic planning, or on the cost effectiveness of training. Basic research is a fundamental and continuing need of this sector, but most suppliers are too small to undertake the type of research that could benefit the sector as a whole.

**Lack of access stalls
adoption of NMLM**

**World markets also
bring world
competition to ETS**

**More data are needed
for accurate industry
assessment**

Networks
investment reduces
research gaps . . .

The current investment of the Social Sciences and Humanities Research Council (SSHRC) in research networks in education and training will help fill some of these gaps (see "SSHRC funds training networks," *University Affairs*, February 1997, p. 17). The council is investing \$5.6 million over five years in five broad-based research networks in education and training. The networks include universities, community colleges, schools, companies, government agencies and non-profit organizations, and international researchers. They are investigating the effectiveness of education and training technologies, private-public training partnerships, informal learning, training for the underemployed and long-term unemployed, and educational outcomes.

. . . but barriers to
national strategy
remain

Although various organizations have performed some research, it is largely insufficient. The Information Highway Advisory Council (*Connection, Community, Content: The Challenge of the Information Highway*, Ottawa: IHAC Secretariat, 1995, p. 186) states: "(The surveys) are incomplete and cannot adequately support a national strategy. The data are not sufficiently comprehensive nor comparable from one survey to another. In particular, insufficient focus is given to household and employer based training . . . and to non-credit learning and training programs provided publicly or privately where too little detail is available."

Economist Gordon Betcherman ("Research Gaps Facing Training Policy Makers," *Canadian Public Policy* 19 (1): 18-28 [March 1993]) writes that research needs to look at whether Canadian industry is underinvesting in developing its human resources, and which policies could encourage optimal investment. He adds that if research is going to provide support to policy makers on these questions, a number of existing gaps need to be filled. These, which Betcherman calls the second-generation research agenda, include analysis of the impacts of training, the nature of firms' training decisions and the incentive levers that will stimulate human resource investment.

Data are also needed to
justify industry support

Full analysis of the competitiveness issues affecting this and other service industries depends on the availability of data at the industry level. To foster the development of government policies and products to help the sector's competitiveness, more comprehensive information and relevant, up-to-date statistical data must be developed regularly, and more research must be performed. This information is critical to strengthening arguments concerning the importance of the sector as a contributor to Canada's economic growth.

International Markets

The inclusion of a training component in international tendering practices is increasingly becoming a determining factor in winning such contracts. Developing and less industrialized countries want their human resources to be trained in critical skill areas related to the ongoing management, operation and maintenance of technology, systems and capital construction co-financed by foreign and multilateral investments. The ETS sector must develop strong links with the consulting engineering, construction and manufacturing communities to exploit such international opportunities. The sector must promote Canadian capabilities and demonstrated successes to Canada's financial community. Both bankers and venture capitalists increasingly recognize the inherent value of consortia, which through strength in numbers generally present more financially viable proposals for their consideration.

To some extent, the international marketing of Canadian education and training services has been hampered by a lack of national standards for private training suppliers. This has placed Canadian companies at a competitive disadvantage with suppliers from Australia and the United Kingdom. Some provinces, such as New Brunswick and Alberta, have formed consortia to assist companies with marketing and to present a common front to international markets. But foreign buyers still find it hard to know exactly who speaks for Canada. Many institutions and companies look to the federal government to play a more proactive role as a spokesperson in the general promotion of Canada as a centre for education and training excellence. The sector's international credibility would benefit from a more uniform approach within Canada.

The sector has difficulty developing formal international marketing plans. Education and training companies for the most part are managed by individuals with considerable expertise in training delivery or product development, but with less experience in business, marketing or distribution. Smaller companies in particular find it difficult to enter foreign markets, partly due to the high cost of maintaining an ongoing overseas presence. Entry to IFI markets is especially difficult for them, as a company can expect to spend \$75 000 and wait two to three years for a decision, with no certainty of securing a contract.

4.4 Future Opportunities

Niche Marketing

Future opportunities lie in niche marketing. Distance education, technology-based training, second language training and public service management training are some of the main areas in which Canadian firms can develop and expand sales.

Training is becoming a component in larger contracts

Uniformity in standards is sought

Narrow focus on subject expertise hinders foreign marketing

"There is reason to be optimistic about the role Canada can assert in the NMLM industry internationally. The country enjoys many strengths that can directly assist the development of the industry and its projection into global markets."

— Market Assessment

Study of New
Media Learning
Materials (Ottawa:
Industry Canada,
January 1996), p. 20

Public-private
partnering is needed
for marketing
ETS abroad

With the rapid expansion of information and communication technologies, a significant niche market is evolving in related products and services. The potential for forming strategic alliances between and among what have become known as "learnware" companies and trainers is enormous, as educators and trainers attempt to migrate from our traditional learning delivery systems to those involving the electronic Information Highway. Vicom's (Alberta) alliances in the construction safety area, or CCH's (Ontario) arrangements with accounting professionals, as well as Learnsoft (Ontario) in the technology area are examples of such alliances.

Implementation of the Information Highway will break down barriers to delivery of learning material, and the fast-paced development of the Internet is reinforcing this trend. If the Canadian NMLM industry is not aggressive, it will risk losing market share as potential clients satisfy their training requirements from foreign sources.

In addition to supplying second language training — both English and French as a second language — for corporate and international student markets worldwide, Canadian firms can market language training as part of a larger training program in partnership with other sectors. There are opportunities to package second language training with tourism to enhance marketing strategies designed to attract tourists to Canada.

To be competitive in marketing training in overseas markets, the Canadian government will need to partner with the private suppliers who have acquired specialized marketing and project management expertise. The strength of the public sector lies in its sectoral and institutional expertise, and its ability to open doors in countries that prefer government-to-government dealings. Marketing Canadian government expertise will create considerable opportunities for more effective partnerships between the public and private sectors within Canada.

More domestic government procurement of Canadian technology-based training would enhance the international profile and credibility of the education and training services industry. CIDA's encouragement of private sector-university partnership through its contracting system is expected to yield greater cooperation among these types of suppliers.

The ability to secure CIDA training funds has led to important strategic advantages in various host countries. For example, prior to bidding on the contract for the boiler island package of the El-Kureimat Power Plant in Egypt, Babcock and Wilcox (B&W) secured funding under the CIDA Industrial Cooperation Program to carry out on-the-job training of local fabrication personnel (in quality assurance and manufacturing processes). After winning the contract, B&W was able to extend this training activity both on-site and in Canada to include several groups of Egyptian Electricity Authority personnel. In addition, B&W was thereafter able to secure a joint venture with this local company, resulting in the first in-kind privatized holding company in this sector.

**CIDA funding assists
ETS sales abroad along-
side larger contracts**

The Canadian Education Centres (CECs) established by the Government of Canada and the Asia Pacific Foundation will help companies capitalize on opportunities in foreign markets. The CECs are open to recognized Canadian educational and training institutions interested in strengthening foreign linkages and recruiting international students. They have been instrumental in raising Canada's profile in some regions. The CECs are mandated to gather market intelligence, identify corporate and group training opportunities, and negotiate contracts. This latter direction is more in keeping with the needs of private training suppliers. As the market shifts from the more traditional university and college programs to corporate training and upgrading, the CECs will need to put more emphasis on attracting corporate clients. In particular, private training suppliers are seeking more solid market leads and greater assistance in negotiating contracts on a fee-for-service basis rather than through payment of annual fixed subscription fees.

**CECs strengthen
foreign linkages
and recruiting**

Targeting Skills Requirements

To identify future opportunities and markets and to ensure that their training services are indeed those demanded by the market, trainers must keep up to date on the skills requirements and on the retraining needs of the Canadian labour force.

Industry Canada's 1996 market assessment study for NMLM mentioned above, which is partially based on the Canadian Occupational Projection System (COPS), analyzes skills requirements in 18 strategic Canadian industrial sectors and occupational categories. Most industries cite the need for management and computer skills training, for training to increase knowledge about foreign markets and for trade promotion skills. Training needs relating to health and safety are common to a number of industries. A large number of industries express a need for skills related to changing regulatory requirements specific to each industry. Other skills listed include technical skills, technology skills and marketing skills.

**Skills analyses form
basis for focussing
training courses**

"Fulfilling this potential
(for growth) will
depend on attracting
and developing
people with the
necessary skills
at all levels."

— Graham Strachan,
chair of the Industrial
Biotechnology
Association of Canada's
steering committee

Labour market studies as well as sectoral analyses conducted by the HRDC sector councils identify skills shortages across a wide range of industrial sectors. For example, a study examining skills shortages (Society of the Plastics Industry of Canada, *People in Plastics: Creating the Competitive Advantage*, cited in *HRD & Training Executive Update* [NewsUpdate Communications Inc., Toronto], August 1996, p. 3) finds that the plastics industry is one of the fastest-growing industries in Canada and uses more than 25 different types of skilled labour. Because its main source of skilled labour — immigration from Europe — is decreasing and because of increased automation and industry growth, the sector's requirements for skilled workers has jumped by 53 percent since 1988. Major investments in training will be needed over the next 10 years to keep up with the sector's growth. A second study, initiated by the Industrial Biotechnology Association of Canada (cited in *HRD & Training Executive Update* [NewsUpdate Communications Inc., Toronto], August 1996, p. 3), expects that about 1 300 research, technical and support jobs, 700 management positions, and 2 000 jobs resulting from new commercial applications of bio-tech research will be created by the end of the century.

Technology-based Training

All client industries are looking ever more closely at their bottom line while requiring their employees to be educated in an ever wider group of subject areas. More firms are looking to NMLMs to give them the learning outcomes and economies of scale that they cannot expect from traditional training.

Canadian firms who
master technology can
aim for share of
\$60B NMLM market
in North America

The multimedia interactive training market, estimated at \$60 billion in North America alone, represents a significant opportunity for Canadian training firms that have the potential to set the standard and become a leading developer and user of high technology training tools. Many studies document the benefits of NMLM and the increased instructional effectiveness resulting from its use. As many potential clients have fewer funds to spend on training, the cost reductions afforded by new media-based training will prove to be particularly valuable. Shorter training periods significantly decrease the opportunity cost of training resulting from downtime, while the cost of sending key personnel on training for more than a few days, or the travel cost of trainers, can virtually be eliminated by technology-based training. Other benefits offered by the technology include instructional consistency, privacy, effectiveness, increased retention, increased safety, motivation, access and greater enjoyment of the interactive learning experience.

The management and monitoring of training is also being facilitated by the technology. Many training software packages now allow trainers to track the progress of a student through a course. This type of technology is particularly useful in allowing managers to verify their employees' training activity and to identify courses taken, passed or failed. This facilitates the identification of a skills set within an organization and aids in developing training plans to address any skills gaps.

The flexibility offered by NMLM is attractive in some sectors such as the environment industry, engineering and agriculture, where work is often performed at many sites or in remote areas. Having access to training and skills upgrading tools on-site is much cheaper and more efficient than transporting employees to distant training sites. In addition, the self-directed nature of NMLM is attractive to medical professionals, engineers and teachers.

Distance education and training will become an important part, both of the education systems of many jurisdictions and the training plans of business. This development is being driven by budget pressures and by new developments in enabling technologies. While experts and non-experts alike feel that human contact will not disappear, funding pressure on the education sector and corporate training budgets will nevertheless push the use of TeleLearning. Industry Canada recently financed the creation of the TeleLearning Network of Centres of Excellence to bring together Canadian expertise from across the country to enhance our capabilities in distance education. The work of the network is to be used to enhance the capabilities of Canadian computer-based training firms.

Distance learning can be a significant part of the solution to the ongoing problem of regional disparities and high unemployment rates in many of Canada's regions. It provides residents with access to quality training and a wide-ranging selection of training materials and resources. It allows them to develop the skills necessary to function in today's knowledge-based economy, and to have access to job opportunities never before available.

Industry Canada's Community Access Program (CAP) provides Internet access for rural and remote areas in Canada. These access points offer NMLM companies opportunities to sell training in areas that traditionally have been ignored because of their small size and distant geographic location.

Technology also facilitates management and monitoring of ETS

"For the disabled, for natives living on reserves, for persons with limited mobility or time, distance learning provides an opportunity to acquire the skills and tools that will help them achieve and maintain equity in Canadian society."

— The Information Highway and Education: Discussion of Issues and Policy: Recommendations (Ottawa: IHAC Secretariat, March 1995), p. 6

**Canadian trainers strive
for world recognition**

The Distance Education and Training Network of the Americas launched by Intelsat offers free satellite transmission time for one year to educational and medical institutions throughout the Americas. After the first year, Intelsat plans to charge for time, but less than an institution would have to pay on the satellite "spot" market, where users must buy satellite time if they do not buy or rent it for a long term. Canadian SMEs in NMLM can use this program to test a new distribution system at a lower risk. At the same time, this program will allow their foreign competitors to try to enter the Canadian market or other markets served by Canadian companies.

Training providers should be able to capitalize on opportunities being created by new initiatives such as HRDC's Office of Learning Technologies, which was launched in 1996. Its mission is to work with partners to expand innovative learning opportunities through technologies. The office seeks to promote effective use of learning technologies, support assessment, research and testing related to the use of these technologies, and increase the availability and sharing of knowledge and quality information about learning technologies.

As stated in Industry Canada's 1996 market assessment study for NMLM mentioned above: "Canada has an enormous opportunity to seize the leadership in learning solutions. The world recognizes Canadian strengths in software, telecommunications, distance education, cognitive science, creative production, cultural and linguistic diversity, and the ability to overcome time and distance challenges. Canada can be known for knowledge and learning just as the Swiss are known for banking and finance" (p. 2).

4.5 The Bottom Line

Canada has the potential to establish leadership as a world-class supplier of education and training services. Growth prospects for the industry are favourable, both in domestic and international markets. A worldwide emphasis on human resources development is driving a dramatic expansion in the marketplace. Canadian firms have a competitive advantage and are often at the leading edge, notably in the development and application of NMLM and in the provision of second language training. However, in order to fully benefit from growing global opportunities, training companies must overcome the following challenges.

**To fulfil its
potential, ETS
needs: greater
cooperation among
firms . . .**

Within the sector, an acknowledgment of the value of cooperation in doing business at home and abroad is necessary. In order to be more competitive, education and training firms must work together in a more coordinated fashion and adopt more effective and cost-efficient approaches to doing business. Education and training firms will greatly benefit from an increase in strategic alliances and partnerships. Small firms in particular will find it vital to

combine their resources and expertise with those of other organizations, including the public sector; to seek new business opportunities and gain competitive strength in domestic and international markets. Success in the future will depend on more effective consortia-building based on stronger linkages with a number of key sectors, including the financial sector.

The industry's marketing efforts are hampered by the lack of uniform standards and accreditation. Continued and concerted efforts by various levels of government and by industry must be made to develop better systems or indicators to provide a reliable measure of quality. A system of quality assurance will be essential for buyers to ascertain effectively the *bona fides* of providers and to build credibility for the industry in both domestic and international markets.

Canadian firms must keep at the leading edge in their application of advanced training technologies. They need to ensure that the skills they provide to their clients are keeping pace with technological developments. The industry's ongoing growth will depend to a large extent on its ability to use new technologies in the delivery of training services.

In the area of human resources development, firms need to concentrate on the development of business skills. Trainers will require a strong business background, and will need to have a thorough knowledge of the issues faced by their clients. Such skills are necessary to develop a solid client base and to educate purchasers on the value and benefits of investing in human capital. In addition, research must be performed to demonstrate the impact of training on productivity and performance.

Additional research and data are needed to provide support to development of government policies and products intended to help foster growth of the education and training industry. Only as data at the industry level become available can Industry Canada begin fully to analyze competitiveness issues affecting this and other service industries. This information is critical to demonstrating the importance of the sector in contributing to Canada's economic growth. Statistics Canada must improve its collection and reporting of service sector data and continue to work internationally with other statistical agencies to develop a system allowing national service industry statistics, including education and training services data, to be collected and reported internationally.

. . . uniform
standards and
accreditation . . .

. . . leading-edge
technologies . . .

. . . trainers with busi-
ness skills . . .

. . . data for more
sophisticated analyses

This *Overview and Prospects* will be followed by a second document, the *Framework for Action*. Based on consultation with key stakeholders, the *Framework for Action* will examine and address key competitiveness issues in further detail, and set out priorities and joint responses.

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Annex A

INDUSTRY ACRONYMS

ACCC	Association of Canadian Community Colleges
ASTD	American Society for Training and Development
AUCC	Association of Universities and Colleges of Canada
CBIE	Canadian Bureau for International Education
CBNC	Canadian Business Networks Coalition
CBT	Computer-based training
CECs	Canada Education Centres
CLFDB	Canadian Labour Force Development Board
CLMPC	Canadian Labour Market and Productivity Centre
ESL/EFL	English as a second language/English as a foreign language
FSL/FFL	French as a second language/French as a foreign language
ETS	Education and training services
HRD	Human resources development
NMLM	New media learning materials
OSTD	Ontario Society for Training and Development
TBT	Technology-based training