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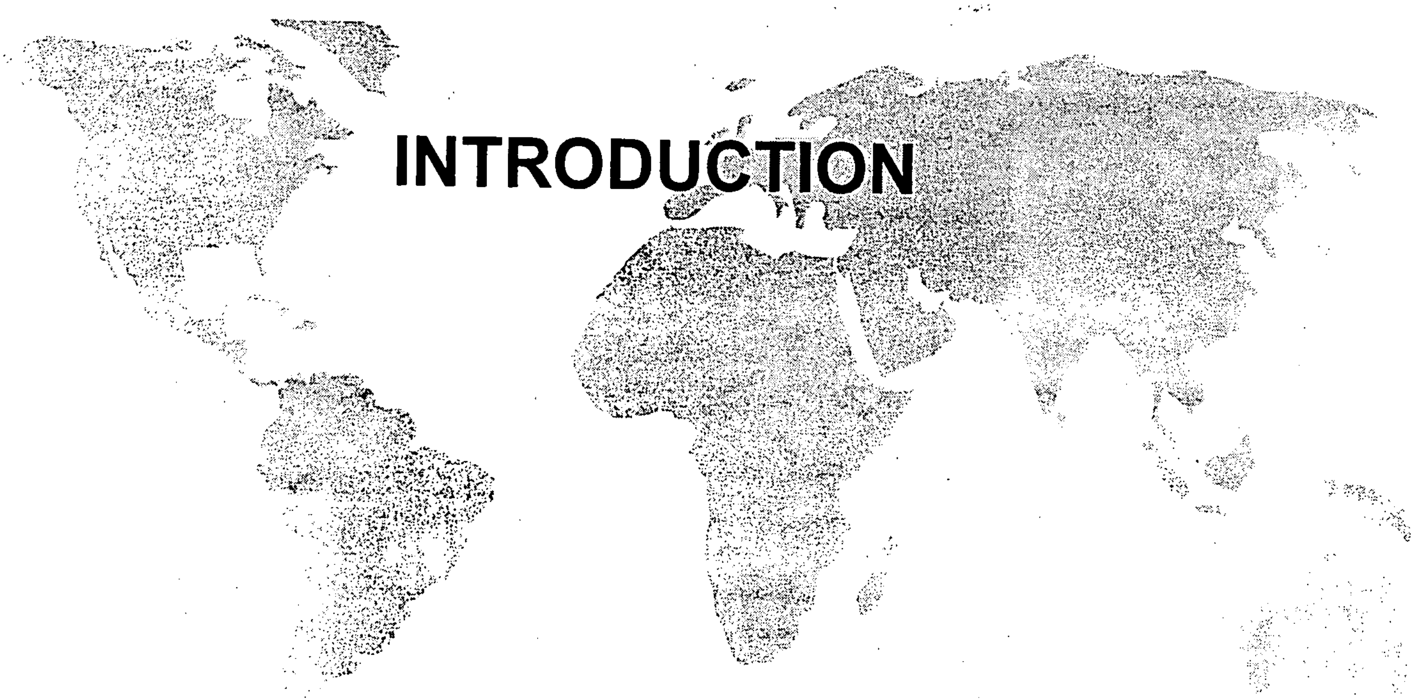
CANADIAN EDUCATION AND TRAINING SERVICES

Pilot Version

Department of Foreign Affairs And International Trade (DFAIT)
Education Marketing Unit (ACET)
in collaboration with CFG inc.

CANADIAN EDUCATION AND TRAINING SERVICES



INTRODUCTION

PILOT VERSION

Department Foreign Affairs And International Trade (Dfait)
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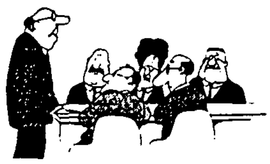
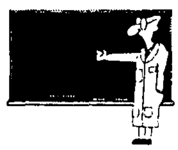
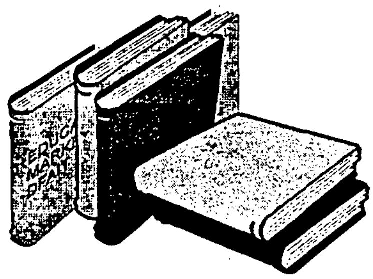


GROUP DISCUSSION



TUTOR

SELF-TEST



ALL MODULES

INTRODUCTION

What do you know about the Education Industry ? Why is it necessary to make other countries aware of this wealth of ours : our political system as well as the expertise in education and made-to-measure special training ? To save you time and energy in unnecessary research answering these questions, we propose a quick and simple way.

Thus, to prepare you for your work as one of Canada's representatives for Education Industry, we suggest you undertake an integrated and modular learning program. This will give you an opportunity to markedly improve your knowledge in this sector of activity by using a dynamic and interactive approach.

To save you precious time, we suggest you follow the program conditions which are designed to promote quicker and more effective learning.

1. INSTRUCTIONS

1.1 PRE-TRAINING ADVICE :

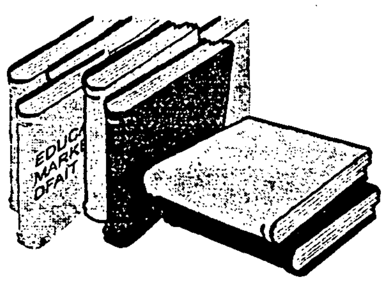
- **Develop a work plan prioritising the modules** in order of importance meaningful to you and which will indicate what merits your immediate concern. To do this, we provide a self-evaluation questionnaire on the education industry in the appendix of this module.
- Schedule **definite time periods** for this activity to be done on a regular basis.
- **Do the exercises** in order to measure your level of understanding and to perfect your knowledge of the subject.

Do not hesitate to use the **tutoring** service put at your disposal. **A provided manual** will serve as a guide to you all the available resources to help you through every stage of the learning process.

1.2 REQUIRED EDUCATIONAL MATERIAL :

Before plunging into the work on the Education Industry, please check if you have been provided with all the necessary material found in the following sections :

Introduction module
Module 1 - Knowing the Geography
Module 2 - Knowledge Of Economy-Education And Training
Module 3 –Canadian International Trade, objectives and major related programs and activities
Module 4 - Distance Education – Technology, Education and Training
Module 5 - Foreign Students
Module 6 - Education Marketing Program
Module 7 - The Competition and Marketing Tools
Module 8 - Case Studies



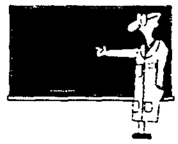
After the wheat industry, Education is the second most important commercial activity in the international marketplace. This industry is in constant evolution in Canada as well as elsewhere in the world. It has made it possible for Canadians to develop important expertise with regard to educational products and services. What began in response to geographical constraints and to make learning accessible, was transformed into both the public and private sectors initiated off-site educational programs tailored to regional needs. We then, developed a world-recognised expertise in the fields of language teaching (English and French), management training, public administration, engineering, telecommunication, etc.

Today, we must unceasingly renew our marketing strategy in order to meet and surpass competition from the USA, Europe, Germany, UK and Australia. As a representative of Canada abroad, you must understand your mission and promote Canada's education expertise. It is generally recognised that for the developing countries education is a means to acquiring their independence and the level of democratisation necessary for their unfettered development. Canada stands to reap sizeable economic and other benefits its leading position in the world.

To answer your questions on the subject and underline the strengths of this industry, we are going to provide you with a list of arguments on marketing of the product. Throughout your involvement, you will do your share in assuring the competitive position of Canada.

2. DESCRIPTION OF THE SELF-STUDY PROGRAM

2.1 TUTORING



The tutoring work is shared among a group of experts who act as catalysts during your learning session . You can use this service in different ways such as when :

- You have particular difficulties with the topic ;
- You have one or several questions for which you cannot find answers in your workbook ;
- You need to compare notes on a range of problems that you encounter regularly ;
- The tutor makes himself available for individual meetings during a fixed period of time ;
- You can communicate by e-mail to obtain the tutor's reply or suggestions within a short period of time allowing you to proceed with your work.

Your tutors :

Dr. Gilles Séguin	Tel. : (613)992-6289	E-mail : gillesseguin@dfait-maeci.gc.ca
Darren Smith	Tel. : (613) 995-5295	E-mail : darre.smith@dfait-maeci.gc.ca

2.2 GROUP DISCUSSION

Several meetings are to be scheduled for the purpose of either exchanging views on particular topics or sharing your problems with others and thus enhancing your presentations with examples and experiences of your colleagues.

2.3 EXERCISES

The exercises will facilitate your learning and provide you with an opportunity to assess on your own knowledge regarding the Education Industry.

There are two types of exercises :

- discussion on location

- questionnaires for testing your understanding

2.4 DOCUMENTS

In addition to helping you locate textbook material, we also provide various website references. This modular structure affords you more flexibility in the use of your time.

Document sections :

TABLE OF CONTENTS

1. Learning objectives
2. Process and Pacing
3. Introduction
4. Subject
5. Questionnaire for self-evaluation
6. References
7. Appendix

Module 8 is especially intended for analysing, originating, and using this information in a marketing context in various business environments.

All modules are basically organised in the same way. Information, exercises and tools are intended to promote the acquisition of necessary know-how for your activities as a representative in the shortest time possible.

An outline of each module follows. The subject matter outlines the main points of this industry by sector of activity.

3. DEVELOPING YOUR WORK PLAN

During this stage you will produce a work program describing your professional and personal needs. About twenty hours are generally needed to complete such a program.

We suggest that you :

- complete the questionnaire
- set your priorities in order of difficulty
- set up a work schedule

3.1 QUESTIONNAIRE REVIEW

The purpose of the questionnaire is to stimulate your creativity and provide you with answers to a range of general or specific questions on marketing of the Education Industry.

The goal here is not a question of being the best or getting a good mark. By answering the questions, you will get a better idea of your strengths and weaknesses in understanding the Canadian Education Industry and its position on the international scale.

1. Write up a brief description of the nature and extent of the market of the Education Industry.
2. What do you know about Canada's capability and expertise in the matter of education and training ?
3. To what extent can The World Bank help and support the Education Industry ?
4. Do you believe that the Education Industry occupies an important place in the Canadian economy ?
5. Define some particularities of the Education Industry and training sectors.
6. Knowing that one has to keep track of the target clientele, what approach focuses on the cultural and political aspects of this clientele ? What are the essential elements in our marketing program ?
7. Please describe your role in marketing the Education Industry and to what extent you consider it to be important as a sector.

8. What are the ideas you have to assimilate to be able to accomplish your task effectively ?

3.2 HOW TO DEVELOP YOUR PLAN

a) You have some difficulties with questions 1, 2, 5, 7 ?
We suggest you begin by :

- Module 1
- Module 3
- Module 4
- Module 5

b) You have some difficulties with questions 4 ?
We suggest you begin by :

- Module 3
- Module 6

c) You have some difficulties with questions 3 and 6 ?
We suggest you begin by :

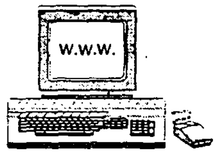
- Module 2
- Module 6
- Module 7

d) You have some difficulties with question 8 ?
We suggest you begin by :

- Module 1
- Module 2
- Module 3
- Module 4
- Module 5
- Module 6
- Module 7
- Module 8

4. APPENDIX

Websites



Study in Canada **http :// www.studyincanada.com**

Companion website for the CD-ROM Study in Canada ! which contains all the latest information and has exciting multimedia campus tours of colleges and universities in Canada. French and Spanish .
Profiles and contact information for all institutions listed on CD-ROM. Information on the Canadian education system and residence in Canada.

Intergovernmental On-Line Information Kiosk **http :// www. intergov.gc.ca/educ/index.htm**

A good link to Canadian higher education institutions.

Association of Universities and Colleges of Canada (AUCC) **http :// www.aucc.ca**

Includes list of member Canadian universities, scholarships, publications, international exchanges, and links.
For answers to some of the questions most frequently asked by Canadian and international students applicants, click to "Connect to Canada's Universities".

Association of Canadian Community College (ACCC) **http :// www.accc.com**

Information on community colleges in Canada, including a list of publications, members institutions, program, services and related links.

Canadian Bureau for international Education (CIBE) **http :// www.cibe.com**

Useful general information for international students providing many goods links.
Extensive list of Canadian awards, scholarships, and other financial aid information, publications, plus programs and services information.

Canadian Information Centre for International Credentials (CICIC)	**http :// www.cmec.ca/cicic**

Wealth of information under CICI Publications on admission to Canadian universities and colleges, as well as employment and post-secondary education systems in Canada.

Council of Ministers of Education, Canada (CMEC)	**http :// www.cmcec.ca**

Information about secondary and post-secondary education in Canada.

Alberta Centre for International Education (AICE)	**http :// www.acie.ab.ca**

Provides English-only information on education system and links to Alberta institutions, and Alberta tourism website virtual tour of Alberta.

British Columbia Centre for International Education (BCCIE)	**http :// www. bccie.bc. ca**

An English-only site providing useful information for international students interested in studying in British Columbia.

ÉduQuébec	**http :// www. eduquebec.gouv.qc.ca**

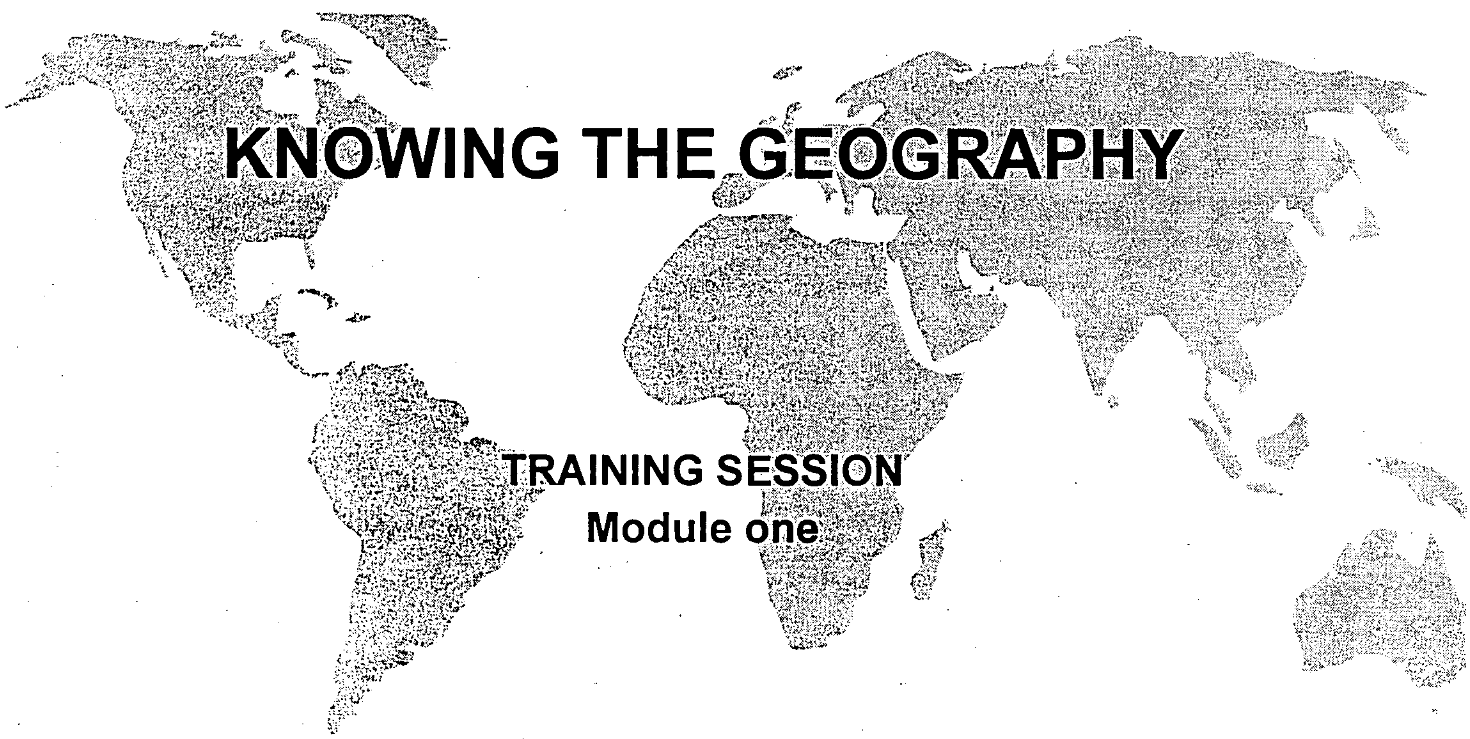
This section "Étudier au Québec" is incomplete at this moment, but will eventually have information on :financial aid, programs of study, universities, colleges, French as a second language schools, and life in Quebec.

Others Website adress :

Strategis - Industry Canada	**http :// www. Strategis.ic.gc.ca**
Export Source – Industry Canada	**http :// www. Exportsource.gc.ca**
Department Foreign affairs and International Trade	**http :// www. dfait-maeci.gc.ca**
The world Bank	**http :// www. Worldbank.org**
International Financial Corporation	**http :// www. ifc.org**

1

CANADIAN EDUCATION AND TRAINING SERVICES



KNOWING THE GEOGRAPHY

TRAINING SESSION
Module one

PILOT VERSION

Department Foreign Affairs and International Trade (DFAIT)
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List of Acronyms

ACCC	Association of Canadian Community College
ACET	Advisory Community on Educational Technology (Alberta)
B&W	Babcock and Wilcoy
BC	British Columbia
CADE	Canadian Association of Distance Educators
CAP	Industry Canada's Community Access Program
CDN	Canadian
C2T2	Centre for Curriculum, Transfer, and Technology
CECs	Canada Education Centres
CEGEP	"Collège d'Enseignement Général et Professionnel"
CIDA	Canadian Internet Development Agency
CLFDB	Canadian Labour Force Development Board
COPS	Canadian Occupational Projection System
CVU	California Virtual University
ECUs	European Currency Units
ESL	English as a second language
ETS	Education and training services
EU	European Union
HRD	Human Resources Development
HRDC	Human Resources Development Canada
ICDE	International Council of Distance Education
IFIs	International Financial Institutions
ISTC	Industry, Science and Technology Canada
IT	Information Technology
MDBs	Multilateral Development Banks
NAFTA	North American Free Trade Agreement
NMLM	New Media-Learning Materials
NTU	National Technological University
OECD	Organistation for Economic Co-operation and Development
OISE	Ontario Institute for Studies in Education
OU	Open University
OUBS	Open University Business School
SCOET	Standing Community on Educational Technology (BC)
SMEs	Small and Medium-Sized Entreprises

SSHRC	Social Sciences and Humanities Research Council
TETRA	Telemedicine and Educational Technology Resource Agency
TL*NCE	Telelearning Network of Centres of Excellence
TLM	Technology-mediated learning
UNB	University of New Brunswick
UNESCO	United Nations Educational Scientific and Cultural Organisation
W.W.W.	World Wide Web
WGU	Western Governors' University

Table of Illustrations

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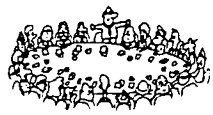
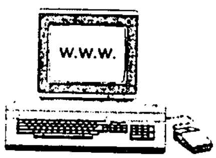
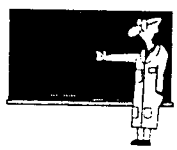


Chat On The Network

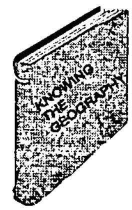
Exercise



Internet

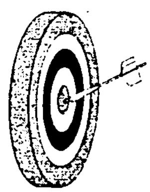


Tutor



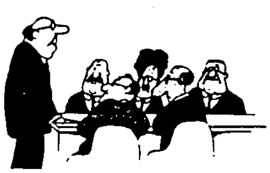
Reading

Self-test

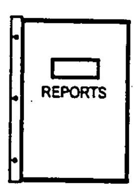


Objectives

Timer

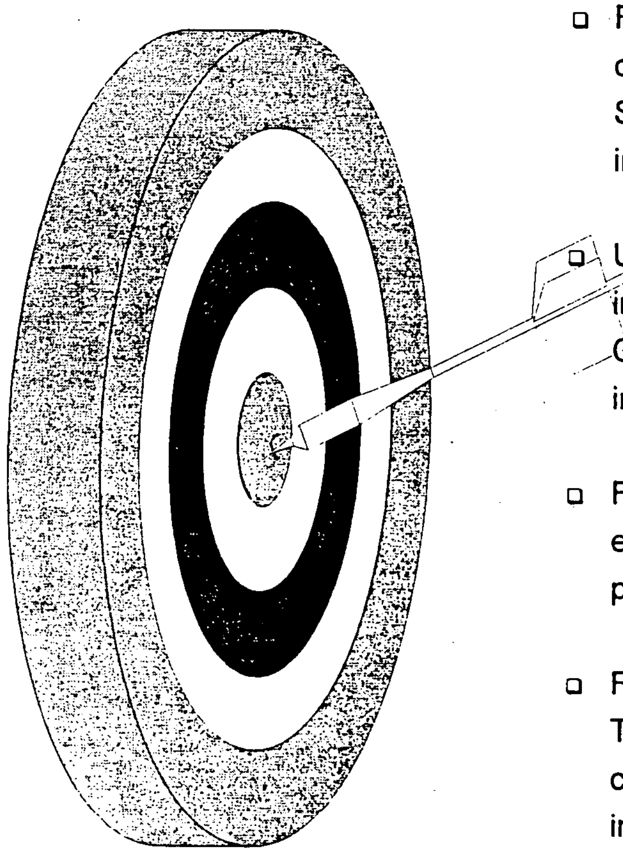


Group discussion



Reports

1. LEARNING OBJECTIVES



At the conclusion of this module, the participant will :

- Familiarise oneself with trends and characteristics of Education & Training Services (ETS) in Canada and in international markets.
- Understand the market dynamics of this import/export domain in light of what Canada can offer in comparison with its international competitors.
- Familiarise oneself with the Canadian educational and training domain, public and private.
- Familiarise with, and identify Education and Training products and services Canada could advantageously offer on the international market

2. PROCESS AND PACING

Canadian Expertise and Marketing Value

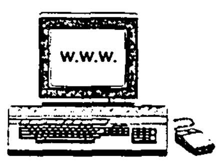
TO FAMILIARIZE WITH THE PUBLIC SECTOR

Department of Foreign Affairs and International Trade

Website : http:www.dfait-macie.gc.ca

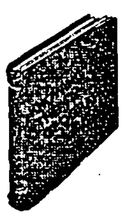
1. Marketing Canadian Education
2. Provincial Education Links

Department of Foreign Affairs and International Trade



Website : http:www.dfait-macie.gc.ca/culture/educationmarketing/menue-.htm

1. Main menu
2. Marketing Canadian Education
3. Provincial Education Links



TO FAMILIARIZE WITH THE PRIVATE SECTOR

To read : p. 38-39

Exercise one

CANADIAN EXPERTISE AND ITS MARKETING VALUE

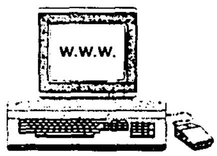
1. Take note of pages 40-48 of this document before the meeting.
2. Group discussion → goals to achieve
    - Identify and seek ETS opportunities and your pointing.
    - Share your observations with other colleagues from different embassies.
    - How can you use this information in your work ? (Canadian Expertise and its Marketing Value).
    - Which points can you use for marketing ?

Exercise two

PRODUCTS AND SERVICES

1. Take note of pages 49-53 of this document before the meeting.
2. Group discussion → goals to achieve
    - Bring out all education products and services which can be included within the main four components ;
    - According to your experience, which product and service can be used immediately in marketing ?

Education Market Place



TO UNDERSTAND THE INTERNATIONAL OUTLOOK

Strategis, Industry Canada

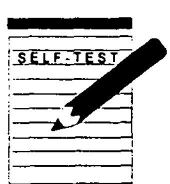
Web site : http:www.strategis.ic.gc.ca

1. Main Menu
2. Business Information by sector
3. Business and Professional Services
4. Sector Competitiveness Frameworks Series - Education Training Services
5. Growth Prospects for the Industry
6. International Market

CANADIAN INDUSTRY'S STRENGTHS AND WEAKNESSES

To read : p. 40-48

Self-Test



Self- test to evaluate your understanding and knowledge of the module "Knowing the Geography".
See pages 55-59.

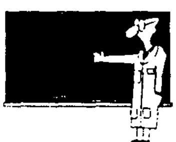
Resources :

CONSULT COMPACT DISKS :

Example for Strategy Marketing

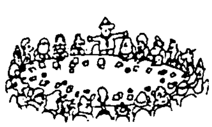
Title : In Aviation and Aerospace
(Aerospace Training Canada International)

Title : Interactive Manager Series
(Harvard Business School Publishing)



You need a tutor?

Contact DFAIT –Education Marketing Unit
Dr. Gilles Séguin
Tel. : (613) 992-6289
E-mail : gillesseguin@dfait-maeci.gc.ca
Darren Smith
Tel. : (613) 995-5295
E-mail : darren.smith@dfait-maeci.gc.ca



You need help or you want to discuss ?

Join group by chat room.

3. INTRODUCTION

The education and training services (ETS) industry consists of establishments and organisations 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 organisations, which often operate on a cost recovery basis. There are four general components within the industry :

Firms specialising 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 focuses 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.

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.

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. Recognising 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.

And at the international level . . .

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.

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 organisational productivity. Continuous education and training provides employees with the skills and knowledge that permit companies to respond positively and in an innovative way to changing markets, changing competition and evolving technologies.

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. Adrian Verspoor, World Bank Education Division Chief, emphasises the importance accorded to education and training by Multilateral Development Banks (MBs) : "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" (Adrian 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 world wide. 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.

And at the national level . . .

The Canadian Information Technology (IT) training and education services industry is estimated to be $635 million for 1996, a 17.5 per cent increase from 1995. The E-learning market represents 2 per cent, or $13 million, of the total market. By the year 2000, IDC Canada anticipates that this market share will rise to 22 per cent of the total, experiencing a compounded annual growth rate of 16 per cent. StatsCan estimated in 1987 that one third of companies provided formal training for their employees for a total of $1.4 billion annually. The Conference Board of Canada surveyed companies in 1990 and discovered a growth trend, with training expenditures of 444 companies reaching $315.9 million in 1989. In 1993, the Board found that 275 medium to large businesses had increased spending from an average of $659 per capita to $849 between 1992 and 1993.

The National Training Survey of more than 17,000 organisations in 1991 by the Canadian Labour Market and Productivity Centre found that 70 per cent of private sector respondents trained their employees, and gave a rough national estimate of CDN $1.35 billion for the Canadian market. A 1996 Quebec survey round that 63 per cent of Quebec companies trained employees on-the-job, and almost 30 per cent used outside consultants or private trainers. It also found that larger firms relied on internal training departments white smaller firms relied on outside suppliers.

Despite the large amount of money being spent on training, Canada still appears to be lagging behind other countries on international measurements of training. The 1997 World Competitiveness Yearbook, published by the International Institute for Management Development, ranked Canada 17th on a scale of corporate training, behind Ireland, Belgium and Luxembourg. A large portion of E-learning delivered in Canada has been developed through U.S. head offices and provided to Canadian subsidiaries (e.g. Oracle, Microsoft and CBT Systems).

The National Technological University (NTU) is a consortium of 40 university schools of engineering, headquartered in Fort Collins, Colorado. By the end of 1990, more than 1,100 distance education students were taking graduate degree programs in engineering, with active collaboration from their employers. After six years of operation it was expecting 1990-91 revenues of $13.5 million U.S., and enrolment trends indicated it would offer more Master's degrees in engineering by 1994-95 than any other American institution. In addition, the NTU had approximately 65,000 non-credit enrolments during the 1989-90 school year.

The most significant recent developments in TML consortia are the Western Governors' University (WGU) and the California Virtual University (CVU). Both offer access to Internet-based courses, as well as programs via satellite. The Western Governors University is a distance learning consortium of universities in more than 16 states and U.S. territories. It has been joined by some outside affiliates including the University of British Columbia and the China Internet Education Centre. The California Virtual University limits affiliation to California-based institutions. The CVU has implemented an online home for the TML offerings provided by state-affiliated public and private higher educational institutions. Both the WGU and the CVU will be discussed again later in this paper.

Canadian Presence Abroad . . .

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 ca develop practical approaches to strengthen the industry.

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 co-ordinated 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 co-ordinated 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 co-ordinated, 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 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.

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 world wide. 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.

Characteristics of Education and Training Services

The Education And Training Services (ETS) industry is a heterogeneous sector comprising many specialised 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 Colombia 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.

4. KNOWING THE GEOGRAPHY

4.1 EDUCATION AND TRAINING AND INTERNATIONAL PERSPECTIVE

4.1.1 UNESCO's Vision on Development and Education

The United Nations Educational Scientific and Cultural Organisation (UNESCO) during the 152nd session of its Executive Board (Paris, 3, December 1997) approved a series of articles in a Draft Declaration on the Responsibilities of the Present Generations Towards Future Generations.

Article 10 of this Declaration reads as follow :

Development and Education

1. The present generations should ensure the conditions of equitable, sustainable and universal socio-economic development of future generations, both in its individual and collective dimension, in particular through a fair and prudent use of available resources for the purpose of combating poverty.
2. Education is an important instrument for the development of human persons and societies. Internet should be used to foster peace, justice, understanding, tolerance and equality for the benefit of present and future generations.

Canada, by virtue of its participation to UNESCO's goals and vision, and its concern with issues raised by this Declaration, more specifically the above-mentioned article on Development and Education, has fostered this goal and expressed its desire to participate actively and efficiently to its realisation in various External Affairs and Development policies over the years.

4.1.2 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 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 thy need. NMLM adds considerable power and value to education and training programs offered though 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 organisational 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, specialised 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 exists in a less structured environment. They nevertheless operate in a more strategic fashion, and have strong co-ordinated marketing support. Better organisation 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.

4.1.3 Demand Outlook

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.

4.1.4 Technological Change

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.

4.1.5 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 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.

4.1.6 International Markets

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.

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 North American Free Trade Agreement (NAFTA) has made the process of selling training services into the United States and Mexico more stable and predictable.

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 focuses on human resources development by funding training, retraining and job creation. In addition, many European Union (EU) member states have their own Human

Resources Development (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; organisations 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 organisations 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.

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 computerised 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 organising 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 industrialised 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.

4.1.7 New Realities

In 1990, 54 electronic networks were involved in educational programming via satellite throughout North America, offering courses in medicine, law, banking, insurance, law enforcement, auto repairs and others. in 1993, there were an estimated 93 institutions or networks offering courses in 20 different countries via computer-mediated communications.

According to the Canadian Labour Market Productivity Centre, students leaving school today will need to be retrained at least five times in their working life, and nearly half the new jobs created will require the equivalent of 17 years full-time education. Many of the new jobs will require a much higher level of skill than those they are replacing. Those already employed will need to retrain to higher or different standards to keep their jobs.

Many commentators argue that the future lies in knowledge-based, high-tech industries, all highly competitive and global in scope in this emerging economy, learning and training is both a key industry and a competitive advantage. Some have argued that it may surpass the traditionally dominant sectors of manufacturing and tourism.

The Conference Board of Canada lists the ability to learn independently as a workforce skill, along with good communications skills, social skills, teamwork, ability to adapt, thinking skills and knowledge navigation. New technologies are being used by companies to train their employees on the job- just-in-time learning'. The new teaching techniques are two-way, collaborative, and interdisciplinary. in some cases, classroom teachers are no longer leaders but 'tour guides'. Students can now pick and choose from available materials. "Education on demand' is a big business, and the growth will be most spectacular within industry.

4.1.8 New Competition

World education markets are fragmenting, with numerous niche markets developing on an international and regional scale. A recent study from Australia finds that the higher education sector today is in the same position as the telecommunications and banking sectors when they first faced massive deregulation. Many of the study's interviewees reflected the view that universities are not meeting the needs of their stakeholders. Lifelong learning has become the new catch-M, and has helped to create a growth in demand for new services. (Cunningham et al. 1998)

If traditional post-secondary institutions cannot fulfil this new demand, new suppliers will emerge. The Australian study finds that the real threat to education from these new providers is in non-traditional undergraduate student education, an area that includes a variety of continuing and professional education programs and specialised training programs. These programs are potentially the most lucrative leaving the possibility that traditional institutions may be left serving only the less-profitable traditional undergraduate market, with declining public budgets. in short, at a time when the public purse for higher education institutions is shrinking, the market for the profitable high end of higher education is becoming more competitive. (Cunningham et al. 1998)

The trends identified by this report point to important policy considerations for both educational institutions and governments. Our institutions must find ways to remain competitive in this environment, without abrogating their traditional responsibilities. Competing successfully for the lucrative higher end of educational services may in fact allow them to continue to support traditional educational practices. The following section identifies many examples of emerging models and non-traditional activities.

4.2 CANADIAN POLICIES AND VISION ON ETS FOR INTERNATIONAL MARKETS

The new Canadian marketplace is expanding form national to global horizons and its economic base is shifting increasingly form 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 sub-sectors having potential for increased exports and other opportunities leading to jobs and growth. They cover 28 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 analysis of policy issues cutting across all sectors. These issues include investment and financing, trade and export strategies, technological innovation and adaptation, human resources, the environment and sustainable development. A thorough understanding of how to capitalise on these issues if essential for 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.

4.2.1 North American Context

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.

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 recognised 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.

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 organisations (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 organisations 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.

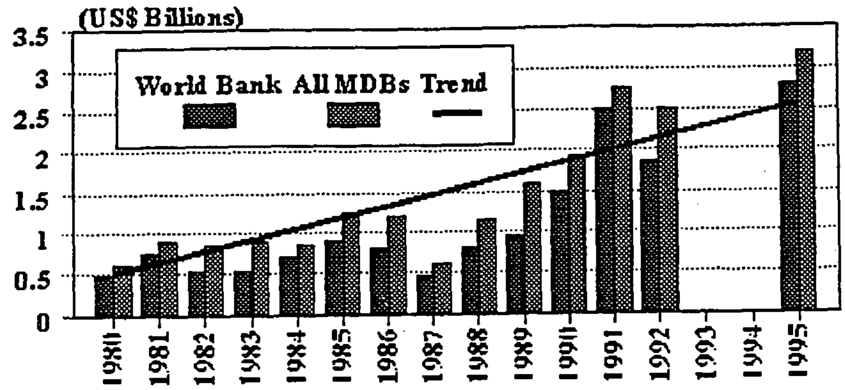
The Canadian Labour Market and Productivity Centre's 1991 National Training Survey (Ottawa : CLMPC, February 1993) of more than 17 000 Canadian organisations reports that 70 percent of private sector organisations represented in the sample provided structured training to their employees during their most recent fiscal year. Organisations 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 sizeable 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 organisations representing business, labour and training organisations. In Quebec, 20 sectoral committees promote continuing education in industry and business.

4.2.2 Multilateral Development Banks

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 1. Education Lending by Multilateral Development Banks [a]



[a]1993-1994 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 (See Module 2 for more specific details).

Vocational and technical skills were once considered the key to modernisation. 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.

*UNESCO'S Charter and Vision, see p. 1

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.

4.3 U.S.A., MEXICO, EUROPE, GERMANY, GREAT BRITAIN, AUSTRALIA

4.3.1 Education and Training Realities

4.3.1.1 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 Labour 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 U.S. $55.3 billion on training. Of that amount, U.S. $26.4 billion was spent on direct training costs, and U.S. $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 of costs : U.S. $25.2 billion on direct training costs and U.S. $27.1 billion in indirect costs. In 1995, U.S. federal government agencies spent an estimated U.S. $1.2 billion on direct training costs and an estimated U.S. $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 U.S. $52 billion. Of this amount, commercial firms spent almost 20 percent (U.S. $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.

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.

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 world wide."

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.

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.

A 1997 study by the University of Southern California round "that only one in five companies made training available through computers. However, they expected to double the amount of computer-based training by the year 2000. The International Data Corporation estimates that interactive courseware is the fastest-growing training method, growing at an estimated 31 per cent. The market is expected to increase fivefold between 1996 and 2000, exceeding U.S. $1.75 billion, or 15 per cent of total Information Technology (IT) training and education revenues. A more conservative estimate from American Society for Training and Development's State of the Industry report projects only 20 per cent growth by the year 2000.

Senior training and technology executives from Fortune 500 companies and major software companies interviewed in 1997 anticipated creating a learning intranet within their organisation, but more than 50 per cent of the intranet projects were still at the conceptual level. The Masie Center round that 80 per cent of training professionals surveyed in February 1998 expected demand for. Web-based training to increase in their organisations this year compared to 75 per cent for CDROM based training and 60 per cent for classroom-based training.

4.3.1.2 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, privatisation 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).

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.

The market for training services in Mexico grew 70 percent from U.S. $26.4 million in 1991 to U.S. $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 U.S. $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 have trained in the United States. They provide services in Spanish and know the market, but most lack the modern technical systems, specialised management know-how, and financial support to create the necessary infrastructure to increase supply in the shorter term. The best prospects for Canadian organisations are for specialised programs, especially if they can be marketed through licensing or partnerships with Mexican training companies and universities.

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.

4.3.1.3 Europe

There is wide acceptance of online courses and degree programs in Europe. The Norwegian Association for Distance Education and FernUniversitat (Germany) are examples of institutions offering distance education programs. Others exist in Belgium, Portugal, Spain, France, Greece, Turkey, Holland and Denmark.

Nonetheless, studies by the European Union have found that Europe is lagging behind Canada and the U.S. in online education. The problem is the relatively small numbers of homes, educational institutions and businesses that have computers with modems. This problem is amplified by line charges for local telephone calls. Unlike in North America, Europeans must pay for every second they use their telephone even when it is not long distance. This discourages users from staying online for sustained periods. Moreover, the traditional fragmentation due to the multitude of languages and countries is a significant barrier although the growing acceptance and use of English as the lingua franca, and the further development of European integration is beginning to break down some of these barriers. A further complication is the entrenchment of U.S. software products in most European markets. This market dominance has fuelled fears of losing unique European cultures at the hands of American software and educational industries.

The environment in Europe has changed dramatically over the last few years. In 1995, the European Union began two important learning technology programs aimed at education and training (SOCRATES and LEONARDO DA VINCI), with EU 1 billion each over four years. Recently, many national governments have launched programs to connect schools to the Internet and equip them with better computers. A by-product of this has been the identification of the need for industrial training that has opened up major TML market opportunities for the delivery of training to unemployed and under-skilled workers and to the workplace.

The largest group of education and training CD-ROM titles on the European market are in language training, IT, business management and science. The best markets for attracting students and course providers appears to be in the UK, France and Germany. These countries have established multimedia industries, their governments are committed to training and education, and they have strong economies.

Deutsche Telekom launched its Global Learning range of services in early 1997. Working through partners, they offer three methods of individual learning ; computer-based training (CBT) and multimedia applications for employees of a single company with tutors; training offered to both internal employees and those of other companies (e.g. Siemens Nixdorf) with self-testing and, teletutors and; the Global Learning Institute, a learning and consultation forum to help transfer conventional courseware and train tutors, course developers and administrators. Several corporations have joined forces with universities in Europe to create EuroPace and the PALIO project, which offer courses electronically to employees.

4.3.1.4 The United Kingdom

The United Kingdom Open University (OU) has probably invested more than any other institution to re-engineer itself into a global education provider. The OU's approach—large numbers of students and courses that remain the same for several years-would appear to be ideal ; the OU can justify the high cost of developing high quality course materials by its lower per student cost and by amortising the costs over several years. Open **University Worldwide** was established in 1996 to seek new markets abroad and reduce the university's reliance on government funding. Despite these efforts, Open

University's approach is still mainly that of print-based, mass distance education. Early feedback on CD-ROM development shows that high-quality multimedia takes too long and is too expensive to be a viable alternative.

Open University Business School (OUBS) began offering the course, 'The Capable Manager'. to twenty managers at the United Nations in New York in February 1998 as part of the first stage of an MBA degree. OUBS viewed the launch of the course as a competitive bid for a part of the distance learning business market. Competitors include Apollo Group in the U.S. and Online Education in Hong Kong. OUBS does not wish to offer the course in countries where tutored learning is available, which restricts its market.

In the private sector, British Telecom launched Solstra, a net-based training system that allows companies and colleges to interact with students.

4.3.1.5 Australia

In Australia, enrolment increased 39 per cent between May 1998. In contrast, on-campus enrolment increased only 12.4 per cent over the previous year. The Ministry of Higher Education predicts that foreign student enrolment will bring $4.5 billion to the country by 2001. In anticipation of this, Australia will be spending $21 million on an overseas marketing campaign over the next four years, and Australian Education International has been created as a generic promoter of Australian distance services. An example of an Australian distance education program can be found at Edith Cowan University.

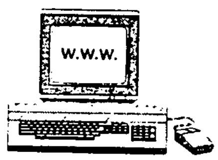
Canada has experience in both single and dual mode institutions to deliver distance education. Canada's open universities include Athabasca, Télé-Université du Québec.

Traditional universities and colleges can offer highly interactive education at a distance and still provide on-campus facilities that are costly and difficult for single-mode distance education institutions to provide. In the most common type, traditional institutions deliver courses using a variety of media to off-campus students through their external, continuing studies departments or through special programs. Some Canadian examples include the University of Waterloo. Which is primarily involved in correspondence delivery. Ryerson Polytechnic Institute created an Open College section in the early 1970s. In British Columbia (BC), North Island College was conceived as an institution that would build on distance education as a core philosophy and methodology. The University College of the Cariboo has built a comprehensive outreach strategy utilising interactive videoconferencing and web courses. Many other colleges and institutes across Canada have experience in TML at the local and provincial level.

4.4 THE TRAINING MARKET : PUBLIC AND PRIVATE SECTORS

4.4.1 The Public Sector

Since the Canadian Education System has many particularities, we suggest you this internet site for each province :



Department of Foreign Affairs and International Trade

Website : http://www.dfait-maeci.gc.ca

1. Main menu
2. Marketing Canadian Education
3. Provincial Education Links

- ✓Alberta
- ✓British Columbia
- ✓Manitoba
- ✓New Brunswick
- ✓Newfoundland
- ✓Nova Scotia
- ✓Prince Edward Island
- ✓Quebec
- ✓Saskatchewan
- ✓Northwest Territories
- ✓Yukon

4.4.2. The Private Sector

The 'California syndrome' refers to the increasing unwillingness of baby boomers whose children have left school to subsidise public education through their taxes. Private institutions like those mentioned below have started filling the breach. The main cost-saving measure employed by private universities is year-round teaching, offering four-year program in two or three years. Students pay lower fees and start full-time employment earlier. A 1989 study at the University of Toronto showed that foregone earnings, after-tax, cost the average student more than four times as much as tuition fees. This ratio will only increase as the average age of students rises, including adults in mid-career positions.

In the San Francisco Bay area, Knowledge Universe, a publicly-traded company founded in September 1997, made $700 million in revenues in less than a year by purchasing Internet-based Corporate training companies.

DeVry Institutes taught 28,000 students on 13 campuses across North America in 1996, including three in Canada : Calgary, North York and Scarborough. Listed on the New York Stock Exchange as a publicly traded company, it charged about $ 21,000 for a three-year Bachelor of Science degree at the time. DeVry made a profit of $15 million U.S. in 1995 on revenues of $229 million U.S. The university's professors can share in the profits by participating in an employee share-ownership plan. The DeVry example demonstrates the potential viability of undergraduate education as a profit-making business. it has been estimated that a virtual university with a basic undergraduate curriculum could cost no more than $40 million CDN(1996 estimate).

Private sector corporations have also started delivering courses online. Ziff-Davis offers technical courses through ZDNet University (http://www.zdu.com/). First Class System, a courseware development company in Fredericton, NB, also offers courses. Spectrum University is a non-profit group that supports Spectrum Virtual University, which offers free courses to students on the (http://www.vu.org/).

The University of Phoenix, which has just opened a campus in Vancouver, is a private, for-profit university that started an online program in 1989. Students attend a virtual classroom, with one faculty member for every 10 to 15 students. Courses are six weeks long with weekly assignments, obliging students to visit their electronic classroom at least five days each week. The university designs the courses, then hires mostly freelance professors but provides no tenure. Online students currently account for less than 7% of the University of Phoenix's total student population, this despite the enormous amount of media attention its. has received.

Scholars.com, a Fredericton-based company started in 1996, delivers online Microsoft Certified Professional training'. It now delivers courses to more than 1500 students at a time, all paying at least $ 1,000 per course. In 1997, the company was bought by CBT Systems and now employs more than 40 people in Fredericton and more than 15 in

Phoenix, Arizona; a new office will open shortly in Australia. in addition, First Class Systems, JOT, Knowledge 3000, and other small courseware development/training companies are delivering online courses from NB.

4.5 CURRENT CANADIAN INDUSTRY STRENGTHS AND WEAKNESSES

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 recognised world wide 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 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 world wide.

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.

4.5.1 Current and Anticipated Competitiveness Challenges

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 learn ware 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 subsidised government organisations or public institutions in the international market.

4.5.2 Generating Demand

While industry recognises 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.

4.5.3 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 sizeable market share and public prestige. Their visibility is heightened by large national organisations 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 organisations in Canada. However, most focus primarily on the professional development of members; few have a strong business development mandate.

4.5.4 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 recognised standards for trainers and training programs makes it difficult to ensure consistent service 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.

4.5.5 Partnering/Consortium Mechanisms

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 realising 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 co-operating 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.

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.

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 organisational 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.

4.5.6 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.

4.5.7 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 world wide 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 will not only 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.

4.5.8 Data and Research Gaps

The 1992 profile for Industry, Science and Technology Canada (ISTC) 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, analyse and communicate the contribution of training to productivity, profitability, competitiveness, the performance of business and employees, and the integration of training into organisational 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.

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 organisations, 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.

Although various organisations 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 under investing 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.

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.

4.5.9 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 industrialised 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 recognise 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.

4.5.10 Canadian Networks

Distance learning networks that facilitate the delivery of courses by different institutions at all levels have been initiated in Canada. These networks are formed by governments, institutions themselves, or by consortia. Initially based on audio-graphic teleconferencing technology (electronic white-boarding), these networks serve a variety of institutions in their geographical areas.

The Telemedicine and Educational Technology Resource Agency (TETRA) network in Newfoundland was the first such Canadian network, launched in 1977 as a distance learning network in conjunction with Memorial University of Newfoundland's telemedicine project. Because the province has only one university with no internal competitors, TETRA, as a university initiative, quickly became a ubiquitous network serving university students around the province. Contact North in Northern Ontario began as a consortium consisting of two community colleges and two universities, with representation from public schools, and involving northern communities and other organisations. TeleEducation NB serves residents in the province of New Brunswick. Another network, Alberta-North, is in place in northern Alberta.

Recently, industry Canada's Notemakers pilot project has encouraged Technology-mediated learning (TML) development consortia. One outcome has been the consortium centred at the University of New Brunswick among six universities in Atlantic Canada for the online delivery of first year university courses (http://www.unb.ca/coned/notemakers/). The Toronto-based Telecommunications Learning Institute (http://www. Tlilearn.com/) is a private sector consortium of telecommunications and banking companies that offers courses and programs to members online.

Contact South is a consortium of Ontario colleges for the delivery of online courses. Members share development and expenses related to the delivery of TML [http://www.contactsouth.org). Consortia such as Contact South are attractive options for Canadian community colleges and institutes. Their smaller size relative to the universities and the logic of scale often leads these institutions to participate in provincial or regional TML coalitions such as Contact South or TeleEducation NB. Nationally, the Association of Canadian Community Colleges (ACCC) is pooling resources and expertise for the purpose of institutional support and joint marketing of services.

4.5.11 Other Canadian Initiatives

Canada is an acknowledged world-leader in distance education, led by such organisations as the TeleLearning Network of Centres of Excellence (TL*NCE). Unique in the world, the TL*NCE is a $12 million national collaboration of Canadian researchers, private sector organisations and members of the public in the development, application and evaluation of TML with a focus on collaborative learning and knowledge building. Hosted at Simon Fraser University, the network plays an important role in researching and developing advanced networked learning environments for all levels of the education system and the workplace. Two of its “beacon technologies” include the Virtual-U, is an integrated distributed learning environment and WebCSILE (Computer Supported Intentional Learning Environments) developed at the Ontario institute for Studies in Education (OISE). Network researchers are also-addressing-associated questions such as the education of educators and the role of TeleLearning networks as the bases for a learning society. TL*NCE is now studying the creation of a Global TeleLearning institute to provide leading edge research, services, technologies, and. content in online learning in collaboration with organisations around the world.

A second important Canadian research initiative is EV-Net which is dedicated to the assessment of new learning tools for the information highway. EV-Net was funded by the Social Sciences and Humanities Research Council as part of the establishment of 5 research networks in training and education.

The Canadian Association of Distance Education (CADE) is also well known internationally and recognised as one of the leading organisations within the International Council of Distance Education (ICDE).

Canadian integrated distributed learning environments like First Class, WebCT, ShareLine, and Zebu, as well as instructional design tools such as Integreator and Télé-Université's Campus virtuelle (see list at are leading the world into online learning. Industry Canada and the Office of Learning Technologies have sponsored two studies of online educational delivery applications. The first was conducted by TeleEducation NB and Mount Allison University's Learning Technology Centre as a survey of "Integrated Distributed Learning Environments". The BC Standing Committee on Educational Technology and the Centre for Curriculum Transfer and Technology conducted another more detailed investigation. This study established criteria for evaluating online educational delivery applications (http://www.ctt.bc.ca/landonline). The site provides an evaluation engine for users who wish to compare different online course delivery tools.

The University of New Brunswick (UNB) is the home of the WWW-DEV listserv which is the world's leading discussion group for online course developers. Every year UNB hosts the North American Web Conference (for 1998 from October 3-5), focusing on innovative and practical uses of the World Wide Web in education. British Columbia has a wide range of TML initiatives and support activities organised by the Standing Committee on Educational Technology (SCOET) and the Centre for Curriculum, Transfer, and Technology (C2T2). The SCOET model has sparked interest in other

Canadian provinces where similar co-ordinating mechanisms are being planned, for example. by Alberta's Advisory Committee on Educational Technology (ACET).

4.6 CANADIAN PRODUCTS AND SERVICES

4.6.1 Future Opportunities

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.

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 "learn ware" 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 world wide, 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 specialised 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 co-operation 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 Co-operation 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 privatised holding company in this sector.

The Canadian Education Centres (CECs) established by the Government of Canada and the Asia Pacific Foundation will help companies capitalise on opportunities in foreign markets. The CECs are open to recognised 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 bas is rather than through payment of annual fixed subscription fees.

4.6.2 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), analyses 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.

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 [News Update 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 biotech research will be created by the end of the century.

4.6.3 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.

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 organisation 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.

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 capitalise 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 recognises 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).

5. SELF-TEST

Questions :

1. Why can the Education & Training domain be considered an import/export industry?

2. Identify key products and services of the Canadian ETS public sector.

3. Identify key products and services of the Canadian ETS private sector

4. Is Canada a major player in the ETS international field?

5. Name five important international competitors (countries or companies) to Canada in the field and describe briefly their strategy and presence in the world.

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6. Identify five potential market domains in which Canada is or could be a key international provider of ETS products and services. Give a brief description.

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7. Name seven private Canadian companies or institutions capable of offering ETS products and services in the international market.

8. Name seven Canadian public institutions capable of offering ETS products and services in the international market.

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9. Identify five international markets (countries) where Canada could intervene and offer ETS products and service and describe brief why.

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10. Provide four major reasons why Canada should be involved in the international procurement of ETS products and services. Give brief explanation.

-
-
-

-

11. What are the main strengths and weaknesses of the Canadian ETS domain in the perspective of its international presence within it?

12. To what can the ETS domain be compared in terms of economic impact for Canada ?

6. REFERENCES

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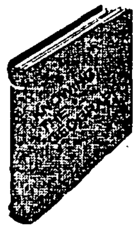

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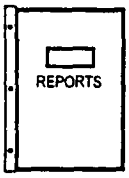
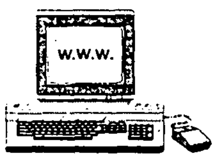
Reports : 

Statistics are a valuable source of information for Canadian exporters exploring new markets. For more information on student statistics, including breakdowns by country of origin and region of study, contact :

Citizenship and Immigration Canada
Decision Support and Delivery Services
365 Laurier Avenue West, Jean Edmonds South Tower, 15th Floor
Ottawa, Ontario
Canada K1A 1L1
Tel : (613) 957-3978

Data Bases of Education and Training Providers, Products and Services

- Canadian Commercial Education and Skills Training Providers in Southwestern Ontario
- A Complete Listing of Canadian Products Related to Second Language Education
- National Report on Human Resources, Washington, D.C. : ASTD, September 1996

Websites, URL : 

More detailed international market information, by region, may be found on the Web site of the Department of Foreign Affairs and International Trade (http://www.dfait-maeci.gc.ca/culture/educationmarketing/menu-e.htm.

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).

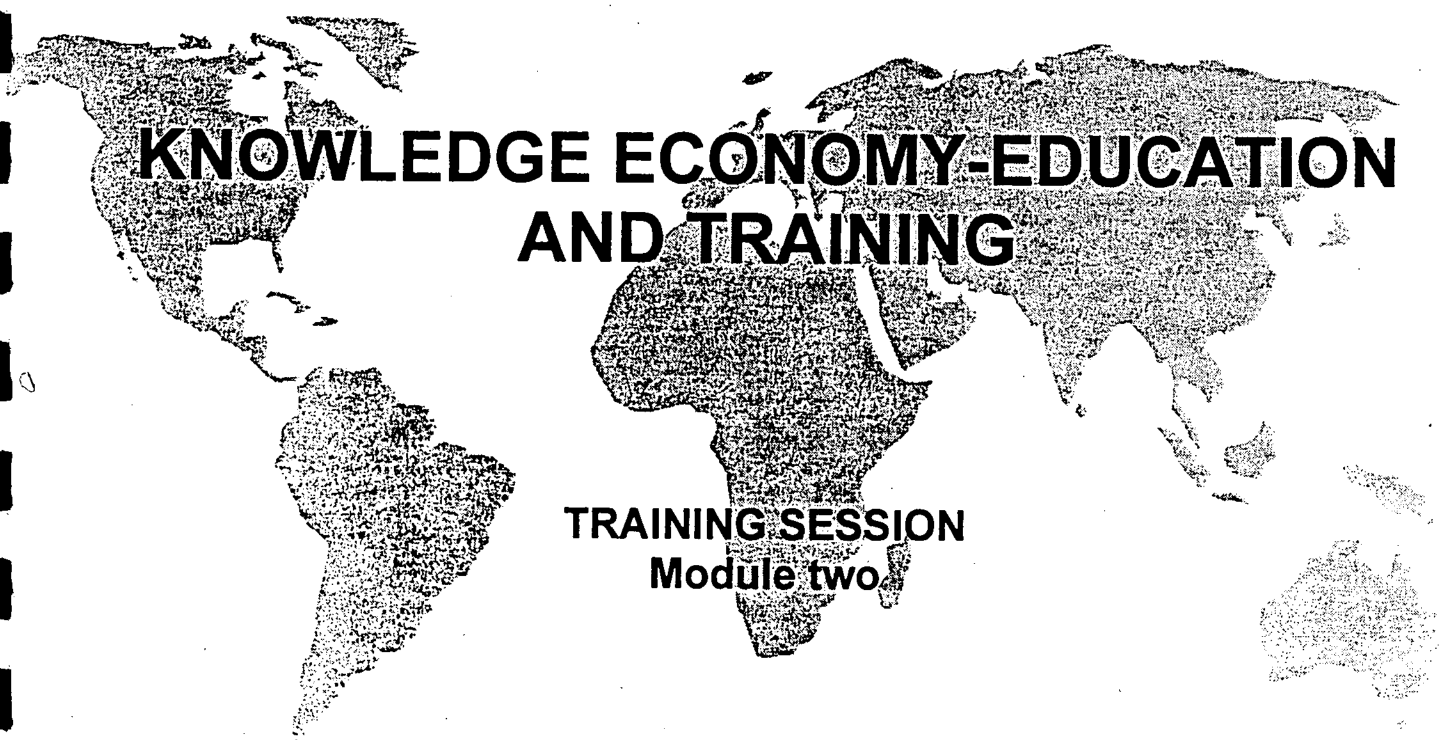
Industry Canada, through Strategis, provides a good overview of the Canadian Education and Training Services Industry as part of its Sector Competitiveness

Frameworks series on industries with potential for increased exports and other opportunities leading to jobs and growth.

Industry Canada	http://exportsource.gc.ca/expkit_3f/navxx.html
Conseil des Ministres de l'Éducation	http://www.cmec.ca/cicic/indexe.htm
Department Foreign Affairs and International Trade	http://www.dfait-maeci.gc.ca/culture/educationmarketing/menue-.htm
Department Foreign Affairs and International Trade	http://www.dfait-maeci.gc.ca/culture/educationmarketing/menue-.htm
Forum for International Trade Training	http://www.fitt.ca/
Stategis, Industry Canada	http://www.strategis.ic.gc.ca/SSG/bp00496e.html#13
Stategis, Industrie Canada	http://www.strategis.ic.gc.ca/SSG/bp01514e.html
Stategis, Industrie Canada	http://www.strategis.ic.gc.ca/SSG/it02692e.html
Spectrum Virtual University, U.S.A.	http://www.vu.org/
ZDNet University, U.S.A.	http://www.zdu.com/
Atlantic Notemakers Consortium	http://www.unb.ca/coned/notemakers
Telecommunications Learning Institute Canada	http://www.telelearn.com/
Contact South (Consortium of Ontario)	http://www.contactsouth.org
BC Standing Committee	http://www.ctt.bc.ca/landdonline
UNESCO	http://www.unesco.org/

2

CANADIAN EDUCATION AND TRAINING SERVICES



KNOWLEDGE ECONOMY-EDUCATION AND TRAINING

TRAINING SESSION
Module two

PILOT VERSION

Department Foreign Affairs and International Trade (DFAIT)
Education Marketing Unit (ACET)
in collaboration with CFG inc.

TABLE OF CONTENTS

LIST OF ACRONYMS

What strikes many organisations when they begin working with IFIs is the myriad of terms and abbreviations. Understanding what they mean and how they are used by Bank officials can mean the difference between a fruitful visit with an important IFIS program manager and a lost opportunity. This can result in a misuse of travel funds or more importantly it may adversely affect your chances of success in a competitive bid. IFIS officials expect clients to know the meaning of these terms.

ADB	Asian Development Bank
AFBD	African Development Bank
CIDA	Canadian Internet Development Agency
EA	Environmental Assessment or Executing Agency
EBRD	European Reconstruction and Development Bank
EDS	Environmental Data Sheets
GPN	General Procurement Notice
IBRD	International Bank for Reconstruction and Development (World Bank Group)
ICB	International Competitive Bidding
ICSID	International Centre for the Settlement of Investment Disputes (World Bank Group)
IDA	International Development Association (World Bank Group)
IDB	Inter-american Development Bank
IFC	International Financial Corporation
IFIs	International Financial Institutions
IMF	International Monetary Fund
LDC	Least developed countries
MOS	Monthly Operational Summaries
PAD	Project Appraisal Document
PID	Project Information Documents
QCBS	Quality and Cost-Based Selection
RPF	Request for Proposal
SAR	Staff Appraisal Report
SBDs	Standard Bidding Documents
SPIs	Summaries of Project Information
TORs	Terms of Reference

WTO World Trade Organization

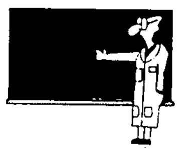
TABLE OF ILLUSTRATIONS

Cd

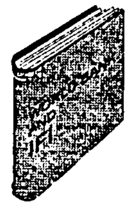
Chat On The Network

Exercise

Internet

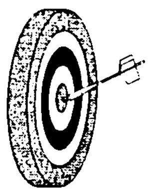


Tutor



Reading

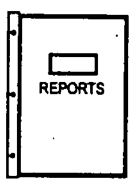
Self-test



Objectives

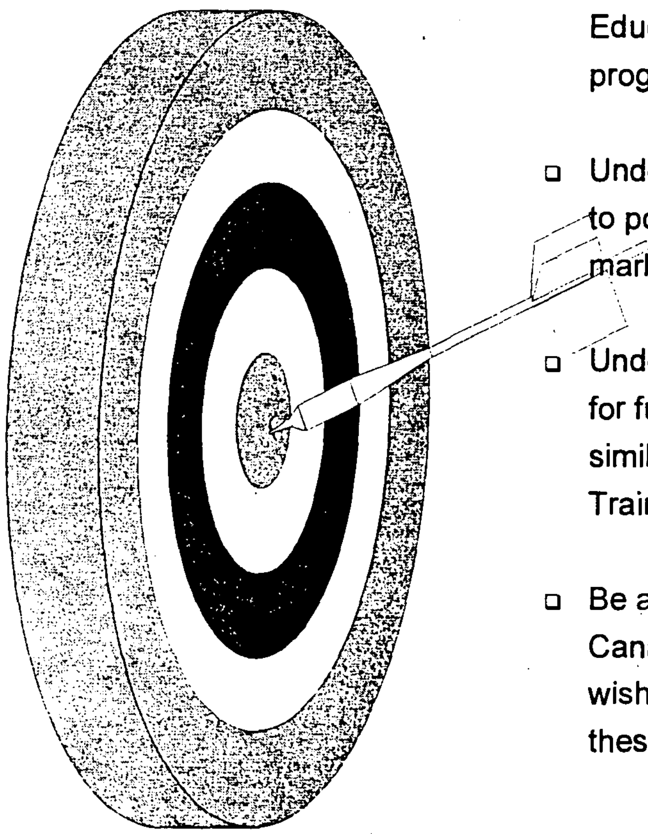
Timer

Group discussion



Reports

1. LEARNING OBJECTIVES

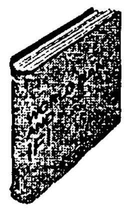


At the conclusion of this module, the participant will :

- Know the various international organisations, International Financial Institutions (IFIs) involved in financing major Education and Training development programs in third-world countries.
- Understand why it is important for Canada to position itself in this huge potential market and claim its rightful share of it.
- Understand how to prepare an application for funds from the World Bank and other similar institutions for Education and Training programs.
- Be able to better assist Canadians and Canadian institutions or companies who wish to apply for Development Funds from these IFIs.

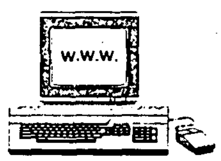
2. PROCESS AND PACING

TO KNOW THE ECONOMIC DEVELOPMENT AND THE EDUCATION TRAINING



To read : p. 12-19

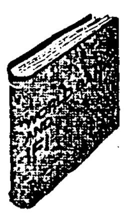
TO FAMILIARISE WITH THE WORLD BANK AND THE STRATEGIC CONTACT



Get acquainted with :

Website : http://www.worldbank.org

TO UNDERSTAND IFIS SERVICES, PRODUCTS AND INFRASTRUCTURE CONTACTS



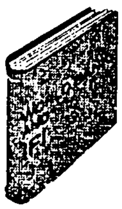
To read : p. 25-29

TO BE ABLE TO ASSIST IN INTERNATIONAL BUSINESS OPPORTUNITIES

Exercise one

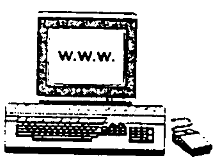
1. Take note of pages 29-40 of this document before the meeting.

2. Group discussion → goals to achieve
   - Discuss the process to tender to IFIs.
   - Submit the steps to proceed.



TO KNOW AND UNDERSTAND THE MARKET RESEARCH TOOLS

To read : p. 40-44



Websites : http://www.ebrd.com
http://www.afdb.org
http://www.ifc.org
http://www.miga.org

Self Test

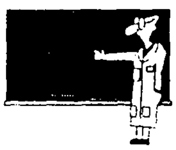
Self test to evaluate your understanding and knowledge of the module.

See pages 44-46

Resources :

CONSULT COMPACT DISK :

Title : Take a World view . . .
The Canadian Trade Commissioner service.



You need a tutor?

Contact DFAIT –Education Marketing Unit
Dr. Gilles Séguin
Tel. : (613) 992-6289
E-mail : gillesseguin@dfait-maeci.gc.ca

Darren Smith
Tel. : (613) 995-5295
E-mail : darren.smith@dfait-maeci.gc.ca

You need help or you want to discuss ?

Join group by chat room

2. INTRODUCTION

Canada's performance in the International Financial Institutions (IFIs) market while certainly credible is still far from satisfactory. Often Canada is on par or slightly above par for every dollar we contribute to IFIs. However Canadian firms consistently achieve a market share of only roughly one per cent of all IFIS-funded procurement contracts. Records also show that as few as 200 Canadian firms - a tiny fraction of Canadian industrial strength- participate in IFIS bids in any given year. In consulting services, the Canadian content per capita is good but in infrastructure we lag far behind. Canadian consultants and consulting firms are proactive and do exceptionally well in this market. On the other hand, goods and equipment suppliers and works contractors are all but absent from it, either because they are unaware of the procurement opportunities or because they consciously choose not to bid. It is therefore vital that Trade officers and Canadian representatives abroad be able to advise Canadian educational exporters on IFIS marketing strategies and formalities in order to strengthen the Canadian market share.

3. THE WORLD BANK AND INTERNATIONAL FINANCIAL INSTITUTIONS (IFIS)

4.1 ECONOMIC DEVELOPMENT AND THE EDUCATION AND TRAINING INDUSTRY

This module is not designed to simply describe the World Bank and other International Financial Institutions (IFIs). It is a practical hands-on guide to identifying opportunities at IFIs and developing successful strategies and proposals to access funds for projects in developing nations related to education and training. This course encourages its participants to develop skills for identifying markets and opportunities early in their development. To successfully achieve this goal, it will be necessary to explain the financial cycle of IFIs, their role, mission and structure. Although all IFIs are distinct entities, the procedures at the World Bank in Washington are fairly well followed by other IFIs. The course will therefore focus on World Bank policies and procedures since almost all of them are followed by other IFIs with several small exceptions. Understanding then how the World Bank operates will serve as a platform for working with the other IFIs. For example, although the African Development Bank (AFDB) and the World Bank are separate entities, each with their own personnel, their policies and tendering rules are very similar. Often even the executing agencies in the same African country are identical. Therefore the same strategic approach for obtaining a contract should be used.

4.1.1 International Niche Markets

In general, Canadian educational and training products and services are of high quality and are in demand in developing countries. Increasingly we are living in a knowledge-based economy and this is certainly excellent news for the training and educational sector. For developing countries to keep up with the rapid pace of innovation and industry, it is essential that these countries have access to state of the art education and training services. Often access to these services is diminished by the capacity of the developing country to pay for such development. This is where the IFIs come in and attempt to ensure a minimum of expertise sharing around the world and paying for donor country expertise. Without such access, the gap between developing and developed countries will widen especially given the nature and rapidity with which the knowledge-based economy develops.

This creates niche markets for Canadian educational and training expertise :

educational systems in need of reform (universities, colleges, vocational training etc) both infrastructure and consulting services in state planned economies, reforms have to be implemented to ensure that these countries adapt to the logic of market economies (privatisation) key human resource development and management training corporate training developing and articulating the relation between employment and education.

The World Bank Report of 1998-9 illustrates the importance of the knowledge-based economy in future development initiatives:

"...developing countries must institute policies that enable them to narrow the knowledge gaps separating poor countries from rich..." **KNOWLEDGE**

"Developing country governments, multi-lateral institutions, non governmental organisations, and the private sector must work together..." **PARTNERSHIPS**

"Recognising that knowledge is at the core of all our development efforts will allow us to discover unexpected solutions..." **INNOVATION**

Clearly the developmental emphasis has changed from huge infrastructure projects in the 70s and 80s to the training and education sector at the turn of the century. This change means that a host of new niche markets are opening for highly educated societies like Canada. For example, corporate training is one of the fastest growing sectors of the Canadian education and training sector - training of bank executives, management education etc. Indeed, Canada already possesses the technical expertise required for these projects and can deliver these products and services at a distance.

As the emphasis changes from building the dams and bridges to their sustainable management by the developing country itself, so grows the training and education market. It has become so important that a training chapter in each IFIs infrastructure bid has become a very positive asset and has tipped the balance in favour of project submissions.

4.1.1.1 The International Financial Institutions(IFIs) regional agenda

In order to identify IFIs niche markets, it is useful to understand the general concerns and issues that have been raised by IFIs and their planners as they relate to different geographic regions of development. In this regard, it would be important to consult the two last World Development Reports 97-98 and 98-99. This is a snapshot in time of IFIs reflection on a host of development priorities and issues. Its publication each year is preceded by intellectual wrangling and debates but the importance of these reports to contracting opportunities and future projects is undeniable. These are of necessity broad generalisations, and each region includes several countries whose experiences are very different. This will give you a flavour of current IFIs thinking. Take for instance the issue of the role of the state in development:

Many countries in *Sub-Saharan Africa* are suffering from a crisis of statehood - a crisis of capability. An urgent priority is to rebuild state effectiveness through an overhaul of public institutions, reassertion of the rule of law, and credible checks on abuse of state power. Where the links between the state, the private sector, and civil society are fragile and underdeveloped, improving the delivery of public and collective services will require closer partnerships with the private sector and civil society.

The capability of the state in most *East Asian* countries cannot be considered a problem. But states' ability to change in response to the new challenges facing the region will plan a critical role in their continued economic success.

The main issue in South Asia is over-regulation, both a cause and an effect of bloated public employment and the surest route to corruption. Regulatory simplification and public enterprise reform, and the resulting contraction of the role of the state, will be complex and politically difficult.

The job of re-orienting the state toward the task of "steering", not "rowing" is far from complete in *Central and Eastern Europe*. But most countries have made progress and are on the way to improving capability and accountability.

Low state capability in many countries of the *Commonwealth of Independent States* is a serious and mounting obstacle to further progress in most areas of economic and social policy. Re-orientation of the state is still at an early stage, and a host of severe problems have emerged from a general lack of accountability and transparency.

In *Latin America*, decentralisation of power and of spending, coupled with democratisation, has dramatically transformed the local political landscape, in what some have called a "quiet revolution". A new model of government is emerging in the region. But greater emphasis is also needed on reform of the legal system, the civil service, and social policies.

In the *Middle East and North Africa*, unemployment is by far the greatest economic and social problem and makes government downsizing especially difficult. Because the political and social difficulties of reform are considerable, although not insurmountable, a promising approach might be to begin decentralising selected services, and focus on reforming state enterprises, while preparing the ground for wider-ranging reforms.

4.1.2 International Co-operation and International Financial Institutions

4.1.2.1 Role of IFIs

IFIs were mostly created after the Second World War and meant to assist developing countries to modernise their economies and move toward a market driven and based economy. They do this by making available funds contributed by donor countries most often to developing nations or public institutions. These loans are subject to negotiation between the IFIs and the recipient countries. This IFIs development plan produces around $20 billion US dollars worth of investment in economic modernisation and betterment of socio-economic conditions. This in turn produces needs for equipment, production tools, engineering services and consultation and a wide range of other activities.

IFIs Political mission, like the Marshall Plan, it is to prevent political and economic dislocation in poorer developing countries. It was conceived at a time of the Cold War combat against communism and socialised economies. In recent years, IFIs have taken a more strategic posture in its policies seeking to facilitate the transition from state controlled and planned economies to market economies with a strong private sector. This process has been speeded up with the end of the Cold War and the advent of reforms in the former Soviet Union. It is not uncommon to see opportunities develop in this area in developing countries such as Jordan which decided to privatise its public utilities thereby creating a host of contracting opportunities for training and engineering companies.

The World Bank Group also provides advisory services to governments on a wide range of issues, such as privatising state-owned enterprises (from the strategic structuring of the sale to implementation) establishing specIFIsc industries, strengthening financial institutions and capital markets, developing modern information systems and promoting sustainable energy development. This work has ranged from the privatisation of state-owned farms in Ukraine and restructuring Mexico's banking system to creating a stock exchange in Zambia.

List of Multi-lateral Development Banks and Their Headquarters :
Six IFIs are the main transmission belts for delivering technical assistance projects around the world. They are multi-lateral international organisations and their administration, structure and financing are a mix of both the public and private sectors.

- World Bank - Washington
- Asian Development Bank - Manila
- African Development Bank - Abidjan
- European Reconstruction and Development Bank - London
- Arab Development Bank - Ryad
- Inter - American Development Bank - Washington

4.1.2.3 Why IFIs?

The principal attractions for business and consultants are :

1. Transparency of Rules - the tendering and procurement process is exceptionally transparent and it provides an even playing field for competing firms.
2. Impartial Appeal Process - the procurement process is based on legal principles with limited and reasonable right to appeal
3. Guarantee of Payment - in convertible currency.

4.1.2.4 Longer term benefits of working with IFIs

Gaining experience in investment projects - learning how to develop successful project submissions based on IFIs criteria and rules will ensure a head start and constitute a tactical advantage for Canada over other competing firms or individuals from other countries. It is important to be able to give clear and useful advice to companies and organisations seeking to do business with IFIs and it is likely that more and more in your career you will be called upon by interested Canadian clients from the Education and

Training sector looking for advice on how to obtain contracts from IFIs. One of the objectives of this module is to arm you with the strategic information that can assist these Canadians in gaining access to this lucrative market.

Market Experience - Often participation in IFIs funded projects will build a solid reputation in the host country abroad and with the IFIs possibly leading to other commercially viable initiatives and projects. Likewise failure or poor performance will often prevent the firm from obtaining other contracts with IFIs.

4.1.2.5 How does an IFIs work, loaning money to developing economies?

IFIs loans are principally financed by securing funds from the capital markets by the sale of bonds or other financial instruments of AAA category. For example International Bank for Reconstruction and Development (IBRD) which accounts for 75% of all World Bank lending, sells AAA rated bonds and debt securities to insurance companies, corporations, other banks, individuals at three-quarters of a percent higher that what IBRD paid for the securities. Thus each dollar obtained by an IFIs can generate more funds and these funds can be loaned to developing countries.

Sometimes the IFIs will have interest-free loans for Least Developed Countries (LDCs) but these types of loans have to be taken from special funds and often have conditions attached to them.

In almost all cases, IFIs loans and credits are directed for the purchase of products and services as per protocols developed with the client country. IFIs personnel are hired on the basis of merit although a rough equilibrium of member countries is often seen as desirable.

Most IFIs practice a policy of transparency in spite of their bureaucratic nature and all publish annual reports and many other documents of public interest. Many of these documents are also accessible on Internet. Moreover this transparency is key and explains why IFIs offer excellent business opportunities for Canadian organisations.

1. project financing is certain
2. the procurement process is well established
3. the complaint process is fair and transparent

Scale of IFIs activities - The World Bank lending generates about 40 000 contracts worth approximately $25 billion annually to firms.

Interamerican Development Bank (IDB) was created in 1959 and is one of the oldest and biggest multi-lateral development Banks. Its goal is to foster and accelerate economic and social development in Latin America. IDB functions are similar to those of other IFIs: loan money to countries seeking to implement priority projects in the field of economic and social development support member country efforts in utilising resources for development purposes and encouraging international trade promote public and private investment in the region provide technical assistance and co-operation to member countries to prepare the financing and execution of development projects.

African Development Bank (AFDB) was created in 1964 by recently independent African countries in order to mobilise their resources and finance their development. Headquartered in Abidjan (Ivory Coast) and with a decidedly Francophone flavour, the AFDB seeks to provide technical and financial resources to its members to stimulate economic growth and development. Sectors targeted are: energy, transportation, water and its treatment, agriculture, education, health and the environment. Structure of the AFDB - African Development Bank, African Development Fund and the Special Nigerian Fund.

The AFDB loans respect market rates while the LDCs procure their financing from the African Development Fund where loans are made at lower rates.

Asian Development Bank (ADB) - Headquartered in Manila (Philippines), ADB loans in 1996 financed US$3.7 billion worth of goods, equipment, civil works and loan-financed consulting contracts tendered by Executing Agencies appointed by the borrowing Asian developing member countries of the Bank. ADB funds about $130 million annually to complete various technical assistance contracts.

The top 10 countries to receive ADB loans in 1996 in order of dollar value were China, Indonesia, India, Pakistan, Philippines, Vietnam, Bangladesh, Thailand, Sri Lanka and Kazakhstan.

Sector by sector analysis - The highest percentage of ADB loan-financed contracts were awarded in the Transport and Communication sector (27%) and the Energy sector

(26%). Agriculture with (15%), Social Infrastructure and Industry (20%). Financial and Multisector (12%).

European Bank for Reconstruction and Development (EBRD)
Headquartered in London, EBRD was established in 1991 and covers over 26 countries in Central and Eastern Europe. EBRD fosters the transition of former Soviet Bloc countries towards market economies, promotes private sector and entrepreneurial activities in these countries.

4.1.2.6 How were these contracts awarded?
On the basis of International Competitive Bidding (ICB) (64%). Other modes included local competitive bidding (17%); direct or single source tenders for purchasing (7%) and other (limited tenders, international shopping) 12%.

The World Bank Group is a family of international development agencies that provides financing and advice to support developing and emerging economies. Almost every country in the world is a member of the World Bank Group organisations. The World Bank Group has over 100 offices in 75 countries.

The World Bank was created in 1945 and was originally called the International Bank for Reconstruction and Development. Since 1960, the World Bank Group includes the International Bank for Reconstruction and Development and the International Development Association (IDA).

International Bank for Reconstruction and Development (IBRD) - extends loans directly to middle-income developing country governments or to enterprises and other entities with the guarantee of the government concerned. IBRD finances its lending operations primarily through borrowing in the world markets.

International Development Association (IDA) - finances projects in the poorest countries aimed at improving living standards and achieving faster environmentally sustainable growth by making credit available to them on concessionary terms. Most IDA resources come from voluntary contributions from its wealthier member country governments.

Trends at World Bank lean towards ***IDA-IBRD*** co-financing with funds from other sources such as governments, commercial banks, export-credit agencies, and other multi-lateral institutions

Three other institutions form part of the World Bank Group an addition to IBRD and IDA. They are International Finance Corporation ***(IFC)*** and the Multi-lateral Investment Guarantee Agency ***(MIGA)*** and the International Centre for the Settlement of Investment Disputes ***(ICSID).***

International Finance Corporation (IFC) - was created in 1956 with the objective of fostering the growth of the private sector in developing countries. Whilst the World Bank loans money to public institutions the IFC can deal directly with the private sector, with entrepreneurs, companies, and financial institutions in developed and developing countries interested in starting ventures or expanding an existing business. IFC does not require government guarantees of repayment. IFC can provide equity and debt financing, mobilises capital, provides financial and technical advisory services.

Multi-lateral Investment Guarantee Agency (MIGA) was established in 1988 to encourage direct foreign investment in developing countries. Its creation was in reaction to the debt crisis of the 1980s. How does it do this?

Investors

Provision of investment guarantees (insurance) to private investors against the risks of transfer restriction, expropriation, breach of contract, war or civil unrest in the host country. In a word, it covers non commercial risks and adds a measure of financial security into international development projects.

Host Government

Provision of technical assistance to host governments to enhance their ability to attract foreign investment.

International Centre for the Settlement of Investment Disputes (ICSID) **-** fosters the expansion of international investments by offering conciliation and arbitration services as a means for resolving conflicts between States and foreign investors.

More information on the World Bank can be found at the appendix 1.

4.2 INTERNATIONAL FINANCIAL INSTITUTIONS (IFIs)

4.2.1 World Bank and the Strategic Compact

The Strategic Compact is an important reform and renewal effort made by the World Bank and IFIs to streamline the way it deals with business - improving its products, speeding up the processes, lowering its costs and increasing its development impact. When dealing with IFIs officials it is important to know the main thrust of this policy. There are four main components of the Strategic Compact :

- refuelling current business activities
- refocusing the development agenda
- retooling the Bank's knowledge base
- revamping institutional priorities

More particularly, this means shifting resources to front line operations, developing a new range of financial products and advisory services, rebuilding technical expertise, decentralising activities to the field and creating new partnerships with other organisations.

4.2.1.1 What does Globalisation mean for IFIs?

The IFIs position can be summed up as follows :
"Globalisation is a threat to weak or capriciously governed states. But it also opens the way for effective disciplined states to foster development and economies well-being." (See the World Development Report 97-98).

It is important to advise Canadian clients on current trends in IFIs thinking since this will have a direct impact on how to apply for contracts, responding to modified submission criteria and what the thinking is behind their existence. Nowhere is this more evident than the IFIs policies with respect to Globalisation and the role of the state in development issues. IFIs have two main priorities:

a) embracing external competition - the global economy tightens constraints on arbitrary state action, reduces the state's ability to tax capital and brings much closer financial market scrutiny of monetary and fiscal policies.

b) promoting global collective action - ex. global warming crisis, managing regional crises, promoting global economic stability, protecting the environment, fostering basic research and the production of knowledge, making international development assistance more efficient.

4.2.1.2 Removing obstacles to state reform

a) Changes in macroeconomic policies in response to internal and external pressures - reforms affecting exchange rates, fiscal policy, trade policy, reforms that can be undertaken quickly without public dialogue by a small competent group of technocrats International Monetary Fund (IMF).

b) Reforms dealing with regulation, social services , finance, infrastructure and public works involve lengthier institutional change to create capable state institutions free of corruption. These reforms often take place as a result of an economic crisis or an external threat and one thinks of the Eastern European example. Benefits of reforms are often in future, whereas losses are immediate.

c) It is necessary to sustain reforms and good leaders, inclusive reforms, including compensation for those adversely affected by reforms ex. Benin's National Economic Conference

International agencies (IFIs) can encourage and help sustain reform in 4 ways.

- Provide important timely technical advice on what to do and not to do adapt reforms to local conditions and institutions
- Provision of multidisciplinary experts
- Financial assistance until the benefit of reforms is felt
- Provide a mechanism for countries to make external commitments. - join in collective global action

The World Development Report is published annually and constitutes the best policy document the Bank . Often, it will indicate where the Bank thinking is going. Clearly, these views, often the object of ongoing discussion and polemics within the World Bank Group itself, have an enormous impact on project identification priorities. As such, it constitutes one of the best IFIs policy indicators and a key element in our market research.

Role of the state in development issues - what its role should be? What it can and cannot do and how best to do it in the context of the promotion of development? This question has been highlighted by 4 recent developments - collapse of command and control economies in former Soviet Union and East Europe, fiscal crisis of the welfare state in established industrial countries, important role of the state in miracle economies of East Asia (recent events are calling this observation into question) collapse of states and explosion of humanitarian emergencies in several parts of the world.

Conclusion - the state is central to economic and social development, **not as a direct provider of growth but as a partner, catalyst and facilitator**. Post-war confidence in government bred demands for it to do more. Industrial economies expanded the welfare state, and much of the developing world embraced state-dominated development strategies.

4.2.1.3 Was has changed since then?

Global integration of economies and spread of democracy have narrowed the scope for arbitrary and capricious behaviour standardisation and universalization of taxes, investment rules (WTO) and economic policies technological change has opened up a larger role for markets (digital revolution) this World Bank document seeks to narrow the growing gap between demands on states and their capability to meet those demands.

IFIs Role

Getting societies to accept a re-definition of state's responsibilities, strategic selection of collective actions that states will try to promote, greater involvement of citizens and communities in delivery of core collective goods (enhancement of private sector).

However reducing or diluting the state's role is not the end of the reform story especially since governments play a lynch pin role in the approval and elaboration of IFIs projects matching the state's role to its capability raise capability by reinvigorating public institutions - rules and restraints to check arbitrary state action and combat entrenched corruption - bringing government closer to the people, subjecting state institutions to greater competition to increase efficiency.

Matching role to capability (5 points plan)

- Establishing a foundation of law

- Maintaining a non distortionary policy environment, including macroeconomic stability
- Investing in basic social services and infrastructure
- Protecting the vulnerable
- Protecting the environment

State need not be the only provider

Governments are beginning to separate the financing of infrastructure and services from its delivery, to unbundle the competitive segments of utility markets from the monopoly segments (ex. hydro-electric power) dismantling of the welfare state. World Bank Answer "Well-designed regulatory systems can help societies influence market outcomes for public ends. Regulation can help protect consumers, workers and the environment. It can foster competition and innovation while constraining the abuse of monopoly power."

Managing Privatisation

It is easier to sell off state assets once a supportive environment for private sector development is in place, 4 points to encourage: transparency of process, winning support of employees, generating broad based ownership and instituting appropriate regulatory reform - key is careful management of the privatisation process.

Reinvigorating State Institutions: reinvigorate the state's capacity by providing incentives for public officials to perform better while keeping arbitrary action in check. How?

- Effective rules and restraints
- Greater competitive pressure
- Increased citizen voice plus partnership accountability.

Policies that lower controls on foreign trade remove entry barriers for private industry, and privatise state firms in a way that ensures competition.

However reforms that open opportunities for private entry into closed sectors of the economy, by that leave entry to the discretion of public officials rather than establishing an open and competitive processes.

Subjecting the state to more competition - boosting competition within civil service (merit principle), more competition in the provision of public goods and services (competitive bids, incentives, output based contracts) CIDA results based management.

Bringing state closer to people: ballot box - government must develop mechanisms to listen civil society getting genuinely representative intermediary organisations on policy making councils.

For further IFIs sector policy documents, you should consult the sector policy paper series on education. These papers are available from the World Bank Info Shop.

4.2.2 IFIs Services, Products and Infrastructure Contracts

4.2.2.1 What types of business opportunities arise from world bank-assisted projects

The wide variety of projects involved provides a broad scope of opportunities, which range in value from a few to several millions of dollars.

For procurement of goods: vehicles, machinery, tractors, farm implements, fertiliser, transport equipment, electrical machinery and plants, industrial facilities, mining equipment, hardware, telecommunications systems, satellite communication systems, school textbooks, furniture, spare parts and raw materials.

For procurement of civil works: construction of ports, highways, schools, hospitals, housing, railways, bridges, irrigation works, water supply and sewerage facilities, and power plants.

For procurement of services: design and feasibility studies, supervision of installation and construction, environmental assessment studies, monitoring of management activities, aerial photography and mapping, oil and gas exploration, financial services, and auditing assistance

Public Notification : for each project, a General Procurement Notice (GPN) will appear in the United Nations publication «Development Business» which appears twice monthly

- **Newspaper ads, trade journals and the IFIs itself** can distribute GPNs to commercial " attachés " - Borrowers are required to keep information on those who express interest in bidding

- **Currency of Bid** : this is left up to bidders themselves, but if they want to break the bid price in more than one foreign currency, then the limit is three(3).

  Sometimes borrowers will require bidders to use local currency but for the purposes of comparing prices, bid prices will be converted to a single currency as stated in the bidding documents ($US).

- **Payments :** important point - Successful bidders are entitled to receive payments in the currencies of their bid, thereby minimising exposure to currency fluctuations.

- **Language** : English, French or Spanish, the idea being to obtain international visibility.

- **Public Bid Opening :** all bids will be opened and read aloud in presence of bidders or their representatives - there is no ensuing discussion and all bids are final after the public opening.

- **Contracts** are awarded to the lowest evaluated responsive bidder (although with margin of preference for local goods and services) regardless of nationality ex.: manufactured goods with a minimum of 30% domestic content are afforded a margin of preference equal to the applicable customs and import tariff, or 15% of cost. Civil works require a margin of 7.5% domestic content.

Note that the lowest evaluated bid may not be the lowest priced bid

Is pre-qualification required before bidding ? Yes, on major civil works or for large, complex industrial facilities. **Why ?** To invite bids from only those companies **capable** of undertaking the work.

- Bidders are **not normally required to provide financing** with their bid and, even if offered, financing arrangements cannot be considered in bid evaluation. Moreover, there is no quota system linking award of contracts to the size of contributions or share of membership by a country in the Bank.

What if there is only one bid ? Maybe bid criteria are too restrictive and should be changed or if bid is indeed responsive and quoted prices are reasonable, it can be upheld.

Other forms of procurement - When the purchase is small, goods/services urgently needed the IFIs can proceed with other forms of procurement.

Limited International Bidding - Suppliers or contractors participate by invitation - no advertisement

National Competitive Bidding - When type of work or goods is unlikely to attract foreign competition

International and local shopping - Used for purchasing low-value, off the shelf items.

Direct purchase - Limited number of suppliers, single sourced

Is IFIs procurement just for large companies?

Answer : Many contracts for goods, works and services are won by relatively small and middle-sized enterprises. Ex. companies that win major contracts often sub-contract to smaller companies ex.: a school building contractor might contract out plumbing and or wiring contracts for computers etc..

Consulting services - Points to remember
The procedures for selecting consultants differ from those for procuring goods and works. The major emphasis is not on cost, but on high quality, technically responsible performance and good results.

- Through competition among qualified short-listed firms in which the selection is based on the quality of the proposal and on the cost of services to be provided (Quality and Cost-Based Selection, QCBS).

- Information on the nature of required consulting services, timing, cost, staff-month will be included in the Project Information Document (PID) - preparation phase.

- Selection: as with procurement of goods and works, the consultant selection process is the borrower's responsibility although Bank must ensure that process is fair and that the host government body chooses a firm or individual capable of delivering the work.

- Consultants from any Member countries are eligible.

How are consultants chosen?
Borrower prepares a description of the assignment (Term of Reference - TORs), a budget and a selection process (QCBS), prepares a short list of firms and the Request for Proposals (RPF).

Short list should contain not more than 6 firms reflecting competence and diversity, no more than two firms from one country and one from a developing country.

The borrower then evaluates the proposals, negotiates the selected proposal and terms of contract - all this to be reviewed by the Bank.

Single sourcing must be in the interest of the proposal and reviewed by Bank.

4.2.3 Role of Canadian Organisations and Small Business

IFIs offer opportunities for all types of Canadian organisations and this is reflected in the IFIs literature - private sector firms, non-governmental organisations, educational institutions, vocational colleges etc. Despite the volume and amounts of funds at the disposal of IFIs, small organisations with flexible and adaptable management and specific expertise can easily compete and win IFIs contracts. It is not necessary for the firm to be in the lead role of a huge infrastructure project. Many sub-contracts of considerable value can be obtained by organisations seeking to partner with bigger organisations. For this, it is necessary to publicise themselves on the world stage and to offer partnerships to bidding firms who can enhance their own chances of success by adding on a key education and training component, a component that has increased in value and importance with the advent of the knowledge-based economy.

Officers have to keep in mind however that IFIs and Canadian Internet Development Agency (CIDA) are different organisations although they are both involved in international co-operation and development. Here is a short list of these differences: in terms of volume of business, the IFIs are many times larger than CIDA the procurement processes are different although equally transparent daily consulting rates are not the same, another reason why Canadian organisations should look to IFIs as a possible source of business IFIs have some specific regional mandates (ADB, IDB etc) distinct from those dictated by Canadian interest abroad

4.2.3.1 Canadian Consultant Trust Fund

It is important to advise your clients particularly those interested in consulting positions or in the midst of developing IFIs projects that the Canadian Government through CIDA has made available trust funds at IFIs for Canadian consultants. These funds are reserved for Canadian consultants engaged in identifying, preparing and implementing IFIs projects. Funds are made available on a sectoral basis so it is important for consultants to check with the IFIs and OLIFIS liaison officers in the field to see whether their field of expertise is covered. For example, at the AFDB, the Trust Fund is targeted for activities in the environment, infrastructure services (including telecommunications, transport, energy) and health services. Education and Training are not always eligible for Trust Fund support.

4.3 INTERNATIONAL BUSINESS OPPORTUNITIES

4.3.1 Prospecting Strategies

4.3.3.1 Which project is right for me?

Geographical considerations are important since many IFIs opportunities are conditioned by the past performance of countries with IFIs and a host of other factors. In choosing a country, you obviously want to make an informed choice, You also want to ensure that the World Bank Group believes that the country is stable, well led and that the economy is reliable. The host government plays an important role in the development and even financing of the project. It participates in the procurement process as well. Several strategic criteria should be looked at when choosing a country for an IFIs project.

Annual income per inhabitant - if it is too low this may impede any structural aid and many LDCs offer reduced opportunities for contracts political system - this is a key factor since it affects the solidity of the social order. Political uncertainty may cause your project to become untenable or unrealisable. Since the host government and their ministries play an essential role in deciding upon and delivering projects, political stability and usually some form of democratic participatory rule or a transition to the same are required

Resources - minimal resources are required locally to base a project i.e., telecommunications infrastructure

Poverty - LDCs may require a different and more elementary form of aid than the expertise of your firm

Economic Planning - The IFIs authorities are particularly conscious of the importance of this factor since IFIs have regional strategies and do not support projects that are not part of a larger sustainable development plan IFIs Performance - given the importance of the host political and economic authorities, this is a key component. IFIs publications and policy papers can be consulted to verify developing trends.

Results - poor country performance will result in fewer IFIs projects and poor project performance by an executing agency usually results in a moratorium of about five years on new project submissions.

Issues to be addressed - developing countries and regions progress at different rates and in an uneven fashion. Depending on the country and region, some specific issues could play a very important role such as the level of connectivity (access to Internet) in the case of information technology projects.

4.3.1.2 How do you know what standing a country enjoys with the IFIs?
The answer can be found by consulting Bank PIDs and sector and country reports.

This preliminary market research can be quite inexpensive and a lot of it can be done on the web, telephone calls, faxes, visits to regional offices, letters, E-mails.

The choice of sector is also important and relates primarily to your individual tastes and competency, or to that of your firm. Often your firm has overseas partners perhaps even working in the country of your choice. Partnerships are key in successful projects funded by IFIs so you should realise that often you or even your individual firm cannot do everything. Partnerships are inevitable.

You should also give some thought to the type of activity you want to undertake with an IFIs. One should keep in mind that the service sector has less funds than the products-equipment-infrastructure sector. Most educational professionals are best adapted to perform consulting contracts although for engineers and some types of professionals procurement contracts can be of great interest.

Rough Breakdown 60% equipment procurement, 30% infrastructure, 10% consulting services.

You may also want to keep in mind that IFIs do not authorise loans :

- For the purchase of military equipment
- For the purchase of luxury items
- For nuclear energy (although the European Economic Reconstruction Bank has looked at projects for former Eastern European nations seeking to increase safety procedures in the nuclear energy field

After you have narrowed down where you want to concentrate your efforts and in which sector, what do we do now? One idea is to turn to the DFAIT IFInet to look at what is available.

4.3.1.3 Marketing Tips

Keep in mind that an **IFIs** contract should be part of a broader marketing strategy to develop a market in a specific country or region and not be an end in itself.

Do not forget! the most important point to understand is that the Executing Agency, acting on behalf of the borrowing country, is responsible for the implementation of a specific project, including its tendering and bid procedures. In a word, ***the Executing Agency (not the IFIS itself) is the " CLIENT ". This is the single most important marketing relation.***

An example :

Profile of a Successful Infrastructure firm at the Asian Development Bank. It possesses:

- A strong local image
- Has a strong local or regional partner
- Markets itself successfully with EAs and local governments
- Understands ADB Project cycle and issues
- Obtains early market intelligence
- Focuses on specifics sectors and often a limited number of countries
- Fully complies with tendering process
- Delivers on time
- Strong after-sales service and training
- Very competitive pricing
- Understands how to do business in the country and in the region

For example in Asia, a large number of goods and equipment procured by the ADB are not marketed or sold directly by national firms. The goods were sold to successful Asian experienced major infrastructure firms. This situation offers an excellent approach to selling your goods and equipment into Asia's infrastructure projects. The ADB encourages this by listing the pre-qualified contractors for a specific project in its ADB Home Page under its ADB Business Opportunities section. Interested suppliers can then follow up with the pre-qualified contractors.

4.3.1.4 Obtaining Early Market Intelligence

If a firm waits until the tenders are issued called specific Procurement Notice, their chances of success are reduced. You must have regular communications with interested infrastructure firms and contacts at government agencies in the borrowing country. Plus regular contact with IFIs project officers responsible for a project and diplomatic staff (commercial attachés).

Determine which major infrastructure firms are interested in bidding on the project and which firm has the best chance of winning.

Apart from making sure your bids and proposals are technically sound, clearly written and explicitly responsive to all TORS, site visits and discussions with IFIs project officers and Environmental Assessment or Executive Agency (EA) staff are indispensable steps to success. The firm should indicate their specific interest in the project when requesting an appointment. Also meet local general managers of major infrastructure firms.

As we have seen, an inexpensive route to winning ADB contracts is sub-contracting to successful infrastructure firms.

These infrastructure firms operate in expensive currencies i.e. yen, German mark (ECU), US dollar. In bidding for ADB loan financed contracts, they must source various project components and services from other ADB member countries with favourable exchange rates like Canada. Some proposals must have 30% favourable currency content for their bids to be competitive. This fact gives Canadian firms another advantage since their participation in a project can reduce its overall cost.

4.3.1.5 A successful sub-contracting approach

- Monitor all IFIs opportunities on a weekly or monthly basis with IFInet and the bi-monthly UN Development Business.
- Determine which projects will require your products and services.
- One of your sales executives should contact infrastructure firms to express their interest to supply.
- Send to firm technical specifications and prices and follow up.
- A sales executive tries to get its equipment and services included on as many submitted bids as possible to increase odds of winning.

Increasingly Email messaging is an effective communication tool with IFIs project officers. Cold calls are not very effective and experience has demonstrated that meetings with the one or two key officers concerned with a project are more effective than a whole list of appointments covering many who are marginally involved. At this stage of the marketing effort, an organisation will likely have to pay for a liaison visit to the IFIS.

4.3.2 The Importance of Partnerships

Since the volume of IFIs contracts is very large, often Canadian organisations must partner or link up with other organisations to bid on a project. It is certainly the case if you are a highly specialised firm with strong staff resumes. The strength of the human resources component is very important in deciding which consortium or firm gets the contract. With the advent of the knowledge-based economy, the role of partnerships has grown in importance since highly specialised types of expertise are required to successfully develop and carry out projects. It is unlikely to find one organisation that possesses all of the requisite capacity to carry out a project. Partnerships are almost always necessary.

4.3.2.1 How do partnerships work in IFIs contracting?

once you find a project in early stages of development (see UN Development Business, Sector and Policy Papers, IFInet and other sources), it is important to orient your research towards finding out which firms are intending on applying for the project. Usually the IFIs has a short list of firms. Find out who the project manager is at the IFIs and discuss the issue with them or if possible, visit them. Make contact with the executing agency in the host country by telephone, fax or better still visit them if feasible.

Contact the firm of your choice (it may not be a Canadian firm) and announce your interest in the project and in developing a partnership with them to bid on a project. Education and training sector specialisation can enhance the bidder's position and perhaps give them a competitive advantage over other bids. Also since most IFIS submissions are based on the US dollar, Canadian firms can actually lower the cost of some international bids and increase their chances of success.

Sign an Agreement with the firm describing your role in the bidding process and staking your claim to a part of the project activities germane to your sector capabilities.

4.3.3 The Project Cycle

There are many opportunities for work at IFIs but they usually fall into two groups: Procurement and Consulting Opportunities. Both are of interest to us. Each IFIs project can involve, for its implementation, a few to hundreds of separate contracts or export business opportunities for suppliers world wide. Some 40 000 contracts are awarded annually (70% goods & equipment, 20% civil works, 10% consulting services). Small and medium sized companies, as well as large ones, can profit from business generated by the World Bank.

For our purposes, Procurement and Consulting Services are subject to the same procedures and can be tracked in the same way through the **PROJECT CYCLE**.

What is the Project Cycle? It is a process of project identification, preparation, appraisal, implementation, supervision and post-evaluation.

It should be remembered that the borrowing country (Executing Agency - EA) maintains full responsibility for the design, preparation and implementation of each of its individual projects.

4.3.3.1 How does an interested company submit a bid?

When a firm learns that procurement is about to occur, it should write to, or have a representative or agent visit the borrower and ask to receive the bidding documents as soon as they are available. There is a nominal fee for the documents.

After a firm receives the bidding document, it should carefully examine the provisions and requirements to decide whether it can submit a competitive responsive bid.

By following where each project is in the cycle and understanding what takes place during each stage , consultants, civil works contractors, and suppliers can identify business opportunities and develop successful marketing plans.

Construction activities, equipment and supplies are generally purchased during the implementation stage. The bidding process typically begins at the preparation stage. Consulting services are procured at almost every stage in the project cycle, but the need occurs more often in the preparation and implementation stages, when consultants may be used by borrowers, or future borrowers - to begin the identification and preparation of projects, to draft bidding documents, to supervise procurement and contract execution, or to provide other technical assistance.

Borrowing countries should be contacted during the project identification stage to express an interest in supplying goods, works or services for a specific project.

WHAT GOODS AND SERVICES WILL BE REQUIRED ? WHEN ? AND WHAT ARE BID SUBMISSION RULES ?

4.3.3.2 Steps in the Project Cycle

1st phase - undertaken based on country economic and sector work at Bank, sometimes re-inforced with non-Bank expert studies.

a) Identification

- Although only governments can propose projects for World Bank assistance, identification can come from several sources - Bank sponsored identification missions, other multi-lateral development agencies and sometimes even private sponsors. By cultivating contacts at the IFIs in your specific area of interest, it is possible to know when and if Bank missions are being planned in certain sectors to certain countries.
- The borrowing country and the Bank have to agree on project objectives for it to be included in the Bank's multi-year lending programme.

A list of all identified projects is published in the United Nations - *Development Business: World Bank Monthly Operational Summary.* This key publication is available on a bi-monthly basis and costs $495US per year. This is an excellent investment since it contains timely information on IFIs and United Nations projects. This report contains Monthly Operational Summaries (MOS), a monthly report listing all of the projects being considered for financing by the World Bank. The MOS tracks projects from the point when the World Bank begins identifying them. Procurement Notices are also posted as invitations to bid/pre-qualify and submit proposals to supply goods, works and services. Contract Awards are also posted and this information is most important for sub-contractors seeking additional work. The MOS is essential for allowing one to identify early on the opportunity and to capitalise on it.

b) Preparation

- Development of an identified idea into a detailed proposal considering all its aspects economic, financial, social, environmental and institutional.

- Best method of achieving project's objectives on basis of their relative costs and benefits.
- Project preparation rests primarily with the borrowing country although Bank officials can provide assistance and has an abiding interest to do so. At this stage, consultants can be hired by the borrowing country to assist with feasibility studies, design analysis, environmental impact assessments, etc...

- IFIs officials frequently help arrange financing for consulting services at this stage. (Project Preparation Facility).

c) Appraisal

- After project preparation has been completed by the borrower, the Bank reviews the proposal (technical, economic, financial and institutional aspects). Bank staff is involved and led by a Task Team Leader sometimes supplemented by external consultants.
- The financing plan is examined to ensure that cost estimates are realistic and that sufficient funds are available to complete the project (like co-financing from commercial banks, export credit institutions, regional development banks, bilateral aid agencies).
- All this is outlined in a (PAD) Project Appraisal document.
- At this stage, bidding documents are normally prepared.

d) Negotiations and Board approval

After the appraisal document is issued and reviewed, formal loan negotiations take place between the Bank and the borrower. Remember that at this time, the Canadian client's marketing effort should already be well advanced.

- Project implementation schedules, procurement arrangements in short, the conditions necessary to ensure the project's success are now finalised.

- These loan documents are then submitted to the Executive Directors of the World Bank for approval - once signed, it becomes a legal obligation.

e) Implementation and Supervision

This activity is the responsibility of the borrower, as is procurement of goods and services. Though the World Bank is not a party to any procurement contract, procurement procedures as reflected in the loan's legal documents must be followed before funds may be disbursed - to ensure fairness and transparency.

Post- Evaluation. After project completion and when the loan is fully disbursed, the Bank undertakes an independent evaluation comparing actual with expected results and applies lessons learned to other projects (clue to future business opportunities).

Project Timetable is a dynamic ongoing process between IFIs and borrower. The time period can vary but generally this takes between 1 - 2 years from the time a prospective project is first identified until a loan is approved.

4.3.3.3 Procurement and consulting

Key point

The borrower, not the Bank, is always responsible for procurement and therefore part of your marketing efforts will inevitably focus on the EA, that is the borrower. The IFIs is not responsible for paying you and your contract negotiations will be held with the borrower not the IFIs.

Who is the borrower ? Typically a government Ministry or public utility.

What is procurement ? The borrower sets up procurement schedule, publishes the advertisement, evaluates the bids, awards and manages the contract, including payments.

Project Cycle - Consulting Opportunities

In the early stage of project preparation, consultants may be required to prepare feasibility studies, environmental assessments, engineering and project design, and cost estimates. During the implementation phase, consulting services are frequently necessary to prepare bidding documents, evaluate bids, and supervise construction and installation. Consultants are also used to conduct studies in marketing, distribution, export opportunities, plans and strategies and investment feasibility studies for follow on projects and to provide all types of training needed by the borrower. ***Depending on the***

sector of activity, it may be in your interest to call on the Canadian Consultant Trust Fund at the IFIs in question.

IFIs and Consulting Firms (Dacon)

- The World Bank and IFIs maintain a computerised database of firms interested in working on Bank-assisted projects to assess qualifications of consulting firms proposed by borrowers and to assist borrowers in developing short lists.
- DACON registration (on CD Rom and used by other international organisations ICO, IADB, EBRD, UNDP) is free and open for firms with more than 5 permanent professional staff and with experience on more than ten assignments exceeding $100 000US or 10% of their annual fee, whichever is lowest.
- DACON CD Rom Directory - for sale to consultants wishing to associate with registered firms, purchased from World Bank Publication Order Desk,, Telephone: (703) 661-1580 or fax (703) 661-1501. This may be useful for sub-contracting portions of consultancy contracts.
- Individuals can register by sending their CVs by mail to the Recruitment Unit of World Bank DACON REGISTRATION (How?) by completing a registration diskette, available by down load from Banks Website - then send electronically to cdejesus@worldbank.org.

Conflict of interest - if a consulting firm accepts a contract to provide services on a project, can it bid to supply goods?

Answer - **NO**

Role of IFIS in procurement

1. Provides financing from its loans for the contracts. To ensure transparent procurement procedures are respected according to Bank's Guidelines: ***Procurement under IBRD Loans and IDA Credits publication***
    - The bidding documents must include evaluation criteria, conditions, description of goods and services required - bidding documents have to be made available to those who ask for them and pay the borrower's fees.
    - Look at Bank's Standard Bidding Documents (SBDs) to be used by borrowers. Reading these can accelerate the process.
    - Bank must insure the fulfilment of 4 conditions during procurement :

- Transparency
- Encourage local contractors and manufacturers in borrowing countries
- Give all qualified bidders from the Bank's eligible countries an equal opportunity to compete
- Ensure loan is used to buy only those goods and services needed to carry out the project.

Procurement is usually done through the international competitive bidding process (ICB) with a margin of preference being given to local providers of goods and services.

Is ICB the same for goods and civil works? Bidding is similar except that when civil works are bought, price and completion period may be considered. With goods, other technical factors may be considered in addition to price, like after sales service, fuel efficiency, maintainability and capacity.

4.3.4 Ten Pillars of Success

A successful firm (or Consultant) will have :

- strong local image;
- strong and reliable local partner;
- uses ingenuity and innovative marketing techniques coupled with determination;
- understands fully the IFIs Project Cycle;
- obtains early market intelligence;
- focuses on specific sectors;
- strong after-sales service and training;
- delivers the services and or products on time;
- very competitive pricing;
- knows how to do business abroad in the region and country.

4.3.5 Market Research Tools

4.3.5.1 World Bank Documents and reports

Project Information Documents (PIDs) give a brief summary of an evolving project and are subject to periodic update, as project preparation proceeds (full texts available on World Wide Web)

Staff Appraisal Reports (SARs) - contain a project description and the plan for its implementation including procurement procedures (Abstracts available on Bank's web site)

Economic and sector reports (probably a good starting place to investigate markets). They contain macroeconomic analysis of a country its economy and its major sectors - issues such as poverty assessment, private sector investment and public expenditures are addressed (Abstracts available on the web).

Sector Policy Papers (also a good starting point) present reviews of major issues relevant to a specific economic sector and give broad guidelines on the Bank's policy for assistance to that sector (Abstracts available on the web).

Environment Assessments (EA) detailed studies required for projects likely to have a significant impact on the environment. These documents are available before the final appraisal of the viability of a project (Abstracts available on the web)

Environmental Data Sheets (EDS) prepared for every project and updated quarterly - give summary information on expected areas of environmental impact of a proposed project (full texts available on the Web)

International Financial Corporation (IFC) Documents
Summaries of Project Information (SPIs) factual summary of main project elements (full text available on the Web).

IFC Reports
IFC country, region, sector and other reports on private sector development (title and abstract available on the web).

Environmental Review
Summaries present key findings of studies carried out for projects that may result in specific environmental impacts and require adherence to pre-determined standards (full texts available on the web).

Environmental Assessments Studies (Eas)
Studies required for projects that may result in diverse and significant environmental impacts (titles available on the web).

Project Information Documents (PID) can be found free of charge through the World Wide Web. Web users accessing WB info through NCSA Mosaic Netscape or other World Wide Web navigator tools should go to :

http://www.worldbank.org

For internet users : access the World Bank's information through a "gopher" should use the following address : gopher.worldbank.org
If difficulties, E-mail to : pic@worldbank.org

There is also:

The World Bank Group
1818 H St., N.W.
Washington, D.C. 20433
Tel: (202)458-5454
Fax: (202)522-2500

or

The World Bank
Public Reading Room
1776 G St., N.W.
Washington, D.C. 20433
Entrance from 18th St., N.W.

An example of regional IFIs :
With respect to the regional IFIs, let us quickly review some of the key publications and sources of information available. The example of the Asian Development Bank (ADB) is reflected in other IFIs and here is a short list of what can be found. The ADB offers the following publications to assist firms in becoming better informed about its procurement opportunities and processes:

1. «Guidelines to Procurement Under ADB Loans» a free publication;

2. Handbook on Policies, Practices and Procedures Relating to Procurement Under ADB Loan, a free publication;

3. «ADB Business Opportunities» found on the ADB Home Page which lists a summary information on upcoming loan projects, pre-qualified contractors, and procurement notices. The Home Page address is http://www.asiandevbank.org

4. For those who do not have access to the internet, the monthly publication «ADB Business Opportunities» can be subscribed to for a yearly fee of US $100;

5. «ADB Annual Report» a free report;

To obtain these above publications write to :

Information Office
Asian Development Bank
P.O. Box No. 0980
Manila, Philippines
Fax (63-2)636-2641 / 636-2640

5. SELF TEST

QUESTIONS

1. What is the Strategic Contact and name three major internal reforms in the IFIs operations and how they affect issues of consulting and procurement?

2. Where do IFIs get their money to lend to developing countries?

3. What is DACON and describe its role for Canadian consultants?

4. What is the Canadian Consultant Trust Fund and how does it work?

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5. At what point in the project cycle should your marketing efforts begin and at what point should they become intensive?

____

____

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____

____

6. Name four (4) International Financial Institutions, their headquarters and Email addresses. How does an IFIS differ from CIDA and its operations?

- ______________________________
- ______________________________
- ______________________________
- ______________________________

7. Name five sources of project information research, two of which should be electronic.

- ______________________________
- ______________________________
- ______________________________
- ______________________________
- ______________________________

8. You are the IFIS officer responsible for a project. Name five key factors that are of interest to you in the country economic report.

- ______________________
- ______________________
- ______________________
- ______________________
- ______________________

9. What is the role of DFAIT's IFIS liaison officers?

____

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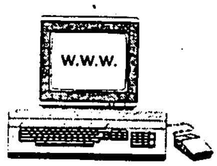
____

____

10. Your lobbying and marketing efforts should concentrate mainly on :
    a) the IFIs
    b) the borrower
    c) the Executing Agency
    d) all of the above
    e) only b and c

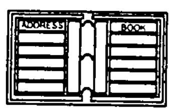
6. REFERENCES

Websites, URL :



The World Bank Group	http://www.worldbank.org
European Reconstruction and Development Bank	http//www.ebrd.com
African Development Bank	http//www.afdb.org
Internatinal Financial Corporation	http://www.ifc.org
Multilateral Investment Guarantee Agency	http://www.miga.org
Asian Development Bank	http://www.asiandevbank.org

Some Addresses :



THE WORLD BANK
The World Bank Group Contact Information and Addresses
Sectorial contacts, Washington, D.C.
For information on specific sectors, please contact:
pic@worldbank.org
dacon registration: cdejesus@worldbank.org

INSTITUTION	TELEPHONE	FAX
AGRICULTURE/AGRIBUSINESS		
Alexander McCalla, World Bank	(202) 458-5028	(202) 522-3307
Tei Mante, IFC	(202) 473-0558	(202) 974-4336

INSTITUTION	TELEPHONE	FAX
CAPITAL MARKETS		
Julio Lastres, IFC	(202) 473-8854	(202) 974-4374
CHEMICALS, PETROCHEMICALS & FERTILIZERS		
Jean-Philippe Halphen, IFC	(202) 473-0573	(202) 974-4325
ENERGY/OIL/GAS		
Henri Bretaudeau, World Bank	(202) 473-3412	(202) 676-9245
ENVIRONMENT		
Ken Newcombe, World Bank	(202) 473-6010	(202) 477-0565
Andreas Raczynski, IFC	(202) 473-0634	(202) 974-4351
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Irving Kuczynski IFC	(202) 473-7750	(202) 676-9706
HUMAN DEVELOPMENT		
David De Ferranti, World Bank	(202) 473-8729	(202) 522-3235
EDUCATION		
Maris O'Rourke, World Bank	(202) 473-7096	(202) 522-3233
HEALTH, NUTRITION, POPULATION		
Richard Feachem, World Bank	(202) 473-0632	(202) 522-3234
SOCIAL PROTECTION		
Robert Holzmann, World Bank	(202) 473-004	(202) 522-3252
INFRASTRUCTURE : POWER		
Vikek Talvadkar, IFC	(202) 473-0607	(202) 676-1719

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Anthony Pellegrini, World Bank	(202) 473-6752	(202) 522-3227
MINING		
Henri Bretaudeau, World Bank	(202) 473-3412	(202) 676-9245
Philippe Lietard, IFC	(202) 473-6677	(202) 334-0230
Karin Millett, MIGA	(202) 473-0394	(202) 522-2650
PRIVATIZATION		
Omer Karasapan, World Bank	(202) 473-8177	(202) 477-1822
Paul HInchey, IFC	(202) 473-9137	(202) 676-1160
SOCIAL DEVELOPMENT		
Gloria Davis, World Bank	(202) 458-2750	(202) 522-3247
TOURISM		
Monica-Sanchez Gonsalez - MIGA	(202) 473-7250	(202) 522-2650
Maurice Desthuis Francis - IFC	(202) 473-6802	(202) 676-1365
DEVELOPMENT STATISTICS		
Client Services	(202) 473-7824	(202) 522-1498
E-mail: Info@worldbank.org	1-800-590-1906	
Website: http://www.world.bank.org/wdi		

3

CANADIAN EDUCATION AND TRAINING SERVICES

CANADIAN INTERNATIONAL TRADE

POLICIES, OBJECTIVES AND MAJOR RELATED PROGRAMS AND ACTIVITIES

TRAINING SESSION

Module three

PILOT VERSION

Department Foreign Affairs and International Trade (DFAIT)
Education Marketing Unit (ACET)
in collaboration with CFG inc.

TABLE OF CONTENTS

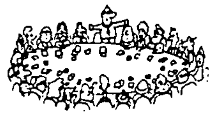
List of Acronyms

ACCC	Association of Canadian Community College
ACET	Advisory Community on Educational Technology (Alberta)
B&W	Babcock and Wilcoy
BC	British Columbia
CADE	Canadian Association of Distance Educators
CAP	Industry Canada's Community Access Program
CDN	Canadian
C2T2	Centre for Curriculum, Transfer, and Technology
CECs	Canada Education Centres
CEGEP	"Collège d'Enseignement Général et Professionnel"
CIDA	Canadian Internet Development Agency
CLFDB	Canadian Labour Force Development Board
COPS	Canadian Occupational Projection System
CVU	California Virtual University
ECUs	European Currency Units
ESL	English as a second language
ETS	Education and training services
EU	European Union
HRD	Human Resources Development
HRDC	Human Resources Development Canada
ICDE	International Council of Distance Education
IFIs	International Financial Institutions
ISTC	Industry, Science and Technology Canada
IT	Information Technology
MDBs	Multilateral Development Banks
NAFTA	North American Free Trade Agreement
NMLM	New Media-Learning Materials
NTU	National Technological University
OECD	Organistation for Economic Co-operation and Development
OISE	Ontario Institute for Studies in Education
OU	Open University
OUBS	Open University Business School
SCOET	Standing Community on Educational Technology (BC)

SMEs	Small and Medium-Sized Entreprises
SSHRC	Social Sciences and Humanities Research Council
TETRA	Telemedicine and Educational Technology Resource Agency
TL*NCE	Telelearning Network of Centres of Excellence
TLM	Technology-mediated learning
UNB	University of New Brunswick
UNESCO	United Nations Educational Scientific and Cultural Organisation
W.W.W.	World Wide Web
WGU	Western Governors' University

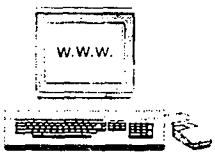
Table of Illustrations

Cd

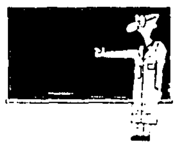


Chat On The Network

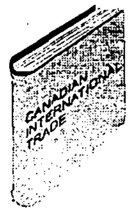
Exercise



Internet

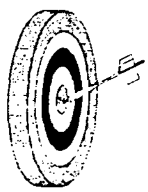


Tutor



Reading

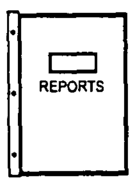
Self-test



Objectives

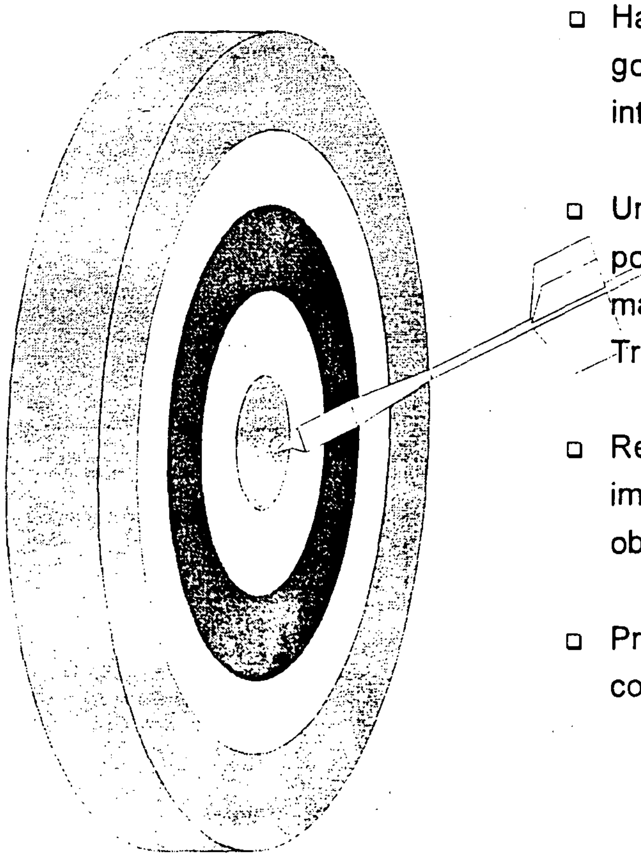
Timer

Group discussion



Reports

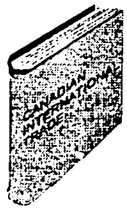
1. LEARNING OBJECTIVES



At the conclusion of this module, the participant will :

- Have a working knowledge of applicable governmental policies and objectives in international trade.
- Understand the key links between these policies and objectives and international markets for Canadian Education and Training Services.
- Review DFAIT's major programs devoted to implementation of these policies and objectives concerning ETS.
- Prepare themselves to helping Canadian companies to Business abroad.

2. PROCESS AND PACING



TO FAMILIARISE WITH INTERNATIONAL BUSINESS DEVELOPMENT PRIORITIES AND TRADE POLICY PRIORITIES.

To read : pp.13-30

Exercise one

TO UNDERSTAND THE KEY LINKS BETWEEN THE GOVERNMENTAL POLICIES AND INTERNATIONAL MARKETS FOR CANADIAN EDUCATION AND TRAINING SERVICES.

1. Take note of pages pp. 30-50 of the document before the meeting.

1. Group discussion → goals to achieve
   - Understand and review DFAIT's major programs devoted to implantation of these policies and objectives concerning ETS.

TO KNOW AND TO UNDERSTAND THE NEW APPROACH TO HELP CANADIAN COMPANIES DO BUSINESS ABROAD.

Consult compact disk :

Title : Guidelines – a new approach to help Canadian Companies do business abroad.

Self-Test

Self- test to evaluate your understanding and knowledge of the module “Canadian International Trade”.
See pages 51-53.

Resources :

You need a tutor?

Contact DFAIT –Education Marketing Unit
Dr. Gilles Séguin
Tel. : (613) 992-6289
E-mail : gillesseguin@dfait-maeci.gc.ca
Darren Smith
Tel. : (613) 995-5295
E-mail : darren.smith@dfait-maeci.gc.ca

You need help or you want to discuss ?

Join group by chat room.

3. INTRODUCTION

The Government of Canada has clearly identified the promotion of jobs and growth as one of the main objectives in the conduct of its international relations in the years ahead. This is a priority shared by federal, provincial/territorial and municipal governments, as well as by industry & the "Team Canada" partners.

In pursuit of the first of these objectives, the federal government launched a new international business development strategy in October 1995 to help Canadian business capture global market opportunities while creating jobs at home. This Jobs Strategy is also intended to build strong partnerships among the three levels of government and the private sector; to attract and retain investment in all regions of Canada; to ensure that maximum benefit is derived from available resources; and to eliminate overlap and duplication among governments in supporting international business development.

The principal component of the Jobs Strategy is ensuring that Canada's economy can grow, thereby encouraging job creation. In pursuing the Strategy, the government's objective is to create an environment in which Canadian business can flourish; a climate that will result in more competitive industries and the creation of more jobs, so that all Canadians will benefit.

The Strategy addresses both immediate and long-term job-creation needs, and focuses on partnerships at all levels. It has several key components, which together provide the necessary ingredients for success: getting the economic fundamentals right; focussing on priority sectors (e.g. youth, trade and technology); and making maximum use of government programs and services.

Trade development is another key element of the Jobs Strategy. Increase trade means new and better jobs for Canadians — it is estimated that for every $1 billion of exports, 11 000 Canadian jobs are created or sustained. Although Canada is a highly successful trading nation, only 100 companies account for over half of the country's total exports. Thus, the government is committed to encouraging and assisting Canadian companies to enter the international business arena. To this end, the government has set a goal of doubling the number of active Canadian exporters by the year 2000.

A key element of the Jobs Strategy is its focus on Canadian small and medium-sized enterprises (SMEs). Recent data confirm that smaller firms create the vast majority of new jobs in Canada. They are also central to government efforts to broaden Canada's trade, technology and investment relations to fast-growing markets world-wide. Indeed, exports are critical to Canada's economic and social well-being, and serve as the engine that is driving Canada's economy.

Canada's International Business Strategy (CIBS) is an integral part of the federal government's international business development efforts, and is a vehicle through which Canadian companies can begin or expand their exporting efforts. Through direct and active consultation between governments and the private sector, CIBS provides Canadian industry with a real opportunity to influence the government's international business strategies and priorities. At the same time, CIBS works to streamline the allocation of resources and to rationalise federal (and increasingly provincial) international initiatives. CIBS will also play an important role in the government's first commitment to departmental sustainable development (SD) strategies. As it prepares its SD strategy, the Department of Foreign Affairs and International Trade (DFAIT) will look at ways to help Canadian exporters — SMEs in particular — to better understand and respond to new environmental imperatives, and to ensure continued access to key export markets.

This strategic overview complements the 27 sector strategies, jointly developed by government and industry, that constitute the main component of CIBS. An abbreviated version of the sector strategies appears as Part II of this document. These strategies lay out the government's broad trade policy and international business development priorities.

4. CANADIAN INTERNATIONAL TRADE – POLICIES, OBJECTIVES AND MAJOR RELATED PROGRAMS AND ACTIVITIES

4.1 INTERNATIONAL BUSINESS DEVELOPMENT PRIORITIES

4.1.1 International Business Promotion

To help Canadian firms capture global market opportunities, the federal government is working to :

- strengthen and expand Team Canada partnerships;
- fully use the combined private- and public-sector expertise to be found in the National Sector teams (NSTs);
- increase the number of exporting SMEs; and
- broaden Canada's trade, technology and investment relations beyond traditional markets to other fast-growing regions of the world.

The Trade Commissioner Service is a key element in the government's business development programs and strategies, and efforts will continue to improve the Service's ability to gather and disseminate market information and intelligence.

4.1.2 Investment Development

Canada depends on international capital to finance a significant proportion of its economic development. Today, more than 1.3 million Canadian jobs (1 in 10), more than 50 percent of total exports, and 75 percent of manufacturing exports can be directly attributed to foreign direct investment (FDI) in Canada. It is also estimated that 22 percent of jobs in Canada are indirectly attributed to FDI. The attraction of international business investment is, therefore, a core objective of Canada's foreign policy; it is, moreover, a critical element in the government's Jobs Strategy.

To meet this challenge, the Government of Canada has adopted a new investment strategy that seeks to increase Canada's global share of inward FDI, which has declined in recent years. This strategy consists of five elements :

- marketing Canada's advantages as an international investment site to decision makers of international companies;

- targeting specific multinational enterprises (MNEs) in priority sectors, to attract new investment and to facilitate the retention and expansion of existing investments;

- helping more Canadian SMEs to grow through international investment partnerships;

- addressing those factors in Canada's investment climate that are of concern to investors or that represent a comparative disadvantage vis-...-vis competing jurisdictions; and

- building new partnerships to attract and retain investment in Canada across all levels of government and the private sector.

4.1.3 Science and Technology

Canadian companies contribute to and benefit from ready access to worldwide scientific and technological knowledge and world-class process and product technology. Participation in international initiatives based on science and technology (S&T), including research and development (R&D) and standards setting, also encourages firms to innovate, thereby contributing to wealth creation and, more generally, enhancing the quality of life in Canada.

The government's main S&T objectives, as outlined in the federal S&T strategy, include sustainable wealth and job creation. In an international business context, one main element is supporting and enhancing the global performance of Canadian SMEs. To this end, a number of initiatives will be pursued to promote R&D, S&T co-operation, and technology acquisition and dissemination. Federal departments and agencies will refine their strategies to promote international S&T collaboration and to gather and disseminate international S&T intelligence more effectively.

4.2 TRADE POLICY PRIORITIES

4.2.1 Managing the Canada-U.S. Economic Relationship

Canada's economic relationship with the United States remains the most complex and substantial among any two countries in the world. Managing this relationship must therefore remain Canada's chief trade and economic policy priority.

While the overall Canada-U.S. relationship has been extremely positive, continued vigilance is needed to defend Canadian interests. The government will continue to focus on resolving any contentious issues that may arise between the two countries.

Canada attaches a high priority to finding solutions that reduce the possibility of disputes with the U.S. concerning such perennial issues as subsidies, dumping and the operation of trade remedy laws regarding such practices. Through advocacy and coalition building, it will attempt to create a positive climate for change.

One of Canada's key interests in managing its economic relationship with the United States is to ensure that Canadian businesses take full advantage of the opportunities offered by the U.S. marketplace and, in particular, its demands for a broad variety of high-technology goods and services.

4.2.2 Establishing an Effective World Trade Organisation

The federal government supports the full and effective implementation of the World Trade Organisation (WTO) agreements. To this end, Canada seeks to reinforce the WTO as a strong, credible and transparent rules-based institution capable of overseeing the operation of the multilateral trading system and conducting multilateral negotiations.

Other priorities include monitoring and, where possible, accelerating the implementation of the Uruguay Round agreements, and preparing for WTO negotiations in a number of new areas, such as investment and competition policy.

4.2.3 Improving International Rules Governing Foreign Direct Investment and Anti-competitive Behaviour

Canada will continue to pursue a "multi-track" strategy to improve international rules governing FDI and anti-competitive practices. This strategy involves negotiating new bilateral foreign investment protection agreements (FIPAs) with developing countries and economies in transition; pursuing negotiations on a multilateral agreement on investment; and encouraging greater vigilance regarding the anti-competitive actions of large multinational firms.

4.2.4 Widening Canada's Network of Free Trade Partners

The federal government will continue to widen Canada's network of free trade partners and improve market access for Canadian exporters. This objective is being pursued within the context of the North American Free Trade Agreement (NAFTA), the Free Trade Agreement of the Americas (FTAA), the Asia-Pacific Economic Co-operation (APEC) forum and the WTO.

The governments of Canada and Chile have reached a bilateral free trade agreement that will facilitate Chile's eventual accession to the NAFTA. Moreover, in December 1994, leaders of 34 countries agreed that the FTAA should be negotiated by 2005.

The Canada-Israel Free Trade Agreement was signed on July 31, 1996. The agreement will allow duty-free access to each other's markets for industrial goods. Implementation of the Agreement is scheduled for January 1, 1997.

In 1997, Canada will serve as chair of the APEC forum. Throughout the year, Canada will be responsible for advancing APEC's trade and investment liberalisation agenda and, in particular, will aggressively pursue the 1994 commitment of APEC leaders to establish free trade in Asia-Pacific by 2020.

Similarly, opportunities to build stronger ties with the European Union (EU) are being addressed. Within this context, Canada will continue to press for further trade and investment liberalisation across the Atlantic, leading to eventual transatlantic free trade.

4.2.5 The Jobs Strategy

The overriding purpose of the government's international business development plans is to provide employment for Canadians.

The government has been working to establish an economic climate that promotes job creation and helps Canadian companies to take advantage of emerging international business opportunities. The Jobs Strategy, an action plan involving the resources and energy of every government department, is a partnership among federal, provincial and municipal governments, business and non-governmental organizations (NGOs). Its aim is to co-ordinate efforts to create more and better jobs for Canadians. In particular, it focuses on youth, trade, technology and infrastructure — four key areas in which government involvement with the private sector can make a difference.

With one in three Canadian jobs dependent on exports, a critical component of the Jobs Strategy is to encourage more Canadian firms to export, and in particular, to actively support SMEs in their international business efforts.

The Prime Minister's Team Canada trade missions abroad provide an example of the positive results that can be achieved through co-ordinated effort. These missions are particularly important in the delivery of the trade and investment elements of the government's Jobs Strategy.

Moreover, the government will maintain its policy of encouraging and helping Canadian businesses to obtain leading-edge technologies. Such technologies are conducive to significant product innovation, and allow Canadian firms to capitalise on opportunities in the global marketplace.

4.2.6 International Business Promotion

The Government of Canada is meeting the challenge of rapid global change by developing new strategies in support of international business development. Building on extensive consultations with the private sector, the government is striving to focus available resources where they can have the greatest impact. Accordingly, international business development efforts are being concentrated in the following areas:

- building strong partnerships between government and the private sector to derive the maximum benefit from available resources and to eliminate overlap and duplication;
- using the combined private- and public-sector expertise to be found in the National Sector Teams (NSTs);
- encouraging more Canadian firms, and particularly SMEs, to become active exporters; and

- diversifying Canadian trade, technology and investment relations to help Canadians capitalize on opportunities around the globe.

4.2.7 Building Team Canada Partnerships

The federal government is continuing with a number of its Team Canada initiatives, which were announced in October 1995:

- **Canada's International Business Strategy**

As noted in the introduction, CIBS is central to the Team Canada approach. Team Canada departments and agencies will be operating under Cabinet directive to allocate their international business development resources through CIBS, and budgets for international business development will be linked to the lists of CIBS-approved initiatives. In addition, NSTs have been charged with monitoring the implementation of CIBS year-round, in order to ensure that the allocation of international business development program resources is consistent with the sector strategies.

- ***International Business Development Agreements***

To date, agreements have been reached with nine provinces and the two territories. These agreements focus on ways to eliminate overlap and duplication among service providers, while ensuring better service for clients. The ultimate aim is to provide end users with "seamless" delivery of all the government's international business-related programs and services.

- ***National Sector teams***

National Sector Teams have been established to guide the development and implementation of trade strategies in 27 sectors. They build upon the knowledge and capabilities of all stakeholders at the industry sector level to develop and implement international business development plans, and to deliver services to private-sector clients.

- **Regional Trade Networks**

The government is committed to improving service to business clients at the local level by linking federal and provincial government departments and agencies and the private sector through a series of Regional Trade Networks (RTNs). These networks build on various federal-provincial trade and investment agreements, and provide services to both active and potential exporters. Key services include exporter-preparation services, market information and intelligence, export counselling, and information on international financing.

Under the leadership of senior federal trade commissioners, RTNs recently prepared three-year regional trade plans laying out how government and the private sector intend to work together at the regional level to generate new international opportunities for Canadian business. Each plan sets out national objectives and regional targets to the year 2000, along with key commitments and deliverables in a number of important areas.

- **Mechanisms for Active Industry Consultation and Participation**

In addition to membership renewal of the existing International Trade Advisory Committee (ITAC) and Sectoral Advisory Groups on International Trade (SAGITs), both of which include senior representatives of the private sector, the government will continue to increase industry involvement in the setting of international business development priorities through the direct participation of private-sector members of the NSTs.

- **Deputy Ministerial Committee on International Business Development**

A Deputy Ministerial Committee on International Business Development brings co-ordination to the whole range of government international business development initiatives, and provides a mechanism to review and establish priorities on an ongoing basis. The Committee is made up of the deputy ministers of all federal departments (or presidents, in the case of government agencies) that are active in international business development. It is co-chaired by the deputy ministers of the two lead departments, the Department of Foreign Affairs and International Trade (DFAIT) and Industry Canada (IC).

4.2.8 Increasing International Business Participation

Canada is known internationally as a trading nation. However, relatively few Canadian companies are actually engaged in export activity. The need to encourage more SMEs to export is particularly critical since smaller firms are responsible for creating the vast majority of new jobs. The challenge is to double the number of active Canadian exporters by the year 2000, with particular emphasis on new SME exporters. To accomplish this goal, the government is undertaking the following initiatives:

- **Target Small and Medium-sized Enterprises**

Government departments and agencies provide a variety of business programs and services aimed at small business. Unfortunately, eligibility criteria governing these programs — particularly those providing direct financial assistance — have been inconsistent in the past. To remedy this situation and to respond to private-sector recommendations that financial support be focussed on smaller enterprises, more consistent government-wide guidelines have been adopted for these programs.

Under the new Common Program Guidelines, direct financial support for international business development is being concentrated on firms with sales of less than $10 million, or fewer than 100 employees (50 employees for services firms). For smaller firms, the federal government shares the costs of participating in government-sponsored trade fairs, depending on the company's previous trade fair experience.

- ***Identify Export-ready Companies***

Canada Business Service Centres (CBSCs) established in each province will continue to play a leading role in identifying export-capable firms, and providing them with one-stop access to the information they need to begin exporting. To ensure that firms receive the personalised attention they may require, the coming months will see the introduction of a new Account Executives initiative. Drawn from existing positions in key federal and provincial departments and regional development agencies, Account Executives will work with firms one-on-one, either to introduce them to exporting or to expand their current export operations. One of their most important roles will be to champion these client companies by helping them to access all available assistance.

- ***Provide Timely, Opportunity-specific Market Intelligence***

The government is refocusing resources on acquiring value-added information and disseminating it to clients in the most accessible form possible. An example of this strategy was the launching of Strategis (http://strategis.ic.gc.ca), the largest and most comprehensive web site of business information in Canada.

The International Business Opportunities Centre (IBOC), established in 1995, has given more than 10 000 Canadian companies leads on international business opportunities fitting their export profile. Canadian businesses benefit from receiving up-to-date information about opportunities in foreign markets, while foreign firms are able to access their product and service requirements. IBOC will continue to match business leads provided by Canada's trade commissioners with the export interests of Canadian firms, particularly SMEs.

The bid-matching service (BMS) of the Canadian Commercial Corporation (CCC) enables Canadian firms to learn of U.S. government and other international opportunities. CCC reviews all U.S. government requirements to identify those on which Canadian firms may bid. These opportunities are then electronically matched against the capabilities of Canadian companies registered with CCC. When a match is found, the firm is automatically provided with a description of the requirement and details on how to proceed. Opportunities are also posted on the Open Bidding Service (OBS), thus making a greater number of Canadian companies aware of them.

The U.S. government is rapidly moving toward electronic data interchange (EDI) as its preferred way of doing business, and CCC is keeping pace with this change. By providing an EDI solution, the corporation will enable Canadian firms that are not EDI-ready to continue to have access to the lucrative U.S. market.

- ***Improve Financing for Exporters, particularly New-to-Exporting SMEs***

To better meet the divergent needs of Canadian exporters, EDC (Export Development Corporation) has adopted a structure that offers clients access to sector and market expertise. The eight sector-based business teams provide more streamlined service, which is delivered by employees who have a thorough knowledge of the exporter's business sector. The Country Centres of Expertise support the business teams by providing timely market information.

One of the business teams, the Emerging Exporters Team, is responsible for maximizing support to firms with annual export sales of up to $1 million. EDC has also increased its financing options for firms with annual exports of up to $10 million. The Smaller Exporters Guarantee Framework increases available sources of export financing support by providing partial guarantees to participating Canadian banks. Another program, the Master Accounts Receivable Guarantee (MARG), makes it easier for smaller firms to access operating lines of credit on the strength of their foreign receivables.

In 1995, CCC, in conjunction with Canada's commercial banks, introduced a program whereby small firms can have increased access to working capital financing. The

Progress Payment Program (PPP) extends funds through commercial banks for particular export sales based on CCC's involvement in the transaction. This program builds upon CCC's risk assessment and international contracting expertise. In its first year of operation, the PPP provided $47 million in financing to Canada's small exporters.

The Business Development Bank of Canada (BDBC) provides specialized financial and management services for SMEs, with a particular focus on knowledge-based businesses, exporters and other growth-oriented companies. It provides a wide range of working capital, loans and equity products that complement those available from the private sector. It also provides training and mentoring services such as NEXPRO, a training and counselling program for new exporters. In view of the government's objective of fostering the emergence of greater numbers of small exporters, BDBC's role with respect to providing growth capital and training for potential exporters is expected to increase.

In addition to helping small businesses financially, the BDBC has developed new ways to help SMEs develop their skills and access new markets.

- ***Improve Canadian Participation in International Financial Institution Procurement***

Annual loans by international financial institutions (IFIs) to developing countries average about US$42.5 billion. Last year, the World Bank alone disbursed over US$22.5 billion. More than half of the IFI loans were for goods and services provided by suppliers outside of the borrowing country, providing excellent potential opportunities for Canadian exporters. With respect to IFI procurement, Canada ranks fourth overall for service contracts; however, it ranks 15th for manufactured goods, equipment, and civil works.

In 1995-96, the government created a Capital Projects Action Team (CPAT), to improve co-ordination of government efforts to help exporters procure IFI contracts. During the first year, CPAT developed several information products; redesigned and replenished the Canadian Consultants Trust Funds in the IFIs; arranged to co-finance several projects in China, India, Indonesia and several African countries; designed a new electronic system to integrate all IFI project information; and trained staff in International Trade Centres on how to do business with the IFIs. In the coming months, the team will focus its efforts on the electronic dissemination of IFI information on the World Wide Web and the Electronic Bulletin Board; the deployment of an IFI tracking system based on Lotus Notes, which will allow CPAT to manage efficiently the support mechanisms for private-sector firms pursuing IFI business and to exchange information concerning them. Further, the team will focus on integrating the CPAT initiative in the NSTs; and establishing new outreach initiatives (e.g. seminars, road maps, etc.) to more actively promote IFI business opportunities to Canadian exporters and manufacturers.

- ***Target Exporters of Business Services***

The government is encouraging services industry associations to engage more actively in export promotion. To this end, a number of tools and training programs have been developed, and support is available to help associations set up export committees or awards programs to promote their members in new markets. A six-diskette self-help software package, Take a World View, has been developed specifically for exporters of services. It includes a one-stop resource guide listing public-and private-sector programs, contacts and publications.

4.2.9 Diversifying International Business Markets

While exports of goods and services account for more than a third of Canada's GDP, most are bound for a single market — the United States. In order to build on Canada's success in the U.S. market, and broaden its trade, technology and investment relations with other fast-growing priority markets (e.g. Latin America, Asia-Pacific), the government proposes to undertake the following initiative:

- ***Play a Stronger Advocacy Role on behalf of Canadian Business***

In response to the enhanced importance of government advocacy as a competitive factor in international commerce, especially in emerging markets, and to the increased efforts of Canada's competitors in advocating their commercial interests, Canadian federal ministers, heads of missions, trade commissioners and trade officers, and private-sector decision makers will adopt a more aggressive approach to representing Canadian business interests abroad. To that end, a dedicated interdepartmental unit is being formed to co-ordinate appropriate advocacy support for Canadian firms. The unit is intended to mobilise high-level support to help Canadian companies achieve greater success in international markets.

4.2.10 Investment Development

Increasing the level of international business investment in Canada is the objective of the government's strategy to support wealth and job creation across the country. Investment is a critical factor linking Canada and Canadian companies to an increasingly globalise world economy. Foreign direct investment (FDI) and Canadian direct investment abroad enhance Canada's global competitiveness by securing capital, jobs, technologies and market access for Canadians.

The government has committed itself, under its new Investment Strategy, to increase its efforts to attract FDI to Canada, and to facilitate the growth of Canadian-based, globally competitive companies.

In response to strong competition for investment, the government has developed clear priorities along with targeted, focussed programs. In pursuing these initiatives, it seeks opportunities to enhance co-operation with provincial and municipal governments and the private sector, in order to support the investment-attraction goals of local/regional economic development organisations.

Investment-attraction programs will focus on the following five priorities :

1. ***Marketing Canada as an Investment Site to International Business Executives***

To increase international awareness of the comparative advantages of Canada as an investment site within the North American Free Trade Agreement (NAFTA) region, potential investors must be made aware of specific opportunities and the positive aspects of Canadian policies. Each year, Canada responds to hundreds of inquiries from potential investors. The government will continue to increase the quality, timeliness and impact of its investment servicing capability, the primary objective being to convert inquiries into investment decisions that favour Canada.

Efforts to support this priority include :

- speeches and testimonials by Canadian chief executive officers (CEOs) to international business audiences regarding their confidence in Canada and the success they have enjoyed here;
- meetings with important investment clients involving the Prime Minister, other federal ministers and provincial premiers;

- a campaign that would include placing success stories in selected international media, briefings of international journalists, and forums on Canada as an investment site.

2. ***Sector/MNE-Specific Targeting and Customised Servicing***

The government will continue its campaign to attract new investment from multinational enterprises (MNEs), which have been the major force behind the unprecedented growth of FDI in the last decade. The United Nations estimates that the world's largest 100 MNEs (outside the banking and finance sectors) account for approximately one third of the combined outward investment of their home countries, while each job in an MNE generates at least one additional job in a host economy through backward linkages. The concerned departments will focus efforts on those MNEs that can develop strong links with Canadian SME suppliers; bring capital and technologies to Canada; serve North American and global markets from Canada; and act as catalysts for technology diffusion within the country.

Efforts to support this priority include :

- meeting regularly with key corporate investors to communicate tailored investment cases to decision makers in foreign firms, and to influence their decisions in favour of Canada;

- targeting individual international corporations in selected major source countries, with regard to priority targets and arranging customised visits to Canada for potential investors; and

- promoting specific investment opportunities in Canadian priority sectors that offer investors a critical mass of specialised capability, skilled labour, research and development (R&D) strengths, and supply capacity.

Reinvested earnings by foreign subsidiaries account for a significant proportion of foreign investment in Canada — over 50 percent in recent years. Many MNEs have had to reorganise and rationalise their operations to find new ways to gain international competitive advantage. Subsidiaries, in turn, have had to seek out niches and mandates in their host markets as they compete with each other within parent MNEs. Government, in partnership with industry, will therefore work with foreign subsidiaries in Canada to develop custom business cases with a view to retaining existing operations and attracting new manufacturing and R&D mandates.

Investment Partnerships Canada (IPC), a joint venture between DFAIT and IC, is engaged in promoting investment in Canada by leading global companies. It undertakes research and intelligence collection to target priority investment prospects, and develops and manages investment campaigns directed at these companies. IPC also provides one-stop servicing of the investment interests of its client companies and other major investors.

3. *Introducing More Canadian SMEs to International Investment Partners and Sources of Technology*

Faced with escalating competitive pressures, companies of all sizes are looking more often to international alliances and investment opportunities to expand their reach. International strategic alliances are an important avenue by which Canadian companies can gain vital access to new technologies, markets, capital and skills. Such partnerships are particularly important for technology-based SMEs, which must look to foreign markets early on to maximise their opportunities for growth and profitability.

The government will continue to promote the growth of Canadian-based, globally competitive companies by working to introduce technology-based SMEs to international investment partners and opportunities. Key elements of this program include :

- the existing investment prospecting methodology has marketed Canadian SME capabilities and investment partnering interests to foreign firms primarily in Western Europe. These efforts will be expanded to selected Asian markets and to the United States. Companies will be profiled in sector kits, and their investment-partnering interests promoted abroad through group discussions and private meetings; and
- managing an international financing project to help SMEs from all regions of Canada to attract growth capital and strategic support from international private equity financiers. This project will help SMEs pursue technology development, commercialisation and international expansion.

4. *Addressing Investor Concerns: Making Further Improvements in Canada's Investment Climate*

All countries are competing to attract new and retain existing international investments. In this atmosphere, a country's business environment or investment climate is of fundamental importance. Many factors determine the attractiveness of the investment climate, including: access to sizeable markets; labour force quality and productivity; costs of capital; taxation levels; the business infrastructure; and government economic policies. Other less tangible factors also come into play, such as quality of life and social policies.

In recent years, Canada has done much to strengthen its business climate by improving its fiscal and macro-economic environment, by negotiating improved market access through the NAFTA and the World Trade Organisation (WTO), and by facilitating business travel through the Open Skies Agreement. However, impediments still remain when Canada's investment climate is compared to that of its competition. If Canada is to continue to attract the foreign investment it needs, it will need to address systematically and continuously the principal impediments that are identified by existing and potential investors. This will involve deliberate action on the part of the government to :

- measure and assess the extent to which the existing environment can attract and retain investments;
- assess the impact of changes in public policies and in corporate behaviour on Canada's competitiveness as an investment site;
- compare ourselves regularly in priority sectors with our key competitors; and
- identify specific, recurring impediments and take action, including conveying that information to investors, in order to address the impediments that can be reduced or eliminated.

5. Building Partnerships with the Federal, Provincial and Municipal Governments and the Private Sector to Attract and Retain Investment

All governments compete for investments. In Canada, provincial and municipal authorities compete among themselves for international investment. Investors consider this healthy, but it means that co-operation on investment initiatives is more difficult to achieve unless mutual interest and opportunities for complementary efforts are identified. Under the new strategy, the Prime Minister has sought the support and participation of the provinces, municipalities and selected private-sector CEOs and labour leaders.

4.2.11 Science and Technology

As the globalisation of business continues, science and technology become more important to the competitiveness of firms, and to Canada's broader economic and social well-being. Canadian companies benefit both from ready access to world-wide S&T knowledge and world-class process and product technology.

The statement of government S&T policy entitled Science and Technology for the New Century summarises the overall focus and strategy as follows :

"Canada is but one of many players in the world's science and technology effort. In many areas affecting our quality of life, such as the environment, health and the advancement of knowledge, the scale and scope of the S&T effort increasingly require international collaboration among researchers, institutions and governments.

International R&D partnerships provide benefits that extend well beyond commercial or other advantages specific to the partners because the technology is quickly diffused to others, including firms and workers in the same industry. The longer-term effect is to increase the technological capability of industry as a whole.

As an extension of their domestic mandates, federal departments and agencies are developing explicit plans to promote international S&T collaboration for the benefit of Canadian firms. As well, they are evolving specific approaches to gathering and disseminating international S&T intelligence. Our missions abroad have a key role in this enterprise."

The international S&T network, consisting of science and technology counsellors and technology-development officers in missions to the major industrial countries, as well as trade commissioners and commercial officers in other key posts, will be enhanced. This network provides S&T-related services to Canadian firms, both directly and indirectly, through support of science-based departments and agencies. Provincial governments are also involved in developing plans for international S&T collaboration.

Government priorities in this area include :

- ***Acquiring Best-practice Technologies***

In the contemporary knowledge-intensive global economy, the use of best-practice technologies is fundamental to a company's success. Businesses that cannot match or exceed the technology benchmarks and capabilities of their competitors often have difficulty marketing their products and/or services. Also, firms need external benchmarks against which they can compare their own processes and operations, and assess their unique efficiencies and capabilities. Such information is essential to developing a strategic plan for long-term growth. Government departments and agencies are therefore continuing to help firms to identify best-practice product and process technologies that can help them compete successfully in international markets.

- ***Improving Technology Intelligence, Acquisition and Dissemination***

Firms must be agile and responsive to rapidly changing client needs, market conditions, standards, regulations and technological trends in order to preserve and expand their domestic and export market shares. Canada's technology development officers and commercial officers are therefore more specifically focussing on responding to the needs of Canadian firms — by improving the dissemination of technology intelligence to firms, helping companies to identify and exploit emerging technology and business opportunities, and alerting firms to impending business threats.

- ***Expanding the Canadian Technology Network***

The Canadian Technology Network endeavours to provide Canadian SMEs with quick, easy access to a broad array of services that address their technology concerns. As of early 1996, over 300 Canadian member organisations were involved, each of which can help client firms in specific technical or related business areas. Development of an international component of the network will allow members and clients to tap world-wide sources of technologies and business information.

- ***Establishing Industrial Standards***

Canada's participation in international standards-setting initiatives is being revised in order to improve dissemination of advanced information to Canadian firms, to provide companies with better opportunities to influence developing international standards, and to facilitate international accreditation of Canadian products.

- ***Expanding Science and Technology Awareness***

S&T awareness plays a significant role in the export performance of many SMEs. Technology and foreign perceptions of Canada as a scientific community have a subtle effect on defining the nature and structure of market demand, particularly for intermediate products such as parts and components, which can be important for Canadian businesses because they often constitute niche markets for SMEs. As well, foreign perceptions of Canada's S&T capabilities also affect the flow of investments from abroad. The government and its private-sector partners will address this twofold challenge by promoting S&T at home and abroad in all appropriate forums.

- ***Encouraging International Research and Development***

The government will continue to provide international arrangements that facilitate the participation of Canadian private- and public-sector institutions in international R&D programs. An example is the Canada-European Community Agreement for Scientific and Technological Co-operation. This agreement facilitates the participation of Canadian firms, universities and research institutes in European R&D consortia established under the European Union Framework Program on Research and Technological Development.

4.3. BUSINESS, PROFESSIONAL AND EDUCATIONAL SERVICES

Business, professional and educational services encompass a wide range of sectors, including : accounting; consulting engineering; management consulting; scientific services; architecture; construction; geomatics; legal services; design; personnel services; education and training; security services; financial services; computer services; communications services; transportation and logistics; trading houses; distribution (retail and wholesale); and health-care services. These services are typically sold to businesses, rather than to final consumers. [Several service industries are discussed in greater detail in other strategies. Consulting engineering, architectural, residential and non- residential construction, urban planning and developer services are discussed in the Construction, Architectural and Engineering Services strategy; communications services, computer services and geomatics are outlined in the Information Technologies and Telecommunications strategy; environmental services are in the Environmental Industry strategy; and health-care services are in the Health Industries strategy.]

4.3.1 Canadian Position

Overall, services account for about two thirds of Canada's gross domestic product (GDP), almost three quarters of employment and some 90 percent of new job creation. Business and professional services have shown the most growth and now make up over 40 percent of total services output.

The dominant role of business, professional and educational services firms is reflected in the strong growth in employment and in net new business formation. In the past two years, one third of the overall increase in firms has been in the business, professional and educational services sector. In addition, self-employment is higher in this industry than in any other.

Canada's international receipts from business, professional and educational services have increased markedly. Since 1980, they have grown at an average annual rate of over 10 percent, with the rate having slowed over the last two years. As a result, international receipts reached over $12 billion by the end of 1995 and constitute the largest component of Canada's non-merchandise trade. As a share of total exports, business, professional and educational services receipts have varied between 4 and 6.5 percent, and currently represent about 5 percent.

Canada's business, professional and educational services exports are more diversified than its goods exports.

- Most services exports are to the United States (60 percent, compared to more than 80 percent for goods).
- An increasing number of Canadian firms are succeeding in other foreign markets.
- Other key markets, by share of exports, are the United Kingdom (7 percent), Western Europe (10 percent) and Japan (3 percent).

Many services firms have established an international presence, through strategic alliances or commercial presence, recognising the need to compete globally for both survival and growth. Canada has successful exporters, ranging from large multinational firms to sole practitioners, in virtually every service industry. Smaller Canadian service firms are particularly crucial to Canada's export success, since, in comparison to large firms, they earn on average a higher percent of revenues from exports and are more likely to create export-related jobs in Canada.

While Canada has had considerable success in exporting, its services export performance still lags behind that of many industrialised countries as a share of GDP.

Canadian companies have the potential to do much better in international markets. To increase their export position, Canadian firms must improve their export-readiness and awareness.

- Many lack market information and requisite marketing skills.
- Potential exporters are often not aware of opportunities for international trade in business and professional services.
- Few know how to effectively access these foreign markets.

Another important market that is receiving increased interest from Canadian firms is international financial institution (IFI)-financed projects, estimated at some US$40 billion.

- Canada traditionally has had a poor record in procuring IFI business.
- Canada ranked 10th to 12th among Organisation for Economic Co-operation and Development (OECD) countries in overall IFI procurement between 1991 and 1994.
- Canadian consultants have done much better. For example, consulting engineers rank fourth among OECD countries.

The World Bank and other IFIs are allocating more of their resources to educational services and social development. This trend represents a major opportunity for Canadian services firms, not just capital projects firms and goods manufacturers.

- Given their successes, Canadian consultants can play key roles in implementing Team Canada solutions for bidding on and winning projects. Their success can help to promote and expand the linkages between consultants and both suppliers and sub-suppliers.
- Opportunities exist for Canadian consultants seeking other IFI contracts not related to large projects.
- There remains a big role for small and medium-sized enterprises (SMEs) to act as suppliers and subcontractors to IFI contractors, both Canadian and foreign.

Non-IFI-related Overseas Development Assistance (ODA) is another source of business.

- Canadian International Development Agency (CIDA) projects are a key method of positioning Canadian consultants, services firms and suppliers in international markets.
- Successful Canadian firms can help foreign donors with the delivery of their projects in recipient countries.

Overall, Canada's strengths in services include management consulting; education and training; legal services; consulting engineering; communications; geomatics; health care; trading houses; environmental services; franchising; independent testing laboratories; capital projects; and construction services. [Because this strategy groups a wide range of services sectors under the rubric of Business, Professional and Educational Services, its approach is generic. The Appendix outlines strategies for services sectors with excellent prospects for international success. The coverage of services sectors will be expanded in subsequent versions of Canada 's International Business Strategy.]

4.3.2 International Environment

Knowledge-intensive services represent one of the fastest-growing components of world trade and are increasingly the way that advanced economies are succeeding in the international marketplace.

- Commercial services represent 20 percent of world trade [Commercial services estimates are by the World Trade Organisation (WTO). The choice of categories in commercial services is influenced by the availability of data. The WTO defines commercial services as transportation services (30 percent), travel services (30 percent) and other private services (40 percent). Business and professional services are included in the last category.] .
- The average annual growth rate for world trade in commercial services has been about eight percent.
- Canada's market share in services trade is less than two percent, compared to its global trade share in goods of some four percent.

The main exporters of business and professional services include :

- the United States, followed by France, Germany, Italy, the United Kingdom and Japan, which account for about 50 percent of world trade; and

- other countries such as Korea, Brazil, India and Mexico, which are emerging as serious contenders.

The major importers of services include :

- the United States, Pacific Rim countries, Latin America, South Asia, Africa and the Middle East; and
- Eastern Europe, as an emerging market.

More countries are opening their borders to goods and services trade due to the decline of centrally planned economies and changing attitudes toward market economies. Developing countries have also recognised the benefits that can be derived from the importation of skills, knowledge and technology from developed countries.

Many of these countries are seeking expertise to assist them with public-sector reform; regulatory reform; privatisation; training and skills upgrading; modernisation of legal systems; and upgrading of financial systems. These trends, combined with the changes in IFI financing practices, should create significant opportunities for Canadian business, professional and educational services firms.

Over the next eight years, the effects of the Uruguay Round of Multilateral Trade Negotiations should result in increased growth in world trade of $1 trillion, with business and professional services trade accounting for about $100 billion. The national treatment, transparency and most favoured nation (MFN) provisions of both the World Trade Organisation (WTO) and the North American Free Trade Agreement (NAFTA) will open up foreign-market opportunities, as well as domestic-market challenges for Canadian services suppliers.

4.3.3 Main Challenges

Canadian services firms face a number of challenges in expanding their foreign presence and export sales, including :

- developing and improving marketing skills better suited for foreign markets ;
- developing cost-effective methods of obtaining and delivering information and intelligence on foreign markets ;
- developing effective methods to raise the profile and credibility of Canadian firms in foreign markets ;
- developing more strategic marketing plans ;
- developing more effective methods of forming partnerships and joint ventures to pursue international business ;

- better exploiting IFI-funded development projects, given their greater emphasis on education and training services and social development ; and
- balancing the expansion of their international business against the need to maintain their domestic business base.

Given the prominence of SMEs in the business and professional service industries, there is also a need to :

- further develop the export capability of the sector's diverse SMEs ; and
- identify SMEs capable of exporting, and improve the management skills of firms that are not yet ready to venture abroad.

4.3.4 Strategic Direction

The following measures will be implemented to increase the export performance of Canadian services firms. Some of the measures are discussed in greater detail in the Appendix.

International Business Readiness

- improving the export skills of services exporters through workshops, "how-to" guides and structured training courses (Department of Foreign Affairs and International Trade [DFAIT], Industry Canada [IC], Forum for International Trade Training [FITT], industry associations) ; and
- developing information products (Take a World View, Steps to Competitiveness, Stakeholders' Analysis) to improve the export readiness of services firms (IC, DFAIT).

Partnering

- promoting the development and use of the Canadian Companies Capabilities database as a means of increasing the international competitiveness of Canadian firms (IC) ;
- encouraging business services firms in related advisory industries to participate in Industry Canada's Capital Projects Suppliers Capabilities Matrix (IC) ;
- promoting the use of the International Business Opportunities Centre (IBOC) to service firms and industry associations, as it attempts to match business leads from trade commissioners abroad with the business interests of Canadian firms (DFAIT, IC) ;

- improving IBOC information on services firms and opportunities (DFAIT, IC) ;
- improving technology/marketing relationships between Canadian goods and services providers (IC) ;
- increasing partnering between Canadian and foreign firms in target markets (IC, DFAIT, missions) ; and
- arranging meetings between business services firms and foreign governments and agencies to discuss business opportunities (IC, CIDA). A series of meetings between Canadian services firms and the government of Panama has already been conducted. Sectors of primary interest are: energy; transportation; communications; tourism; informatics; geomatics; training; logistics; marine-related services; environmental services; and infrastructure. Missions to Panama are planned to ensure that Canadian industry is well positioned to tap this market.

Networking

- relying on the Business, Professional and Educational Services National Sector Team (NST) to increase private-sector and government co-operation in trade development and promotion (NST) ;
- enhancing network opportunities by expanding the companies participating in the broader Services NST Network (NST) ;
- encouraging service industry firms to develop business networks under the Canadian Business Networks Coalition, which is administered by the Canadian Chamber of Commerce (IC, NST, industry associations) ;
- enhancing networking among firms in the same sector to improve industry cohesiveness and develop industry-based export strategies (IC, industry associations) ; and
- encouraging service industries to develop conferences, seminars and workshops that introduce potential customers to their services (i.e. trading houses and franchising) to increase industry awareness, expand business opportunities and promote exports (IC, industry associations).

Profile and Credibility

- designing and delivering new trade-development initiatives for services exporters to profile Canadian expertise and build credibility in foreign markets (use of local media, showcasing of capabilities through conference participation, and marketing and technical presentations) (DFAIT, geographic divisions, missions) ;

- completing Sector Competitiveness Frameworks on specific services industries (Geomatics, Commercial Education and Training, and Management Consulting) that will develop a consensus among industry players on competitiveness and export issues with possible actions by key groups (IC) ;
- providing follow-up training and resource support to DFAIT trade commissioners to expand their knowledge of Canadian services companies to help them provide expert assistance to services exporters (DFAIT, IC) ; and
- encouraging service industry associations to develop information products for trade commissioner training and to help trade commissioners to better represent the service industries in foreign markets (DFAIT, IC, industry associations).

Market Information

Engages services industries associations and firms to :

- determine export interests and market priorities of members (NST, DFAIT, IC) ;
- define market-intelligence needs (NST, DFAIT, IC) ;
- help members with their export efforts and provide required training (DFAIT) ; and
- develop sector export strategies (NST, IC) ;
- developing mission and trade-fair strategies for specific service industries (DFAIT, IC) ;
- working with specific service-industry groups to develop a Team Trade Canada approach to international trade for their industry (IC, DFAIT) ;
- providing market information and networking facilities by electronic means such as the Internet, electronic bulletin boards, supplier databases, etc. (DFAIT, IC) ;
- providing access to Industry Canada's Strategis (http://strategis.ic.gc.ca) expertise and strategic information to help Canadian firms be more competitive, and provide hot links to Canadian and international business information databases ; and
- developing industry statistics to provide timely measurement of export performance (Statistics Canada, DFAIT, IC, NST, Sectoral Advisory Group on International Trade [SAGIT], industry associations).

Financing

- providing improved access to financing for small services exporters (DFAIT, EDC [Export Development Corporation]) ; and
- identifying financing needs unique to service exporters and develop an action plan (NST).

International Projects

- increasing Canada's share of IFI-funded contracts by the year 2000, by:
- educating companies on how to work with IFIs and how the changing priorities of IFIs are creating new opportunities for Canadian services firms (IC, DFAIT) ; and
- electronically distributing IFI project information (IC) ;
- undertaking targeted missions in response to the priorities identified by NST working groups, particularly those that will encourage consortia development and promote downstream linkages among services firms and goods producers (DFAIT) ; and
- publishing quarterly lists of CIDA's bilateral projects in pipeline and operational projects.

Market Access

- focussing on improving market access in priority sectors for Canada in the WTO (in particular, architects and consulting engineers) (DFAIT, industry associations, SAGIT) ; and
- documenting and pursuing cases in which access provided for in the WTO and the NAFTA is denied in practice (DFAIT, IC, SAGIT, industry associations, individual companies).

4.3.2 Management Consulting Services

The management consulting industry covers those firms that offer guidance and advice on a wide range of management and business issues to public- and private-sector organisations on a fee-for-service basis and assist, when requested, in the implementation of recommendations.

4.3.2.1 Canadian Position

Management consulting in Canada is a vibrant and fast-growing industry characterised by a considerable depth of experience. Domestic practitioners bring a wide range of functional and sectoral expertise to their assignments with public- and private-sector clients.

The Canadian market is currently estimated at more than $2 billion, with 4000 to 5000 firms and approximately 17 000 practitioners. Developments in the Canadian market tend to parallel those in the global market, and both are now rebounding after several years of low growth. Most of the major international consulting practices are represented in Canada. In addition to those large firms, Canada has a unique strength in its highly specialised sole practitioners and small and medium-sized niche practices. These practitioners bring significant experience to their assignments, experiences gained in many of the larger international firms, as well as in the corporate, public and private sectors.

Through the Institute of Certified Management Consultants of Canada (ICMCC), Canada is the leader in the movement toward professional accreditation in consulting. The ICMCC and its provincial and regional institutes confer the Certified Management Consultant (CMC) designation on practitioners who successfully complete the institute's course of studies and practical experience. Canada was the first jurisdiction to legally recognise this professional designation. Although the CMC designation is not a prerequisite to practise in Canada, it is an international designation recognised in many countries. The ICMCC has also been active internationally helping many countries to establish their own institutes and certification programs.

Many Canadian management consulting firms, from the SMEs to the large companies, have already exported, and exports of consulting services are currently estimated to generate about 15 percent of market revenues. Nevertheless, there are many more firms that are interested, but they often need assistance to become export-ready and information on how to take the first steps into foreign markets.

Foreign markets pose particular challenges to consulting firms. Many of these countries already have an established consulting industry, but Canadian firms have been successful. Factors contributing to this success include: marketing skills; product differentiation; specialisation and expertise; reputation and professionalism; interpersonal skills; and methodologies and ideas brought to the assignment.

Canadian consultants have undertaken assignments in virtually all corners of the world. As an introduction to exporting, many new exporters have turned to the U.S. market. Established practitioners continue to serve that market, but they have also explored Eastern Europe, Latin America and the Pacific-Rim countries. Canada's small and medium-sized firms, for example, are active in the Pacific Rim working for governments, and as associates with larger domestic and foreign firms. Other firms are active on development-bank projects in the Asia-Pacific region and elsewhere.

4.3.2.2 International Environment

The global market for consulting services in 1995 approached US$40 billion, and double-digit growth is expected until the end of the decade. About 60 percent of the world market is accounted for by approximately 40 large consulting firms, which also have a presence in individual markets. A large part of their growth has been achieved through alliances, mergers and acquisitions of small and medium-sized niche practices.

With a strengthening global economy following the recession, and with much of the downsizing and cost-cutting by the industry and its clients now past, the current trend is to focus on growth strategies. There are several other important trends evident in consulting. These include :

- the increasing role of information technology (IT) in today's assignments and the movement of these firms into mainstream or non-IT consulting ;
- client demands for the implementation of consulting recommendations ;
- a continuing global expansion strategy of larger firms through mergers and acquisitions of specialised and niche practices ; and
- the importance attached to knowledge technology and the development of knowledge networks.

4.3.2.3 Main Challenges

The industry's numerous small and medium firms, together with sole practitioners, necessitates a unique export strategy. While there are many established and experienced exporters, there are many more firms that want to break into export markets. Many of these firms are not necessarily export-ready.

There is a need to encourage firms to become export-ready and to gain an understanding of the mechanics of exporting. Some firms may prefer to learn the process as part of an experienced group or even be partnered with a company experienced in the process.

Another impediment to firms contemplating exporting is the level of resources necessary to assess market opportunities, to undertake market-identification trips and to market services to foreign clients. Not only are there concerns about expenses, but many smaller firms also suffer from foregone revenue in terms of lost billings while marketing abroad.

Competing in a global market necessitates a strong product and the need for product differentiation vis-à-vis competitors. Smaller domestic firms will continue to compete with the larger consulting firms and the non-management consulting firms moving into mainstream consulting. Networking, partnering and alliances are options for smaller practitioners to compete and to capture the range of skill sets increasingly required on international projects.

The ICMCC is active in and concerned about international trade and business-development issues for its members. It recognises the opportunities that foreign markets hold for the domestic industry and is working to accommodate its members' needs with limited resources and a broad mandate.

4.3.2.4 Strategic Direction

To help Canadian management consultants to identify, develop and win foreign contracts for which they are qualified, Industry Canada, the Department of Foreign Affairs and International Trade Canada and the ICMCC will work together to :

- implement the Framework for Action which provides a systematic analysis of Canadian capabilities, strengths and weaknesses, and to articulate an action plan to assist the sector to become more internationally competitive ;

Under the Framework, the three parties will :

- promote the industry's export interests and areas of preferred practice to trade commissioners ;
- increase the number of export-ready practitioners through the conduct of workshops;
- identify foreign markets that are holding the greatest opportunities for the industry ;
- strengthen the linkages between the ICMCC and the Construction and Engineering Services National Sector Team to assist with projects to increase Canada's participation on international capital projects ;
- encourage management consultants to register in the CCC database and Industry Canada's Capital Projects Suppliers Capabilities database to ensure better integration of expertise in the pursuit of international capital projects and exports in general ; and
- examine the feasibility of export consortia or alliances, and appropriate funding mechanisms, as a means of pursuing export opportunities in selected foreign markets.

4.4 A NEW APPROACH TO HELPING CANADIAN COMPANIES DO BUSINESS ABROAD.

As part of completing this module, the participant shall use the "Guidelines" CD_ROM produced by the Canadian Trade Commissioner Service to review his or her knowledge familiarity with the expectations and methodology applying to the subject at hand.

The participant will have then mastered the contact of the CD-ROM.

4.5 DFAIT EXPORT MARKET DEVELOPMENT SERVICES

4.5.1 For education exporters

Canadian education providers interested in selling their products and services in international markets have access to several Department of Foreign Affairs and International Trade export programs and services. The following programs are designed to meet the needs of both new and experienced Canadian exporters.

- Info Export provides exporters with business advice, regional market intelligence, information on Canada's trade commissioner service, and links to other programs and services for Canadian exporters. Info Export also features a section on Team Canada which features information on upcoming trade missions as well as highlights of recent missions. Another good source of market intelligence is ExportSource, the Team Canada Trade Network's on-line resource centre providing information on the global trade environment, financing, trade regulations, and export contacts and programs.
- WIN Exports is a database of the capabilities of Canadian exporters used by Canadian trade commissioners world-wide. Trade Commissioners use WIN Exports to share information, keep track of services provided and link Canadian exporters to foreign purchasers. WIN Export-registered organisations have access to extensive market information. Canadian education providers can register with WIN Exports. Information and eligibility requirements are available on the WIN Exports website.
- Small to medium-sized education exporters may be eligible for assistance through the Program for Export Market Development (PEMD) which provides funding to assist exporters to undertake activities to develop their export markets. Private sector academic institutions are eligible to apply for PEMD. Public education institutions may also apply for PEMD but must meet certain additional criteria in

addition to the regular eligibility requirements for the program. For more information on public institution eligibility see Public Education Institutions and PEMD.

- Education Exporters can also read about emerging business opportunities, market trends, policy and legal developments, trade fairs, and recent Team Canada and other export missions and activities in DFAIT's trade newsletter, CanadaExport On-line.

Related Export Links

- Strategis
- Business Development Bank of Canada
- Export Development Corporation

4.5.2 Te international Business Opportunities Centre's Service Bringing Business to Business

The International Business Opportunities (IBOC) searches for and matches Canadian companies like yours with international trade leads provided by Canadian Trade Commissioners and Commercial Officers around the world.

Operated by the Department of Foreign Affairs and International Trade (DFAIT) and Industry Canada (IC), IBOC is Team Canada's sourcing centre.

Who Benefits from the Centre's Services?

The Centre and the Trade Commissioners work together to give you, the Canadian company, the opportunity to participate in global markets.

How the Centre Works

The Centre responds to trade leads on a case-by-case basis to ensure a timely response, and therefore does not publish a general list of trade lead inquiries.

When the Centre receives a trade lead request from a Trade Commissioner stationed overseas, the Centre searches databases such as the Department's WIN Exports and Industry Canada's Canadian Company Capabilities (Strategis), and a broad network of sources to find potential suppliers for the specific product/service requested.

Interested companies are then referred to the Canadian Trade Commissioner abroad who generated the lead. If your company has received a trade lead, an IBOC officer contacts your company to find out if any business occurred.

How to Access the Centre's Services

To position your company to receive trade leads, register in the WIN Exports and the Canadian Company Capabilities (Strategis) databases. The Centre uses these databases when searching for Canadian suppliers. You can register in WIN Exports by calling 1-800-551-4WIN (4946). Register in the Strategis database by calling 1-800-328-6189.

Making the Match

The International Business Opportunities Centre matches Canadian Companies with trade leads from around the world. To date, the Centre has responded to 7500 trade lead inquiries from 142 Canadian missions world-wide and contacted 10 000 companies across Canada. The Centre has helped register over 450 companies in the WIN Exports database.

International Business Opportunities Centre (IBOC)

Department of Foreign Affairs and International Trade
125 Sussex Drive
Ottawa, Ontario
Canada
K1A 0G2
Fax: (613) 996-2635
Internet: http://www.dfait-maeci.gc.ca/iboc-coai

4.5.3 WIN Exports : Your Gateway to World Markets

WIN Exports (World Information Network for Exports) is the Department of Foreign Affairs and International Trade (DFAIT)'s computerised database of Canadian exporters and their capabilities. WIN can be accessed only by DFAIT's Trade Commissioners and by Team Canada partners -- the federal and provincial government departments involved in international business development, as well as the International Trade Centres.

Imagine having an endless supply of your company's marketing brochures on the desks of Canadian Trade Commissioners around the world. That's essentially what happens for companies that are registered with the WIN Exports database. Company information supplied to WIN Exports can be quickly printed and provided to prospective foreign buyers, importers, distributors and partners.

World-wide Awareness of your Company

What all this means for your company is more customised services. The WIN Exports database is used by Canadian Trade Commissioners to find out more about your company and to identify Canadian exporters in response to the tens of thousands of requests they receive each year from potential foreign buyers. Trade Commissioners also use the fax function of WIN Exports to keep registered companies informed of events of interest, such as trade fairs and missions, seminars, and business opportunities.

Register your Company Today ... for Free

It's easy to register your company in WIN Exports if you are an exporter (or an export-ready firm that expects to be actively exporting soon). Please fax a request for registration, on your company letterhead, to the Export Development Division, DFAIT, at 1-800-667-3802 (944-1078 for the National Capital Region). WIN-registered companies automatically receive CanadExport, DFAIT's international business newsletter.

(Call-out) For additional information on WIN Exports, please call the hot line at 1-800-551-4946 or 944-4946 for the National Capital Region.

Your registration request should specify your line of business and whether your company is a manufacturer or a services firm. Information concerning your company's export experience and the countries to which you have exported your products/services should also be included.

Qualifying companies will be sent a detailed questionnaire for completion on receipt of the registration request and will also be asked to provide a company marketing profile.

Your Marketing Profile Works Wonders

Your company's information in WIN Exports includes your basic company particulars, exported products and services, foreign markets your company exports to and those of interest. The marketing profile is an important component of your WIN Exports entry. The profile is mandatory and provides an opportunity to promote your company to potential buyers around the world. The profile should include "key words" describing your specific expertise and competitive edge.

The more accurate and complete the information you provide to WIN Exports, the more likely you are to be contacted with export sales leads. You will also be contacted annually so you can review and update your company information.

This publication and additional export information are available by calling 1-800-551-4946 or on-line at http://www.infoexport.gc.ca

"Anyone interested in exporting who is not registered in WIN Exports ... is missing out on a great opportunity."
Don R. Fell, International Marketing, Fell-Fab Products, Hamilton, Ontario

"If you're not registered in WIN, we don't know you; if you aren't profiled in WIN, we can't find you."

Thomas Oommen, Canadian Trade Commissioner

4.6 CANADIAN BUSINESSWOMEN IN INTERNATIONAL TRADE

4.6.1 Beyond borders : Canadian Businesswomen in International Trade

As Canada enters a new millennium, the role of international trade has reached an unprecedented level of importance in the strengthening of our economy. In recent years we have witnessed the signing landmark trade agreements between our country and our key trading partners. Much policy setting, government programming, and public and private sector effort have been directed towards encouraging Canadian businesses to pursue international trade. Canadian companies have risen to the export challenge, forging into the uncharted waters of new markets.

For the first time, particular attention is being placed on the unique challenges faced by women owners of export-oriented small- and medium-sized businesses (SMEs). This report addresses the issues that confront women business owners who are actively exporting or planning to engage in global trade. The document summarises the findings of the most extensive Canadian study on women exporters to date. It is only a first step, yet a major leap forward in our understanding of women in the international marketplace.

The size and scope of this project are firsts in the world! No other country has undertaken research on this scale to investigate the internationalisation of women-owned firms. This accomplishment is the result of the commitment of project participants, sponsors, advisors and members of the research team to comprehend the needs and contributions of Canadian women business owners.

Many women entrepreneurs have shared their experiences. They have relayed their accomplishments and challenges. In addition they have offered concrete advice on how to successfully go beyond our borders.

4.6.1.1 Next Steps

This research has revealed diverse insights into the characteristics, attitudes and actions of women owners of exporting firms. Real issues and concerns have been highlighted.

The study if a first step on the part of the Trade Research Coalition (TRC) towards its mandate of proposing recommendations, policies, measures and activities to promote export development by businesswomen.

The TRC will seek private sector input by working with women's business organisations, primarily the Women Entrepreneurs of Canada (WEC) and Women Business Owners of Canada (WBOC), to hold cross- Canada round tables to discuss the findings of the report and to draw up recommendations for action.

Finally, the TRC will develop policy initiatives to promote exporting by businesswomen based on the outcome of private and public sector consultations and the research findings. These initiatives will be presented at the first Canada-US Businesswomen's Trade Summit to take place in May 1999 in Toronto.

4.6.2 Summary of important findings

1. Canadian women are selling their products and services all over the world.
Women-owned firms are doing business with Canada's most important trading partners. The U.S. is the dominant market where 74 percent of exporters are making sales. Sixty percent of exporters report activity in Asia and 58 percent sell in Europe. Active exporters generate close to 40 percent of their sales in foreign markets.

2. Export-oriented women-owned SMEs are committed to growth.
These women measure success in terms of financial performance, expansion of their firms, and recognition from their clients. They move into international markets in order to increase sales. Women exporters set aggressive growth tar-gets, expecting to increase both total sales and export sales by more than 50 percent in the next two years. In addition, they plan to increase their workforce by 33 percent.

3. Women exporters are experienced managers.
Active exporters have an average of 15 years of industry experience. Over 70 percent of the women surveyed have a college or university degree. Close to 30 percent speak more than one language.

4. Women exporters want to be taken seriously.
Three quarters of business owners surveyed feel that being a woman impacts their export business. In-depth telephone interviews with 54 study participants revealed that gender affects both the export challenges faced by women and the way in which they run their businesses. A significant challenge for many of these women is their perception that the business community, both foreign and domestic, does not take them seriously enough.

5. Summary of important findings
Thirty percent of firms began to export at business start-up. Fifty-five percent made their first foreign sale within two years of launching the business. Many women found that exporting is less complicated than first imagined, and that their firms achieved export profitability shortly after launching into foreign markets. Summary of important findings.

6. International marketing poses the greatest challenge to women exporters.

The costs of developing foreign markets, obtaining market information, and establishing effective distribution channels rank highest among the export challenges confronting women business owners.

7. International success is based on contacts, contacts, contacts.

Active exporters and export planners agree that the key to international success is making strategic contacts with potential customers and business associates through networking and personal visits to foreign markets.

8. Women-owned SMEs are overcoming the financial challenges posed by exporting.

More than half of active women exporters use personal funds and retained earnings to capitalise the firm. Short-term export financing is achieved through lines of credit, letters of credit and guarantees of receivables.

9. Women-owned SME exporters are primarily product-based firms.

Less than one in four of the companies surveyed are service-oriented. This confirms the findings of previous research that exporters are primarily focused in manufacturing, however does not reflect the higher service orientation of Canadian women business owners, in general.

10. Businesswomen have mixed views on export support services.

Survey data indicate varying levels of awareness, usage, and satisfaction with public and private sector export support programs. The study reveals a need to review export programming in order to determine its effectiveness in helping women-owned SMEs to achieve their international trade goals.

5. SELF-TEST

Questions :

1. Describe core elements of what constitutes the Canadian International Trade and business development priorities.

2. Provide two examples of Trade policy Priorities and briefly explain.

3. Describe major mechanisms put in place by the Canadian government to implement its International Trade and Business development priorities.

4. In relation to the previous question, specify what is the role of DFAIT and the Trade Commissioner's Office in the implantation of these priorities.

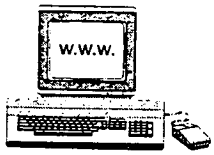
5. Give examples of major programs created and managed by DFAIT to implement these policies.

6. Why should Canada devote attention to marketing Business Professional and Educational Services internationally ?

7. Describe why and how Canadian Management Consulting Services and Education and Training Services are an essential element of International Trade and Business development priorities for Canada.

8. How should Trade officers view their role and responsibilities in providing assistance to Canadian Business wanting to expand internationally ?

6. REFERENCES



Strategis – Industry Canada Trade and Investment	http://www.strategis.ie.gc.ca
Strategis – Industry Canada Business, Professional and Educational Services	http://www.strategis.ie.gc.ca
DFAIT Department of Foreign Affairs and International Trade For Education Exporter	http://www.dfait-maeci.gc.ca
The International Business Opportunities Centre's Services	http://www.dfait-maeci.gc.ca/iboc-coai
InfoExport Win Exports : your gateway to world markets	http://www.infoexport.gc.ca
InforExport Business women in trade	http://www.infoexport.gc:ca

CD ROM :

Guidelines – A new approach to helping Canadian companies do business abroad.

7. APPENDIX

IMPROVING KNOWLEDGE OF CANADA ABROAD THROUGHT INTERNATIONAL EDUCATION

7.1 MINISTER GORDON SMITH

In a speech given in 1997, DFAIT Deputy Minister Gordon Smith stressed the importance of presenting Canadian ideas to the world:

Ideas are the essence of any society. By promoting them, we are also promoting our values, and giving expression to ourselves as a people. This helps create understanding, dialogue and common frames of reference to solve international problems. And, in a global world, most problems of any import, whether it be crime, jobs, even unity, have an international dimension. it is therefore crucial for the world to hear the Canadian perspective.

For these reasons, improving the knowledge of Canada abroad is a prime component of the "third pillar" of Canadian foreign policy introduced by the federal government in 1994. But this is no simple task for, as John Lennox, President of the International Council for Canadian Studies (ICCS) recently observed : “Canadian culture is threatened enough in Canada. If constant arguments have to be made for the support of that culture within its own country, then by how much more must we work together to ensure its promotion and health outside Canada?”

There is a strongly reciprocal relationship between developing the international competence of Canada's human resources and marketing internationally its education and training programs and services, on the one hand, and improving the knowledge of Canada abroad, on the other. Education of foreigners about Canada (through Canadian Studies and other programs) contributes directly to their knowledge of our country, and the overseas marketing of Canadian education and training programs and services functions indirectly to transmit understanding about our values, culture and strengths, as does the presence of Canadians studying abroad. Conversely, the success of our marketing efforts (of education and training as well as of other commodities) depends heavily on the degree to which international clients appreciate what Canada stands for.

Regrettably, Industry Canada concluded in its competitiveness assessment of the commercial education and training services sector that "Canadian capabilities are not well-known or understood overseas;" and a recent survey of study in Canada as viewed by American high school counsellors round that despite their belief that "their students can receive a good education in Canadian universities and a good job when they return home with a Canadian degree, ... only a handful thinks their college-bound students would be interested in attending a Canadian university and most counsellors say they have little or no information about Canadian schools." Projecting an accurate, effective and positive image of Canada to influence foreign leaders in our favour is thus inextricably inter-related with international education, which both depends on it and is a prime means of achieving it.

RATIONALE

International education enhances understanding between peoples and countries — culturally, politically, and economically ; such understanding helps to ensure Canada's success in the international marketplace and to promote the acceptance of Canadian policy interests abroad. It thus contributes to our effectiveness in pursuing Canada's economic and political/security foreign policy interests. More specifically :

> International students' exposure to Canadian education and training fosters familiarity with and acceptance of Canadian products, which in turn creates opportunities for technology transfer joint ventures and other business arrangements, making us a partner of choice; and ;
>
> The better our image abroad, the greater is Canada's capacity for effective and independent action in foreign affairs — this is the essence of "soft power," the ability of a country that is not a world political, economic or militaristic superpower to be persuasive in influencing international dialogue to achieve its ends — to pursue peace and security built on mutual confidence among neighbours which grows from the knowledge imparted through education and training.

International education, then, helps to position Canada with our future trade and political partners by projecting our values, culture and knowledge; and it serves as the key instrument for establishing and maintaining peaceful and harmonious connections with the global community.

STATUS

Aside from the various indirect means by which international education contributes to improving the knowledge of Canada abroad discussed previously in this diagnostic, the most direct approach to this end at present is through the Canadian Studies program. Its support by DFAIT began in the late 70's pursuant to the mandate of making Canada better known and understood abroad, and it now constitutes a comprehensive set of measures designed to enable foreign academics to develop and teach courses on Canada, or to undertake research in their own disciplines about aspects of Canada leading to publication in the overseas scholarly presses. Its umbrella organisation, ICCS (which is effectively an international "virtual university"), has grown from nine founding member associations to twenty associations representing over thirty countries and about 7,000 academics and 150,000 students world-wide.

7.2 HONORABLE ART EGGLETON

NOTES FOR AN ADDRESS BY THE HONOURABLE ART EGGLETON MINISTER FOR INTERNATIONAL TRADE TO THE BOARD OF THE ASSOCIATION OF UNIVERSITIES AND COLLEGES IN CANADA "EDUCATION: INTERNATIONAL MARKETING CHALLENGES AND OPPORTUNITIES"

OTTAWA, Ontario

March 5, 1997

I am delighted to have this opportunity to share with you some views on the importance of the international dimension of education in Canada. I look forward to hearing your comments, questions, and advice over the course of our luncheon.

Some among you may wonder why the Prime Minister, the Foreign Affairs Minister and the International Trade Minister are all so interested in the internationalisation of higher education, including education marketing, that we would each speak on the same day on the subject. Let me explain.

The international dimension of higher education equals job creation, economic stimulation and competitiveness — which remain Canada's top priorities.

Many of you were on the latest Team Canada mission to Asia. Thanks in large part to an effective strategy on the part of the AUCC [Association of Universities and Colleges in Canada], education was a major theme in this year's Team Canada, reflected in the individual education-related events during the mission.

Team Canada, working as it does through partnerships among governments and key economic sectors, is a winning strategy that creates jobs and growth in Canada.

That said, today, I want to talk to you more specifically about "Education Team Canada." When I talk about Education Team Canada, I am talking about a partnership that includes those among the relevant departments in the federal and provincial governments, municipalities, the corporate world, public and private educational providers at every level, associations such as the AUCC and private consultants. The degree to which we can unite in our efforts will largely determine how successful we will be in selling Canada's excellent education services and products abroad. The real competition is not within Canada but beyond our borders.

Where does the Department of Foreign Affairs and International Trade [DFAIT] fit into this partnership? Our role remains that of a catalyst. Without infringing on provincial government mandates in education, we in the Department act as a catalyst in bringing institutions and associations from across Canada together to address marketing challenges and opportunities.

Let me emphasise, however, that we are not the principals. You are. We in this department will do our best to provide you with support that no other entity can provide. We will do our best to furnish you with marketing information and intelligence, as well as marketing tools. We will look for innovative ways to provide more on-the-ground assistance for your marketing efforts at our missions abroad, and we will help you get better access to International Finance Institutions [IFI] education contracts. We will also work closely with you on the development of marketing strategies so that you can go out and get the job done effectively. But you are the principals. Let there be no mistake about it.

I will come back to the importance of working in partnership a little later, but first I'd like to spend a few moments talking about the benefits of international education for

Canada. Just how does international education contribute to jobs and growth in Canada?

I'll give you a few examples and statistics. As the Prime Minister indicated this morning, according to a recent study, in 1994-95, international student expenditures alone contributed $2.3 billion to the Canadian economy and represented about 21 000 jobs.

At the University College of the Cariboo in Kamloops, B.C., it has been shown that international students last year contributed $11 688 000 to the Kamloops economy — not an inconsiderable amount.

In another part of the country, the president of a multi-language school in Montreal figures that for every eight new students who take up places in his school, he needs to hire one more teacher. For every 54 new students, he needs to hire an additional administrator. He has just set up a new school in Toronto.

These are just a few examples that demonstrate how international education contributes to the Canadian economy.

This phenomenon is taking place against a backdrop of declining domestic student enrolments and budgetary cutbacks, both of which provide a sharp stimulus for public and private education institutions to generate alternate sources of revenues if we are to maintain our current high standard and quality of education. International education creates jobs and generates revenues.

Education is also an instrument of diplomacy, and we in Canada have an opportunity to influence the next generation of world political and economic decision makers through one of the very best education systems in the world.

Think of our country and our education system: our environment is relatively safe, our tuition fees are modest, we can offer education in French and English, and we are a home to cultures from around the world. We quite rightly have an international reputation for being an attractive country in which to study — and a nation of people eager to make long-term commitments and friends.

International education means enhanced understanding between peoples and countries — enhanced understanding culturally, politically and economically. Such understanding will help ensure Canada's success in the international marketplace and help promote the acceptance of Canadian policy interests abroad.

One of the best examples to illustrate what I mean involves the AUCC and most of the institutions represented in this room. On March 20-21, over 17 representatives of universities from every region of Canada and institutions of French and English instruction, a member of the AUCC, and two officials from our department, will form a delegation to participate in an Education Fair in Venezuela sponsored by the Fundayacucho, the Foundation that administers the World Bank education loan in that country. This Education Fair is directed towards postgraduate scholars. The Venezuelan Foundation hopes to place up to 100 of their top students in Canadian postgraduate schools. The Canadian Ambassador has backed this initiative from the outset, as it will form a centrepiece of celebrations of the 50th Anniversary of Canada-Venezuela relations.

Last year American universities received 418 of these coveted scholars who have their tuition paid through the World Bank loan and receive a stipend of $US 1 000 a month during their stay at university. Canada received only 13. More Venezuelan postgraduate students went to the University of Colorado (Boulder) than went to all universities in Canada! This must change. This will change.

While Canada is holding its own in the international education marketplace in places where we market effectively, there is a widespread view that we could be doing much better.

The Government of Canada is sensitive to this opinion. We have stepped up our assistance to Canadian education exporters over and above our commitment in Asia Pacific with the Canada Education Centre [CEC] network, and we plan to do more. Let me tell you how.

The CEC network in Asia, based on a partnership between the Government of Canada and the Asia Pacific Foundation of Canada and founded on cost recovery principles, is one vehicle designed to promote Canadian education services and products internationally. But the education market is surging in many parts of the world: in South

America, the Arabian Peninsula, South Africa, the European Union and Eastern Europe, and Russia to name a few.

The market is not, however, sitting waiting for us. We need to hone our marketing skills and move with a sense of urgency. We face fierce competition. The Australians, the New Zealanders, the British, the French, the Americans and now even the Russians, have stepped up their efforts to promote their education institutions.

Meeting the challenge of developing this market will require concerted effort on our part. I firmly believe we can meet the challenge.

As I mentioned earlier, the key lies in partnerships. We need to come together like never before. With growing world-wide interest in education and the transformation taking place in our economy, Education Team Canada has a unique opportunity to become a team of international education marketing partners on a grand scale.

While you in this room are the ones who deliver the education services and products, DFAIT must fulfil its part in this partnership. I therefore would like to outline for you a number of initiatives that we have undertaken in the last year and some of our thinking for the future.

Over the last 12 months, we have identified a number of new education markets and broadened our focus in terms of determining education market potential. No longer are we simply developing markets for attracting fee-paying and well-qualified international students to Canada, but we are exploring the potential for obtaining lucrative International Finance Institution contracts in the education and health training area, and examining the prospects for selling New Learning Technologies [NLTs], of which Canada has well-developed capacities in both official languages. For instance, under a World Bank loan, Argentina is undergoing a massive restructuring of its education and health systems worth millions of dollars. Canada has the capacity to obtain a good piece of the action, but we will need to push for it.

We are also developing new vehicles to support your marketing efforts at our missions abroad. At our Embassy in Athens, by May 1, an Education Resource Centre [ERC] will be up and running. The ERC simply involves the conversion of a locally engaged staff member, complete with new job description, into an education marketing officer. The

ERC will be located in the Canadian Embassy and will be staffed by a Greek national who studied at a Canadian university. The Manager of the Greek ERC will be coming to Canada on a familiarisation tour in the latter part of this month and she hopes to meet many of you and your representatives.

In Venezuela, the Canadian Embassy has established a ground-breaking affiliation with the Association Venezolano-Americana de Amistad [AVAA], which allows Canada to use the resources of the AVAA to promote Canadian education institutions. It is this alliance with the Americans and the Venezuelan Foundation that is sponsoring the Fair where most of you will be represented later this month.

We will encourage such partnerships in other countries. Certainly the Canadian Studies centres networked around the world could prove effective allies in making Canadian education opportunities better known. Similarly, the scholarly exchange programs we have in place with different countries should raise the profile of Canadian education institutions. In other words, we should see all programs, whether designed for marketing or designed to increase the knowledge of Canada abroad, working in an integrated fashion so that together they reinforce both objectives. It is for this reason that all of the Department's international academic responsibilities have been joined together in the International Academic Relations Division.

We are in the process of exploring the possibilities of establishing Education Resource Centres in the Arabian Peninsula, South Africa, Colombia, Russia, Germany and Washington, D.C.

We will also be addressing the training needs of new foreign officers, whether they are in the trade, political or immigration stream, to be able to promote your education interests abroad. Our Canadian Foreign Service Institute [CFSI] will be turning out new foreign service officers with a sensitivity towards education marketing by this fall.

We have also encouraged a Canadian consortium to develop a CD-ROM with Internet capabilities that can be used to help market your education institutions abroad. This powerful marketing tool will bring the excellence of Canada's education institutions and services to the attention of education leaders and international students around the world. Over 80 schools, many of which are represented here today, are featured on the CD-ROM, complete with audio and visual campus tours.

Our department will distribute this CD-ROM for use in all its diplomatic and trade missions abroad, as well as to foreign Canadian Studies centres. The technology will also be used throughout the Canadian Education Centre Network, where other materials in local languages are also available. In addition to being produced in both official languages, the text portion of the CD-ROM will be translated into Spanish, Portuguese (to get at the significant Brazilian market) and German. The CD-ROM will be ready for commercial distribution by April 1 and will be sent to our missions shortly thereafter.

These dramatic developments in international education marketing beg the question: are our structures up to this marketing task? Is the Department of Foreign Affairs and International Trade organised in such a way as to be able to provide the optimum support for your marketing efforts? By the same token, is the AUCC, as an organisation, and its individual members, situated in such a way as to take maximum advantage of the vast education marketing opportunities abroad?

To address these and related questions, the Department of Foreign Affairs and International trade plans to hold a National Conference in the same month that Minister Axworthy addresses the National Association of International Educators [NAFSA] conference in Vancouver on May 23 to determine how education providers and government can best work together to support the international dimension of education, including marketing, as we head into the next millennium.

By coming together in common cause, we can lend added value to individual efforts and give Canada a competitive advantage in the international education marketing world. By doing so, we will strengthen our higher education institutions, which in turn can better prepare Canadians individually and collectively to meet the competitive challenges of the future.

Thank you.

7.3 K.R. HIGHAM

NOTES FOR AN ADDRESS TO DELEGATES OF THE EDUCATION INDUSTRY SUMMIT

BY
K.R. HIGHAM
DIRECTOR GENERAL
INTERNATIONAL CULTURAL RELATIONS BUREAU
DEPARTMENT OF FOREIGN AFFAIRS
AND INTERNATIONAL TRADE

"INTERNATIONAL EDUCATION:
MARKET OPPORTUNITIES AND CHALLENGES"

TORONTO, ONTARIO
SEPTEMBER 24, 1997

I would like to thank Charles Ivey and Smith Barney for inviting The Department of Foreign Affairs and International Trade (DFAIT) to share with you our experiences and some views on the opportunities and challenges that face Canada in the international education market. Our trade minister, Sergio Marchi, has made it quite clear to us even in the very early days of his mandate, that he views education marketing as a top priority and one where he expects the Department to make an important contribution.

I am learning a great deal by hearing your own views and advice on how the investment and finance community, the private and public education providers, and various levels of government in Canada can work together to maximise our success in the highly competitive world of marketing education goods and services abroad. All of us who are concerned with this file at Foreign Affairs and International Trade applaud the conference organisers for bringing you -- the investment and finance community -- together with Canada's education providers for the first time in one room.

In my remarks today, I would like to explore three aspects of international education marketing as seen from the perspective of the Department of Foreign Affairs and International Trade: first, the economic and diplomatic case for international education;

second, the role of the Department of Foreign Affairs and International Trade and the evolving nature and location of the international education markets and; third, a little future search by way of some reflections on how the investment and finance community should get into the act.

Education as business:
It will not be news to you that the international dimension of education is a both vital sector of the Canadian economy and has a major role in Canada's Foreign Policy.

The economic case for international education is compelling. We have heard this morning impressive statistics about the value of the international market in education goods and services. Those numbers indicate that the international demand for education services and products is phenomenal. The education market is truly global in nature, as we speed not toward but through, the knowledge-based economy, and the explosive growth in demand seems destined to continue for some years to come. We noted with some satisfaction, the views expressed in the final report of the Smith Barney Symposium last February in New York in which the word "Bullish" was used to describe the investment possibilities in the international education sector.

However, I should add that only a tiny share of the $700 Billion annual global market referred to earlier this morning, including the nearly $3 Billion awarded by world bank authorities in 1994 for education and training projects, will be won by Canadian education suppliers. Of course, not all education services and products developed in Canada are designed for, or suited to, the international market. While some of our education products are avant-garde, others designed for sale abroad will, alas, not succeed on the international scene. Our sometimes shaky performance in marketing and in after-sales service could be the subjects of seminars in their own right.

Nevertheless, in 1994, international students pumped $2.3 billion into the Canadian economy, representing 21,000 jobs. In 1995, it is estimated that over 40,000 foreign students contributed between $785,000,000 and $1,178,070,000 to the Ontario economy alone!

While Canada is meeting with success in some areas, I think that most informed observers would agree that we could and should be doing much better. In fact statistics show that we are losing overall market share. Later on I would like you to reflect on ways that we might improve Canada's performance in education promotion and marketing. I will leave a hint with you now. We believe the key lies in partnerships.

Education and Diplomacy:
International education is not just market economy, supply and demand, and bottom lines. The promotion abroad of Canadian values, Canada and Canadians through international academic relations is a major objective of Canadian Foreign Policy. It is a prime component of the third pillar of our Foreign Policy, introduced by the Government of Canada in 1994.

Canadian education contributes significantly to favourable international impressions of Canada. The positive experiences of international students learning about Canada from abroad or studying in Canada lead to many long-term friendships for us. These new friendships are formed, more often than not, with future business and government decision makers in Canada and abroad. Our Ambassadors and Trade Commissioners, international business persons and professionals in all areas, including Canadians involved in the new information technologies industry around the world, provide strong anecdotal evidence of this fact. In addition, Canada's "Foreign Alumni" (our term for those with Canadian content in their education) frequently attest to the excellence of Canada's education system seen against the backdrop of a civil, vibrant, bilingual, and multi-cultural society, and well they should. On its quality of life index, the united nations has rated us number one, three years in row.

Think of how Canada compares with the competition. We continue to have modest tuition fees and relative safety in our streets and on our campuses. We have a reputation as a caring and responsible member of the world community, with stability anchored in one of the world's most evolved democracies. We are a home to new Canadians who have come here from all over the world, partly as a consequence of our culturally diverse domestic student bases. Our schools are known worldwide for their "international student absorptive capacity". Canadians are eager to make friends and long-term commitments and, perhaps most interesting, we offer a modern and creative north American experience.

Against this backdrop of a wide variety of cutting-edge Canadian education products and services, a surging international education market, and governments committed to education as a primary instrument of domestic and foreign policies, I want to tell you what your Department of Foreign Affairs and International Trade is doing to boost support for private and public education providers in their international activities.

However, I urge you to understand my comments in terms of "Team Canada" and of partnerships. It is through the formation of alliances, working partnerships, and leveraging that Canada will be most successful in cracking the tough international education market.

Prime Minister Chretien, as you know, has led a number of highly successful "Team Canada" missions abroad. Recently, the concept of a virtual "Education Team Canada" is gaining more and more currency in Canada. The Education Team Canada we speak of can take many forms. We are talking about partnerships involving the public and private education providers, the provinces, municipalities, national education associations, relevant federal departments, and individual companies and consultants.

On the last Team Canada visit to Asia, over 50 education marketers were on board the jumbo jet. The education sector had the second largest percentage of delegates on that mission. We expect similar representation on the next Team Canada visit, this one to Mexico, Brazil, Chile and Argentina, in the first quarter of 1998. (the departmental official in charge of organising this Team Canada Mission is Mr. Peter McGovern. He can be reached at 613-944-1233).

Let me give you a concrete example of one winning partnership which is playing out in the international market. In 1994, the Government of Canada, in partnership with the Asia Pacific Foundation of Canada (APFC), committed to the establishment of up to 10 Canadian Education Centres (CECS) in Asia within 5 years. We are on or ahead of schedule and on budget. Centres are up and running in Hong Kong, Singapore, Seoul, Taipei, Kuala Lumpur, Jakarta, Bangkok and New Delhi. Mini-offices will open in Beijing and Canberra soon. An education centre has also opened in Mexico.

The CECS operate on cost recovery principles and are the Department's principal education marketing arm in Asia Pacific. The CECS are designed to forge links with local education institutions and bring to the attention of international students, corporate and local government clients, the excellence of Canadian education goods and services. Early results, measured in terms of the increase in student visas, are certainly encouraging.

With the Canadian education centre network in Asia up and running in terms of attracting students and securing training and service contracts, where and what are the marketing opportunities beyond Asia and what is The Department of Foreign Affairs and International Trade doing to help Canadian education providers get at those markets? Are there new markets to be tapped in Asia and else where, beyond recruiting international students and providing training for corporate and local government clients?

We are concentrating our support in four main "product" or "service" areas identified by Canadian education suppliers. They are 1) recruitment of international students to study in Canada; 2) obtaining collaborative research contracts with and selling academic, and training education programs as well as administrative know how to education authorities and private sector distributors abroad; 3) gaining better access to projects in developing countries which are funded by the international finance institutions; and 4) providing assistance in marketing technology-mediated education and training services (distance learning).

Our approach seeks to provide assistance which is not available elsewhere. This assistance has two dimensions: facilitating access, and reducing impediments which adversely affect competitiveness. In both cases our value-added guidance comes in the form of market intelligence and local contacts, and is delivered by your network of government missions abroad — that is the Canadian embassies and consulates general world-wide. At The Department of Foreign Affairs and International Trade's headquarters, we focus more on strategic planning and policy advice.

On the facilitation side, our assistance takes the form of providing preliminary market assessments; helping institutions develop marketing strategies to enter, consolidate, and/or further their position in particular markets; developing new and creative ways to provide more on-the-ground assistance for education marketers in our missions abroad; helping education suppliers get better access to international finance institution projects in education, health, and environment; developing new education marketing tools; and providing more support for alumni development.

With a view to reducing marketing impediments, we have supported efforts by the education community to ensure the maintenance of high standards of education and user-friendly access to their schools. For example, we are encouraging education institutions in their efforts to modernise, streamline, and make their admission procedures more uniform. We have also been urging responsible federal departments to bring Canada's student visa processes more into line with those of our international competitors, while continuing to ensure the well-being of Canadians. These efforts are designed to show international students and exchange scholars that we welcome them in fact, as well as in spirit.

But how does the investment community get on board? With shrinking government funding, and with universities, colleges and private education suppliers searching for alternate forms of revenue, this seems to us to be an excellent time to enter the scene. But you must do so with a certain sense of urgency. Like time and tide, the international education market is not waiting for us.

In closing, I want to share with you a few questions on this subject which we are hearing with increasing frequency from students and stakeholders. Are we going to see increased privatisation of the education sector in Canada? Will private sector growth be limited to training? What are the international relations issues which should be anticipated if this is so? Has the time arrived in Canada and around the world, where traditional universities are losing their domination of the market for marketable degrees? Should publicly-funded or private niche universities or colleges be established in Canada as some of our international competitors have already done? Finally, "are some of our publicly funded institutions approaching absorptive capacity for their international components?"

Now I invite you to add to this list some questions of your own: could partnerships be formed in this room to respond to the opportunities you are discussing here? How and in what ways can the investment and the finance community better help the Canadian education industry to market their services and products abroad? Could the investment and finance and investment community help forge a coalition to market Canada's remarkable distance learning capabilities abroad?

These are business questions which only you can answer, and not necessarily by the close of business today. We do think, however, that some of the answers you come up with, and new partnerships which may well have their genesis today, will determine, in a measurable way, how well Canada eventually performs in this broadly defined international education market place. We in The Department of Foreign Affairs and International Trade encourage you and wish you well in your deliberations to come together in new and creative international education marketing partnerships as we enter the new millennium.

7.4 MAY 8, 1998 NO. 114

MARCHI HOSTS ROUNDTABLE ON MARKETING CANADIAN EDUCATION ABROAD

International Trade Minister Sergio Marchi today hosted at York University, in Toronto, broadly based consultations to promote Canadian education abroad. Minister Marchi co-hosted the education roundtable with Dr. Lorna Marsden, President of York University.

"We recognise that our exceptional education system is a valuable economic resource, contributing almost $2.5 billion to our economy — the equivalent of sustaining 21 000 jobs," said

Mr. Marchi. "That's the reason we are working in a Team Canada partnership with clients and stakeholders to advance a national marketing strategy. Our overall objective is to attract more international students to Canadian education institutions and to obtain a larger market share of international education contracts."

The consultations involved the provinces, national and regional associations, and representatives of public and private education institutions at all levels.

The Minister announced the creation of a new and permanent dedicated international educational marketing unit in the Department of Foreign Affairs and International Trade. This will provide one-stop shopping for those selling Canadian educational products and services around the world. The unit will report to the Minister for International Trade through the Chief Trade Commissioner.

As well, to complement this, Minister Marchi announced the creation of an Education Marketing Advisory Board, which will report to him directly, twice a year. Members of the Board will be drawn from the widest possible range of the Canadian education community, and will provide advice and guidance to the Minister on Canadian education marketing in a global context. The first meeting is expected to be held in the fall of 1998.

"The quality of Canadian education is recognised world-wide," said Dr. Paul Cappon, Director General, Council of Ministers of Education Canada (CMEC). "We have the potential to market this expertise and Canadian-developed learning products in the global village. We look forward to working with the Department of Foreign Affairs and International Trade and our education partners to focus the Canadian presence abroad."

7.5 LESLIE SWARTMAN, OFFICE OF THE MINISTER FOR INTERNATIONAL TRADE

Backgrounder

EDUCATION MARKETING IN CANADA

The Economic and Foreign Policy case

The Canadian education sector generates great revenues for this country. In 1996, over 99 335 international students studied in Canada. In the same year, it is estimated that international students contributed almost $2.5 billion to the Canadian economy representing approximately 21 000 Canadian jobs.

International students enrich Canada's campus life, contribute to Canadians acquiring a global outlook, and serve as emissaries for Canada when they go back to their home countries.

International students are viewed as economic and political decision leaders of the future. In turn, students who get to know Canada through good education experiences are more likely to buy Canadian services and products when they return to their homes than those who attend schools in competing nations.

There are 90 degree granting universities and colleges in Canada, over 164 community colleges, a large number of private career colleges, and English and French language schools.

Education Marketing Time Line

On November 1, 1994, the Government of Canada announced its intention to establish a network of up to 10 Canadian Education Centres (CECs) in Asia within five years. The CECs are designed to forge new links with local education institutions and bring to the attention of international students, local corporate and government clients the excellence of Canadian education goods and services.

By January 1998, 10 CECs were established in Taipei, Seoul, Singapore, Hong Kong, New Delhi, Bangkok, Jakarta, Beijing, Kuala Lumpur, and Canberra.

From September 1995 to the present, the Department of Foreign Affairs and International Trade identified and tested new education markets, broadened the basis of the education marketing search, and developed new methods of delivering services on behalf of education providers in Canada.

In March 1997, the Canadian Embassy in Caracas, forged a ground-breaking marketing arrangement with the Association Venezolano-Americana de Amistad to market Canadian education goods and services in Venezuela.

On June 19, 1997, the Canadian Embassy in Athens inaugurated the first Education Resource Centre (ERC) in our missions abroad. The ERC has one locally engaged officer dedicated to promoting Canadian education institutions.

In September 1997, a pilot Education Resource Centre was opened in Abu Dhabi to tap into the burgeoning regional Arabian Peninsula market.

In November 1997, International Trade Minister Sergio Marchi called for the establishment of up to 15 new education marketing centres by the year 2000.

In January 1998, on the recent Team Canada mission to Latin America, Canada officially inaugurated four new CECs in Mexico, Brazil, Argentina and Chile.

There are currently 17 generic "education marketing centres" (14 CECs, two ERCS (Athens and Abu Dhabi) and one with a local arrangement (Caracas).

Current Situation

The education roundtable has been called to consult with the broadest possible range of representatives of the education sector to advance a global education marketing strategy that will take Canada into the next century.

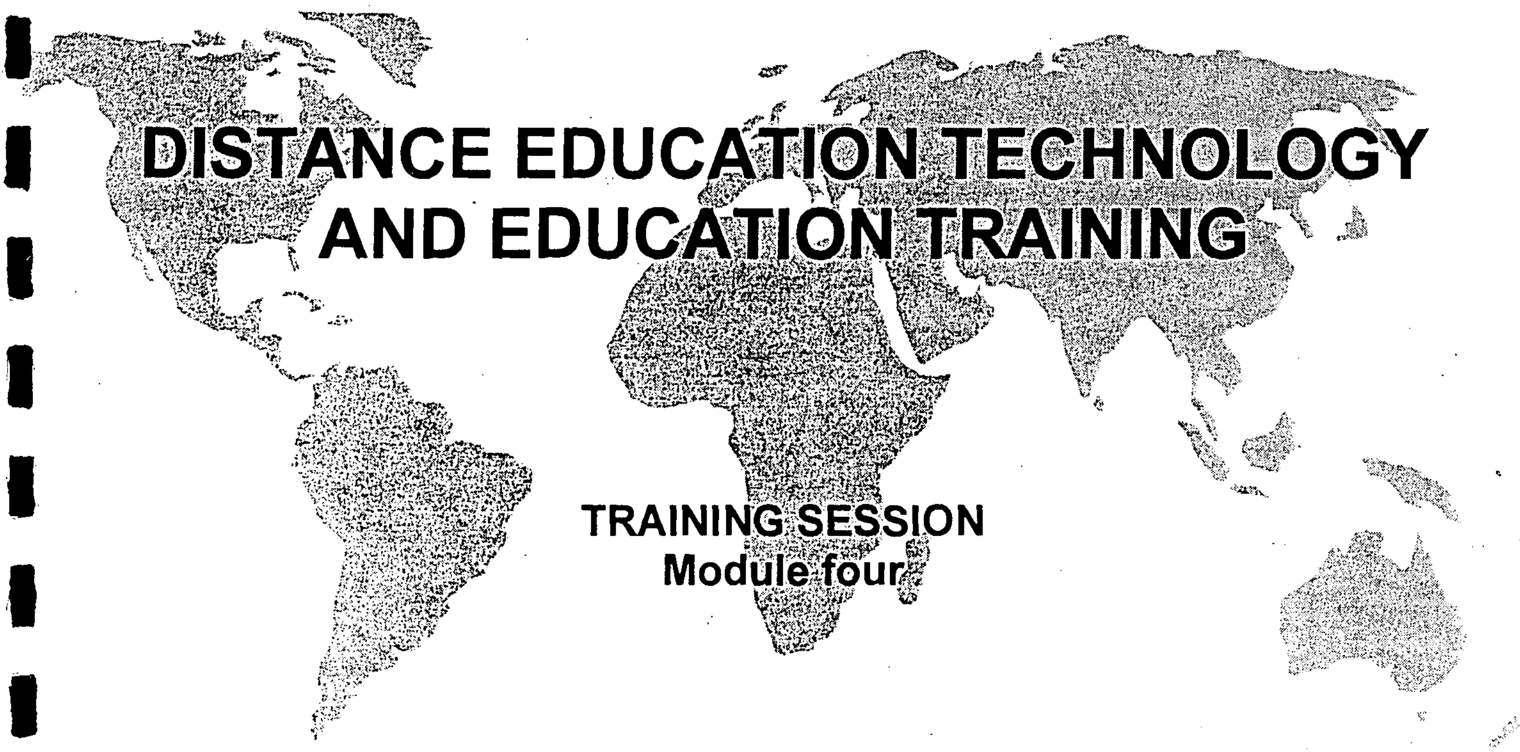
Issues to be discussed include where the new points of service will be established, timetables for openings, and the most appropriate vehicles to deliver services effectively on behalf of the education suppliers in Canada.

This landmark consultation will include representatives from the provinces, the national and regional education associations, not-for-profit education organisations, public education institutions at all levels and private education providers including career colleges and private language schools.

All parties at the roundtable will have prepared position papers and have present specialists to lead discussions on issues critical to achieving Canada's international education marketing objectives.

4

CANADIAN EDUCATION AND TRAINING SERVICES



DISTANCE EDUCATION TECHNOLOGY AND EDUCATION TRAINING

TRAINING SESSION
Module four

PILOT VERSION

Department Foreign Affairs and International Trade (DFAIT)
Education Marketing Unit (ACET)
in collaboration with CFG inc.

TABLE OF CONTENTS

LIST OF TABLES

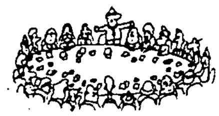
LIST OF ACRONYMS

ADLC	Alberta Distance Learning Centre
BC	British Columbia
BLS	Bureau of Labor Statistics
CAI	Computer Aided Instruction
CAL	Computer Assisted Learning
CAP	Community Access Program
CBNC	Canadian Business Networks Coalition
CBT	Computer-based Training
CDI	CD Interactive
CECs	Canada Education Centres
CIDA	Canadian Internet Development Agency
CIPP	Canadian Institute of Petroleum Producers
CMI	Computer Managed Instruction
CML	Computer Managed Learning
COPS	Canadian Occupational Projection System
CVU	California Virtual University
EPSS	Electronic Performance Support System
FUN	US-based Electronic University Network
GIS	Geographic Information System
GUI	Graphic User Interface
HRDC	Human Resources Development Canada
ISDN	Integrated Services Digital Network
LANs	Local Area Networks
NAFTA	North American Free Trade Agreement
NB	New Brunswick
NFBC	National Film Board of Canada
NMLM	New media learning materials
NSECA	Nova Scotia Educational Communications Agency
OLA	Open Learning Agency
PSS	Electronic Performance Support Systems
PSS	Performance Support Systems
SCN	Saskatchewan Communications Network

SIAST	Saskatchewan Institute of Applied Science and Technology
SMFs	Small and Medium-sized Firms
TETRA	Telemedicine and Educational Technology Resources Agency
TL*NCE	Telelearning Network of Centres of Excellence
TML	Technology-mediated learning
UK	United Kingdom
US	United States
USUN	US-based Electronic University Network
VOD	Video-on-Demand
WANs	Wide Area Networks
WGU	Western Governors' University
WWW	World Wide Web
XML	Extensible Mark-up Language

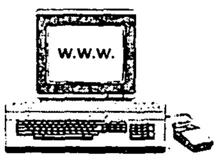
TABLE OF ILLUSTRATIONS

Cd

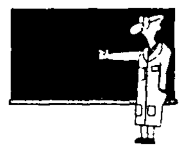


Chat On The Network

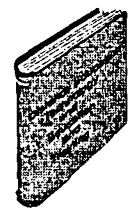
Exercise



Internet

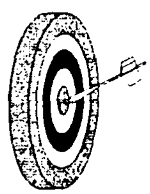


Professor



Reading

Self-test

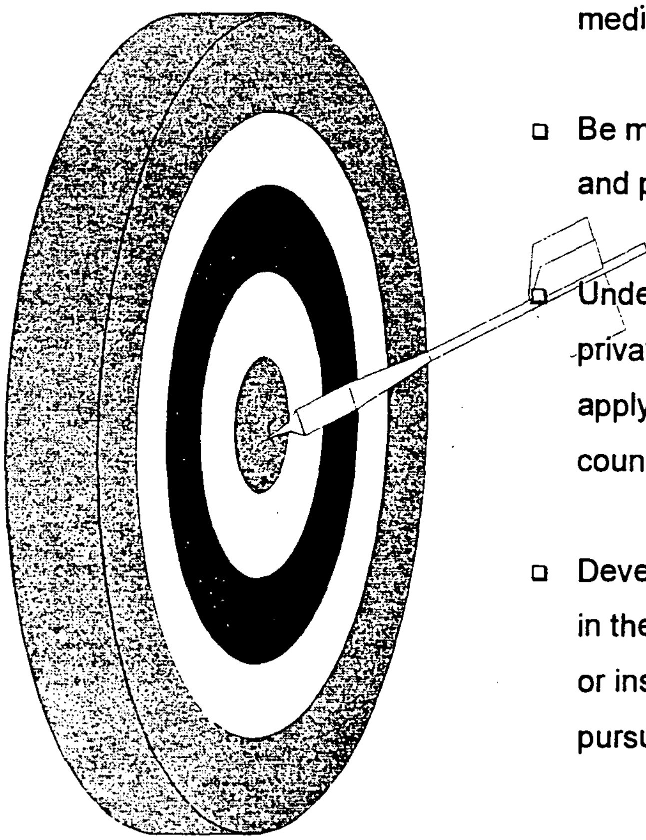


Objectives

Timer

Group discussion

1. LEARNING OBJECTIVES

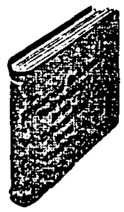


At the conclusion of this module, the participant will :

- Understand the new approaches and characteristics of distance education and mediated learning.
- Be more familiar with Canadian expertise and products offered in these domains.
- Understand the mix of Canadian public and private entrepreneurs in these domains and apply to the situations observed in their countries of posting.
- Develop a marketing vision for opportunities in these domains that Canadian companies or institutions may wish to advantageously pursue.

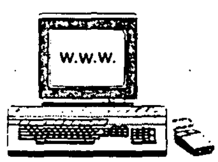
2. PROCESS AND PACING

Activities



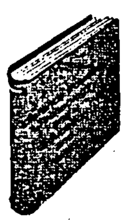
TO UNDERSTAND THE MEANING OF DISTANCE LEARNING AND TECHNOLOGY MEDIATED LEARNING

To read : pp. 15-44



TO KNOW THE TELELEARNING NETWORK OF CENTRES OF EXCELLENCE

Website : http://www.telearn.ca



TO UNDERSTAND THE TENSION AND POTENTIAL OF TELELEARNING

To read : pp. 53-58

TO DEVELOP A MARKETING VISION FOR OPPORTUNITIES IN THESE DOMAINS THAT CANADIAN COMPANIES OR INSTITUTIONS MAY WISH TO ADVANTAGEOUSLY PURSUE :

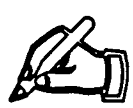
Exercise one

EMERGING MODEL TO DELIVER DISTANCE LEARNING : JOINT VENTURE IN THE PUBLIC CENTER

1. Take note of pages 45-46 of this document before the meeting.

2. Group discussion→ goals to achieve
   - Understand the consortium mechanisms.
   - Use this force in the marketing program.

Exercise two



THE PRESENCE OF CANADA IN INTERNATIONAL MARKET AND STRATEGIC NATURE.

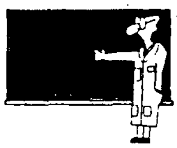
1. Take note of pages 64-72 of this document before the meeting.

2. Group discussion→ goals to achieve
   - Describe the mix of public and private sectors, services and products.
   - Describe the high potential sectors for the application of NMLM ?

Resources :

CONSULT COMPACT DISKS :

Title : Collaborations : a practioner's guide to Telelearning



You need a tutor?

Contact DFAIT – Education Marketing Unit
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Tel. : (613) 992-6289
E-mail : gillesseguin@dfait-maeci.gc.ca

Darren Smith
Tel. : (613) 995-5295
E-mail : darren.smith@dfait-maeci.gc.ca

You need help or you want to discuss ?

Join group discussion by chat room.

3. INTRODUCTION

In Canada, the Constitution assigns responsibility for education to the provincial governments. However, because this country's population of 26 million is dispersed across nearly 10 million square kilometres, distance learning becomes a priority. Canada, a country once largely isolated by location and weather, must now cope with the reality of a borderless marketplace which stresses integration. For over two decades, electronic networks have proliferated. As a result of this expansion, there have been predictions of the so-called "wired city," a continuously linked environment where various technologies are compatible and connected, permitting seamless communication. This expected integration is fast approaching as computers, television, telephone, and fax machine use becomes more widespread. This integration of networks also amalgamates diverse sectors of the marketplace, affecting everything from fast-paced businesses to the cloistered studies of academic research. The corporate or medical professional can instantly retrieve vital information from distant data bases. Academics who previously made little use of computer technology in education now expect to freely communicate with their colleagues all over the globe via the Internet.

As fewer and fewer commute to offices, children are starting to see their parents at work in the home. In an earlier agrarian society, children grew up watching father and mother do farm work, helping out with the chores. In such circumstance, children received training directly from their parents. With urbanisation, in an industrial society, one or both parents vanished at the start of the day, went off to office or factory, and returned only at dusk. Children knew that their parents were working, but had little real concept of what that meant. In a technological society, once again the home becomes a work environment, with parents linked to the office or clients via electronic networks. In this environment, children again see their parents at work and may well help out with the chores, directly and indirectly receiving training. The young may also receive schooling at home, with instruction and lessons imported via computer and interactive television. De-ubanization is a distinct possibility, as many will find cities polluted and unsafe. Such developments as these will drastically influence everything from architectural design to transportation systems. De-ubanization is a major trend and one that deserves further study.

We begin with a snapshot of the current state of activity in technology-mediated learning (TLM) internationally and in Canada, including some examples of traditional paper-based distance education institutions that have laid the foundation for the transition to more recent TML "virtual" institutions.

A delivery of TML through consortia is identified as a recent innovation in distance education. Most high-profile recent developments in TML consortia are the Western Governors' University (WGU) and the California Virtual University (CVU). Both offer access to internet-based courses, as well as programs via satellite. The Western Governors' University is a distance learning consortium of universities in more than 16 US states and territories. It has been joined by some outside affiliates including the University of British Columbia and the China internet Education Centre. The California Virtual University limits affiliation to California-based institutions. The CVU has created an online home for the TML offerings provided by state-affiliated public and private higher educational institutions.

Another important consideration is the prominence of for-profit educational delivery systems such as the US-based University of Phoenix. The University of Phoenix delivers courses using a combination of face-to-face and TML by opening up sites in different centres and through their Online Division. Magellan University is another example. Both of these institutions have opened online Web sites that advertise courses and programs delivered on the internet in Canada, the University of Phoenix recently opened a Vancouver campus.

In Canada, our experience with open universities and distance learning networks has set the groundwork for early forays into TML. Examples cited in the report of networks or consortia arrangements that have emerged to support TML in Canada include TeleEducation NB for residents of the province of New Brunswick, and the Atlantic Notemakers consortium of six Atlantic universities supported by an industry Canada Notemakers grant.

Canada is also home to an important TML research initiative, unique in the world, the TeleLearning Network of Centres of Excellence (TL*NCE). The TeleLearning Network is a national collaboration of Canadian researchers, private sector organisations and members of the public in the development, application and evaluation of TML with a focus on collaborative learning and knowledge building. Hosted at Simon Fraser

University, the network plays an important role in researching and developing advanced networked learning environments for all levels of the education system and the workplace. Network researchers are also addressing associated questions such as the education of educators and the role of TeleLearning networks as the basis for a learning society.

Other important Canadian initiatives include : the Social Sciences and Humanities Research Council-funded research network EV-Net, dedicated to the assessment of new learning tools for the information highway, Télé-université's Campus virtuelle, and the East/West project that joins four provinces in offering an online course in information Technology and Telecommunications.

A report presents data drawn from the TeleCampus database, created and maintained by TeleEducation New Brunswick. These data show that the US, Canada and Australia are leaders internationally in terms of numbers of online courses offered, with the US far ahead of any other country. Undergraduate level courses are much more common than graduate courses, although the latter are still represented in a significant way. Community college lever courses occurred slightly more frequently than graduate courses. The most commonly offered subjects were, in order, computer-related courses, education, business and English.

The phrase *technology-mediated learning* can represent a broad range of activities from the use of audio-graphic conferencing to three-dimensional simulated worlds. For the purposes of this paper, technology-mediated learning is defined as the use of networked computers for learning. This definition includes those instances where computers are used to enhance face-to-face learning or to deliver a course completely online-and everything in between

Canadian industry, consistent with industry around the world, has significant training and learning needs. This is particularly true of the key sectors of the Canadian economy, which are forecast to be major locations of current and future job growth. Eighteen industrial sectors and occupational categories have been examined, which represent 2.8 million new jobs over the period from 1995 to 2005 and 64 percent of the projected job creation over the period.

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 leamers 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.

4. DISTANCE LEARNING AND TECHNOLOGY-MEDIATED LEARNING IN CANADA

The learning industries include software producers, hardware manufacturers, research and development, and electronic publishers, as well as education and training organisations. These industries use new forms of media like CD-ROM, courseware, group-ware, and television broadcast and telephone network, to develop and deliver technology-based learning to the required location, be it home, office, or school. Learning technology may also include satellites, cable, and fibre optics capable of delivering, through interactive multimedia, educational opportunities to individuals or groups.

The two key markets for the learning industry are education and training. Education includes elementary and secondary schools, colleges and universities. Training includes job training, skills enhancement, training upgrades, and other job-related learning. This section examines existing resources, networks, and market potential for educational and training products. An additional factor is the emerging role of distance learning in reshaping every aspect of our society. The learning industries must now address both domestic and international markets. Globally there are increasing demands for technology-based educational and training products, and there are many ways in which Canada can benefit from this vast new market.

Educational Network Location(s)

Knowledge Network Burnaby, B.C. Access Network Edmonton, Alta. Saskatchewan Commercial Network Saskatoon and Regina, Sask. Manitoba Satellite Network Winnipeg and Brandon, Man. Wawatay Sioux Lookout, Ont. TVOntario Toronto, Ont. Radio Quebec Montreal, Qc. Memorial University St. John's, Nfld. TV Northern Canada Iqaluit and Yellowknife, N.W.T. Whitehorse, Yukon.

Provincial Networks for Remote Learning

Most provinces have developed an infrastructure to support the delivery of education and training to all their citizens. The level of service usually includes :

- computer-based audiographic teleconferencing
- computer-aided communications- electronic data links
- multimedia.

Typically the formation of a successful education network involves three tasks :

- decide which mode of broadcasting is most effective yet affordable with the existing resources and funding available
- collect the technology and make it work
- develop the programming and courses to fulfil the needs of the subscribers.

Computer-based video-conferencing and teleconferencing systems allow classrooms to be transformed into interactive distribution centres. Educational broadcast networks offer good examples of point-to-multi-point public video technology, which permits remote learners to participate via telephone audio conferencing. In general, success of the network projects have been the result of co-operation among the institutions, the telecommunications companies, and the provincial government involved. The educational institutions have recognised the need to make technology further their own goals. This point is illustrated with several examples.

TeleEducation NB

TeleEducation NB is a distance education network formed under the Canada-New Brunswick Co-operation Agreement on Entrepreneurship and Human Resource Development. This project stimulates private and public educational institutions, private knowledge-based industries and training companies to develop and market innovative training products. The network co-ordinates about 18 community learning centres throughout the province, each set up as an "electronic classroom" with the co-operation of local community and educational institutions. Both students and teachers benefit another way -- they pick up expertise in the use of the new technology.

The courses are designed and offered by public and private educational and training organisations. Using New Brunswick's advanced telecommunications infrastructure, the courses can be transmitted to or received from other centres. Online learners can view a calendar of all current distance education activities or consult local facilitators who provide further course information. To encourage community participation, a special Program Development Fund helps defray the cost of implementing innovative distance education projects that will be distributed on the network.

Nova Scotia Educational Communications Agency (NSECA)

NSECA, created by provincial legislation in 1989, sanctions the collaboration of the Department of Education and the Ministry of Transportation and Communications to promote the use of technology for educational communications. The agency has spearheaded four main initiatives in the province :

- Atlantic Satellite Network (ASN)
- Educational channels on cable television systems
- Collège de l'Acadie- Network Nova Scotia (NNS).

ASN

ASN is a private satellite-to-cable broadcast service. The Atlantic provincial governments and the Atlantic universities now broadcast on ASN about 20 hours of formal courses a week, mainly on the weekend. Students registered with the institution that originates the courses can obtain credit toward a certificate or degree. Outside regular broadcast hours, the ASN also provides download service from a video course library. On occasion, live teleconferences have been arranged linking Nova Scotia classrooms to European students using both national and international satellite systems. So far, ASN is the only private broadcaster in Canada providing this service.

Cable Systems

The agency has also designated an educational channel in the Halifax, Dartmouth, Bedford and Truro cable systems. As with ASN, the channel is used for formal educational courses. Proceedings of the provincial legislature when in session may also share the airwaves provided there is no conflict with the educational program.

"Collège de l'Acadie"

At "Collège de l'Acadie", the latest communications technology has provided a unique and much-needed service to the province's francophone community (about 40 000) in the area of college training. The "collège", with over 400 registered students in six communities taking courses via compressed video and audiographics, provides universal access to technical and vocational instruction within the province. Students can converse and exchange documents with students in other centres, while receiving all training in their own home region. The interactive video provides an obvious advantage in the trades courses, where procedures are demonstrated in automechanics, plumbing and electrical workshops.

NNS

NNS was developed in the same time period as a distance education network, linking the 18 community college campuses and allowing access by all of the universities in the province. As with "Collège de l'Acadie", all sites are both originating and receiving sites. For the "Collège" and NNS, the video equipment includes PictureTel or CLI, and the audiographics are handled by VIS-þ-VIS. Satellite via Telesat was first considered and found costly and not the best transmission for interactive audiographics. Accordingly, Maritime Tel and Tel (MT&T) was consulted for land-line transmission. After much negotiation, and backed by the agency, MT&T filed the Educational Communications Tariff with the CRTC. Now, the educational service rate is available :

- to any educational institution in Nova Scotia
- at three levels of service: audio, audio-graphics, or video
- at a flat annual fee that is uniform throughout the province.

The 25 combined "Collège de l'Acadie" and NNS sites pay very low rates, thanks to practices like using off-peak hours and blanket service commitments. MT&T provides the bridging equipment for the service and fully maintains the system. Although both networks have access restricted through the designated learning centres and community colleges, they are part of MT&T's own network. The agency retains control over the scheduling of the bridge, 24 hours a day, through a personal computer.

The audiographics system was decided by consensus involving all the major players in the distance learning network. Content scheduling follows rough guidelines developed by the province and agreed to by the institutions. Economy of operation is foremost, so that resources are allocated only as much as the application demands. With more post-secondary educational institutions per capita than any other province, Nova Scotia sees its development of education with technology as a potentially significant national and international export commodity.

Future projects for NNS and "Collège de l'Acadie" include :

- adding audiographics to NNS
- increasing the workstation numbers to the service
- increasing the co-operative learning between the educational institutions and the private sector

- increasing co-operative ventures in other provinces responding to requests for course delivery by both networks outside Nova Scotia.

SchoolNet : An Educational MultiNetwork
SchoolNet is a co-operative initiative of Canada's provincial, territorial and federal governments, educators, universities, colleges, and industry. Its goal is to link all of Canada's schools electronically to the Information Highway. Officially launched in October 1993, SchoolNet was to link up 300 schools across Canada through CA*Net/Internet during the 1993-94 school year. The project proved extremely popular. Within three months, 600 schools had come on-line, accessing SchoolNet services more than 100 000 times.

SchoolNet has set out to achieve some important national goals :

- provide national and international education resources to Canadian teachers and students, regardless of location
- stimulate learning
- develop students' network skills, which will be a vital key to their future employment
- provide Canadian information technology, software, and multimedia businesses with new market opportunities.

Not a network in its own right, SchoolNet links educational networks across Canada, most of which are established and operated by provincial ministries of education. On SchoolNet, students and teachers can access :

- a guide to 100 best Internet science and technology resources
- 350 scientists, engineers and advisors from around the globe
- a career-entry selection guide
- an electronic, national press news feed from Southam News
- library catalogues and data bases from around the world
- teacher-designed networking projects
- scavenger hunts.

Students using SchoolNet develop interpersonal and social skills for use in a technological world. Users of SchoolNet will find that they acquire a far-reaching network of like-minded individuals. Through this network, they may establish long-standing relationships. When students enter the job market, these relationships can provide current information about available work or personal references. In a highly competitive market, employers look for people they know, or who have friends who will speak for them. A student with an extensive personal network stands a much better chance of hearing about a job opening and getting an interview.

Distance Learning Institutions

There are a growing number of distance learning institutions across Canada. Here are some examples.

Open Learning Agency

Formed in 1988, the Open Learning Agency (OLA) in British Columbia consists of the Open University, Open College and the Knowledge Network. They offer degree, certificate, and general-interest programs, and work co-operatively with British Columbia's three universities and 15 colleges to co-ordinate the development and delivery of distance education activities.

The Knowledge Network is the education telecommunications authority for the province with the added responsibility to provide electronic delivery systems for educational institutions in British Columbia. The Knowledge Network operates a KU band satellite to a cable broadcasting system, which delivers almost 100 hours of instructional and general interest programming per week. A 40-port full-duplex audio teleconferencing bridge also allows the OLA and provincial colleges and schools to unite students and instructors for interactive audio tutorials. Some community colleges have added computer-based audiographic units for multipoint voice data and visual graphics.

OLA will add slo-scan video, VBI, computer conferencing, and online CBT to the Knowledge Network, as well as expand the number of electronic learning centres in business, education, and the general community.

Community Campus Network in British Columbia

The Community Campus Network (CCN) is a network of OLA regional and local sites joined together by an information system, communication links, support services, and a common goal -- to have all the learning opportunities from local, regional, provincial, national, and international sources reaching the remote communities in British Columbia. The primary objective of CCN is to create learning centres throughout the province, each acting as a "local campus" of every university and college. For economy, centres use current facilities such as libraries, schools, community colleges, and workplace sites. Some sites allow students to fax in assignments and participate in group activities and international conferences over the network. CCN will provide a local "gateway to the world" for people wishing to upgrade skills and acquire knowledge.

The CCN has served to :

- provide consulting to industry, community organisations, and education institutions wishing to develop on-site learning centres
- co-ordinate the registration and credit process for those accessing programs from a variety of sources
- install satellite receive dishes to access programs from around North America ; these programs will be distributed live, or recorded and rebroadcast to Learning Centres at optimum times for student/worker viewing
- establish a turnkey studio facility at OLA to develop cost-effective, live video education and training programs.

The services are available to :

- educational institutions
- business and industry
- government agencies
- health care
- engineering and technology
- Chambers of Commerce
- Integrated Services Digital Network (ISDN) distance learning
- trial in British Columbia.

In co-operation with the Vancouver School Board, the OLA delivers adult education programs via the ISDN communication links and British Columbia-developed interactive multimedia technology. A bridge conferences in the ISDN audio and data channels between the four adult learning centres offered by the Career and Community Education Services division of the Vancouver School Board.

The Open Learning Agency has an extraordinary range of pilot projects which deal with aspects of distance learning. Although these projects are not explored in this report, those interested in innovative applications of distance learning would benefit from knowledge of the OLA.

Telemedicine and Educational Technology Resources Agency (TETRA)

The TETRA has been established to make the distance education resources of Newfoundland's Memorial University available to the private sector. Currently, the Telemedicine centre at the university operates a 190-site audiographic teleconferencing system in 100 communities in Newfoundland and Labrador. The "receive" sites include all provincial hospitals, community colleges, university campuses, 50 small rural high schools, a number of nursing clinics on the coast of Labrador, and a variety of government offices. A user consortium, consisting of health, education, government, and community groups, participates in approximately 5 500 programs per year.

TETRA also facilitates application trials for new compressed video applications and high-speed diagnostic medical data transmissions. The basic approach is a multimedia delivery with videotape, audiotape, and audioconferencing using telewriters as required. A variety of single-purpose remote testing units are used in some patient care. Occasionally, TETRA uses the "original" format of one-way video or two-way audio satellite conferencing for a large audience, as for the recent Women in Business and the Alternatives to the Fisheries conventions.

Saskatchewan Communications Network

The Saskatchewan Communications Network (SCN) is an educational network, consisting of :

- the Training Network, which delivers live, interactive credit and professional development programming
- the Cable Network, which distributes educational television programming via satellite from the University of Saskatchewan to provincial cable companies who in turn broadcast to subscribers.

In the 1991-92 academic year, the network delivered 21 post-secondary courses and six secondary courses to the 3 000 students across the province. Programming is received in 54 SCN centres, housed in Regional College and Saskatchewan Institute of Applied Science and Technology (SIAST) facilities, and at 18 high school classrooms across the province.

SCN is also available to agencies, departments and businesses who have a need to provide training and upgrading to a dispersed audience

4.1 TECHNOLOGY-MEDIATED LEARNING : VARIETY OF TECHNOLOGIES

Virtual Reality On The Networks Distance Learning

With a new type of computer software called virtual reality, children in Canada, Italy and the United States were recently linked via satellite to explore and interact with each other's typical urban environments. The students played in front of a chroma key wall, facing a large screen monitor, while a video camera sent information of their activities to a computer. Mirrored on the monitor, the students were able to interact with each other and with computer generated images, in a virtual commons concept. This 1992 Virtual Cities project is an initiative of the National Film Board of Canada (NFBC), in co-operation with the Toronto-based Vivid Group and Telesat Canada. The unique human interface technology was developed in Canada as the MANDALA SYSTEM by the Vivid Group of Toronto.

The National Film Board is currently evaluating human-machine partnerships in cooperative learning which encourage participation and interaction. Investigations into virtual reality systems for learning environments continue in the areas of :

- three-dimensional imaging
- dramatic storytelling
- networking.

A wide variety of virtual reality technologies are evolving. Some require the user to operate in special eyewear, gloves, and other apparel. As the technology becomes easier to use and cheaper to acquire, virtual reality promises to foster new educational and entertainment platforms. Conceivably, students from all countries may one day attend one central virtual university, a university existing only in cyberspace. Students would access it from their homes, via television or computer.

4.1.1 Job-Related Distance Learning and Video-On-Demand University Lectures and Courses

The University of Ottawa, Carleton University and Stentor, the alliance of Canada's major telephone companies, have joined forces to test video-on-demand (VOD). The trial permits students at both universities to use the public telephone network to directly access libraries of video productions. From personal computers on campus, users can consult a menu, selecting from over 60 hours of video material, including pre-recorded university lectures and National Film Board of Canada productions, then instantly watch them on screen. This is the first VOD trial where users directly select and start videos from an on-screen menu, without phoning a human operator. The user has full-remote VCR control features, such as to pause and replay the video sections.

If this experiment proves useful, the lecture will have been liberated from the classroom, and students could import instruction at any hour. Furthermore, this trial may lead to the creation of other learning environments. As an example, an on-campus class may link up with other students, living great distances from the school or university. Students, connected by visual and voice link-up, could participate fully in discussion and debate. In other words, our educational system would no longer be confined by time and space. Rather, schools could optimally reach out to those that needed their services.

Once Canadian universities are fully networked, students may be in a position to "assemble" a university education, drawn from courses and lectures from the all across the country. Students in the United States and Europe may also import classes from Canadian universities, via network. One of the effects of networked education may be to streamline the costly administration of educational institutions. Rather than attending one or two universities to get a diploma, students may simply take appropriate courses from any number of institutions, until they accrue a designated total of credits. The Information Highway promises to make an international education commonplace within a few years.

The Electronic Village

In September 1993, the University of Ottawa began teaching an undergraduate course in nursing using computer conferencing. The registered nurses, scattered across Ontario, use asynchronous communications provided by The Electronic Village, the primary service of Réseau Interaction Network, Inc. of Orleans, Ontario. The Electronic Village is a system designed for ease of use and with distance education as its focus. A participation feature identifies the number of unread messages for the user and the date of last connection. The system is accessible from any regular telephone line in Canada. In January 1993, the Electronic Village launched a new interface based on the needs of the Creating a Culture for Change project of the Ontario Teacher's Federation. The system operates in both languages from all computer platforms (Macintosh, DOS, Windows, ICON, etc.) and, at present, has over 2 800 registered users. Users are responsible for membership and content. Software development incorporates users comments, wants, and needs.

Medical Education, Service Standards, and Remote Diagnosis

Plans are also under way to expand the VOD trial in Ottawa to pilot VOD-based interactive multimedia education for physicians. The partners in development include :

- Stentor
- Mentor Networks Corporation (an organisation which provides on-demand network delivery of interactive digital media education, training, and communications services)
- the Royal College of Physicians and Surgeons of Canada's

Maintenance of Competence Program Ottawa Civic Hospital, a teaching hospital for the University of Ottawa conducts the trial.

Health care via the networks promises great strides in education, training, co-ordination and integration of services, on-line consultation, and review of records, as well as the monitoring of patients in hospital or convalescing at home.

Intercom Ontario

Supported as a field trial by a consortium of public and private partners, Intercom Ontario hopes to offer subscribers a diverse and useful suite of services. This broad-bandwidth network communicates multimedia objects such as speech, music, pictures, movies, television programs, computer files, text, hypertext, animation, and games directly among users and content providers, who may operate from their home computer or personal digital assistants. Further network testing into Intercom goes on at the Cultech Collaborative Research Centre at York University.

4.1.2 On-the-Job-Training

DVS Communications Inc.

Newbridge Networks Corp. of Kanata, Ontario, manufactures and distributes standards-based networking products for local area networks (LANs) and wide area networks (WANs) for an international market. Static electricity in the manufacturing environment can do invisible damage to the products, so all employees must be given special training in regard to static control. Traditional training courses have proved too costly and ineffective. Responding to this problem, DVS Communications Inc. of Ottawa, a company specialising in design, development, and delivery of interactive multimedia solutions created an easy-to-use Windows-based program. Employees work through modules of the program and are automatically scored (Hum, The Government Computer Magazine, September 1993, pp. 46-47).

Centre for Information Technologies Innovation

The project called Deversys supplies environment emergency response teams with a decision support tool to make them more effective. The objective of the project is to help diagnose a damaging event and implement clean-up methods, particularly oil spills on the St. Lawrence River shoreline. The system allows the capture of, the access to, and the updating of information on environmental resources and shoreline conditions. Resources and clean-up priorities are also supplied to the user to allow better planning and followup of restoration activities. The knowledge-base system helps standardise the decision-making process. Periodically, the rule base is reviewed and may be updated.

Users include :

- Environment Protection Directorate intervention teams of Environment Canada, region of Quebec
- Canadian Coast Guard (Transport Canada) - Quebec Department of the Environment
- Members of the Canadian Institute of Petroleum Producers (CIPP)
- Musee Maritime Bernier
- Systemcorp. Montreal (contract from CANARIE).

Systemcorp (an Advanced Learning group)

Systemcorp specialises in multimedia training and performance support systems, designed to help employees master new workplace technologies. An expert design team offers a complete range of services and tools to complement integrators, management consultants and training providers. The team participates in needs assessment, designs and implements solutions, and develops the courseware and the interactive video productions. For the multimedia-based training, Systemcorp produces Broadcast Quality visuals, including interactive three-dimensional animation and simulations, that are essential to good training.

In the support environment, Systemcorp's Performance Support System (PSS) supplies appropriate instructions for the user at the right time during the actual task. The PSS has gained international acceptance in monitoring and assisting productivity at such companies as IBM, Dow, AT&T, Intel American Express, and Amdahl, Martin Marietta, US West and Pomus Companies. The Systemcorp solutions are less instruction- or lesson-centred and more learner-centred. Training time up the learning curve is frequently halved. Subscribers are reported to acquire knowledge on their way to meeting their goals, with more enthusiasm and more independent pursuit of further material.

In 1991 Systemcorp researched the human- computer interface specifically aimed at courseware, just-in-time training and performance support. Communication disciplines and all related natural mapping methods were researched, validated, and incorporated. The result is a training environment that is intuitive, meaningful, user controlled, and that creates understanding. Hardware costs are moderate since the CD-ROM format is a standard, and new video compression techniques bring high-quality video lessons to the PC.

4.1.3 Educational Technologies

Computer Aided Instruction (CAI) : Computer aided instruction is the encompassing term defining education products developed and delivered using computer technology. Computer aided instruction is one of many terms, most with overlapping meanings, related to the educational program designed to serve as a teaching tool. Others include computer-assisted learning, computer-assisted training, computer-based-learning, computer-based training, and computer-managed instruction. The term CAI (computer assisted instruction) is used primarily in the US, while CAL (computer assisted learning) is often used in Europe and the United Kingdom (UK). Fuelled by technology advances and ever- increasing demands for training, CAI programs are excellent aids for presenting factual material and for allowing learners to pace their speed. They should actively involve the learner every step of the way and be smart enough to branch to appropriate segments, depending on their assessment of learner progress. If learners wanted to be passive, they would opt for a video course or other non- interactive media. The best CAI programs keep the materials interesting and inject humour as appropriate. CAI may supplement traditional classroom delivery of print-based material. It can provide tests, practice and exploration, or it may be a form of stand-alone training. Facts, concepts, and principle can be introduced, and then various practice activities and tests can be provided to effect learning--all using the computer as the delivery medium.

As an aside, linear CBT refers to the computer aided training programs that lack branching. The learner is forced along a straight path without options to branchoff based on his or her needs or responses. In the early days of development this was called "electronic page turning" because the program was no more than a book with one screen leading to another in a linear fashion.

CD Interactive (CDI) in 1991, Philips, Sony (and others) formed a technical standard for the interactive use of CD-ROM material. This was a European initiative, and has led to the development of several interactive entertainment and education CD products. Typically, standard televisions are coupled to a special CDI CD player. The user interacts with a remote control unit similar to one for a standard TV. The interaction is limited to page turning and basic branching because there is no keyboard type of interface. Once hailed as the next great media, CDI plans seem to be dwindling. Like many other medias, they may return or fade away over the next several years.

Computer Managed Learning (CML) and Computer Managed Instruction (CMI) refer to the use of computers to help manage the learning process. The computer is used as a tool in managerial, clerical, statistical, and administrative tasks related to learning. These tasks can include but are not limited to enrollment, learner statistics and learner profiles, test marking, score analysis, audio-visual resource management, and general training record keeping.

Multimedia has been defined as the marriage of computers and television or the marriage of Silicon Valley and Hollywood. Basically, multimedia applications combine traditional digital computer information like text and data with traditional analogy information like images (pictures), audio, video, and animation. Multimedia applications are being used today in stand-alone and networked environments to support a variety of functions. Training and education is one of the most popular application areas for multimedia today.

Electronic Performance Support Systems (PSS) are high-tech job aides that combine tutorials, reference libraries, and computer aided instruction, in a single system accessible to workers on an as needed basis. We can ask for advice, look up information, and take a class--any time and all at practically the same time. With Electronic PSS we can do this without leaving our desks. Learning and support are provided when needed and at the level needed. As companies begin organizing their information in retrievable data forms, Electronic PSS will become more common.

On-Screen Help Systems, the ultimate just-in-time education, comes in the form of electronic job aides called "help files. " New users and those wanting to try something for the time have grown to rely on menu- driven files that offer additional information, instructions, or tips on software applications. More and more application developers are putting additional tutorial data into the application, rather than relying on manuals or paper-based documentation.

Online Education, in increasing numbers, companies and universities are using the internet as their instructional delivery media. There are several ways to facilitate learning on-line. Facilitators can pose questions to on-line learners and discuss topics through electronic mail. Instruction designers can develop a series of self-directed exercises for on-line learners to do in their own time. And individuals can have interactive sessions with experts one-on-one, or in a small distribution group, rather than special scheduled events which might look more like traditional classes. The implications for on-line education are difficult to conceptualize because they are so numerous.

Distance Learning at its broadest, is what happens whenever the instructor and the learner are not in the same place at the same time. That covers everything from correspondence courses to two-way multi-site video- conferences. It is worth noting that distance learning is perceived differently in various countries. For instance, in the US distance learning is considered parallel to traditional study, differing only in the type of delivery media used, and almost always containing some face-to-face interaction with learners. In Europe and the United Kingdom distance learning usually refers to individualized study. In Australia it is somewhere in-between.

Teleconferencing includes many forms like audio, video, and satellite. Generally it defines a conference held among people in different locations by means of telecommunications equipment. One of the most popular business multimedia applications appearing today is desktop video conferencing. This is one of the most exciting, affordable applications available today. Most people think of video conferencing as having to assemble lots of people in a high tech room and pay very expensive rates for a call. But many vendors are now offering desktop video conferencing packages at affordable prices that enable users to conference with other users right from their desktop. These applications offer an interactive and collaborative atmosphere where users can work real-time with other conference participants. Video and audio of the participants are often carried simultaneously with data over a number of supported protocols. The application of teleconferencing in training will increase as the tools become more widely available and accessible.

Video-Based Training are one of the oldest instructional media products and are still widely used today. Though not interactive, they can offer learners access to hearing from and seeing experts talk about or do things unavailable on-site. When supplemented with case studies, discussions, and hands-on work, they can be effective.

Virtual Reality, using digital and full motion video, software and specially designed hardware to help learners master new skills. Isolated from natural audio and visual sensory inputs, (with the use of goggles and headsets) a learner receives a synthetic representation of reality (virtual reality) where they can try new things without fear of failure or danger. Applications currently focus on entertainment with the state-of-the art trying to create interactive movies. Future training applications with virtual reality seem very exciting.

To Support the Networks with Canadian Software many Canadian companies have developed tools that are necessary to operate from a node in the networks.

SMART Technologies Inc.
SMART Technologies Inc. of Calgary make the SMART 2000, a data conferencing system for distance learning and training. The Front screen version of this system is a touch-sensitive whiteboard, IBM-PC, SMART software, phone line or network, and a projection system. In distance training, instructors control their presentation directly from the touch-sensitive SMART board in front of the classroom. This big screen has a graphic user interface (GUI) that is also ideal for trade show presentations. Students can input their ideas and questions back to the instructor by making notes, highlighting and annotating on top of the projected images. Any image can be captured from an application before a presentation with the SMART Notepad, a fully functional Windows application. During a conference, these images can be played back in a prescribed order. Any of the connected locations can draw or highlight these images with different coloured pens. These altered images can be saved and printed at any time.

The SMART 2000 makes use of telecommunications networks already in place in most countries. A new Kanji version of the system has enjoyed success in Japan, and sales are described as buoyant (The Globe and Mail, April 11, 1994). In 1994, total company sales are expected to triple to $8 million. In January, the company signed an agreement with Intel Corp. of Santa Clara, California, the world's largest semiconductor maker, to jointly develop document conferencing software products.

Visual Interactive Technology

Northern Telecom has developed Visual Interactive Technology (VISIT), an interactive multimedia video desktop application. In the pilot project involving the Alberta Distance Learning Centre (ADLC), Apple Canada, Alberta Government Telephones, Northern Telecom, and the county of Lacombe, four schools conducted courses by two-way video. The VISIT video system integrates telephone and desktop computer with video, supporting :

- high-speed file transfers through the public telephone network
- any Apple Macintosh II or IBM-PC running Windows, with complete interoperability between any combination of these.

In a typical scenario, students from remote locations can join in the VISIT session and simultaneously design and edit a shared document.

VIS-A-VIS

WorldLinx Telecommunications Inc., of Mississauga, Ontario, has created VIS-A-VIS multimedia desktop conferencing for the PC. No proprietary hardware is required, just a mouse and a modem. Optional peripherals like document scanner, high-resolution colour monitor, electronic white board, screen projector camera, video coder decoder for full-motion video, are all standard hardware components that can be acquired from local suppliers. In the simplest case, two or more PCs communicate over LAN or packet-switched network. Using an optional data bridge software, VIS-A-VIS supports any combination of LAN, synchronous, asynchronous, and ISDN networks (with speeds from 2.4 kbps to 64 kbps). Each data bridge can support up to eight simultaneous conferences with a total of 32 participants. Data bridges can be linked together to provide service to even more parties.

VIS-A-VIS technology is ideal for more interactive classes. Instructors are encouraged to use techniques that promote brainstorming, role playing and case studies. Classes can reach the less populated sections of the state to smaller groups at remote locations.

"I have to do more up-front preparation for my teleconferencing classes, but the investment in high-quality visual material means the classes run very smoothly, and students have good material to take away after class. The visuals can be scanned images, still-camera images or graphics developed using paint and drawing software. The same materials are also useful for my on-campus classes."—A professor, University of Illinois

With Illinois predominantly an agricultural state, one VIS-A-VIS application has allowed farmers to bring up crop problems to local branches of the university and the photographs are transmitted to an on campus specialist. The diagnosis can be reached between the two remote parties — farmer and specialist. Farmers are reportedly delighted with the quick response and expert attention they receive using this new technology.

The potential for VIS-A-VIS technology for business is high for employers looking to train or retrain employees. The universities have the trained instructors and subject expertise needed by business. Courses can be delivered right to the corporate headquarters at scheduled "best" hours.

First-Class Software

SoftArc Inc. in Scarborough Ontario "Global-Area Communications" has created First Class offering multiplatform e-mail, electronic conferencing, bulletin board service (BBS) functions, GUI support across the network or modem, context searching, CD-ROM access, sending faxes or messages, and links to other First Class servers or mail systems, and send and receive Internet mail.

GeoAccess

GeoAccess is a service based on open system concept integrating a geographic information system (GIS) and a graphical interface across different platforms, operating systems, and computer networks. The GIS is built upon the CANARIE Information Superhighway infrastructure. A data management system called Geoserver provides Canadian businesses with powerful GIS processing and distributed data bases.

This GIS network development benefits Canadian SMEs that cannot currently afford a GIS service to enhance their competitiveness. The initiative can also help reduce government spending by providing the service to industry and by merging currently dispersed and redundant sources of information.

Conclusions for the Development of the Learning Industries

The Canadian educational market, over which the provinces have jurisdiction, is small and fragmented, preventing large-scale production of educational products. A national strategy is required to meet the challenge of this market. The federal government can assist, through its traditional support of distance learning. As well, it can foster the development of content for educational and training networks. Otherwise, these networks will soon be flooded with foreign products and services and the result will be the loss of national character and identity.

The learning industries operate in a global market. Canada has some of the finest educators and technologists in the world. We have the expertise to create educational and training products that would serve our domestic markets from coast to coast. These same products would also provide exports for vast foreign markets. A unified effort among federal and provincial governments and business is necessary to take advantage of the new world market. Canadian content, while specific to our culture, is universal in its appeal. For the preservation of our sovereignty and prosperity, the manufacture and export of *learning* products must become a priority.

4.1.4 Producers of Videos and Teleconferences

The Conference Board survey shows that producers of videos may expect growth in demand for their products (from 13 to 27 percent of respondents), and that the number of companies which plan to introduce teleconferences (video and audio) and audio cassettes may almost double. Canadian commercial suppliers of courseware for these technologies were elusive in this study, as they are not organised in national professional organisations.

Canadian producers of training videos appear to operate out of small firms and to produce customised videos for corporate clients. In-house production of training videos is also not uncommon. The catalogues of Canadian distributors of training videos are dominated by US products. Some observes feel that Canadian suppliers can only compete with US suppliers in niche markets, or for custom productions.

Producers of teleconferences are becoming more prominent. Canada has a long history of teleconferences. with a sizeable number of people capable of producing them. Most of the Canadian commercial producers are small operators. with the exception of a few companies which may have around ten employees. Typically, they serve all teleconferencing needs of clients, and do not limit themselves to education and training.

Many of the educational teleconferences received by Canadian companies are produced in the US, and some Canadian produced conferences are received by companies in the US. The largest single near-term market for teleconferences within Canada is likely for staff training and development of the federal government. A number of suppliers are poising themselves to capture the market, including multinational companies.

4.1.5 Producers of Computer-Based Materials

This group of companies is articulate and is making its presence felt through national and provincial organisations.

Customised and Off-the-Shelf Materials

The business of customised training materials is significantly different from the business of off-the-shelf (generic) materials. Generic materials typically are less costly than customised materials and are marketed via distributors, mailings or advertisements in trade journals. Customised materials require personal contacts and sales cycles of about three months. Several suppliers, with US experience reported that US sales cycles are consistently shorter, as companies are more "technology-friendly".

Compatibility with commonly used hardware and software platforms is very important for producers of generic materials. They benefit from good communication with major hardware and software firms to ensure that changes can be anticipated and built into product developments. When companies provide customised materials, they develop or adapt materials to work on the client's infrastructure. Companies often combine generic and customise products in their business. Many use the customised business as the basis on which they develop generic materials. Several have made arrangements with the contracting client to share revenues from sales of the product to third parties.

Company Size

Many of the producers of computer-based training are small companies. They may have around six employees, although more established firms may have between ten and thirty employees. The companies draw on free-lancers for skills that are needed occasionally. Many of the firms cannot survive on training and education applications alone. To diversify income sources, they may develop computer applications for inventory control, they may sell and service hardware or they may offer consulting services.

A few companies are significantly larger and employ as many as 100 or 150 people. In most of these companies, only a percentage of the staff will be working on training-related products. The main corporate business may be operating computer services and networks for corporate or government clients. Larger companies, in which all or most staff appear to work on products related to training, are typically part of an international company, or claim parentage of an international company.

In the long-term, it will be difficult for very small companies to survive. Present staff, often consisting of programming instructional design, graphics and content expertise can produce quality computer-based courseware. As computer-based courseware moves toward multimedia applications, the skills bank will also need to include video and audio production animation and expert system know-how. It may be possible to draw on these resources through a stable of free-lancers. This may be an expensive solution, however. Past experience indicates that an experienced team can reduce course production time by up to two-thirds.

The small size of supplier companies also influences the prospects of winning large, multi-million dollar contracts, e.g. from the military. Lack of experience to manage large projects and shortage of sufficient qualified in-house staff are-among the handicaps.

Annual revenues of over $1 million may be the bare minimum required for companies which operate in the multimedia environment. This estimate is based on observations that, first, at least seven different skill sets are required to produce quality material and second, that sales revenues of between $150,000 to $200.000 per employee should be generated in a healthy company.

Company Background

It appears that the majority of people behind companies which produce computer-based courseware have a computer, programming or educational backgrounds. Few people reportedly have actual background in technical and workplace training.

This background is appropriate for the development of materials designed to teach programming skills. It also is appropriate for the development of customised materials, since the client typically assigns staff to provide the content expertise and to make the link to the nuts-and-bolts of the training environment in the company,.

The situation is different for off-the-shelf materials for workplace training. Some observers feel that it results in single products in areas of content expertise or interest, and it can be difficult to fit these into human resources and training plans which support a worker's progression in his field or company. Also, these products do not always sufficiently reflect realities in workplace training.

4.1.6 Producers of Authoring Tools

Authoring tools are the basic fabric of computer applications, including training package. They determine issues such as, the way in which a course is structured and designed, the animation of learning sequences, the approach to test items and the type of interaction the learner can have with the materials. The increasing power and flexibility of technologies and software requires increasingly complex authoring tools, which can translate these advances into applications. These tools are universally needed, e.g. for entertainment or business applications, and training packages will benefit from overall development efforts.

Producers of generic or customised courseware typically have developed, or adapted, authoring tools to suit their own requirements. As a result, authoring approaches used by courseware developers are not necessarily compatible with each other.

A major boost to the use of computer and multimedia in training is expected once authoring tools are sufficiently "transparent" and universal, so that trainers and line managers can adjust training packages to fit their own requirements. A proliferation of diverse authoring tools will discourage the growth of this market.

A few Canadian supplier target authoring tools as their main market and will sell, license or franchise their tools. The growth potential for these tools in training is evident from the Conference Board survey which shows that 21% of the responding companies expect to use computer software for course design within the next two years, while none were using it at the time of the survey.

4.1.7 Producers of Administrative Software

The range of applications of software in training. cited earlier from the Conference Board survey, shows that software applications for administrative support to training, for human resource management and for course registration are areas with growth potential. The importance of software applications to administer training is also voiced strongly in other reports. One important user of technology-based training ranked the administrative support achieved from software as more important than direct teaching.

Decentralised, independent learning represents major management and administrative challenges to established training systems. Appropriate software is critical to the success of the evolving systems. Courseware producers often incorporate some administrative functions into their products.

Telephone companies also are beginning to realise that they can offer additional value to customers through service features which help manage training applications. For example, learner may use a personal code number to call up a course module on which he is working, and the software may be recording factors such as use, type and level of course as well as success or repeated mistakes.

4.1.8 The Business of Delivering Workplace Training

A large number of companies use computers to deliver worker training in computing and programming skills. The present discussion, however, highlights efforts by private suppliers who deliver technology-based workplace training in other fields, such as hospitality or construction. This sector of the industry is wrestling with the increasing importance of accreditation. or some form of measurement of the standard of learning. Government funding may link funds to credits, or workers are increasingly aware of the need for "portable" skills and knowledge which imply some form of accreditation.

Companies that deliver training directly to learners may use their own courseware, supplemented with materials developed by other courseware producers. In other cases, they might use course materials developed by others and offer it as their own training centers. on their own hardware, supported by their own trainers. In other cases, they may supervise training on a client's premises, using installed infrastructure, or renting hardware for the duration of the training.

Some companies offer turn-key training programs to clients. For example, one company offers a distance education network, including course production. instructional design and student administration. The client only defines or provides the learning content.

Another company wants to develop a training course in hospitality and to deliver it at hotels and restaurants, and proposes to install hardware units on a rotational basis and to charge clients a flat fee per installation, plus a fee for each learner who signs up. Another supplier is developing a system which combines, on a computer disc, a number of training courses, personal access codes and administrative protocols. A registered learner's personal code activates and manages the learning process any time the learner signs up. The fee structure will combine a basic registration fee and a usage fee. This approach may be particularly attractive from a cost point of view in situations where the number of learners is low. One cable operator promotes the use of its unique interactive system for downloading education and training programs to learners.

Distributors of Technology-based Training Materials

Distributors are important players in bringing generic training products to the market. They expect that their business will undergo major changes over the next decade. At present. the main products they represent are videos and hands-on training equipment, combined with print materials and some computer-based materials. They promote the products they represent through catalogues, telemarketing and personal sales contacts. They offer facilities to screen products or send-materials on approval-basis. Many of their products originate in the US. Several Canadian distribution houses were set up to make it easier for Canadian customers to view or return materials from US producers, avoiding customs and shipping delays.

The strength of these companies lies in the fact that they know workplace training and that they know customer requirements. Reportedly, customers appreciate that distributors are not married to the benefits of one particular technology. SMEs, who rely to a fair degree on off-the-shelf materials may find it useful to go through a distributor who may understand the particular business sector and may know the merits of a number of available products. Also. distributors may offer customers the option to pay for a product over a number of months. SMEs reportedly appreciate this option. Further, customers expect that distributors exercise standard and quality control over products they represent. They also ensure that copyright rules are adhered to.

Small and newly established producers are not favoured by the financial terms of distribution agreements, which appear to favour established producers. Also. distributors in Canada will rarely co-invest in the development of a training product.

New types of distribution arrangements are evolving as a function of the higher investments required by customers, when using advanced training technologies. Even for off-the-shelf materials, sales are more targeted, sales cycles are longer and the marketing staff must understand the technologies well. A large (US-owned) company with offices in Canada which sells its own catalogue of advanced technology products exemplifies new breed of distributors. The company will represent the products of small Canadian suppliers, which will be reviewed and adjusted to fit the company-'s standards.

Established distributors are also developing new distribution methods. One distributor is packaging existing training products, incorporating different media, into instructional packages to help clients plan and implement a progressive training system. This service is of particular benefit to small client companies. In the long-term, the main challenge for distributors will come from the expansion of fast and high capacity telecommunication infrastructures. Physical distribution of training materials may become cumbersome and more costly than electronic distribution. An electronic distribution system will change the fee structure for training packages. Fees may be charged on the basis of a combined enrolment/access and usage fee. Telephone companies, cable operators. and software developers are among the companies preparing to capture a share of this market.

4.1.9 Characteristics of the Canadian New Media Learning Materials (NMLM) Industry

To develop an understanding of the Canadian NMLM industry, a supplier survey was conducted, and a series of teleconference workshops to validate the survey findings was held with representative firms in the Atlantic, Quebec, Ontario and western regions of the country. A teleconference with representative industry users of NMLM was also held.

Working with a collection of lists and directories for the software and multimedia industries, 95 companies were identified as producers of NMLM in Canada. Of these, 37 (or 39 percent) responded to the survey questionnaire, and 20 firms participated in the teleconference workshops.

Canadian NMLM Industry Strengths and Competitiveness

- The Canadian NMLM industry is growing rapidly and already has produced several companies of significant size (more than 50 employees).
- Canadian NMLM suppliers enjoy significant technical capability and operate at the junction of the software domain, where Canada has significant strength and an international reputation, the multimedia domain, which is rapidly growing, and the education domain, where Canada has a considerable reputation, particularly in the field of distance education.
- With 100 companies operating in the industry, the necessary critical mass is developing. This is particularly true of the Montreal and southern Ontario centres. In areas where there is less concentration -- New Brunswick, Alberta and British Columbia -- there is growing regional attention to networking and cooperation.
- NMLM growth and competitiveness will require the participation of film, entertainment and print media companies. Canada has a strong creative base, largely centred where the highest concentrations of NMLM suppliers exist.
- Joint ventures and strategic alliances will be important elements in the development and marketing of Canadian NMLM.

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, worldwide 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.

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.

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.

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 (SMEs), 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.

New media learning materials consist of computer software and courseware content, including multimedia and interactive programs, applied to computer-based training. The spread of NMLM follows the increase in desktop computing power, sophisticated presentation software, CD-ROM technology and broadband networks.

4.2 TECHNOLOGY-PEDAGOGICAL MODELS

The emergence of information technologies on the market, particularly in the training field, enabled the number of techno-pedagogical models using IT to grow. From a simple decentralisation of classroom activities to interactive multimedia environments that allows learning with no time and space constraints, education technology literature describes seven techno-pedagogical models : the enriched class ; the virtual class ; multimedia training ; training on the information highway ; communication networks ; the performance support system and the virtual learning centre, commonly referred to as the virtual campus (Paquette, 1998) (see figure 1).

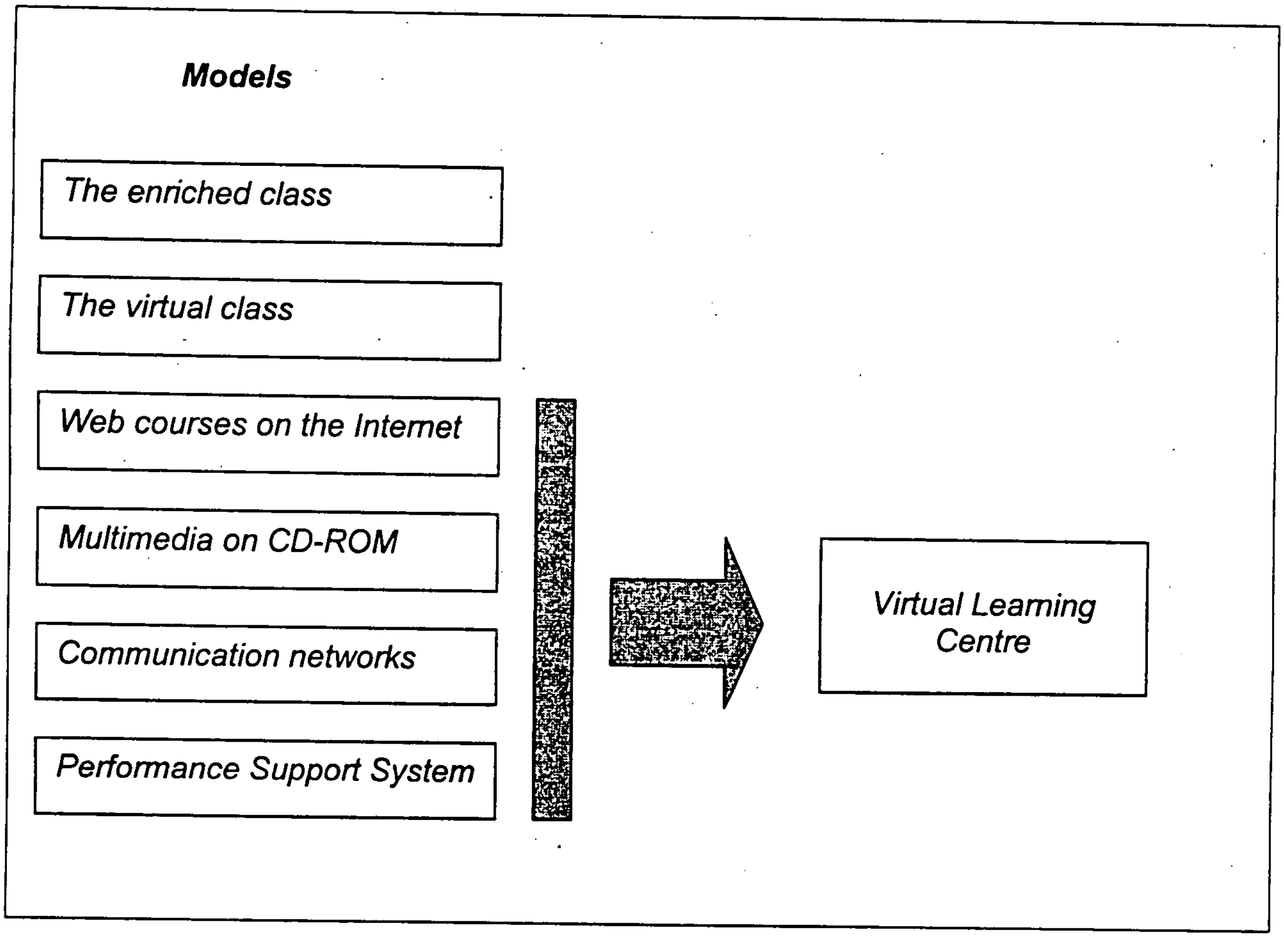

Figure 1
TECHNO-PEDAGOGICAL MODELS
USING IT FOR LEARNING
(Source : Paquette, G., LICEF Presentation, 1997)

The enriched Class : In the enriched class, information technologies are used in a conventional context, that is, for class presentations, demonstrations or experiments (Paquette, 1998). Information technologies are therefore used as aids in conventional training, allowing access to outside resources and databases.

The Virtual Class : The virtual class (Wilson and Mosher, 1994 ; Hiltz, 1990) essentially uses videoconferencing as an aid for learners and distance trainers by recreating the class through telepresence. This is decentralised or spread out training.

Multimedia Training : Multimedia training (Pea and Gomez, 1992 ; Bourdau et al. 1994) places the emphasis on the learner's station by making the contents of prefabricated multimedia courses available on CD-ROMSs that can be accessed through a multimedia server or sent by mail. The resources available to the learner allow a personalised learning process.

Training on the Information Highway: Training on the information highway (Paquette, 1998) is also centred on the learner's station that is basically used as a tool for researching and navigation through educational information. Generally speaking. A Web course is offered as the home site leading to various didactic resources and other Web sites. In most cased, learning activities must be followed in sequence.

Communication Networks : Communication networks (Henri and Rigault, 1993 ; Rigault and Henri, 1990) use the work station not only as a media aid or for accessing information, but also as a synchronous (videoconferencing, screen sharing, etc.) and an asynchronous (electronic mail, computer assisted teleconferencing, etc. communication tool. In this instance, the technology is used as an aid for learners and for the different resources in the context of teamwork or group discussions.

Performance Support System : The electronic performance support system (EPSS) (Gery, 1997) comprises task-oriented training modules integrated into the support system at a workstation. The information is described as just-in-time and training is considered a complementary process integrated into the work process.

The Virtual Learning Centre : The virtual learning centre (Paquette et al. 1996) is based on networking different actors and means. Its aim is to offer direct or delayed access to a variety of learning resources : learners, trainers and tutors, content experts, mangers, teacher-designers. These different actors have access to computer servers offering multimedia documents, software, work and training tools, individual or group message files and the possibility of working alone or in a group.

According to Paquette (1998), the enriched and virtual class models are still very popular in the workplace. Both use the traditional information transmission paradigm in which the trainer is at the centre of the process, using IT for group facilitation, or for in-class or distance presentation of the course content. In a socio-economic context where learning is a lifelong process, where professionals are less and less available and increasingly mobile and where high level cognitive skills are required, these models appear unable to meet workers' growing needs for learning. The creation o the Internet and other multimedia technologies offer workers greater freedom while presenting them with various information sources form which to choose. Hence the emergence of a new paradigm : the learner is at the centre of the learning process and has access to multiple sources of expertise. The last five models presented belong to this paradigm.

4.3 EMERGING MODEL TO DELIVER DISTANCE LEARNING : JOINT VENTURE IN THE PUBLIC CENTER

4.3.1 Consortia

A recent innovation involves the delivery of TML through consortia. In this model, a number of traditional teaching institutions bands together to offer programs at a distance, linking institutions through a co-ordinating body.

In the US, course delivery has been realised typically via satellite videoconferencing. One of the earliest attempts at creating a TML consortium was the University of Mid-America in the mid1970s. Japan has followed the American model with the inter-University Satellite Network.

The oldest online higher education program comes from the US-based Electronic University Network (EUN), which began in 1983. The EUN is a consortium of over 20 academic institutions and businesses that provides courses (60 undergraduate, 30 graduate), degree programs (Ph.D.).

The East/West project, funded by industry Canada Notemakers' pilot project, involves Canadian adult learners and learning professionals taking a full online course offered through the Titled introduction to information Technology & Telecommunications, the course consists of four modules. Available in both official languages, the course is accredited in four provinces (Alberta, British Columbia, New Brunswick and Newfoundland). The development of this course pointed to the need for a new paradigm for continually maintaining courses, i.e. finding ongoing financing as opposed to the traditional one-time development costs. The course and the course development standards established are being used by many institutions around the world.

4.3.2 Partnering/Consortium Mechanisms

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.

New Brunswick offers one model for alliances to capitalize on the industry's enormous opportunities. It has established, 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 organisations, 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 co-operate 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 co-operating 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.

4.4 TELELEARNING NETWORK OF CENTRES OF EXCELLENCE

The TeleLearning Network of Centres of Excellence (TL*NCE) is fulfilling its mission to research, develop, and demonstrate the learning models, methods, technologies and social practices which will enable telelearning —the use of networked computer environments and tools for education and training —to support the development of a society in Canada. A further component of the mission is to transfer the resulting knowledge to Canadian organisations and institutions of learning and to support a leadership role in the world-wide development of telelearning.

4.4.1 Research Objectives

The original research objectives proposed in 1995 continue to be critical objectives and will remain unchanged for 1999-2002. The research objectives are :

1. To develop pedagogy and pedagogical design principles for knowledge building, based on modern reconsiderations of the nature of knowledge, its advancement, acquisition, and uses (theme 1 Learning Models) ;
2. To produce guidelines for investment in learning and knowledge-building technologies, based on social and economic analyses (them 2 Socio-Economic Models) ;
3. To design next-generation systems for telelearning and to development general principles for telelearning interface design (Theme 3 Systems Moles) ; and
4. To develop and test innovative telelearning approaches in the following education and training sectors :
   - *K-12 education*
   - *Post-secondary education*
   - *Workplace training and continuing education*

- *Education of educators*

4.4.2 Social Objectives

The TL*NCE is based on the principle that a society committed to education and knowledge building enriches the economic and social well-being of its members. In keeping with this principle, the TL*NCE's activities aim to transform Canada into a learning society which provides life-long educational opportunities to all citizens. Untapping the potential of telelearning to enhance the education experience will contribute to building this society.

The TL*NCE's vision of a learning society encompasses a knowledge-building communities and life-long, economically significant learning as a right and a personal obligation of citizenship. In order to cultivate this society, the TL*NCE's is dedicated to researching, developing and demonstration telelearning models, technologies and social practices, and to transferring the resulting knowledge to Canadian organisations and institutions of learning.

To successfully transform itself into a learning society Canadians must work together towards :

- Meeting the educational needs of people who are disadvantaged by lack of resources, access, or knowledge ;
- Building systems and helping institutions which can provide life-long learning ; and
- Engaging educators as leaders in the use of learning society technologies.

The TL*NCE's will play a significant role in helping to build a strategy to reach these national objectives. For this reason, TL*NCE's seeks to demonstrate the following :

- Increased knowledge of telelearning by Canadian leaders, educators, policy makers and decision makers :
- An expanded community of telelearning educators, and researchers in Canada and accelerated progress and achievement in the adoption of telelearning ; and
- A greater national commitment to access to education and training for all Canadians.

4.4.3 Business Objectives

The TL*NCE proposes the following business objectives :

1. To ensure the continuity of the TL*NCE and to further develop TL*NCE's global competitiveness and strategic alliances in key telelearning research areas ;
2. To demonstrate and showcase accelerated progress and achievements in commercialisation (formation of new companies and collaborative ventures, license agreements, products in the marketplace with TL*NCE sources innovations), knowledge dissemination (generative ideas, best practices, experience in what works), and the training of students and educators ;
3. To create an international leadership forum in telelearning to ensure global relevance and impact ;
4. To be a catalyst in establishing Canada as a global leader in the telelearning industry ; and
5. To establish a self-sustaining applied telelearning research program by the end of the TL*NCE program grant in 2009. Basic research in telelearning must continue and should be funded by the federal granting councils and other organisations

A review of knowledge in this field was provides in the original proposal submitted by the TL*NCE in 1995. This review concentrates on developments since that time and highlights the principal changes, technological advances, and the advances relevant to telelearning practices.

4.4.4 Major Changes Since 1995

Among the many changes that have taken place since 1995, the following ones stand out as having particular significance for the advancement of telelearning. :

1. ***Increase recognition of the importance of 'intellectual capital'.***
   This phrase comes from a much-heralded book of the same name by Thomas Stewart (1997). Also noteworthy has been the creation o the Xerox Professorship in Knowledge at the University of California, Berkeley and its awarding to I. Nonaka, known for his research on knowledge creating companies (Nonaka & Takeuchi, 1995). Developments even more closely related to telelearning are the establishment of the Knowledge Media Institute at the United Kingdom's The Open University and of the Knowledge Media Design Institute at the University of Toronto.

2. ***Emergence of 'knowledge management as a new profession, replacing 'information management.'***

   Knowledge management subsumes many of the concerns of telelearning in organisations, but is also concerned with institutional memory and with knowledge creation (Barclay, 1997). This comprehensive view of the role of knowledge is very much in keeping with the emphasis on knowledge building, which has characterised the TI*NCE since its inception.

3. ***Emergence of the World Wide Web as the medium of choice for telelearning.***

   Although the Web figured as a resource in many of the 1995 project descriptions, the shift to building Web-based applications has been a striking development reflecting a world-wide trend. Along with convergence on the Java programming language for Web applications, this change greatly increases the possibilities for technology transfer between projects and from research projects to commercial applications.

4. ***Explosive growth of computer mediated distance education at the post-secondary level.***

   At present this growth seems to be driven mainly by competitive pressures : Distance education allows a college or university to reach students anywhere, thus enabling the more aggressive institutions to invade the territories of the others, taking away their enrolment bases. On one hand this creates a greatly expanded market for telelearning technology and know-how but on the other hand it presents challenges for the maintenance of educational quality. Indeed, a backlash against what is referred to as the 'commercialisation of knowledge' is already in evidence, with sensational cases occurring in California and Ontario (Chronicle of Higher Education, 10 December 1997).

5. ***Turmoil in K-12 education.***

   Most telelearning development for K-12 education is aligned with a more general reform trend characterised by constructivist project-based and learner-centred education. This trend, which has its source within the education profession, is countered, however, by an externally-driven trend characterised by explicit standards, achievement testing and a back-to-basics movement. In many school systems in North America, both trends are evident : Schools are investing heavily in technology used mainly for project-based learning and at the same time are adopting standards and high-stakes testing. It seems inevitable that these trends will come into conflict and that telelearning will lose unless convincing results can be demonstrated with respect to community standards.

4.4.5 Technological Advances

Perhaps the most striking phenomenon in telelearning technology over the past three years has been proliferation rather than innovation. There are more than 50 Web-based conferencing environments, many of them free, and-because of he limitations of HTLML—most are similar. Course delivery and course authoring systems have also been proliferating, with major software producers entering the marketplace. One college has even held a run-off, comparing the speed at which the same course could be set up using different authoring systems.

Innovation has not been lacking, however. "Ubiquitous computing" is a term used to refer to a diversity of mobile or embedded devices which include hand-held and wireless computers along with more exotic creations (e.g. Mann, 1997). To date, instructional applications of ubiquitous computing have been limited to the use of hand-held computers in field-based learning experiences such as research projects (Rieger & Gay, 1977), but a much larger range of learning applications can be envisioned (Buxton, 1997).

The proliferation of Web-based learning environments reflects in part the case with which applications can be produced using PERL, Java, and the wealth of usable components available on the Internet. There is promise that the limitations imposed by HTLML on functionality and appearance of the user interface may be overcome by XML. The Extensible Markup Language (XML) was officially announced in 1996 as "a new language for advanced Web application." XML is designed so that information providers can define new tag and attribute names at will, document structures ca be nested to any level of complexity, and any XML document can contain a description of its grammar for use by applications that need to perform structural validation (Bray & Sperbert-McQueen, 1996).

The other practical constraint on Web-based learning technology has, of course, been the availability of bandwidth. The intense and varied efforts of governments and industry to overcome bandwidth limitations promise to open the door to multimedia learning environments that currently exist only in demonstration versions. Bandwidth availability and computing power are both limitations on the deployment of 2D/3D virtual learning environments. There is no consensus on the value of such environments for the general support of learning but there are indications that they can be very useful for support of virtual labs and similar spaces.

4.4.6 Advances Relevant to Telelearning Practice

Impressed by evidence of the shallowness of learning that typically results form formal education, instructional researchers are increasingly focusing on problems of teaching for understanding (Wiske, 1997). Because effective approaches tend to require intense teacher involvement (e.g. Hunt & Minstrell, 1994 ; Cobb, et al., 1997), this poses a significant challenge for the design of telelearning (Scardamalia & Bereiter, 1996). One approach to technological support of learning with understanding that is being explored by several research groups is "Learning By Design" or "LBD" (Kolodner, 1997). Based on a rationale similar to that of Logo, LBD seeks to promote deep learning by engaging learners in design projects. Early results indicate the importance of careful selection of the design projects. The project of designing an educational computer game, for instance, can trivialise content and draw attention away form understanding (Yarnall & Kafal, 1996), whereas the project of designing an artificial lung can draw learners into a deep analysis of the functioning of the respiratory system. Prominent in recent conferences on learning technology has been the shift away form rule-based approaches to case-based approaches—a movement that is evident in the work of Carey & Blurton-Jones, 1996.

Some of the most innovative work in telelearning relates to its social organisation rather than in its social organisation rather than in its specific supports for learning. The "Virtual High School" (HSI & Tinker, 1997) differs form most other "virtual" educational institutions in that both the teachers and the learners are decentralised. Teachers in many different high schools offer online courses that can be taken by students at any of the other participating schools, thus enormously expanding the variety of course offerings available at each school. "TAPPED IN" (Schlager & Schank, 1997) is an effort to overcome the limitations of computer conferencing for teacher professional development. It combines a number of existing Internet technologies in order to create a coherent, multi-functional virtual community for teachers. Creating effective online communities of teachers remains a significant challenge, however, which is being extensively addressed in TL*NCE's conference.

A noteworthy development in the United States is the recent creation of a (virtual) Center for Innovative Technologies which is aimed not so much at technology development as at addressing a problem that is evident in Canadian education as well : The low impact on practice of the learning technologies that have already been developed. One of the strategies of the new Center is integration of technologies into coherent programs that schools can implement, as opposed to the piecemeal uptake of technologies that has characterised educational computing so far.

4.5 THE TENSION AND POTENTIAL OF TELELEARNING

4.5.1 Real Tensions

Technological change in the education process appears to have interfered with the "balance of power" that for centuries has placed the university at the centre of the learning process. Eli Noam, Director of the Tele-Information Institute of Columbia University, describes the traditional university as centrally buttressed by three facts of information flow : (i) information is centrally stored ; (ii) scholars and students come to the information and ; (iii) there is a wide range of information all under one roof. But universities can no longer cover all subject areas, they can no longer claim ownership of scholarly communities which are highly distributed and they can no longer claim ownership over the transmission of higher knowledge, as other educational providers enter the market.

"This system of higher education," Noam writes, "remained remarkably stable for over 2500 years. Now, however, it is in the process of breaking down. The reason is not simply technological ; technology simply enables change to occur. The fundamental reason is that today's production and distribution of information are undermining the traditional flow of information and with it the university structure, making it ready to collapse in slow motion once alternatives to its function become possible." (Noam 1995, 247).

Higher education has been slow in coming to terms with the emerging global society, and many educators do not yet seem to be concerned that he shape of electronic education may be determined by global forces such as business, technology and other government priorities. To maintain a balance between government, academia, volunteer, and private educational organisations, and business corporations involved in continuing education, current bureaucratic institutions must be replaced by flexible networks of scholars linked together world wide.

But this transition raise important questions. As we move form localised, institutionally centralised educational systems to highly decentralised, distributed models, what becomes of our universities and colleges as institutions? What happens to the people, what happens to the spaces, the stakeholders? Clearly there are some significant changes underway and as with all change, there will be both risks and opportunities.

4.5.2 Real Potentials

The opportunities, or potential, of technology-mediated learning can be seen in terms of its benefits to learners and institutions.

From a learner perspective

TML is thought to offer benefits to student learning by enriching the traditional learning experience in several ways while extending the experience to more people.

1. One of the most common observations about TML is its role in distance learning. In addition to the role that TML can play in bringing education to learners inadequately served by existing face-to-face educational services, distance students are able to use TML technologies such as computer conferencing to communicate with other students to a degree previously impossible to achieve. The pace of distance learning, which previously relied on the slow (mainly postal) exchange of printed documents, has also been increased.

2. The learning experience for both face-to-face and distance students can be enriched and enhanced through TML tools. For example, reference materials that were previously inaccessible can now be viewed by students via the Internet. TML can also be used to create simulations of phenomena too small, too large, too fast-paced, too expensive or too dangerous to bring into the classroom.

3. Finally, TML can bring post-secondary education to a new group of students without the time or ability to attend normal campus courses. Working adults and advanced learners are key beneficiaries of the process of extending advanced training beyond the walls of the colleges and universities. This benefit depends on learners having access to the necessary hardware and connectivity.

In addition to extending and enriching the traditional learning experience, TML also provides opportunities to involve teachers and students in entirely new ways of teaching and learning. The excitement about the potential of TML comes not just from the implementation of new technology but from the combination of the networking capabilities of the new telelearning technologies with an approach to teaching and learning that is learner-centred, distributed and collaborative. This marriage of educational philosophy and technological development is most clearly demonstrated in Canada by the kind of research being undertaken by the TeleLearning Network of Centres of Excellence. For learners, this means better learning in self-paced environments in ways that fit into lives already busy with family, work and other responsibilities. In this way, TML offers the potential for greater personalization of teaching and learning.

From an institutional perspective

TML offers much to institutions as a 'value added' strategy where new technologies can be seen as 'components' that can be added to existing structures. This strategy can come in the form of adding new aspects to face-to-face teaching or extending the reach of campus-based and paper-based distance programs. In an example of doing more with less, the University of Ottawa has created *Biodidac*, a database of biological images and text that provides an excellent online resource for biology lab students. *Biodidac* assists students in preparing for and better understanding the content of their biology laboratory sessions. The impetus for developing the resource was a realisation that student learning in the labs was suffering due to increased class sizes and decreased funds for buying specimens for dissection.

By extending learning to the new groups of learners mentioned above, TML offers the potential to expand the traditional post-secondary client base ; learning can be made available to students regardless of distance or traditional geographic boundaries and "catchment" regions. Asynchronous learning formats allow mature learners, many with paid employment that restricts their ability to attend classes on campus, to enrol in university and college courses.

New client groups offer the potential of new revenue sources for post-secondary education, an important consideration in times of declining government funding. Programs can be tailored for learners in specific areas or in specific industries and made available to them for learning at their convenience.

4.5.3 Finding the Balance

The enormous promise of TML makes it tempting to see technology-enabled distance learning as a panacea for all the problems and challenges facing education. Ross Paul and Jane Brindley caution us against this and urge us to focus on the "softer" lessons of distance education : the importance of collaboration ; the importance of taking a critical and learner-centred view of technologies ; and the centrality of student support services in the design of courses, programs and institutions (Paul and Brindley 1996)

Implementing TML in our post-secondary institutions involves complex issues that are both pedagogical and institutional. Our policy research has shown that a set of issues involving the nature of education, its definition, its power structure and its culture are now beginning to be engaged in debate. Debates about TML can quickly become polarised as issues well beyond pedagogy become engaged—control over education, the privilege of professors, the rights of students as "consumers"—not only "how" something is taught, but what, when, why, by whom and for what purpose. Those of us in higher education are witnessing changes in demand, costs, funding, delivery mechanisms and the nature of competitors. Technology might be the focus of debates within our institutions, but often the technology is only one expression of some larger forces at play.

4.5.4 Potential for New Learning Media

A 1995 study conducted by Ekos Research Associates Inc. for the OLT indicated the potential for new learning media by sector. Table 1 illustrates the results of this study.

SECTORS WITH A HIGH USAGE POTENTIIAL (in descending order)
Health services
Banking sector
Environmental industries
Printing and publishing
Electric and electronic products sectors, including the telecommunication equipment industry
Software and computer experts sector
Agriculture
Construction

Table 1 : Sectors with a high usage potential for new learning media

Training Content

According to the Conference Board of Canada, the skills profile that various professions will have to acquire shows a mix of skills. Table 2 presents the results of a study conducted in 1992.

SKILLS TO BE ACQUIRED
Teamwork skills
Skills in new types of compatibility and communications
Skills for-learning to accept new ways of working
Basic skills
Task-specific technical skills
Organisational understanding

Table 2 : Skills to be acquired by employees in coming years

The results of a benchmark study on corporate universities conducted in 24 major Canadian and American companies provide the following data on subjects addressed by corporate universities (The Corporate University : Learning Tools for Success, February 1998). Corporate University is a term commonly used in the Anglo-Saxon milieu to designate an entity with a distinct status within the company and co-ordinates or ensures the company's training activities are carried out (see table 3).

Subjects Addressed
Development of executive level mangers
Development of leadership
Training in management techniques
Technical training
Development of personal efficiency
Client training
Supplier training
Marketing and sales
Team consolidation
Office tasks
Quality and client satisfaction

Table 3 : Subjects addressed by corporate universities

Along the same line of thinking, the 1991 National Training Survey provides some interesting data on recourse to different training services organisations, by training topic. In Canada, 85% of businesses use internal staff for employee initiation. This same staff is used when training relates to environmental issues (69%), health and safety (67%), equipment other than office equipment (54%) and informatics (50%). According to the CES (1998), it is hard to dispute the relevance of preferring to use in-house staff for initiating new employees or equipment suppliers on how to use the equipment. The timeliness required to meet the business training demand adequately appears to be a service supply condition that is difficult for training suppliers to meet.

The results of the benchmark study on corporate universities provides the following data on the methods most commonly employed (*The Corporate University : Learning Tools for Success, February 1998)* (See Table 4).

Methods Employed by Large Companies	Percent
Conventional classes	40%
Interactive classes on the same premises	33%
Computer teaching	8%
Interactive multimedia teaching	7%
Electronic Performance Support System	6%
Distance teaching on the Internet and Intranet	7%
Televised distance teaching	9%
Print-assisted self-tutoring	12%

Table 4 : Methods employed by large companies

We see that most training is till conducted in the classroom in major Canadian and American companies. However, the most rapidly expanding technology is proving to be the Intranet (the Corporate University : Learning Tools for Success, February 1998).

According to data in the 1995 survey conducted by the Société Québéçoise De Main-d'oeuvre (SQDM), the methods used most frequently in Quebec are presentations and lectures (84% of companies), followed by team work or workshops (69% of companies). Nearly half the companies (46%) choose the employee sponsoring method. Another observation is that computer-assisted training (31% of companies) and non-computerised self-training programs (11%) are relatively under-represented in Quebec companies.

Other research conducted on the Internet Web sites of public organisations such as the Public Service Commission of Canada, Industry Canada, etc., shows that when the Web is used for in-house training, it is more useful for providing users with information about the various programs offered by the organisations than for offering complete training on the information highway. The ratio of interactive sites to the supply of traditional classroom courses is minimal. When a site offers more than simple logistical information, users are asked to register through the site using an electronic address. In the next draft of this report, we will be able to provide more details on the overall Canadian public organisations use of IT for learning in the workplace..

Finally, we must keep in mind some passages concerning the market potential of IT for learning in the workplace. A certain number of articles published in Atlantic Canada and Ontario allude to the necessity for the business community to adopt technology-based learning methods such as the Internet (OLT, 1998). For Ben Watson of the firm Scholars.com direct staff training will become a spearhead industry. He believes training on the Internet will enable more effective programs to be offered at a very low cost.

4.6 STRATEGIC NATURE OF NICHE IN CANADA

4.6.1 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.

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 world-wide, 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 specialised 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. Canadian Internet Development Agency's (CIDA) encouragement of private sector-university partnership through its contracting system is expected to yield greater co-operation 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 privatised holding company in this sector.

The Canadian Education Centres (CECs) established by the Government of Canada and the Asia Pacific Foundation will help companies capitalise on opportunities in foreign markets. The CECs are open to recognised 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 bas is rather than through payment of annual fixed subscription fees.

4.6.1.1 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), analyses 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.

Labour market studies as well as sectoral analyses conducted by the Human Resource Department Canada (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.

4.6.1.2 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.

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 organisation 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.

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 capitalise 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 MNLM mentioned above: "Canada has an enormous opportunity to seize the leadership in learning solutions. The world recognises 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).

4.6.2 Presence of Canada in International Market

4.6.2.1 Growth Sectors – The New Economy

Eighteen industrial sectors and occupations have been identified in which significant job growth is forecast and where training, new applications of skills and knowledge development are issues. Of these, the following have been identified as having high potential for the application of NMLM :

- health services and care
- banking
- environmental industries
- printing and publishing
- telecommunications, electrical and electronics
- software and computer professionals
- agriculture
- construction.

Of these sectors, the following exhibit strong international markets:

- health services and care (particularly in the U.S.)
- banking (particularly in newly industrialised countries)
- environmental industries
- telecommunications
- software and computer professionals (globally).

As models to leverage into international markets, telecommunications and environment are interesting. The telecommunications and environmental industries have extensive internal needs and also represent industries where Canada has a significant international market position and reputation. The telecommunications industry represents a significant market opportunity for Canadian NMLM suppliers, in terms of both meeting Canadian training requirements and leveraging the significant international market position Canadian telecommunications suppliers enjoy in the world. This suggests the potential to embed NMLM within the overall telecommunications product and service business offering and also to seek joint venture marketing alliances to introduce Canadian NMLM into Canadian telecommunications international situations.

Canadian environmental industries are developing international markets principally focused on consulting and engineering services, and impact assessment and mitigation. There is a significant international requirement for environmental education and training, and the Canadian government is a strong international proponent. Education is particularly acute as it pertains to North American Free Trade Agreement (NAFTA) compliance (Mexico, Chile), eastern Europe and newly industrialised nations such as Vietnam, South Korea and Brazil, where environmental impacts are receiving increased attention. The environmental sector also represents a deep wealth of topics, from generic process management to specific industry impacts and specialised knowledge. Environment would appear to be an ideal sector for NMLM joint venturing.

The transition to a knowledge-based economy is a global phenomenon, and effective training is a factor important to all national economies. Common standards in micro-computing and the growing accessibility of communications networks as software delivery vehicles create international market opportunities for successful software products almost instantly.

While the Canadian NMLM market has significant requirements, it is insufficient to support the type of growth that companies must achieve to assert significance within a product line. Canadian NMLM companies must therefore develop international market strategies to complement domestic market development.

The access to international markets that communications technology enables cuts both ways: if the Canadian NMLM industry is not aggressive, then Canadian industry will be readily able to satisfy its training technology requirements from foreign sources instead. Significant investment in the NMLM industry is occurring in the U.S. and has been ongoing in Europe for several years.

In order to guide international opportunities, markets in the U.S., Europe and, to a lesser extent, the rest of the world were reviewed.

4.6.2.2 The United States

Using U.S. Bureau of Labor Statistics (BLS) data, a strong correlation with the Canadian findings was observed. These can be summarised as follows:

- There is a strong shift of employment into the service sector, with the following BLS occupations experiencing the greatest numerical and percentage growth and resulting in the largest occupational groups: service occupations, professional specialities, technicians, administrative support and managerial.
- The highest growth appears to fall in the general categories of: health and care services, computing, education and retail.
- There is growing attention placed on developing generic skills. Skills experiencing increasing emphasis include : management, basic computer, communications, supervisory, customer relations, adaptation to change, basic literacy and numeracy.
- Despite this, occupation-specific training still dominates the type of training provided to employees.

Corporate training expenditures for 1994 were estimated at $50 billion. Of this, close to $4 billion was for external purchases of learning/training materials, and NMLM purchases presumably represent a significant portion.

Corporate training budgets remain stable, while training requirements are increasing. This suggests a shift to more cost-effective methods and points to increasing use of NMLM.

Corporate purchases of multimedia platforms are estimated at $1.3 billion in 1995, declining to less than $500 million in 1999; this trend suggests that the install base is rapidly being satisfied. Multimedia platforms are prerequisites for NMLM, and thus the U.S. appears to have a more mature computing infrastructure than Canada, where multimedia platforms and CD-ROM drives are still at an early stage of implementation in industry.

Forty-three percent of U.S. companies claim to be using computer-based training technology. The dominant use is teaching basic computer skills.

Many companies are restructuring their training departments into profit centres and are becoming competitors in the education and training marketplace. This is often in joint venture with their courseware suppliers.

Significant numbers of American NMLM suppliers are already focusing on the key sectors identified in Canada. While they constitute a competitive threat, they also represent opportunities to form U.S./Canadian joint ventures and alliances to tackle specific industry markets.

4.6.2.3 Europe

There has been significant investment in Europe to support the development and adoption of flexible and distance learning technologies including NMLM, as defined in this study. Significant programs focused on learning technology have been a major feature of the European Union's Framework Programs to support research and development over the past 10 years. The principal program is DELTA, which focuses on technological advances in distance education and learning.

Canada, unique among non-European countries, has established a working relationship with the European Union under the framework of the EU-Canada Forum for Distance Education. This forum has encouraged the share of information among the European participants in the DELTA program and Canadian distance education and NMLM companies. The Forum has also sponsored a number of joint research projects under a co-financing agreement.

Within the DELTA program, the BEACON project performed market observatory research. Market research in Europe has not identified industrial sectors or skill shortages, as this project has done for Canada. The significant national economic differences among European countries makes this difficult to do at a consolidated EU level. The BEACON project has estimated market size at national levels and has probed attitudes toward the use of technology to support education, training and learning.

The European market size for NMLM was estimated at $1.2 billion in 1994, a figure that is expected to experience consistent but modest growth through to the end of the century. The data suggest that training bodies in most European countries anticipate an increase in the use of NMLM, with Denmark, the Netherlands and Finland being most bullish. Belgium, Germany, France and the United Kingdom (U.K.) are less enthusiastic, which likely reflects early adoption disappointment. Data describing key training domains and potential markets have been largely derived from the views of the NMLM industry in a manner similar to the expression of market views developed from Canadian NMLM suppliers in this study.

European market potential for NMLM as expressed by European NMLM suppliers is summarised in table 5.

Training Domain	Market Potential
General education	High
Basic office skills	High
Communication and personal development	High
Management skills	High
Marketing and sales	High
Information technology	Medium
Languages	Medium
Industrial techniques	Medium
Office automation	Medium
Finance, accounting and banking	Medium
Human resources	Medium
Trades and crafts	Low
Administration and secretarial	Low
Law and international business	Low
Purchasing, logistics and transport	Low
Medicine, health and care	Low

The low ranking of medicine, health and care contradicts observations of the Canadian and American markets.

Table 5 : European market potential for NMLM.

However, there appears to be a continuing high ranking of generic business skills, which is consistent with the Canadian and American market findings. This is understandable, based on the current emphasis within industry on the development of a flexible, adaptable work force and the belief among NMLM suppliers that these are the subject areas where multiple product sales will occur. Where purchase decisions are made by employees as individuals, it is also most likely that these topics will be priorities, supporting a general trend in the industrialised world toward the development of basic skills that support employability as opposed to specialisation skills.

As in Canada, the European research also observes the weakness of NMLM producers in terms of business volume and number of employees. This presumably suggests a good potential for alliances, although partners should be selected carefully.

In contemplating the European market, Canadian companies should note that, despite the steady integration occurring in Europe, national differences continue to be very strong.

Countries that are obvious potential markets for Canadian NMLM suppliers are the U.K., France, the Netherlands and Scandinavia, where language is not a problem and where a strong Canadian affinity exists.

Markets that are receiving European development investment attention to improve economic conditions to the levels found in the U.K., France and Germany include Portugal, Greece and Ireland. These markets are often overlooked and could prove to be attractive niches, particularly for Canadian NMLM suppliers with language capability or national relationships.

Eastern Europe is also the focus of significant infrastructure development attention and a market in which generic skills training is a priority. Partnerships with western European firms can be an advantage in approaching these markets.

European investment in the exploitation of NMLM continues as part of an emphasis both on modernising the European training infrastructure and on developing new cultural industries. Through a number of incentive programs, European investment appears to be in the range of $4 billion over the next four years to support multimedia education and cultural projects.
With this activity and with the collaborative agreements existing between Europe and Canada, there is significant opportunity for Canadian international business development.

4.6.2.4 Rest of the World
The following general observations apply to the potential of markets in the rest of the world for Canadian NMLM.

There will be strong universal markets for generic skills NMLM (e.g. basic computer skills, management), and North American suppliers and sources are favoured. Major issues continue to be installed technology base, distribution methods, after-sales support, language and cultural differences.

Industry-specific NMLM will benefit from marketing partnerships or product coupling with Canadian industry or with companies already supplying international markets.

While developing nations have critical and largely unserved training requirements, technology infrastructure and financing are critical barriers. Marketing efforts should be directed at international organisations and financial institutions such as the Canadian International Development Agency, the World Bank and other regional development banks. The following table provides a summary of national observations, showing specific country indications of either significant industry sector emphasis or a significant technology install base (see table 6 page 68).

Hong Kong, South Korea, Malaysia, Singapore, Thailand	Key employment sectors : manufacturing, wholesale/retail, restaurants hotels, finance, government services, personal services
Argentina	Banking/insurance, government services
Australia	$84 million allocated to multimedia enterprise of which $57 million is for NMLM ; major training reform program ; community services, health, construction, wholesale/retail, public administration ; many partnerships with Canada
Brazil	Growing economy and install base
Bulgaria and Eastern Europe	Basic managerial skills stimulated by privatisation, environment
China	Technical skills, management, accounting, marketing
Indonesia	Banking and finance
Japan	Growing home use of computers, promotion of computers in schools
Mexico, Chile, NAFTA	Govemment services, environment
Morocco	Largest African computer market
India, Pakistan	Government services, para-government organisations
Philippines	Emphasis on performance improvement in government and industry
Singapore	"Intelligent Island" program to link homes, offices, factories and schools ; finance, health, transportation, construction, tourism, manufacturing, wholesale/retail In middle of 10-year program to increase computer install base
Taiwan	In middle of 10-year program to increase computer install base –
Turkey	Banking, government services
Vietnam	Govemment services, significant Canadian development emphasis, long-term Canadian contracts to assist in developing government infrastructure, particularly information technology and environment

Table 6 : Summary of National Observations.

5. SELF-TEST

QUESTIONS

1. Describe the Canadian context and experience in light of the development of DET and TML within its frontier.

2. Identify and describe briefly three major Canadian institutional examples of TML.

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3. Apply, in a comparative market perspective, one of these Canadian experiences to the specific context of your country of posting.

4. Identify and describe briefly two non-university and two industry-based examples of TML, and apply to your country of posting (see preceding exercise).

5. Identify four Canadian TML products offered by the private sector and available on the national and international market.

-
-

6. What is the typical organisational profile applicable to Canadian producers of computer-based material ?

7. You are being asked by a foreign education minister what new learning approaches using interactive, computer-based technologies exist in Canada. What would you answer ?

8. Describe and explain what is meant by the expressions "Intellectual Capital" and "Knowledge management." Apply to region or country of posting.

9. What are the long-term social implications of Telelearning ? Think of the present education systems and the typical classroom situation.

10. Identify knowledge-based market domains where new learning media represents a high potential for development. Apply to region or country posting.

11. To what extent is Canada present in the NMLM world market ? Give five examples by regions (i.e. US, Europe, Asia, etc. . .).

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-
-
-
-

12. What is "Niche Marketing" and how does it apply to Canadian NMLM institutions or private firms ?

6. REFERENCE

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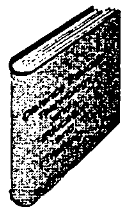

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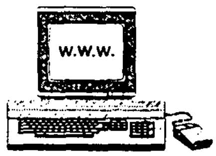
IMPORTANT WEBSITES 

Distance Learning and Supported Learning Worldwide is a site with valuable information regarding Distance learning in Canada and the rest of the world.

- **http://www.strategis.ic.gc.ca**
  - Main Menu
    - Business Information by sector—search for Learning Industries
      - Information and Communications Technologies document #21
        - Distance Learning in Canada

CORPORATE-DISTANCE LEARNING
- Alex Informatics Inc.
- Applied Courseware Technology Inc. (Act)
- BC Telecom Inc.
- Cable in the Classroom
- Digital Renaissance Inc.
- Famic Inc.
- Firstclass Systems
- Gemini Learning Systems Inc.
- Learnsoft Corporation

CORPORATE-DISTANCE LEARNING
- Shl Systemhouse

- Sonatic Systems Inc.
- Synervision Digital Productions Inc.
- Telesat
- Attachment (I): Cable Operators
- Attachment (Ii): Telephone Companies

PROVINCIAL-DISTANCE LEARNING
- Access - The Education Station
- Athabasca University
- Carleton University
- Contact North/Contact Nord
- George Brown College
- Knowledge Network
- Memorial University of Newfoundland

PROVINCIAL-DISTANCE LEARNING IN CANADA
- NB Teleeducation
- Open Learning Agency
- TV Ontario
- Telemedicine/Tetra
- Télé-Université
- University Of Ottawa
- University Of Waterloo
- Wahsa Distance Education Centre
- Wawatay Native Communications Society

NATIONAL/INTERNATIONAL-DISTANCE LEARNING
- Canadian Association for Distance Education (CADE)
- The Commonwealth of Learning
- EBI Group Inc.
- The International Francophone Centre for Distance Education (CIFFAD)

FEDERAL
- Canarie Inc.
- Insurance Operational Training
- Schoolnet
- Telelearning Network of Centres of Excellence

CONTACT LIST-DISTANCE LEARNING
- Corporate
- Provincial
- National/International
- Federal

5

CANADIAN EDUCATION AND TRAINING SERVICES

FOREIGN STUDENTS

TRAINING SESSION
Module five

PILOT VERSION

Department Foreign Affairs and International Trade (DFAIT)
Education Marketing Unit (ACET)
in collaboration with CFG inc.

TABLE OF CONTENTS

LIST OF ACRONYMS

ACCC	Association of Canadian Community College
AUCC	Association of Universities and Colleges of Canada
AVAA	Asociacion Venzolano-Americana de Amistad
CBIE	Canadian Bureau for International Education
CECs	Canada Education Centres
ESL	English as a second language
FAFSA	Federal Student Aid
FSL	Foreign Second Language
NACAC	National Association for College Admission Counselling
TOEFL	Test of English as a Foreign Language
UHIP	University Health Insurance Plan

TABLE OF ILLUSTRATIONS

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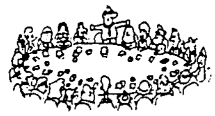
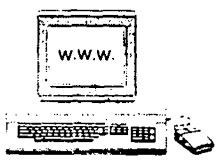
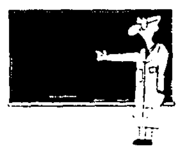


Chat On The Network

Exercise



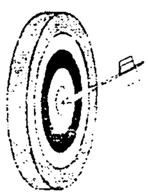
Internet



Tutor

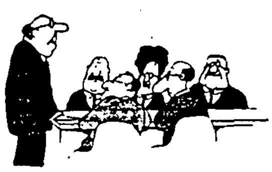
Reading

Self-test



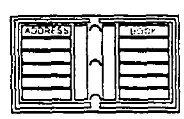
Objectives

Timer



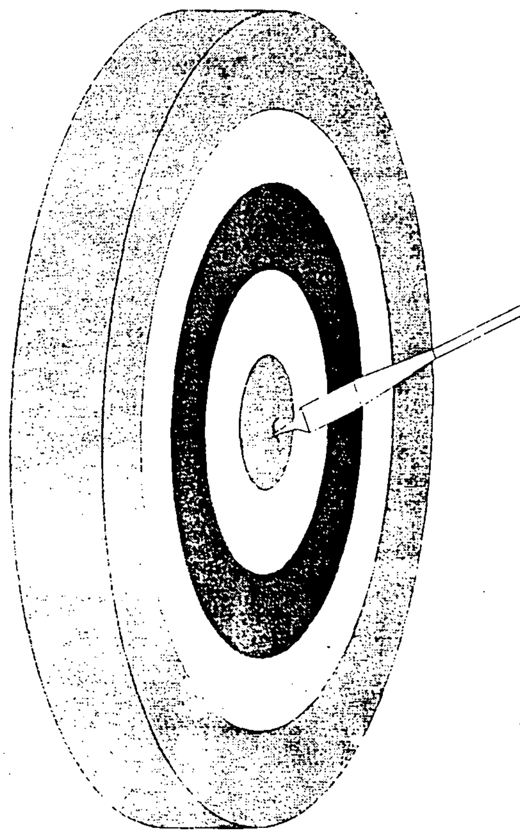
Group discussion

Reports



Address Book

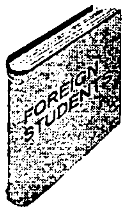
1. LEARNING OBJECTIVES



At the conclusion of this module, the participant will :

- Be sensitized to the economic and cultural importance of foreign students study in region Canada.
- Understand the role of Canadian institutions in providing education to foreign students.
- Explain the role of Canadian Education Centres Network.
- Be familiarised with the Visa process for foreign students.

2. PROCESS AND PACING



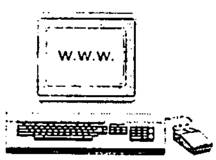
TO FAMILIARISE WITH FOREIGN STUDENTS

State of Activity since 1991

Read : pp. 8

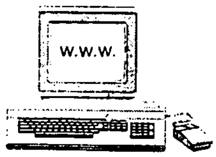
WHY STUDY IN CANADA

Consult compact disk : Study in Canada



KNOWING OUR INSTITUTIONS IN LIGHT OF RECEIVING FOREIGN STUDENTS AND WHAT THEY DO FOR THEIR MARKETING.

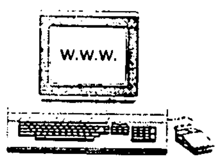
- **Association of Universities and Colleges of Canada**
  ⇒http://www.aucc.ca
- *(For answers some of the questions most frequently asked by international students applicants, click to "connect to Canada's Universtiy").*



- **Canadian Bureau for International Education (CBIE)**

⇒http://www.cbie.ca

General information for international students providing many good links



- **Intergovernmental on-line information kiosk**

⇒http://www.intergov.gc.ca

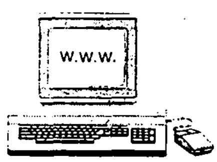
A good link to Canada Higher Education Institutions

BE FAMILIARISED WITH THE VISA PROCESS FOR FOREIGN STUDENTS

Exercise one

What to study in Canada

1. Take note of page pp. 31-39 of this document before the meeting.

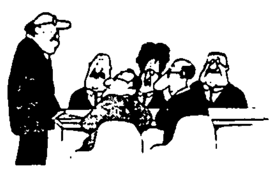


2. Also, you can go to Website :

Citizenship Immigration Canada

- Coming to Canada
  - Citizenship Immigration authorisation Kits and Forum

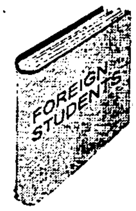
⇒http://www.cic.ca



3. Group discussion → goals to achieve

- Familiarise with the process of admission for a foreign student.

TO UNDERSTAND AND CAN EXPLAIN THE ROLE OF CANADIAN EDUCATION CENTRES NETWORKS



Read pp. 21-27

Self-Test

Self- test to evaluate your understanding and knowledge of the module "Foreign Students". See pages (   ).

3. INTRODUCTION

There are six great reasons to study in Canada :

The first one : Quality Education
Canada's universities and colleges are world-renowned for their high standards and educational excellence. A degree from a Canadian university or college is internationally recognised and considered equivalent to a degree from an American university. Moreover, the choice of schools is wide and varied, from major research institutions to ·small liberal arts schools.

The second one : Tuition and Living Costs Low
Canadian tuition notes are very competitive in comparison to posted rates for most major »European and American Universities and colleges. The same rules applies for other related expenses such as housing, food, books, entertainment and travel. Foreign students should expect a valuable return on investment in choosing Canadian institutions for their studies.

The third one : Preparation for a Global Economy
With a Canadian education you will be well positioned to take advantage of opportunities in the growing global market. Canadian schools are at the forefront of the information technology revolution, ensuring that their students are equipped for the 21st century. Most schools offer co-operative education and training programs that allow students to spend a portion of their school year gaining practical experience in the workplace.

The fourth one : Enjoyment of a Safe Environment and a High Quality of Life.
In each of the past four years, Canada was ranked first on the United Nations Human Development Index (based on a comparison of life expectancy, education, health and income). It is safe, and the pace of life is manageable.

The fifth one : Exciting and Beautiful Place.
In Canada you will find great schools in world-class cities, serene settings on the Great Lakes, near the ocean, or close to the mountains. Canada is well known for the beauty

of its natural settings, but it is also famous for its cosmopolitan and multicultural cities brimming with ethnic foods, great entertainment, cultural events, and sports.

The sixth one : Ease of travel.

It is very easy to come to Canada from almost anywhere with world. Most major cities in the world have access to convenient international airline services to Canadian entry points such as Vancouver, Toronto and Montreal. In addition, travelling within Canada is easy, with inexpensive, reliable and varied means of transport.

4. FOREIGN STUDENTS

4.1 ISSUES AND TRENDS

4.1.1 State of Activity since 1991

For the purpose of this document, *international students* or *foreign students* refer to those students who have received authorisations from visa officers to attend public or private educational institutions at the elementary, secondary, college or university level in Canada.

After a decade of growth, the overall number of international students coming to study in Canada has declined over the last three years. Canada is also losing international student market share to our competitors, principally the Australians, the British, and the Americans.

This general downward trend is partially offset in specific areas of the world where Canadian educational institutions, the federal, and provincial governments are actively marketing education services. In Taiwan and Korea, where Canadian Education Centres (CEC's) have been established, authorisations to study in Canada are increasing substantially. Similarly, British Columbia and Quebec, two provinces that are actively promoting their educational institutions, have seen their international student figures defy the national trend and increase sharply. In the last four years, Quebec has increased its international student enrolment by 12 %. British Columbia's international students have grown by 8% from 1991 to 1994.

Three principal reasons for Canada's decline in receiving international students :

1. Canada is facing unprecedented competition from nations that are aggressively marketing their educational institutions. (For instance, Australia now has dedicated education resources in separate Australian Education Centres, and in their diplomatic missions in over 36 countries abroad) ;
2. Some nations and jurisdictions, such as Hong Kong, are increasing domestic capacity to absorb their own students, particularly at the post secondary level, there also appears to be a trend for more and more students to study intra-regionally, such as within the Asia Pacific region and the European Union.

Based on a formula developed by the Vancouver Board of Trade Study in 1986, Statistics Canada estimated that in 1991 that international students pumped $1.5 billion into the Canadian economy, generating 19,000 jobs. In 1994-95, the economic contribution of international students in Canada was $2.3 billion, with 2 1,000 jobs being generated. Canada can ill afford to lose this valuable source of revenue generation, let alone the untold adverse downstream effects of losing more and more access to the future decision makers and opinion shapers in our top trading partners. In an era of drastic budget cuts and declining enrolments in Canada, and the concomitant interest shown by Canadian educational institutions in attracting more well-qualified, fee-paying students, it would appear Canada needs to step up its marketing efforts. There is strong correlation between effective marketing and international student flows.

The message is clear. Canada has first rate education services and products and has competitive advantages in terms of tuition costs and living expenses within a secure social environment. However, we need to market more effectively and in more broadly based ways to reverse this current international student decline.

4.1.2 Major sectors

The overall decline in 1993-94 and 1994-95 is reflected in each of the three major sectors : schools (-0.1% (28) and -5.8% (1,584); colleges and other vocational institutions (-2.5% (655) and -9.4 % (2,328) ; and universities (-0.8% (306) and -1.24% (461). Moreover, the decline is accelerating in all sectors although the increase is least sharp for the universities.

The relative proportions of international student enrolment between the three sectors from 1992-1993 to 1994-1995 have remained relatively stable. However, the college and vocational sector has declined by approximately three per cent relative to the universities and the schools.

College/Trade

The greatest drop is the college and trade sector: 2.5% (655) in 1993-1994 in relation to 1992-1993; 9.4% (2,328) in 1994-1995 in relation to 1993-1994. There has been a decline of 11.7% (2,983) in two years.

Elementary/Secondary Schools

School enrolments of international students dropped by 0.1% (28) in 1993-1994 in relation to 1992-1993. and by 5.8% (1,584) in 1994-1995 in relation to 1993-1994. The school sector reached its peak in 1991-1992 and began to decline the following year, 1992-93, with a drop of 4.3% (1,242). So, in three years, international students in the schools have declined by 9.9% (2,854).

Universities

The universities have seen their international student population drop by 0.8% (306) in 1993-1994 in relation to 1992-1993; and by 1.2% (461) in 1994-1995 in relation to 1993-1994. In two years then, their international student population has declined by 2.0% (766). They have thus suffered the smallest drop in absolute and percentage terms. It is noticeable that the decline in undergraduate enrolments is greater in 1994-1995 than for the graduate level although the numbers involved are relatively small.

4.1.3 Who lost ? Who Won ?

4.1.3.1 Who lost ?

In looking at the individual provincial situations, Prince Edward Island, Nova Scotia, New Brunswick, Manitoba, Saskatchewan and Alberta all showed a decline in their overall enrolments. Ontario and Yukon and the Northwest Territories also showed a decline in their total international student enrolments in 1994-1995. This continued the pattern of enrolment decline in both 1993-1994 and 1994-1995 for Yukon and the Territories and in 1992-1993, 1993-1994 and 1994-1995 for Ontario.

Although eight provinces and territories showed a decline in their international student enrolment, some 97% of the total loss was accounted for by Ontario and Alberta. A closer look at these two provinces reveals the following picture.

Ontario

Ontario was the province with greatest overall drop in enrolments and the longest downward trend. Ontario started to decline in 1992-1993, dropping 4.22% (1,974), another 5.1% (2,270) in 1993-1994, and a further 13.4% (5,690) in 1994-1995. In three years, therefore, the provinces international student enrolment has declined by 21.24% (9,934). No other province has suffered such a decline in absolute numbers or in percentage terms.

All sectors in Ontario have shown a significant downward trend: the greatest decline has been in the college and vocational sector, followed by the universities and the schools. Again, all sectors began to decline in 1992-1993.

The college and vocational sector has dropped. by 34.1611/o (5,917) in three years, the universities by 18.6211/o (2,655) in the same period and the schools by 9.32% (1,362). In each case except the schools, the decline has accelerated sharply from year to year :

INSTITUTION	1991-92 to 1992-93	1992-93 to 1993-94	1993-94 to 1994-95
college & vocational	5.16 % (895)	-11.0% (1,799)	-22.0% (3,223)
universities	-3.48 (496)	-4.6 (639)	-11.6 (1,520)
schools	-3.98% (583)	+1.1% (168)	-6.4% (947)

Table 1 : The State of Activity since 1991.

Ontario alone with a decline of 5,690 students accounts for some 87% of the total decline in students among the provinces of 6,540 (offset of course by an increase of 1,544 in Quebec, Newfoundland and British Columbia).

Alberta

Alberta registered the second greatest decline in enrolments after Ontario - a drop of 8.6% (663) from 1993-1994 to 1994-1995. This accounted for 10.13% of the total decline among the provinces.

In fact, the province registered an 8.37% (65 1) decline in enrolment in 1992-1993 but reversed this in 1993-1994 with a gain of 8.47% (604). Despite this, Alberta did not return to its 1991-1991 enrolment peak (7,777).

The university and college and vocational sectors have both reflected this pattern, showing sharp declines in 1992-1993, recovery in 1993-1994 and again a drop in 1994-1995. The universities experienced an 8.1% (280) drop in 1994-1995 while the college and vocational sector fell by 7% (120). The school sector, however, has been showing a continuing decline in enrolment for three years: 7.7% (218) in 1992-1993; 1.9% (50) in 1993-1994; and 10.3% (263) in 1994-1995.

4.1.3.2 Who Won ?

In contrast, British Columbia, Quebec and Newfoundland each showed an increase in enrolments in 1994-1995 in all sectors. In this, with the exception of Newfoundland in 1993-1994 when enrolment declined 1% (8), and the university sector in Quebec, which showed a decline of 0.3% (28) in 1993-1994, the growth trend in enrolments in all three provinces continued.

British Columbia

Overall enrolment increased by 3.2% (517) in 1994-95, which followed an increase of 4.0% (628) in 1993-1994 and 1.2% (193) in 1992-1993 for overall growth from 1992-1993 - 1994-95 of 7.3%. (1,145). However, while the university sector grew 8.9% (400) in 1993 -94, it grew hardly at all - 0.1 % (7) in 1994-95.

The school sector declined in both 1993-94, 6.4% (356) and 1994-95, 8.9% (466) for an overall two year decline of 14.7% (822). Thus the growth is largely supported by the college/trade sector: 10.7% (584) in 1993-94 and 16.1% (976) in 1994-95 for an overall two year gain of 28.0% (1560).

Quebec

Overall enrolment increased by 2.6% (355) in 1993-94 and 7% (984) in 1994-95 for a two year gain of 9.7% (1,339). Every sector showed some increase although the increase for schools was less in 1994-95 at 2.1% (5 1) than in 1993-94 at 3.7% (185). The two year overall increase for schools was 5.9% (236). The college/trade sector showed major increases: 24.0% (298) in 1993-94 and 27.5% (424) in 1994-95 for an overall increase in two years of 58% (722). The universities registered a small decline in 1993-94 of 0.3% (28) but gained 5.0% (509) in 1994-95 for a two year gain of 4.7% (481). Thus, as in British Columbia growth is being led by the college/trade sector.

Newfoundland

The numbers of international students in Newfoundland are relatively small. Nonetheless, overall enrolment grew by 5.6% (43) in 1994-95 after a 1.0% (8) decline in 1993-94. Essentially, the school sector grew in 1994-95 by 26.7% (45) after dropping 6.3% (18) in 1993-94; the college sector grew 3 5.7% (5) in 1993-94 but declined 26.3% (5) in 1994-95; the university sector grew 1.1% (5) in 1993-94 but declined 0.6% (3) in 1994-95. Thus the latest growth is accounted for by the school sector but again the numbers here are very small.

An assessment of the costs and benefits of foreign study can be carried out from a number viewpoints, corresponding to the various stakeholders in the process of internationalisation of higher education. We identify four groups of stakeholders: individual students the cost-benefit calculation relates to their personal financial commitments and expectations of increased future income; institutions, which have an interest in assessing the impacts of foreign student activities on overall financial and educational planning; educational systems, whose concern is with cost efficiency in administering foreign student services and policy development; and the nation or society as a whole, in which all citizens bear some part of the cost, and reap some of the benefit, flowing from the movement of students to and from their shores. In the remainder of the Report attention is concentrated on the institutional and national levels of assessment.

4.1.4 Comments

There is clearly an overall trend of a decline in international student enrolments in Canada over the last two years, that is, 1993-94 and 1994-95. While the magnitude varies with sector the broad effect nonetheless is felt in all sectors, although the universities appear to be the least affected so far. Ma is a complex issue which we are not mandated to explore, and any explanation is at best tentative, but in discussion with some of those in the field in Canada and the United States, it appears that the following factors may be at play :

- There is increased competition. Canada, England, Australia and the United States, all destinations for students, are now competing head to head, especially in the major source region for students, Asia. In a sense globalisation has arrived and what was in the past parallel competition has become direct and all three of Canada's competitors are hard marketers. In particular, the Australians appear to be very successfully pursuing Asian students driven by their foreign policy goals of integration into the region but there is also, as noted below, generally increased competition between the region. According to the Director of Research for the Institute for International Education OM in New York while the United States remains the potential foreign student destination, the American international student population has been essentially flat in 1994-1995 and American market share of what is world wide a growing market is decreasing.

- There may also be a trend among the newly industrialised Asian countries to more of their own region's students and to retain their students at home. The IIE has noted a sharp drop-off in east Asian students, especially China, and considers that as educational infrastructures develop and the need to go abroad for technical goals lessens this trend could with more students choosing the humanities and social sciences over engineering and the natural sciences.

- The Asian growth in regionalization of foreign student movement is paralleled in Europe. The European Union has a goal of 10% of its students studying m a member state other than their own and has encouraged this by specific schemes such as the Erasmus and Socrates programs and by the progress made in the equivalency arrangements for courses and qualifications.

- The Asian situation is much less formal than the European in terms of structured multilateral exchanges nonetheless the growing regional consciousness and Connections are leading to much stronger bilateral exchanges, for example, Japan and China have significant bilateral arrangements as do other countries. Also, Japan is recruiting hard among the countries of what might be described as its "national security area" in Asia.

- Moreover, the IIE believes that international students may be looking for a much broader experience than in the past. Students may be coming to the United States for example not for specific programs leading to a degree in engineering and more for a cultural breadth, much as many Canadian and American students have traditionally gone to Europe for studies in and language. This phenomenon could be accompanied by another: short term professional development and educational tourism - language, cultural and secretarial or other business courses for example, over a two or three month period. The IIE has an impression that this may be developing on the American west coast. In Canada's case of course, students here for less than three months do not need an authorisation so there is no direct means of tracking whether this is taking place.

- In addition to these global trends, there is a view that Canadian institutions are not offering the level of services that international students expect, whether pre-arrival services or post arrival services. When people are paying top dollar they expect appropriate service and if they do not receive it may go elsewhere. So, dropping students from OUT in Ontario probably has been a disincentive as are long lead times for admission and poor responses to requests for information. Equally, Canadian institutions' TOEFL (Test of English as a Foreign Language) requirements are among the strictest in the world.

- The service issue is compounded by the resource crunch now felt by institutions who cannot afford to improve (and, indeed, may have to reduce) international student services given other competing demands but who thereby lose out to other countries. Moreover, universities, unlike community colleges, are for the most part not able to retain foreign student fees and thus have little monetary incentive at least to improve services or marketing efforts. Yet, it is more necessary than ever to operate in a business like fashion in a world of tough competition.

- The question of cost and differential fees has arisen in the past and there is a view that Canadian fees may be approaching a threshold for the product this country can offer. On the other hand, Canada's costs and fees are not out of line with those of our competitors and our general costs have been relatively stable over the past few years. Nonetheless, it may be that increasing fees are playing a part as students become more determined shoppers in a more competitive market.

- Linked to cost and service - good and fast information provision and enrolment procedures, excellent welcome and on-campus services, etc. - is the information modes of the international student market. An IIIE study done for the United States Information Service examined ways in which foreign students obtain information about the United States has confirmed that only 4%-5% of students obtain information from government or government-related sources. The vast majority rely on what they learn from family, friends and other students. The word very quickly gets around - a phenomenon familiar to anyone who has worked in Immigration. Even so, some feel that official Canadian educational marketing materials are, compared to for example those of the Australians, simply not attractive or informative.

- Linked to issues of service and information provision is the matter of where students get information if they do approach an official source such as a Canadian post. Some consider that no matter how pleasant and helpful the staff at a post meeting them nonetheless involves official buildings, security and a level of formality. This may be off-putting. Thus some believe that the education centres already established are a model to be expanded elsewhere. In addition, information may be being provided by locally engaged staff who do not have a sufficient understanding of the Canadian educational system.

- There is also a view that Canada's immigration procedures are, despite measures taken to streamline them, tough and require too long lead times, complicated proof of financial stability and confirmation of admission from institutions whose international student services are inadequate in many cases. However, Canadian procedures would appear to be no less tough than those of the other major countries with whom we compete.

4.2 MARKET DISCUSSION

4.2.1 Economic impacts

Hong Kong continues to be the major source country for international students although it has dropped from a 1993-94 peak of 15,054 to 12,302 **in** 1994-95 - a drop of 18.2% or some 2,752. This would account for a significant part - 58.8% of the overall 4,679 drop in international students from 1993-94 - 1994-95.

Most of the decrease in Hong Kong students in numbers of students is in the university sector, 15% (1,148), followed by the school sector, 21.8% (966), and the college and vocational sector, 21.3% (638) but, in percentage terms, the school sector leads the college and vocational sector followed by the universities.

The United States is the second major source country at 7,613 students in 1994-95. It has seen a small drop of 199 or 2.5% students -from 1993 -94 which encompasses a drop of 8.4% (322) in the school sector, a 4.9% (51) increase in the college and vocational sector, and a 2.4% (72) increase in the university sector.

Japan is the third source country after the Hong Kong and the United States and marginally increased its students in Canada in 1994-95 by 156 or 2.2%. This reflected a decline in the school population of some 10.5% (226) but an increase of 9.2% (317) in the college/trade sector and 7.3% (104) in the university sector.

These three countries are quantitatively ahead of the next group Sri Lanka, China and Taiwan. For each of these countries a relatively small decline in numbers occurred in 1994-95. It should be noted, however, that likely a significant number of Sri Lanka students may in fact be refugees awaiting determination of their status in Canada. The same observation can be made for the Somali students who have become an important and growing - source.

Among the remaining major source countries in 1994-95, France increased its students marginally (81 or 2.9%), South Korean students increased by 282 or 12.1% continuing a pattern for the past several years; Iranian students grew by 172 or 8.5%; Malaysia dropped by 199 or 9.0%.

When looked at regionally, in 1994-95 every region except Africa shows an overall decline in international students, and the increase in African students is not enough to offset a decline in 1993-94. The greatest decline is in Asian students, 8.5% (4,302), followed by Oceana (Australia), 7.3% (83), Europe, 5.4% (685), South America, 4.5% (111) and North/Central America, 3.6% (475). In the case of Europe, the decline follows a drop of 7.1% (966) in 1993-94.

The universities show a decline of 8.3% (1,662) in Asian students in 1994-95 which offsets a gain of 8.6% (1,588) in 1993-94. In 1994-95 Asian student numbers fell also in the schools, 10.0% (1,399), and the colleges and vocational institutions, 7.6% (1,241).

Despite the decline, however, Asia remains by far the most important source of students for Canada providing some 55% (46,057). Overall, the relative distribution between the regions has hardly changed in the past five years.

At the institutional level, we can identify three broad categories of costs and benefits that ant to the accounting and decision making within a given university or college. These are the of establishing infrastructure to deliver foreign student services and programs, the ongoing costs am delivery, and the time-stream of benefits that may accrue to the institution as a result of its internationalisation activities. Within these categories a listing of specific items is developed, of the major components are the direct costs of service provision, including tuition, and revenue effects from fees, grants, exchange programs and so on.

At the national level, a separate itemisation of costs and benefits can be drawn up for host and sending countries, bearing mind that some countries (e.g. Germany, Netherlands, Sweden) fall into both categories at any one time. In regard to host countries the principal items are the resources committed to tuition and provision of services for incoming students, and the economic impacts of financial inflows due to fees (if charged) and other expenditures of the students. Some external costs 'and benefits may also be relevant in particular instances. In the case of sending countries, the main cost items relate to the resource commitment made to support fees and expenses of outgoing students, together with opportunity costs, whilst the economic benefits are likely to be seen in terms of the students' increased productivity in the labour force on their return from study abroad.

The Report concludes by observing that this study has shown both the potential and the problems in trying to evaluate the economic benefits and costs of foreign study. It has provided a comprehensive framework within which these effects can be assessed, and this framework has been successfully applied within the participating country studies. Useful results have been derived at both institutional and national levels. At the same time the study has illustrated the considerable variation in countries in the extent and quality of data available upon which assessments can be based, and has pointed the way towards further research needed in this field.

4.2.2 Survey on Education Marketing in the United States

The findings of a new pilot study suggest that with appropriate marketing techniques Canadian universities and colleges could attract far more American students than they do now. By participating in college fairs and inviting counsellors to Canadian campuses, Canadian schools can offset the evident lack of knowledge on the part of American high school students and their counsellors about study in Canada. Canadian universities and colleges would be particularly well advised to concentrate their efforts on schools with a tradition of graduates going abroad and a large percentage of college-bound students as well as schools in urban and suburban settings. Moreover, they should emphasise good education at lower costs vis-a-vis American schools and the safe environment their institutions provide.

A just completed pilot survey of high school counsellors in northern tier states and California explores their knowledge about Canadian universities and colleges and counsellors' perceptions of their students' level of interest in studying in Canada. Princeton Survey Research Associates conducted the survey for the Department of Foreign Affairs and International Trade. A report on the results of the survey notes the following:

- Most American high school counsellors believe their students can receive a good education in Canadian universities. Two in three say a degree from a Canadian university is as prestigious as a degree from an American university. Likewise, a majority consider the Canadian education system equal to the American educational system.
- Two in three counsellors believe an American with a degree from a Canadian university can get as good a job in the United States as he or she would if that person has a degree from an American university.
- Only a few counsellors think their college-bound students are interested in attending a Canadian university. Yet one in two counsellors believes their students would be somewhat likely to attend a Canadian university, if they knew they could get a comparable education for 25 percent less cost. Six in ten counsellors say parents would be very likely (5%) or somewhat likely (54%) to encourage their teenager to attend a Canadian university, if they knew Canadian universities provided a very safe environment.
- Most counsellors claim they have little information about Canadian schools. Only one in ten believes counsellors have a moderate amount of information, over half say counsellors have little information, and one in three say counsellors have no information.
- Three in four counsellors rate college fairs as a useful way for Canadian universities and colleges to increase American student awareness of

opportunities to study in Canada. Somewhat fewer consider regional information briefings for college-bound students to be useful. Inviting counsellors to Canadian campuses and advertising in educational publications are also seen as useful ways to increase the profile of Canadian universities and colleges.

Although this is a pilot study and based on a relatively small sample (257 counsellors), the report offered a rough sketch of students thought to be interested in studying in Canada. Counsellors in the Northeast and the West, urban and suburban schools, schools with a large percentage of college-bound students, schools with a tradition of graduates going abroad, and schools with a predominantly white population, are more likely than others to think their students are interested in attending school in Canada.

4.2.3. National Association for College Admission Counselling (NACAC)

A new report on marketing analysis of college recruiting in the United States, prepared by Mark Milroy, Chief Officer, Programs and Services, National Association for College Admission Counselling (NACAC), offers practical advice on the college recruiting process for Canadian universities and colleges.

Once a student requests information from a university or college, it typically requires several more contacts by the school before the student may actually apply for admission. Once a school accepts a student, recruiters still need to keep in contact with him or her to answer questions, encourage a campus visit, and identify any obstacles that may prevent a student from finally deciding to attend. Cost, distance from home, financial aid, housing, and the opinions of parents and significant others all factor into a student's final decision as to where they will enrol.

The report suggests universities and colleges conduct research on how their institution is perceived in the marketplace, identify competition, ascertain best selling points, identify key marketing message, and eliminate ineffective recruitment strategies. Recruiters need to determine who are the best potential students for their institution, what characteristics define them, and how to recruit them. Recruiters should learn from the current American students and alumni of their institution about why they chose the institution, their perception of its perceived strengths and weaknesses, and their level of satisfaction. Recruiters should also survey those students who inquire but do not apply and those who apply but do not enrol in order to identify problems with the institution's message and to learn about the competition.

Other marketing strategies include: posters with post-paid reply cards for display in high schools, web sites that make it easy for students to request more information and obtain an application, electronic application option on the web site, promotional videotapes, CDs (audio) and CD-ROMs, participation in college fairs, receptions for prospective student in the homes of alumni, regular high school visits, regular campus open houses, on-campus weekend experiences for students, campus preview nights in various cities, and letters from prominent alumni welcoming accepted students.

The college recruitment process is a year-round project. In January, Juniors begin to think about which colleges they would like to attend. In February, Juniors meet with school counsellor to begin preparing a list of colleges to explore. In March, Juniors write to colleges and evaluate the literature they receive. In April, Juniors begin eliminating some choices from their original list of colleges. In May, Juniors attend a college fair to get more information about colleges on their list and plan visits to colleges during the summer. In June, July and August, Juniors visit colleges, take tours, and have interviews. In September, Seniors request admission applications and make additional visits to schools. In October, Seniors attend regional college fairs to investigate those colleges to which they will probably apply; Seniors begin to apply for admission. In November, Seniors take Standard Achievement Tests (SAT) and continue to apply to schools. In December, Seniors have SAT scores sent to colleges on their list and submit last applications. Before May 1, Seniors decide on the college that they will attend.

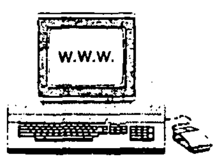
NACAC Membership and Services. Accredited post-secondary institutions are eligible for NACAC membership. An annual fee of $235 provides voting membership; nonvoting membership dues are $135. NACAC members receive a copy if the NACAC Membership Directory, the monthly NACAC Bulletin (which reports news, trends, resources, etc.), the quarterly Journal of College Admission, and early information on all NACAC activities.

NACAC National College Fairs are held in cities across the U.S. Each year more than 300,000 students and parents attend these programs to learn more about educational and career opportunities after high school. Admission and financial aid information, one-to-one counselling, and special information sessions are offered, as well as opportunities to meet representatives from colleges, universities, and other educational institutions. Contracts for booth space at the NCFs are accepted from any accredited post-secondary institution offering curricular study leading to a degree or diploma. Booth for groups of accredited institutions wishing to register for one or more booths are also accepted. Price per booth is $400 for NACAC members and $600 for non-members. Canadian universities and colleges or consortia should consider contracting booths at targeted regional fairs.

NACAC will host its annual national conference. More than 3,000 college admissions counsellors will attend the conference, which will include panel sessions, workshops, and social activities. Booth space may still be available for accredited post-secondary institutions as well as associations and organisations.

NACAC offers the annually updated Admission Practitioner: Strategies and Resources for College and University Admission Professional. This manual provides practical techniques and references exemplary programs and practices in college admissions. It is written by experts in the profession and provides an extensive bibliography and resource list. It is available to NACAC members for $59.95 and to non members for $69.95. The NACAC Membership Directory contains alphabetical and geographical listings of who's who in college admission counselling, bylaws, policies, and position statements. It lists the 6,300 counsellors and admission professionals from colleges, universities, independents, and secondary schools. It is available to NACAC members for $10 and to non members for $50. In addition, NACAC provides many other publications and newsletters to assist college admissions professionals.

4.2.4 Market Report in Website :



⇒ http://www.dfait-macie.gc.ca/culture/educationmarketing/menue-.htm

This section contains geographic education market reports and studies produced or commissioned by the Department of Foreign Affairs and International Trade to help education exporters identify foreign market opportunities. The reports contain information about the trends, demographics, education systems, social and cultural attitudes of targeted countries in order to assist exporters in the development of effective market strategies.

These market reports have been prepared by the Department of Foreign Affairs and International Trade based on primary and secondary sources of information. The Department does not guarantee the accuracy of the information contained in these reports, nor does it necessarily endorse the organisations listed herein. Users should verify the accuracy and reliability of the information independently. The Government of Canada declines any responsibility for losses resulting from information or advice contained in these documents.

Several of the studies listed are provided via a link from Info Export. and users will be required to register for a password before receiving access to them.

4.3 ROLE OF CANADIAN EDUCATION CENTRES NETWORKS

4.3.1 Canadian Education Centre (CEC) Networks

The Department of Foreign Affairs and International Trade has put into place several marketing channels to provide on-the-ground assistance to Canadian education exporters promoting their programs, services and products in international markets. Through 14 offices in Asia Pacific and Latin America, the Canadian Education Centre Network promotes and markets Canada as a destination for international students as well as a source of international corporate and group training. The CEC Network is based in Vancouver and is a wholly-owned subsidiary of the Asia Pacific Foundation of Canada. It is run in partnership with the Department of Foreign Affairs and International Trade, the Canadian International Development Agency, and Citizenship and Immigration Canada. Canadian education exporters can use CECN services on a subscription and/or fee-for-service basis. The 14 CEC offices are located in: Bangkok, Hong Kong, Jakarta, Kuala Lumpur, Mexico City, New Delhi, Singapore, Seoul, Taipei, Beijing, Canberra, Buenos Aires, São Paulo and Santiago.

The mission of the CEC (Canadian Education Centre) Network is to promote and market Canada as a destination for international students as well as a source for international corporate and group training. It is also to provide high quality service and support to our in-Canada and overseas clients and to support Canada's foreign policy and development assistance objectives world-wide.

Founded in April, 1995, the CEC Network is based in Vancouver and is a wholly-owned subsidiary of the Asia Pacific Foundation of Canada. It is run in partnership with the Government of Canada; specifically, the Department of Foreign Affairs and International Trade, the Canadian International Development Agency, and Citizenship and Immigration Canada. To date, there are 14 CEC offices in the following cities: Bangkok, Hong Kong, Jakarta, Kuala Lumpur, Mexico City, New Delhi, Singapore, Seoul, Taipei, Beijing, Canberra, Buenos Aires, São Paulo and Santiago.

The Network has received overwhelming support from Canadian education institutions. To date, 230 institutions - universities, community colleges, career colleges, private and public secondary schools, language schools and training associations - are clients of the CEC Network. These institutions pay a modest, yearly fee for a number of services provided by our Canadian Education Centres (CECs) and in-Canada staff, such as material display at CECs and individual student counselling on programs. See the section on services and rates for more information on services offered to CEC Network clients.

The CEC Network works closely with the Association of Universities and Colleges of Canada (AUCC), the Association of Canadian Community Colleges (ACCC) and other non governmental agencies. Any recognised education institution can join the Network. Associations, institutions and corporations which provide training may also find the Network of interest.

As a client of the CEC Network, you become part of the promotion of Canada and its education system that recruits, counsels and tests international students coming to Canada. You also receive market intelligence about the education market and are provided with easy accessible service through offices located in Vancouver, Montreal and Toronto.

4.3.1.1 Corporate and Group Training

The CEC Network has been actively marketing Canadian corporate and group training internationally, and response to our efforts indicates the products we're offering are extremely competitive. The reason? Canada offers a superior quality of education at a cost deemed relatively inexpensive in the international education marketplace. It is also viewed as a safe, clean, multicultural environment. To date, the CEC Network identified 84 contracts valued at approximately $3 million in South Korea, Taiwan, Hong Kong, Thailand and Malaysia. Of these, 24 contracts worth $1.5 million have been won. These contracts have ranged from speciality ESL courses, to management training for executives, to training for music teachers.

Corporate training refers to education geared towards mid to senior level executives from corporations and government who are seeking upgrades in various international business practices. The CEC Network has also identified a strong international demand for group training, which refers to any type of training, from ESL to computers, for groups of people of any age.

4.3.1.2 How can the CEC Network help boost corporate and group training at my institution ?

The CEC Network helps secure corporate and group training contracts for clients by providing the following :

1. We identify potential contracts (Requests for Proposals) which are then provided to clients who may choose to submit a proposal ;
2. We directly market clients' corporate and group training programs that are unique in nature ;
3. We assist clients visiting a specific region in identifying potential joint ventures there with education institutions.

This service is only available to clients of the CEC Network. Our management fee for finding potential contracts is generally in the range of five to seven per cent of the contract's total worth. If desired, a separate management fee would be negotiated for directly marketed programs.

Paulo and Santiago.

4.3.2 Canadian Education Resource Centres (ERCs)

In Europe and the Middle East, there are two Education Resource Centres, based in the Canadian Embassies in Athens, Greece and Abu Dhabi, United Arab Emirates. A pilot ERC in Ankara, Turkey is expected to open in autumn 1998. These centres are designed to assist Canadian education exporters access these regional markets. The ERCs are one-staff member operations which provide information on the market and upcoming promotional activities. The centres can also provide assistance, on a case-by-case basis, in arranging seminars, conferences, and one-on-one meetings with local education contacts. The centres are also involved in other annual and ongoing marketing activities such as participating in education fairs, and producing Canadian promotional materials in the language of the local market. See appendix for contact information for the ERCs.

4.3.3 Local Partnership Agreements

In Venezuela, the Canadian Embassy in Caracas has established a partnership with *Asociacion Venezolano-Americana de Amistad* (AVAA), a local non-profit organisation established to promote international education to Venezuelan students. AVAA responds to almost 10,000 information requests annually and, under the partnership agreement, Canadian institutions can make use of AVAA facilities and resources, including accessing the AVAA's extensive knowledge of the Venezuelan education market and contacts, displaying brochures at the AVAA resource centre, and participating in AVAA education fairs at discounted rates. To learn more about the AVAA and its activities, see the appendix for information.

4.3.4 National Education Organisations

4.3.4.1 Association of Universities and Colleges of Canada (AUCC)

The AUCC has begun to take a proactive international stance. AUCC and its members believe that increasing global economic, political and cultural interaction requires universities to develop an international approach to their teaching, research and community service.

However, the efforts of AUCC to date have been fragmented due to a lack of consensus amongst the autonomous members of AUCC. They have commissioned yet another study that will try to determine the size of the education export market – presumably to provide to its member universities as an enticement to co-operate.

Unfortunately, amongst AUCC members there are diverse views concerning internationalisation ranging form what is it to aggressive successful competition internationally.

- Includes lists of member Canadian universities, scholarships, publications, international exchanges, and links.

AUCC International promotes increased collaboration between Canadian and foreign universities. We believe that international co-operation in higher education improves the human resources capacity of nations. Among AUCC's international activities are : advocacy, policy development, liaison, information, exchange, as well as administration of international institutional linkages, scholarships and academic exchange programs. We also monitor Canadian Foreign policy as it relates to universities' international activities. Staff watch how Canada's 1995 foreign policy agenda, Canada in the World, is implemented, paying particular attention to how the federal government promotes Canadian culture and values abroad and how much support is provides to Canadian Official Development Assistance. AUCC is guided in its international Relations and the International Relations and program Committee as well as by a number of working groups.

For answers to some of the questions most frequently asked by Canadian and international student applicants, click to "Connect to Canada's Universities".

Association of Universities and Colleges of Canada (AUCC) ⇒ http://www.aucc.ca

4.3.4.2 Association of Canadian Community Colleges (ACCC)

ACCC, founded in 1974, represents 175 public colleges and technical institutes whose primary mandate is to stimulate social and economic development. They offer technical, technological, professional, vocational, academic and service career programs.

The members of the Association are Canada's leading adult education and training institutions. They employ 25,000 instructors who teach over 40,000 full-time students and more than 1.5 million part-time students. Clients range form high school graduates, to experienced workers seeking retraining, to adult learners who need new skills to find jobs.

The Association of Canadian Community Colleges devotes more than half of its energies to international contacts and contracts. The ACCC has been international contract search as major membership service for more than a decade and has recently signed an agreement with the Canadian Exporters Association.

ACCC International is the international marketing component which aggressively markets itself and member services. Since 1979, ACCC has implemented and managed over 300 development projects in over 70 countries. These projects have been supported by the Canadian International Development Agency (CIDA), the Department of Foreign Affairs and International Trade Canada (DFAIT Canada), the World Bank, regional development banks, governments, la francophonie, the Commonwealth Secretariat, and the United Nations and its specialised agencies.

ACCC provides delivery of educational services and training for international markets in the following sectors :

- education environment and natural resources
- gender and development
- industry
- health

Association of Canadian Community Colleges (ACCC) ⇒ http://www.accc.ca

- Information on community colleges in Canada, including a list of publications, member institutions, programs and services, and related links.

4.3.4.3 CBIE

CBIE is an organisation that promotes the interest of the international learner both the foreign national learning in Canada, and the Canadian learning overseas in both formal and non-formal educational experiences. CBIE promotes, primarily at post-secondary level, the internationalisation of its member colleges, universities, and other institutions of education. CBIE facilitates education relations between Canada and other countries for purposes of academic exchange, development assistance, and international trade in educational services.

Canadian Bureau for International Education (CBIE) ⇒ http://www.cbie.ca

- Useful general information for international students providing many good links.
- Extensive list of Canadian awards, scholarships, and other financial aid information, publications, plus programs and services information.

4.3.4.4 Intergovernmental On-Line Information Kiosk

The Canadian Governments On-Line (CGOL) intergovernmental team maintains the site Intergovernmental On-Line Information Kiosk. CGOL is a joint federal, provincial, territorial, and municipal government initiative to facilitate co-operation across governments in the use of on-line and information technologies to improve the access and delivery of government services to the public. It's a good link to Canadian Higher Education Institutions.

⇒ http://www.intergov.gc.ca/index.html

4.3.5 The Choice of Field Study by International Students

Sectors and Institutions

As noted above, it is not possible to do any significant analysis within the college and school sectors. Analysis within the university sector is limited to 1992-93 at this point until Statistics Canada completes its data processing for 1993-94 and 1994-95.

For the university sector in 1992-93, international students chose the following fields as follows :

Field of study	# of students	% change 1989-90 to 1992-93	
Social sciences	10,602	15.5 %	(1,754)
Engineering/applied sciences	6,182	15.0 %	(811)
Mathematics/physical sciences	5,496	15.7 %	(1,198)
Humanities	3,280	24.2 %	(640)
Agriculture/biological sciences	2,321	23.1 %	(437)
Health professions	2,212	14.1 %	(274)
Education	1,217	- 1.3 %	(17)
Applied/fine arts	600	33.0 %	(149)
Not reported	2,999		

Table 2 : Foreign student enrolment

Overall, every field except education, which dropped a minimal 0.2 % (3), and fine arts, which declined 4.5 % (28), increased its enrolment in 1992-93. Nonetheless, apart from the humanities, which increased 9.4 % (718), all the increases were between 0.8 % (42) (mathematics/physical sciences) and 2.1 % (48) (agriculture/biological sciences). Thus while over the four years 1989-90 to 1992-93, all fields except education have shown solid growth this trend is slowing. Moreover, in every field, one or more of levels of study – undergraduate, master's doctorate or other graduate, show a decline form 1991-92.

At he institutional level, of the top twenty universities for foreign student enrolment (Table 2) almost two thirds (thirteen) showed a decline in enrolments form 1991-92. The largest decline was 25 % (601) at the *Université de Montréal* but York dropped 11.1 % (199) and Western Ontario 10.5 % (106) while Calgary lost 9.9 % (110). In contrast, British Columbia had an increase of 22.4 % (469), Queen's 14.8 % (104) and Ottawa 12.0 % (110).

4.4 EMBASSIES AND MISSIONS

For assistance in accessing other markets not served by any of the above marketing service centres, contact the officer responsible for education marketing at the nearest Canadian Embassy or Mission. All of Canada's embassies and missions are provided annually with education reference and promotional materials including, the marketing brochures of national education associations and organisations such as the Association of Universities and Colleges of Canada (AUCC), the Canadian Bureau for International Education (CBIE), and the Association of Canadian Community Colleges (ACCC) and the Canadian Information Centre for International Credentials (CICIC). The Embassies also receive an annual shipment of the multilingual Study in Canada! CD-ROM, produced by a Canadian company, EDge Interactive, for use in answering inquiries and showcasing the diversity of Canadian study opportunities, programs and campuses at promotional events.

4.5 FOREIGN STUDENTS : WHAT TO DO...

4.5.1 Admission Requirements

Each university sets its own admission standards and assesses the qualifications of its applicants individually. The minimum required Grade Point Average (GPA) varies from institution to institution. Some universities require applicants to submit their Scholastic Aptitude Test (SAT) scores. Advanced placement courses are recognised by some universities. Check with the individual schools to verify their policy in this regard. (Note the application deadlines imposed by each school).

4.5.1.1 To apply for undergraduate studies :

- Contact the admissions or registrar's office of universities that interest you eight to twelve months before you intend to begin your studies and request an undergraduate calendar (school catalogue) and application form. Information on tuition fees, student services, financial assistance, admission qualifications and deadlines is provided in the school calendar.

- Contact the departments or programs that interest you, via the admissions office, for more detailed information that can help you in the application process. This is particularly recommended for specialised programs such as Engineering, Medicine, Nursing, Business, and Law. The School Finder search engine can help you match schools with programs of interest.

- If you intend to apply to a university in Ontario, you must complete an OUAC 105F application form. This form can be obtained from the university or the Ontario

Universities' Application Centre. Applications for Ontario Community Colleges are available through the Ontario College Application Service.

- If you intend to apply to a university in British Columbia, you have the option of applying to the school directly or on-line through the Post-secondary Application Service of British Columbia.

- Contact the graduate studies office of the universities that interest you eight to twelve months before you intend to begin your studies and request a graduate calendar (or catalogue) and information on your field of study. The calendar details research opportunities, admission requirements, fees, scholarships, and research grants.

Contact the individual departments or programs for information on faculty research interests and advisors.

4.5.1.2 Tuition Fees

Tuition fees will vary among schools and programs. The range of tuition fees by province, based on the eight-month academic year of two semesters in 1997- 98 is as follows :

Province	**Undergraduate**	**Graduate**
Alberta	$3,351 - $4,643	$3,492 - $10,220
British Columbia	$2,606 - $10,096	$1,533 - $5,475
Manitoba	$2,959 - $4,054	$2,562 - $4,606
New Brunswick	$3,106 - $5,457	$1,789 - $3,927
Newfoundland	$4,599	$1,318 - $2,466
Nova Scotia	$3,903 - $5,723	$3,741 - $6,643
Ontario	$4,599 - $8,760	$1,897 - $13,140
Prince Edward Island	$4,782	$3,966
Quebec	$6,036 - $6,694	$4,936 - $9,053
Saskatchewan	$4,106 - $4,464	$2,053 - $2,606

Table 3 : Figures are in American dollars, based on a US$1.00 = Cdn$1.37 exchange rate. These tuition rates only apply to foreign students enrolled on a full-time basis.

Source: Statistics Canada, Centre for Education Statistics, 1997.

4.5.1.3 Scholarships and Financial Aid

Financial aid options for American students vary among schools. Once enrolled as a full-time university student, an American citizen may be eligible for subject- or program-specific awards. Information on awards offered to international students can be found in Awards for Study in Canada, published by the Canadian Bureau for International Education (CBIE). American students attending Canadian universities accredited by the U.S. Department of Education are eligible for U.S.-guaranteed student loans. For a Free Application for Federal Student Aid (FAFSA) package, contact the U.S. Department of Education at (800) 433-3243. American students who attend Canadian schools are also eligible to claim the recently implemented HOPE Scholarship and Lifetime Learning tax credits. More information on these programs may be obtained through the U.S. Department of Education web site or its information telephone line listed above.

4.5.1.4 Living expenses, accommodations and health insurance

The financial resources needed to cover living expenses will depend on the individual's spending habits and the geographic locale of the school. Roughly speaking, an American student would need somewhere between $6,500 and $12,000 (in U.S. funds) to meet a twelve-month period of living expenses, including housing, food, clothing, and entertainment.

Acceptance at a Canadian school does not automatically secure **accommodation** in a residence. Students need to apply separately for on-campus housing. Information on housing, both on-campus and off-campus, is available from the housing office or the International Student Adviser at most universities. (Please note the housing application deadlines imposed by each school.)

You should make arrangements for **private medical insurance**. Some universities in Canada have a compulsory health care plan for foreign students and employees. In Ontario this plan is called the University Health Insurance Plan (UHIP). For more information contact the international student adviser at the university you wish to attend. You can also contact UHIP Department at (613) 741 3661. Contact the university of interest to you to learn more about specific medical plans.

4.5.1.5 Degree Recognition

A degree from a Canadian university or college is internationally recognised and considered equivalent to a degree from an American university. If you wish to enrol in a professional program, such as business, engineering, or law, you may want to contact the appropriate American professional association or organisation to inquire about recognition. The Canadian Information Centre for International Credentials provides a national information and referral service on credential assessment procedures. It advises individuals on how to obtain an assessment of their educational, professional, and occupational credentials by referring them to the appropriate bodies. Particularly useful for professional degree programs, is the Association of Accrediting Agencies of Canada web site.

4.6.2 Visa Process or Study Authorisation : Canadian Student Authorisations

The Immigration Act R.S.C. 1985, c. I-2 requires all persons seeking admission to Canada comply with the general requirements of the Immigration Act and Immigration Regulations SOR/78-172. Student authorisations allow the person to study while in Canada, but do not themselves grant admission or status. Therefore, the proposed student will also be required to show apply for and obtain visitor status. Visitor status is discussed

If a person applying for student authorisation is from a country where visitor's visas are required, the proposed student will be expected to apply for and obtain a visitor's visa in conjunction with the application for student authorisation. The proposed student should request a multiple entry visitor visa for the same period as the student authorisation. Persons who are visa exempt need not apply for a visa but must still obtain the necessary student authorisation prior to appearing at a port of entry.

Section 10(a) and (b) of the Immigration Act provide that a person other than a Canadian citizen or permanent resident who seeks to come to Canada for the purpose of :

a. attending any college or university authorised by statute or charter to confer degrees; or

b. for the purpose of taking any academic, vocational or professional training course at any college, university or other institution must obtain a student authorisation prior to appearing at a port of entry. Where the proposed course of study does not fall within this language, no student authorisation will be required.

The words "academic, vocational or professional training" are not defined. However, section 14.04(3)(a) of the *Immigration Manual* states that these words do not encompass short-term, self-improvement, general interest courses. Also, section 14.05 of the *Immigration Manual* states that children who attend day care centres and nursery schools do not require student authorisations.

Section 14.2 of the *Immigration Regulations* provides that certain persons are exempt from the requirement of having a student authorisation. Exemptions contained in section 14.2(a) include dependants of: (a) foreign diplomats, (b) consular officials, (c) officials of the United Nations, or (d) other intergovernmental organisations of which Canada is a member, who are coming to Canada to perform official duties. Section 14.2(b) also exempts persons, who are studying in Canada, from the requirement of a student authorisation where the sole course taken or to be taken is a French or English training course that is three months or less in duration. However, according to s. 14.04(4) of the *Immigration Manual*, if a person attends such a course and wishes to continue past the three month limit, he or she may not get a student authorisation from within Canada. He or she will have to apply through normal procedures to obtain such an authorisation.

4.6.2.1 Application for Student Authorisation at a Port of Entry

Certain persons may apply for a student authorisation at a port of entry instead of at a visa office abroad. Section 15(2) of the *Immigration Regulations* exempts several groups, including dependants of clergymen or members of religious orders coming to Canada for religious duties, employees of foreign news companies, persons coming to Canada to engage in athletic or other sports activities, and persons in possession of employment authorisations. Section 15(3) also exempts nationals of the United States, lawful permanent residents of the United States, residents of Greenland, residents of St. Pierre and Miquelon, and persons whose application for student authorisation has been approved in writing by a visa officer but to whom the authorisation has not been issued.

4.6.2.2 Application or Student Authorisation Within Canada

Certain persons who are already in Canada are permitted to apply for a student authorisation without departing Canada and applying abroad. Section 16 of the *Immigration Regulations* describes these persons, including persons referred to in section 15(2) and 15(3), holders of Minister's permits and their dependants, pending refugee claimants and their dependants, persons who already hold valid and subsisting student authorisations, and persons whose course of study would be incidental and secondary to the main purpose of their presence in Canada.

4.6.2.3 Course Requirements

Section 17(1) of the *Immigration Regulations* states that student authorisations may not be issued for any academic, professional or vocational training course unless that course :

a. is at least six months duration and at the rate of at least twenty-four hours of instruction per week;

b. is given at a college or university authorised by statute or charter to confer degrees or any other publicly-funded institution;

c. is recommended by a minister of the Federal Government, other than the Minister of Employment and Immigration, or by a minister of government of any province, or by any agency thereof;

d. is incidental and secondary to the main purpose of that person's presence in Canada; or

e. involves upgrading of skills or language training and it given at an institution that operates under a provincial or federal license.

Section 17(2) also prohibits the issuance of a student authorisation for the purpose of taking any academic, professional or vocational training course at any university, college or institution listed in Schedule III of the *Immigration Regulations*. These appear to be organisations which have shown a history of improper business practices, exploitation of foreign students or other improper conduct.

4.6.2.4 Requirements to Obtain a Student Authorisation

The requirements for obtaining are set out in section 15(1) of the *Immigration Regulations*. These are in addition to the requirements for obtaining visitor status. Applications for student authorisation must normally be accompanied by:

a. a letter of acceptance is required from an institution which meets the requirements of section 10(a) or (b) of the *Immigration Act*; and

b. sufficient documentation to satisfy the immigration officer that the applicant has sufficient financial resources to :

   1. pay her tuition fees;

   2. maintain herself and any dependants who will come to Canada during the period of he student authorisation; and

   3. pay the cost of transportation to and from Canada for herself and any dependants without engaging in unlawful employment in Canada.

In addition, a course of study will often require facility in English or French. If this is the case and the student has not evidenced a plan to take some form of foreign language course prior to commencing the regular course study, the immigration officer may deny the student authorisation. Where foreign language courses are necessary prior to commencement of the regular course of study, the applicant must show that he or she has sufficient time and funds for the course.

4.6.2.5 Duration of Student Authorisation

Section 14 of the *Immigration Manual* provides that student authorisations issued for post-secondary education should be issued for the length of the course of study. In the case of secondary education, student authorisations will be issued for a one year period unless the student is a dependent of a person who has been issued long term status in Canada.

4.6.2.6 Employment by Persons Under Student Authorisation

Although as a general rule, students are not permitted to engage in employment without obtaining an employment authorisation, section 19(1)(x) of the *Immigration Regulations* provides that student authorisation holders in full-time studies at a local university or college campus do not require an employment authorisation to be engaged in on *campus* employment.

4.6.2.7 Student Authorisation

Americans who plan to study in Canada must obtain a student authorisation from Canadian Immigration. After being accepted in a Canadian university or college as a full-time student, you can apply for a student authorisation, at the nearest Canadian Immigration Office, at a border crossing or at a Canadian port of entry. When you apply, bring a valid passport (a birth certificate or a voter's registration certificate will also suffice); an original letter of acceptance from a university, college or other institution; and evidence of adequate funds to cover tuition and living costs for you and your dependants, including return transportation. If you are supported by a parent/guardian, you will need a notarised statement of support plus proof of income. If you are financially self-reliant, bring proof of funds such as a bank statement or tax return.

There is a nominal processing charge for the student authorisation. Please be aware that if you attend a school in Quebec you must first obtain approval from the province before you submit your application to the Canadian Government. Contact the Quebec "Ministère des Relations avec les citoyens et de l'Immigration" (Ministry of Citizenship and Immigration) to obtain a Quebec Certificate of Acceptance.

4.6.2.8 Part-time Work

Full-time students are permitted to work on the campus of a university without an employment authorisation from the Canadian government. This includes facilities that are located on the campus. A student may work off-campus with an employment authorisation, but only under certain conditions. Contact Citizenship and Immigration Canada for more information. The spouse of a full- time university or college student may also apply for an employment authorisation. An employment authorisation application may be obtained from Citizenship and Immigration Canada.

4.4 CONCLUSION

Every year increasing numbers of third-level students are travelling abroad to study. Some go as independent free-movers, some on exchange arrangements in bilateral or multilateral programs. Universities and colleges are becoming more involved in supplying tuition and support services to international students or in encouraging their own students to travel abroad. Governments in some countries are encouraging the inflow of students because of the export revenue they generate ; in other countries governments provide financial support to outgoing students in the expectation of the economic and educational benefits those students will bring back with them on completion of their studies. It is clear that there is an economic dimension to the decision-making of all these stakeholders – students, institutions, educational systems, host-country and sending-country governments – and it is equally clear that an understanding of the size and nature of these economic effects will be important if the best decisions are to be made.

5. SELF-TEST

Questions :

1. Is Canada a good choice for foreign students searching for quality university or college tuition ? Give reasons.

2. How is Canada faring in light of the competition for foreign students ?

3. Identify the major sources (countries)of foreign students choosing Canada as their provider of educational services

4. What is the economic impact of foreign students on Canada economy ? Give figures.

5. Describe the role of Canadian Education Centres (CECs) Networks, and the services offered to potential foreign students. Name some CECs partners.

6. Describe briefly the basic procedure to follow in assisting a foreign student who wishes to study in Canada. In point form, list the steps involved in completing the process.

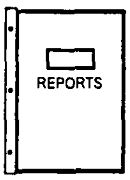
6. REFERENCE

UNESCO : statistics on third level foreign students by country of origin and destination. Two useful publications available for purchase that offer international student statistics and analysis are:

International Student Participation in Canadian Education, 1993-1995. (Catalogue no. 81-261-XPB) Available from Statistics Canada

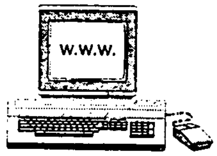
The National Report on International Students in Canada 1996/97. Available from the Canadian Bureau for International Education . 220 Laurier Avenue West, Suite 1100, Ottawa, Ontario, K1P 5Z9. Tel: (613) 237-4820, Fax: (613) 237-1073

REPORTS :



- Statistics Canada—Centre of Education Statistics—1997 ;
- Milroy, Mark—Programs and Services—National Association for College Admission Counselling ;
- Promotions of Cultural and Education Goods and Services Division—Report on International Students in Canada—Department of Foreign Affairs and International Trade. Ottawa : December 11, 1995.
- Lee, Yan Dr.—Education Exports : Preparing for an Education Market in the Information Society—Faculty of Public Affairs and Management, Carleton University—August 1997.

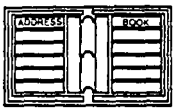
Websites, URL :



Study in Canada	http://studyincanada.com
Canadian Information Centre for International Credentials (CICIE) Assessment of Qualifications • For admission to Canadian universities and colleges.	http://www.cicie_ca/indexe.stm
Canadian Bureau International Education • Destination Canada Information for International Students	http://cbie.ca/publicat/destin_f.htm
Intergouvernmental On-Line Information Kiosk	http://intergov.gc.ca/educ/index.htm
Intergovernmental Centre of Information in Direct	http://www.intergov.g.ca/edu/index.html
Association of Universities and Colleges of Canada	http://www.aucc.ca
Association of Canadian Community Education	http://www.accc.ca
Citizenship and Immingration Canada	http://www.cicnet.ci.gc
Canadian International Development Agency	http://www.acdi_cida.gc.ca
	www.dfait-macie.gc.ca/culture/educationmarketing/menue-.htm

Some examples of Canadian Institutions :

Nova Scotia	ednet.ns.ca/educ/abroad.htm/
EduQuebec	eduquebec.gov.qc.ca
Alberta Centre for international Education	ww.acie.ab.ca/
British Columbia Centre for International Education	www.bccie.bc.ca

Some Addresses : 

Greece
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Fax : (301) 727-3475
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6

CANADIAN EDUCATION AND TRAINING SERVICES

INTERNATIONAL MARKETS AND THE MARKETING APPROACH

TRAINING SESSION

Module six

PILOT VERSION

Department Foreign Affairs and International Trade (DFAIT)
Education Marketing Unit (ACET)
in collaboration with CFG inc.

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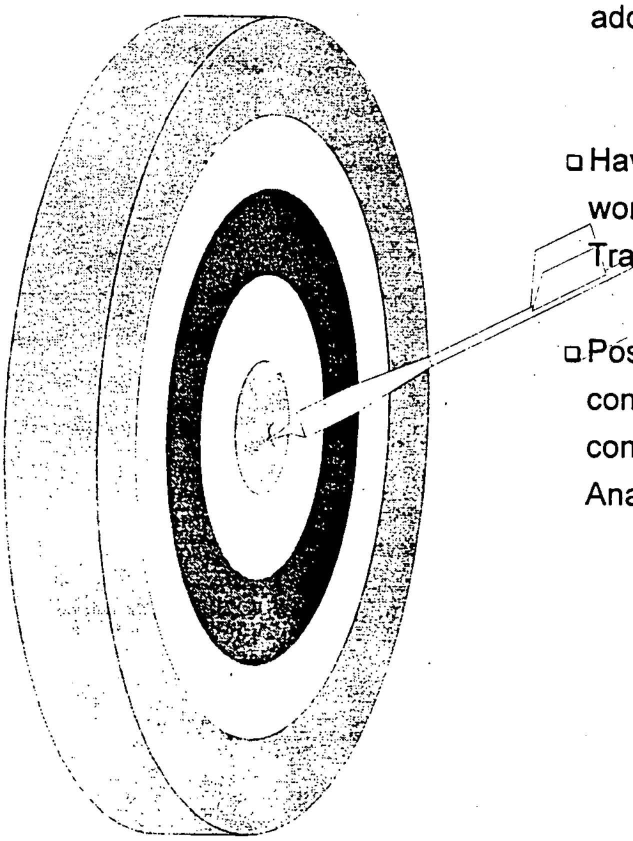
1. LEARNING OBJECTIVES



At the conclusion of this module the participant will understand :

- The main elements of a successful Education and Marketing Plan ; what needs to be addressed in a workable Marketing effort ;
- Have developed a working knowledge of world markets related to Education and Training services and products;
- Possess the knowledge necessary to complete Module 7 entitled « Exercise : a concrete and specific Education and Training Analysis

2. PROCESS AND PACING

In this module you will find a wealth of information on how to develop an education marketing plan that you may use to sell Canadian Education and Training services to specific countries or regions of the world. The material in this module is intended to provide you with the basic information and questions you should ask in order to develop a workable Education and Training marketing plan.

3. INTRODUCTION

You will find that it meshes with the material and data on the « Take a World View... » CD-ROM, particularly with regard to the Market Research and Marketing aspects. It is presented in the form of a Marketing Plan work Grid which will make it easier for you to analyse markets and market segments both in particular countries and in specific regions of the world.

As we will frequently refer to this CD-ROM, it shall be referred to simply as « World View » for the purposes of this module.

Also of note is that the material in this module will provide you with the groundwork necessary to complete the next module in this series, module number 7.

As competition between industrialised countries is on the rise especially in the area of Education and Training services offered to emerging nations, it is important that you be well prepared and equipped with the best tools presently available.

On the domestic front, the markets are becoming more and more specialised ; niche products and markets need to be developed constantly as the whole market evolves. On the International scene, events are quite similar and we might say that the speed of change is no less quick.

In fact, as emerging nations become aware of the knowledge gap separating them from some of the more advanced areas of the world, their thirst for more and more knowledge, more productivity and therefore results augur well for those with the competence and the will to provide the training and education products that they need so desperately.

One might add that things get a bit more interesting as complexity sets in due to the variety of cultures, languages, history and political circumstances in each country . On the other hand, Canadian training and education products enjoy an outstanding reputation for quality.

In order to reach our prospective customers, it is necessary to build and use an effective Education and Marketing Plan that will not only emphasise the product's image and characteristics but will make it absolutely obvious to the clients what makes the Canadian education and training services superior .

In any case, you will find that the tool called marketing is critical to your success, abroad and right here at home.

Let's begin by giving you the basic facts you need to design your marketing plan, after which you will read a series of questions organised by topic. These topics cover the range of questions that need to be answered before drawing up the marketing plan.

Two things need to be done :

1- Identifying the Canadian Products that are to be offered to the markets
2- The Marketing of the products which involves understanding our customers' needs, knowing what the competition is up to, having a good grasp of the marketing environment we want to offer our products in, factors influencing pricing, the effect of distribution, proper positioning of our products and the promotional plan that will emerge after we have gathered, analysed, synthesised and most importantly understood those data, summarised in an Action Plan.

4. INTERNATIONAL MARKETS AND THE MARKETING APPROACH

4.1. WORLD VIEW CD-ROM

As mentioned on World View, here are some of the steps that you generally need to take, once you know what products are to be offered :

1. Assess present core competencies (strengths, products, services)
2. Research possible markets
3. Choose target markets
4. Build your market profile
5. Identify customers

As you peruse the « World View CD-ROM, you will find the Main Menu which will lead you to its sub-menus « Take a World View Starter », « Export Readiness Analysis », « Sources of assistance », « Selecting a Market », « Market Reports », « Financing Options », and finally « Tips from Exporters ».

1. Take a world view starter

Selecting « Take a World View Starter » takes you to a virtual Office in which you see a File Cabinet, an Encyclopaedia, a Bookcase, a Trophy, a Briefcase and a Wastebasket.

- Clicking on the File Cabinet opens « Plan for Export » which gives information on Plan Objectives, the Export Process, an Export Planning Worksheet, a Plan Evaluation and finally, Anticipation of Success.
- Clicking on the Encyclopaedia, you will find the « Services Marketing Encyclopaedia » with its Services Marketing Hotlinks. The topics are :
    1. Passing the Elevator Test
    2. Differentiating your firm and its Services
    3. Your Experience Counts
    4. Building Awareness
    5. Effective Marketing Tools
    6. Relationship Selling
- Clicking on the Bookcase and its Expert Resource Library takes you to four « books » entitled :
    1. Export Research Handbook
    2. Target your Market

3. Partnering Issues and Strategies
4. Customer Identification

The Trophy, Briefcase and Wastebasket are icons representing respectively the Canada Export Awards; the Briefcase, the information you learn as you cover the material and accumulate the baggage necessary for an enjoyable and successful trip; the Wastebasket describes the ten most common exporting errors.

2. Export readiness diskette

This covers many subjects from what is « Export Readiness » to « How do I do it ? »

3. Sources of assistance

4. Selecting a market

This part includes Market Opportunity Matrices

5. Markets report

By country and by sector

6. Financing options

7. Tips for exporters

A collection of interviews with successful Services exporters.

From the Main menu, you will have access to information relating to key Internet sites plus « Exporter tips » on Video.

4.2 THE ELEMENTS OF MARKETING

One way to look at the process of writing up an Education and Training Marketing plan is to simply follow a loose pattern that includes at least the following criteria :

4.2.1 Objectives

The objectives will be stated clearly and preferably simply in terms of specific results that you want to reach. They will have constraints such as what, how many, when, etc.

4.2.2 Market analysis

The Market Analysis will equate Canadian Education and Training offers to the market needs of country and region postings.

4.2.3 Strategis

The strategies will derive from a close analysis of where you want to be, and how and when you want to get there : they will specify, in detail, how you want to reach your goal.

4.2.4 Action plan

The action plan will be based on the evaluation of the choices presented during the strategy phase. It will detail what needs to be done by whom and when. It will also include cost estimates and firm implementation dates.

4.2.5 Implantation impacts

Important impacts will be emerging needs for more resources, both human and material.

Also, there may be negative impacts to contend with.

4.2.6 Plan B

Plan B means that we have alternatives in case we encounter unforeseen obstacles. For instance, it is obvious that our friendly competitors in the world market will not simply stand by and watch us take away part of their market shares, not to forget possible newcomers on the scene. We have to be ready for anything.

4.2.7 Continuous review

It is mandatory that we regularly assess our progress and evaluate the results of our marketing efforts. Questions arising should include a review of current accomplishments, state of real results attained as compared to results originally projected, unforeseen difficulties, competition activities, new opportunities arising, etc.

4.2.8 Group discussion and meetings

You may be part of groups discussing the pros and cons of strategies, action plans or sometimes just to come up with new ideas, for instances. It is suggested that discussion orientation should center around solutions to be implemented, by whom and when.

The following pages cover the aforementioned Marketing Plan Work Grid. This grid is intended to help you gain an awareness of the many nuances of a Marketing Plan, both its scope and its depth. The more thorough your research, the better your results will be !

This Work Grid will again be used in Module 7

4.3 DEVELOPPING THE APPROACH

Before we can consider going out in the field and marketing our services, let's find out why customers purchase our training and education products : please answer the following questions.

4.3.1 Our products

Some people are surprised when they find out that the products that people buy are not what is sold them. In fact, our products are the sum of the elements that persuade people to buy them. The following questions are intended to verify whether our products are indeed designed to answer specific client expectations :

Is each one of our products designed to meet or exceed client expectations ?
How do we know that ?
Are all of our products at the leading edge of training and education technology ?
Are we sufficiently up to date technology-wise ?
Do we eliminate non-profitable products ?
Do we develop new ways of teaching, training ?
Do we constantly improve our existing products ?

4.3.2 Understanding our clients

Why do they purchase our products ?
What do our products do for them ?
Do our products serve them really well ?
What makes them interested to the point of buying our products ?
What is their buying pattern ?
Who makes the buying decision ?
What do they expect from their suppliers ?
How do they decide whether they are satisfied ?
Do they buy at specific periods during the year ? When ?
To what degree are they dependent upon us ?

The answers to these questions should give us an outline of what we are really selling to our clients. We might then know more about our real market share if we determine the number of customers who correspond to the profile that emerges from the above questions.

4.3.3 Knowing the competition

Market share is the direct result of the actions or lack thereof, of each player in a given market. This is why we must know what the competition is up to if we are to survive and indeed, prosper. Not only will business intelligence guide our endeavours but it will help us find new ideas for our customers.

Answers to the following questions should help in knowing the competition better... :

Who are they ?
What are their respective strengths and weaknesses ?
How do their products compare with ours ?
What are some advantages that some of their products enjoy over ours ?
What are their product's weaknesses ?
How do they make their decisions ?
How does their sales force compare with ours ?
What are their sales tools and tactics ?
What are their priorities ?
Are they content with their present market share ?
What are their principal strengths from a customer's point of view ?
What is their respective market share ?
What are their main problems ?

4.3.4 The environment

The environment is paramount when trying to market products and services. The political climate, the state of the economy, social stability or unrest, technological and ecological concerns are forces that we must deal with if we are to be successful. For instance :

How do the local laws affect our operations ?
How would a severe depression affect our operations ?
Might our living mores affect our efforts in a particular country ?
What is the stability of the current political regime ?
Etc.

4.3.5 Price

We should be aware of the effect of prices on our marketing efforts, right ?

How do our prices compare with those of the competition ?
Are our quotations realistic ?
Does the competition offer discounts or other enticements ?
Etc…

4.3.6 Distribution

What impression do our teachers convey ? Clean ? Efficient ? Helpful ?
Are our services rendered on time ?
Do customers often complain ?
Do we employ a sufficient number of resources ?
Etc.

4.3.7 Promotion

The goal of any promotion is to help us win market share. Contrary to popular belief, advertising does not bring in customers per se. Rather, **a potential client is won over and never « bought »**. This simply is because advertising might bring about a change in attitude in the customer but it will certainly not transform him or her into a regular customer.

In order to win over a new customer, we must define precisely what we are offering in terms of value-added products. A well thought-out promotional campaign will then become mandatory, based on our original objectives. The following questions should help us focus on what our target customers really want and what we want to offer them.

What could we offer this market segment that would make it try us for the first time ?
What would encourage our current customers to purchase more from us ?
Does our promotional effort in with our profile ?
How will the current promotion impact our established customer base ?
What is the best advertising medium to use ?
What added value would interest our customers ?
Could we test the promotion on a few select customers ?
What is the cost/benefit ratio of this promotion ?
Is the sales force ready and equipped to follow through ?

4.3.8 Positioning

Is it not a good idea to know on which criteria customers base their decisions on ?

Are our products attractive from the standpoint of price and quality ?
Are we competent, trustworthy, friendly ?
Is our positioning aligned with our objectives ?
Would another positioning be more in line ?
What about product positioning, prices, distribution and promotion ? All congruent ?
Do we regularly re-evaluate our positioning ?

4.3.9 Pitfalls

There are definite pitfalls to avoid. For instance, if we don't know enough about our customers, we will have problems trying to find what makes them choose one supplier over another and will make it difficult to sell our products to them.

If we fail to keep an eye on the competition, we will probably overlook new marketing ideas and will also have difficulty assessing our customers' emerging needs.

If we take the wrong product decisions, we might spend a lot of development time and money to no avail because we will not have detected what features interest most our present and future customers.

If we take the wrong promotional decisions, we might get to preach to absentees or project an image of our products that might even cause harm to the whole organization.

4.4. CONCLUSION

It should be clear that we want to be perceived as people who can be trusted, who will continually meet or exceed customer expectations.

In order to meet our growth objectives, to keep our market share and to invest in research for new and better training technology, we must actively pursue new customers, new selling opportunities. Only in this way can we hope and expect to serve our customers well which is, after all, the point.

5. REFERENCES

5.1 CD-ROM :

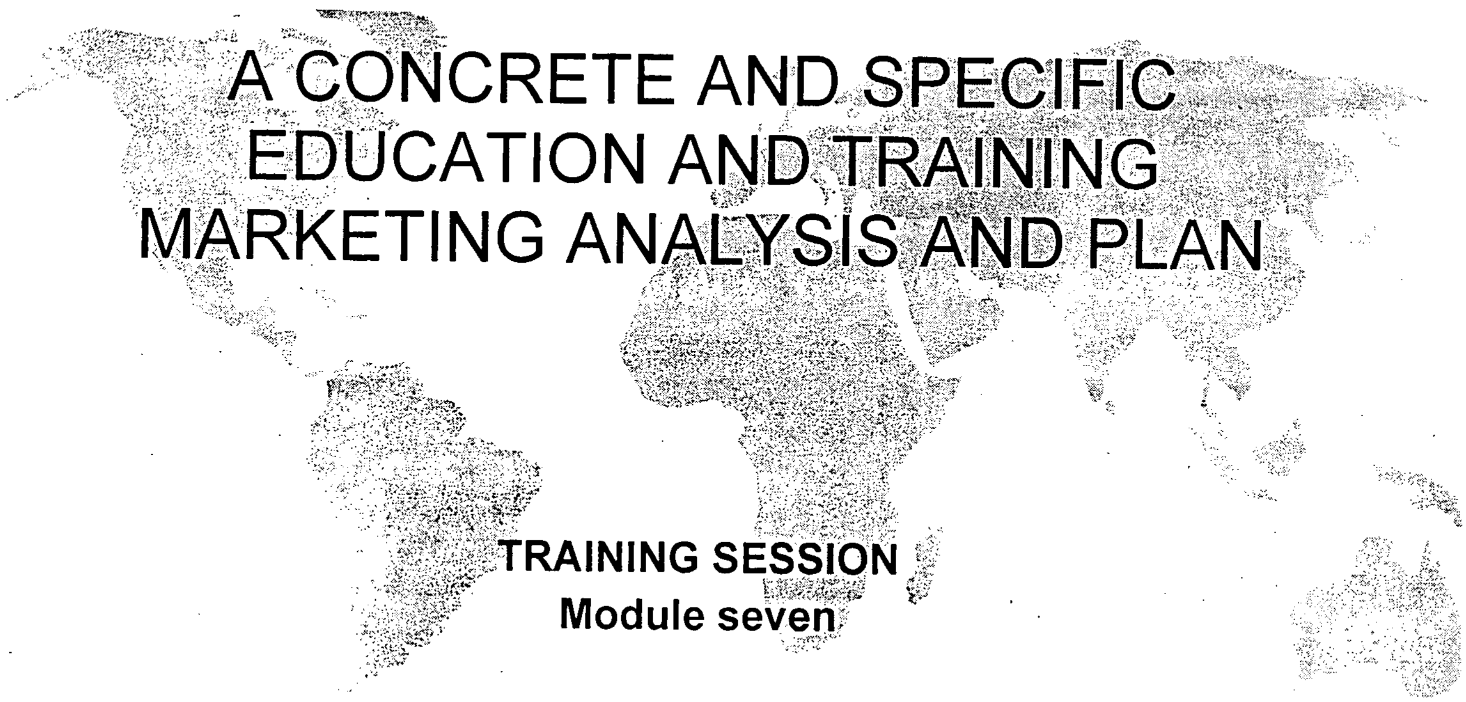
- Take a world view ...
  ...export your services!

5.2 REPORTS :

- MISCT – « Le Marketing : votre plan d'action » - 1998

7

CANADIAN EDUCATION AND TRAINING SERVICES



A CONCRETE AND SPECIFIC EDUCATION AND TRAINING MARKETING ANALYSIS AND PLAN

TRAINING SESSION
Module seven

PILOT VERSION

Department Foreign Affairs and International Trade (DFAIT)
Education Marketing Unit (ACET)
in collaboration with CFG inc.

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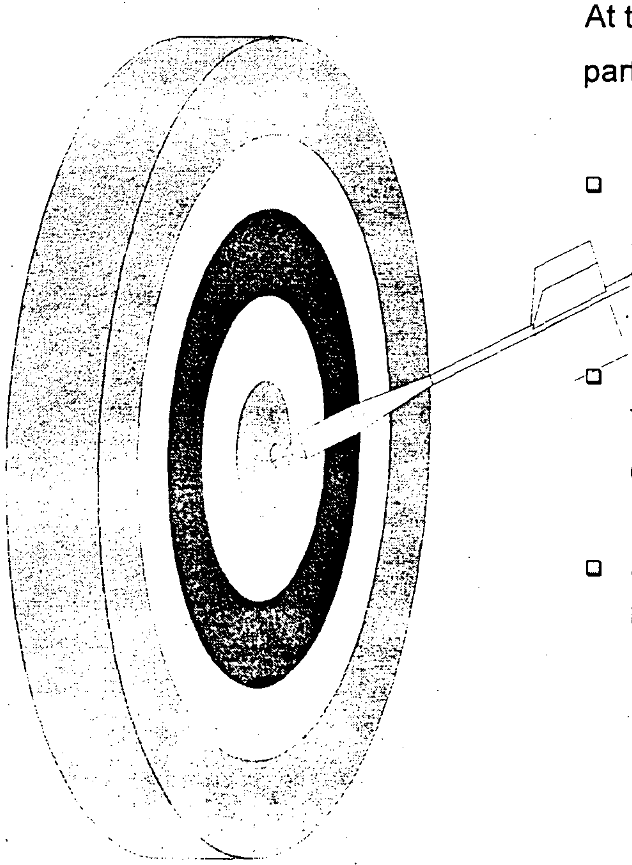
1. LEARNING OBJECTIVES



At the conclusion of this module, the participant will :

- Have performed an analysis of the particular country or geographic region of posting.
- Have completed a basic Education and Training Marketing Plan specific to the country or Region.
- Mastered the knowledge of what needs to be addressed in a workable and successful Marketing effort.

2. PROCESS AND PACING

Based on the answers you found in Module Six, you will now build an Educational and Training Marketing Plan. You should review the Marketing Work Grid found in Module Six so that you may apply the knowledge you have attained in view of completing the Plan. Please write up the Plan as if you had been assigned to a posting and had been asked to quickly write an Education and Training Marketing Plan.

3. INTRODUCTION

This module addresses the specific task of putting together the information you have gathered as you completed Module 6.

You found much information in the way of the products the specific clients to be served.

You have gleaned information on the competition, you know the many facets of the selling climate where you will be assigned to a posting, you have a good idea of the pricing, the positioning and what tools you are going to use for the promotion of your products.

Finally, you are well aware of the pitfalls to avoid if your efforts leave you feeling exhausted while having accomplished nothing or instead lead to success and the feeling of exhilaration that buoys you to new heights.

As you go on to your postings, the knowledge you will have acquired as to the Marketing of Education and Training Services will be of invaluable help. Understanding the Education and Training marketplace, and the different market niches is important for a successful effort; and putting this understanding to practical use is mandatory for the results that must eventually surface.

This is what Module 7 offers you : a concrete and specific tool that will provide you with the pattern needed to reach your Education and Training Marketing goals.

4. A CONCRETE AND SPECIFIC EDUCATION AND TRAINING MARKETING ANALYSIS AND PLAN

The Marketing Plan should include key elements such as the objective, marketing analysis, strategies, business intelligence data, pricing information and, most important, an action plan. This exercise should take approximately two hours to complete.

4.1 OBJECTIVES (WHEN, HOW MANY, WHAT, ETC.)

4.2 MARKET ANALYSIS (PRODUCTS OFFERED AS AGAINST THE NEEDS OF THE MARKET)

4.3 STRATEGIES (WHAT WE WANT TO ATTAIN, HOW AND WHEN WE PLAN TO GET THERE, SPECIFICALLY)

4.4 ACTION PLAN (BASED UPON ACTUAL CHOICES : WHAT NEEDS TO BE DONE AND BY WHOM AND BY WHAT DATE – MUST INCLUDE COST ESTIMATES)

4.5 IMPLEMENTATION IMPACTS (BOTH POSITIVE AND NEGATIVE)

4.6 PLAN B (DEVELOP HERE A SERIES OF OPTIONS IN CASE SOMETHING GOES WRONG)

4.7 CONTINUOUS REVIEW (WHEN SHOULD WE REVIEW, WHO SHOULD ATTEND THE MEETING, ETC)

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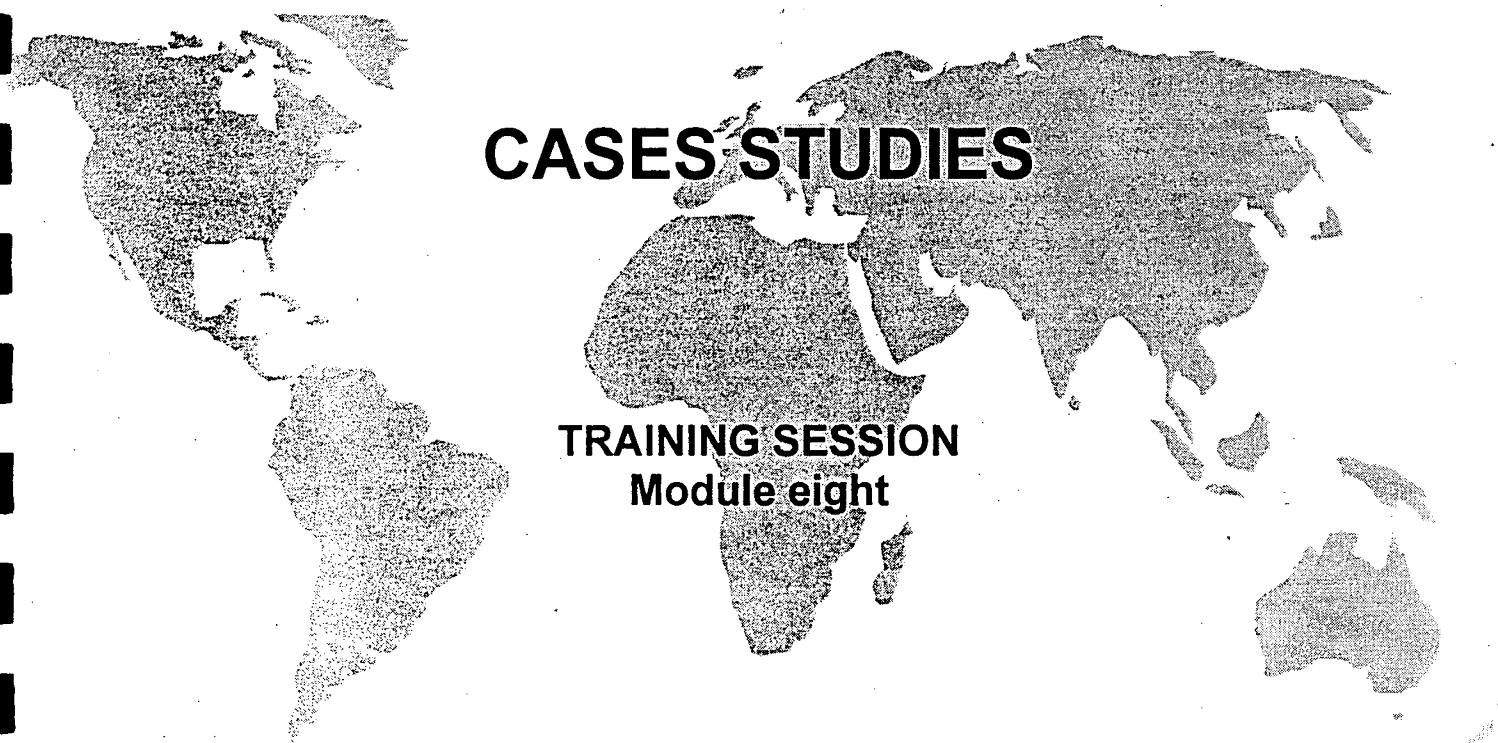
CANADIAN EDUCATION AND TRAINING SERVICES



CASES STUDIES

TRAINING SESSION
Module eight

PILOT VERSION

Department Foreign Affairs and International Trade (DFAIT)
Education Marketing Unit (ACET)
in collaboration with CFG inc.

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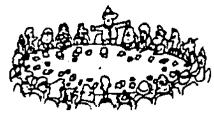
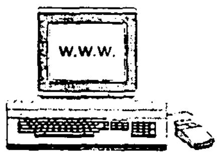
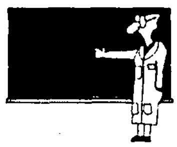


Chat On The Network

Exercise

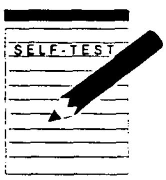


Internet

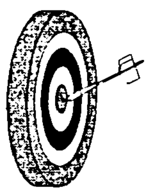


Tutor

Reading



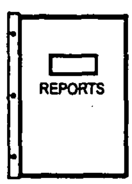
Self-test



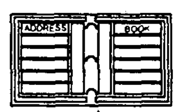
Objectives

Timer

Group discussion

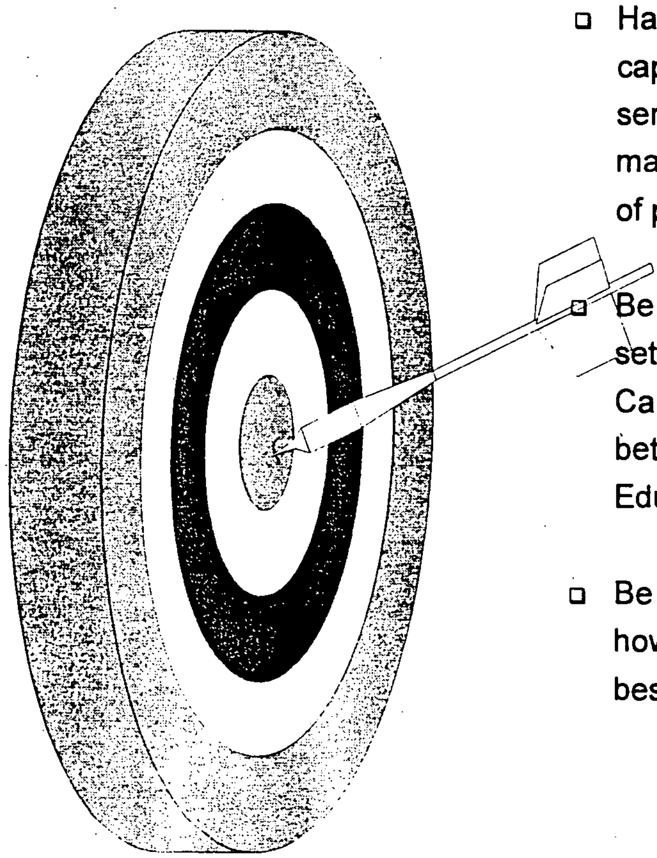


Reports



Address Book

1. LEARNING OBJECTIVES



At the conclusion of this module, the participant will :

- Have developed a vision of and analytical capability about Education and Training services in light of various situations that may present themselves in their countries of posting.
- Be able to understand the dynamics of setting up favorable conditions to assist Canadians and Canadian institutions to better intervene in the international Education and Training Services market.
- Be prepared to offer counsel and advice on how to develop these market niches in the best interest of Canada.

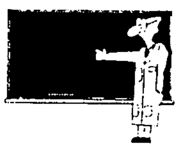
1. PROCESS AND PACING

CASE ONE

University and College Foreign Student Recruitment

Read Case 1 : pp. 14-18

If you have questions, refer to module five.



You need help or you want to discuss it? Contact the tutor.

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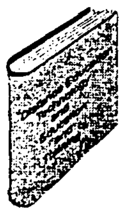
CASE TWO

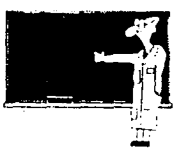
Distance Education

Read case two : pp. 19-22



If you have questions, refer to module four.

You need help or you want to discuss it ?
Contact the tutor.



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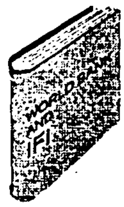
CASE THREE

International Financial Institutions (IFIs)
Information Technology

Read case three : pp. 23-25



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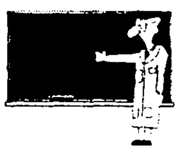

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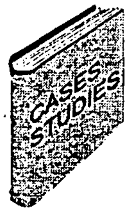
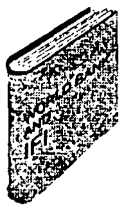
CASE FOUR



IFIs – Provisions and Services

Read case four : pp. 27-33



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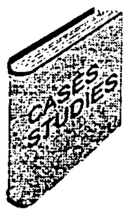
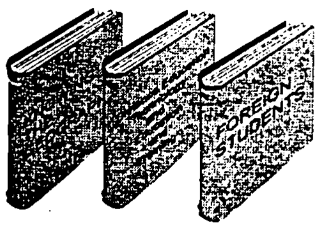


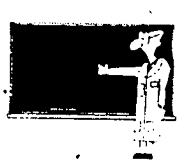
CASE FIVE

Corporate Training

Read case five : pp. 34-37



If you have questions, refer to module one, four and five.



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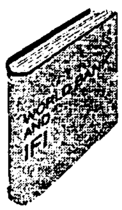
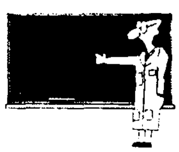
CASE SIX

IFIs projects –procurement for goods.

Read case six : pp. 38-43



If you have questions, refer to module two.



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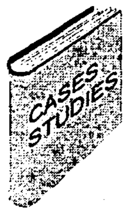
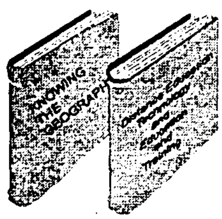
CASE SEVEN

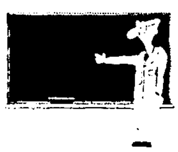


IT Training and Procurement

Read case seven : pp. 44-47



If you have questions, refer to module one and four.



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3. INTRODUCTION

The last training module is the Case Studies one which weaves together the knowledge gained form preceding modules and offers practical examples of how to apply this knowledge to concrete situations. All of the examples are culled from real experiences and are oriented towards practical and successful problem solving.

The Education Marketplace is a complex one that demands high levels of knowledge, flexibility and services. These case studies reflect partnerships are highly valued indeed and they are often the key to success. As Canadians we enjoy market advantages in the education and training field. Some of these advantages are :

- a positive international reputation amongst nations of the world.
- A high quality and diverse educational system form K-12 and beyond.
- Innovative products and services especially in the information.
- Technology sector as it applies to education and training.
- A world wide system of Trade Commissioners dedicated to the Team Canada approach abroad.

The Case Studies you are about to analyse stress the importance of the Team Canada approach to exporting educational products and services abroad and you are going to play an important role in that process. Exporting Canadian education and training requires a team effort with each stakeholder/partner contributing to the success. The Education Marketplace is also a very competitive market which is another reason why teamwork amongst Canadians can make the difference between success and failure. Far form home, relying on Team Canada becomes one of the key elements of a successful business strategy.

4. CASE STUDIES

4.1 THE CASE 1 - UNIVERSITY AND COLLEGE FOREIGN STUDENT RECRUITMENT

4.1.1 Road play

The head of a university delegation of five has sent you a message directly at your post where you are the Public Affairs Officer. The message says that they will be visiting shortly as part of an Asian business trip. Their Rector is requesting assistance from the mission to market their academic programs in your countries of accreditation. One of their major priorities is to recruit foreign students for their undergraduate and graduate programs. To this end, the delegation wants to explore the possibility of founding an alumni association in your region.

4.1.2 Background

Before the delegation arrives, you may wish to reflect on a number of issues. Most Canadian universities have developed an international profile and almost all have an international mission statement of one form or another. This is the case for the visiting delegation. Faculty members usually have links abroad with other academics and academic institutions. In many cases, there are international student exchange programs some of which may be government sponsored. There is in most cases a definite yet sometimes ill defined interest in developing international links. This educational institution has taken some preliminary steps to recruit foreign students but requires assistance with its marketing effort and in knowing the minimum conditions for success. The cost of recruiting foreign students is an issue. Your role will be to act as a catalyst for these activities and assist them in focussing on the strategies required for successful recruiting.

One of the reasons for developing interests abroad is to secure more and more international visa students (foreign students who pay the more expensive foreign fees which vary from province to province). Cuts in university budgets have to be made up through downsizing and other sometimes unpopular measures such as early retirement, more frequent use of part-time instructors etc. However by increasing the number of full fee paying foreign students, the university can gain more revenue instead of having to undertake difficult and unpopular decisions. Instead of shrinking in size, access to international markets can stabilise revenues and even assist in enlarging certain facilities or refurbishing university or college infrastructure.

Canadian universities often do not possess the human resources and training required to recruit international students. It will take time before university officials can train new staff in the art of international recruitment which requires quite different skills from those engaged in domestic recruitment. Although Canadian education enjoys a high degree of prestige abroad, this alone is insufficient to increase numbers of foreign students to Canada. **Education has to be marketed in a strategic way in order to be successful and it will be important to explain this to the delegation. Dissemination of school information is the first step but not the last and is usually insufficient if not followed up by additional activities, effort and commitment.**

4.1.3 Issues and Answers

The mere fact that a high level university delegation is visiting the post should indicate some interest on their part for increased activity in your region. Some of the questions you will need to ask the University are:

do they have an international student recruitment strategy (a document approved by senior university authorities)? What are the plan's targets? Undergraduate or graduate? Which disciplines represent niche markets? What is the expertise of the university and how does it apply to the region?

Does the school have any signed exchange agreements with universities abroad and specifically those in your countries of accreditation? If so, these may be the building blocks for a regional recruiting strategy. Are these agreements active? Some remain paper agreements or letters of intention.

How many foreign students does the university have now and is there institutional capacity to welcome more? Availability of residences, international student services etc. This is a key question since a lack of capacity can ruin newly created markets and tarnish the school's reputation and that of other Canadian schools in the region.

If the visiting delegation is made up of Canadian Community Colleges, you may wish to look closely at niche opportunities in the local educational system. Do not forget that some colleges offer the first two years of university and have developed linkages with universities. Colleges offer a vast choice from vocational programs in demand in developing countries to academic programs leading to university study. Most Canadian colleges are flexible and can provide made to measure academic programs to foreign clients without inordinate time delays. Oil and gas industry training, corporate training and English and French language programs are just some of the possibilities colleges have to offer.

The visa question is important and should be addressed early on when deciding which students can go to Canada on a student visa. How long is the wait? This factor has often created confusion and difficulties between the Canadian school, the mission and the foreign client so it will be vitally important to explain this clearly to the visiting delegation. The waiting period will in some cases discourage foreign students from coming to Canada. Two things need to be done. The Canadian government is already analysing ways of shortening time delays but the institution should also be prepared to streamline its admissions procedures to help in the collective effort.

Who will ensure the sustainability of this initiative? In most cases, the university does not have offices in your region so it will have to depend on an agent or perhaps other Canadian organisation operating in your area. Your mission should develop a list of trustworthy recruiting agents if it does not already exist. The list is a notional one and universities know that it is not an iron clad guarantee of trustworthiness. Some institutions do not use agents and are opposed in principle to the practice of paying commissions for students. This is not the case with the visiting delegation.

If there is a Canadian Education Centre (CEC) in your area and there are a number in Asia, you can contact them and arrange for the delegation to meet with the CEC. They will offer some services to the university (dissemination of information, arranging educational fairs etc) in return for an annual fee. They are especially relevant in distributing information to parents and students. The university should also market itself electronically with web sites and establish a presence on the CD ROM Study in Canada! it will be important to advise the delegation on what the competition is doing - Americans, British, Australians and French. Sometimes the Canadians can learn from other successful recruiting efforts or devise more effective ones. You can advise the delegation to consult the DFAIT web site where a number of sector marketing reports in

Education and Training are to be found and will help the Canadian school target its regional marketing efforts.

Develop meetings with the local Ministry of Education and other foreign universities to ensure that the Canadian client understands the context fully. Often in developing countries, this can result in corporate training or IFI contract opportunities since many developing countries are undergoing serious educational reforms in the wake of the new knowledge-based economy. In order to recruit foreign students and measure equivalencies or advance standing, it is essential to understand the national and regional systems of education. Moreover the delegation should have someone knowledgeable about the school's admissions policies and procedures.

If undergraduate recruitment is the priority, ensure that the delegation meets lycees, private schools, international schools and other appropriate high schools.

It is important that the university understands the cost of international recruiting since it is not an easy fix/task and requires institutional commitment, resources and dedication. These resource requirements should be made clear in an international student recruitment plan. What works in Asia may not work in the USA and elsewhere.

Ensure that the marketing effort will take advantage of the Team Canada approach while devising successful recruiting strategies. If other Canadian universities recruit in the region, economies of scale could be made with more impact if the universities could agree on sharing resources.

Promotional material should be in the language of the region to have a strong impact.

Some universities and colleges have discovered in regions like Asia that English language study can attract significant numbers of students and it behoves the institution to create bridges between their Continuing Education programs (non-credit) and access to the regular academic stream. This market niche can be very cost effective and the school retains the student for a longer period of time thereby maximising return on investment.

4.1.4 Solutions/Lessons Learned

- Take advantage of any pre-established international platform or links such as Alumni associations, CIDA funded projects, IFI projects, research and teaching links etc.

- Make sure the university understands how to do business in your countries of accreditation and is familiar with issues of foreign competition, national standards, visas, CECs.

- Encourage return visits to keep the university's regional presence at an adequate level. They should be familiar with the PEMDE and know that public organisations can apply for assistance for the export of Canadian education and training services.. encourage a sustainable, institutional approach to the problem so that efforts will not be wasted if one or two individuals lose interest or decide to leave the university. For this, it is important that links should be made at the faculty level.

- Attempt to counsel the university on developing reasonable expectations. It is not realistic to believe that all academic programs can be successfully marketed abroad. Niche markets are important to develop (often language study can become the passport to integrating regular academic programs and universities are increasingly using this in tandem with language schools and community colleges). Moreover the local educational system may be more conducive to the recruitment of undergraduate as opposed to graduate studies or vice versa and this issue will have to be addressed by the receiving school. Community college-university partnerships may also be useful given the specific nature of the host educational system.

4.2 THE CASE 2 - DISTANCE EDUCATION

4.2.1 Road Play

A consortium of Canadian colleges and universities contacts you at the post requesting assistance to implant and market academic and technical distance educational programs in your host country. **They need assistance in finding a reliable partner to act as a host for the programs in your region and they need help in approaching government communications authorities to assess any technical difficulties.**

4.2.2 Background

Distance education is intimately linked to the advent of the new knowledge-based economy and the shrinking of distances due to enhanced communications technology. As we have seen in the Distance Education module, this activity is very attractive for Canadian schools since it opens up new markets for their programs and can increase revenue. Because of its emphasis on delivering Canadian education and training to distant communities, our distance education capacity evolved as one might expect into international markets. The initial focus was domestic, reaching far flung communities in the Arctic and elsewhere. In Canada itself, there are two universities that have been created specifically for distance education - Télé-université and Athabaska University.

International markets pose new challenges and difficulties for the marketing and sale of Canadian distance education abroad. First in importance is the identification of a regional partner with the capacity to act as a local host for distance education programs. This choice will ultimately be the deciding factor between success and failure of the initiative. The following questions should be asked of a potential host :

- Does it have the technical capacity to handle the new Canadian product?
- Does it have the human resources necessary to carry out the project or will they have to be trained?
- Is the partner a fellow academic institution in the host country and if so questions of dual accreditation and possible competitive constraints become operative and need to be addressed
- Is the partner strengthened through this exercise and have plans been made for their progressive participation in the program?

- Is the partner a private body or attached in some way to government in which case often bureaucratic authority will be required to ensure success?

Other important considerations include language of study, the market niche and whether distance education can fill a particular need, foreign competition. Other countries possessing distance education capacity are increasing and although the demand is high, questions of cost and quality remain key components of a successful bid.

Sometimes specific market niches can be developed in response to client interest and one easily understands why the Canadian experience is rich in lessons :

In island countries like the Philippines or far flung territories, distance education is a way of unifying peoples and elevating the educational level in rural as well as urban areas.

It can reach national minorities confined to specific geographical spaces.

It can impact on rural areas with great effect and alleviate poverty through human resource development.

It can create dynamic indigenous academic institutions.

Distance education can create momentum for democratic participatory forms of government and bring education to certain disenfranchised groups of society.

Moreover it is for these reasons that distance education is being grappled with by government officials, economic authorities, IFIs and others. In order for you to give useful advice to the Canadian consortium client, it will be important to underline that distance education is qualitatively different and more complicated than other more traditional forms of education and training.

4.2.3 Issues and Answers

In the first stages, it is unlikely that a full blown distance education program can be transferred from Canada to another country without considerable changes and modifications. Often the program responds to a specific request being made by the foreign client for specific training. In some cases, the course offering may be more a reflection of the Canadian supplier interests than those of the foreign buyer. This inverses the marketing relation and should be corrected early on.

Marketing distance education abroad is a very costly business indeed because of the effort required on the technical and academic side to implement the program in the host country.

If the partner is an academic institution, then some agreement will have to be made on the academic level with the Canadian client. Most Canadian schools can not afford to set up operations abroad especially in remote areas where distance education is most useful. They need a strong regional partner that will respect the academic integrity of the program proposed.

Depending on the methods employed to deliver the courses, government authorisations may be required for teleconferencing or use of the national television system. Sometimes the delivery mechanism consists of a mixed form of traditional (visiting professors giving courses and exams in the host country) and highly sophisticated technological means (internet, multi-media plus teleconferencing).

4.2.4 Solutions/Lessons Learned

The choice of a partner is the key element in a successful distance education initiative and as an Embassy official you will play an important role in advising the Canadian client on options.

Host country rules and regulations governing the deliver mechanisms of distance education should be analysed for possible obstacles.

Decide who is going to market the program(s) and how and with what resources. Inadequate financing will result in problems that you may have to deal with directly at a later date.

Academic questions relating to credit, double accreditation, choice of course material can create problems and should be fully addressed in the partnership agreement.

Advise the Canadian school, if it is acting independently, that working in consortium with other Canadian actors can be beneficial. A Team Canada approach abroad has many advantages and resources can be shared to lower marketing costs.

4.3 THE CASE 3 - INTERNATIONAL FINANCIAL INSTITUTIONS (IFI) – INFORMATION TECHNOLOGY

4.3.1 Road play

A small international education and training firm (five permanent employees and five consultants) has contacted the Department seeking assistance with an information technology project that they have devised with the support of another Department of the Canadian Government (Industry Canada). Issues of intellectual property do not apply since the Department involved has decided to share its technology with the host country. They think the World Bank might be interested in this project but are unsure of how to proceed. The project would be undertaken in a developing country in Latin America although not a LDC. **What advice and support can you give them to move their project forward?**

4.3.2 Background

One of the key niche markets that has developed over the last few years is the exporting of the expertise of Canadian government departments abroad. Elections Canada staging and organising elections in the Ukraine, the RCMP furnishing police training to Haiti. Moreover small organisations with international marketing experience can market this expertise abroad and act as a catalyst for this type of project. This is the case of this small consulting firm that is seeking to apply this logic to a niche market in Latin America.

The project itself seeks to create a virtual job market using Canadian technology in order to increase the competitiveness of indigenous firms by providing them access to human resources and stimulate and create employment. The National Graduate Registry in Latin America will also perform a pedagogical function by providing up to date information on current employment trends, CV writing and posters on firms hiring through the NGR. The Canadian firm will train their Latin American partners in how to use the NGR and how to commercialise it (sell yearly subscriptions to companies) to ensure its sustainability after the funding runs out.

Information technology has become a key instrument in the rise of the knowledge-based economy and as such plays an increasingly important role in IFI projects. The World Bank has created an arm that deals exclusively with the intersection of international development and information technology. This organisation is called INFODEV.

Contrary to most IFI project procurement, INFODEV accepts unsolicited projects in information technology in pursuit of international development aims and objectives as espoused in IFI policy papers and the World Development Report. As a section of the World Bank, INFODEV is located in Washington and can be reached easily by internet.

http//www.worldbank.org
Email - infodev@worldbank.org

One of the first pieces of advice that you can offer the Canadian client is to consult INFODEV and to obtain an application form and Application Guide.

What is particularly interesting about the proposal is that it already benefits from a measure of support from a Department of the Canadian government. Without this partnership, the project would not exist. The Canadian company has effectively added its international expertise and marketing experience and combined it with an information technology innovation and applied it to a developing world context.

In order to test whether the project conforms to INFODEV guidelines, lets us look briefly at the general categories of activities. Project objectives must fall into one of the following :

- Creating market-friendly environments
- Reducing poverty and exclusion of low-income countries or social groups
- Improving education and health
- Promoting protection of the environment and natural resources
- Increasing the efficiency, accountability and transparency of governments

Strategic activities should be one of four types: Consensus building and awareness raising, Telecommunications reform, Information infrastructure projects or pilot projects.

Another important area where INFODEV is currently working feverishly is the Year 2000 bug. In many developing countries this is a very deep concern since the access to solutions has remained elusive and entails a high cost of hiring experts to help solve the problem. INFODEV then is attempting to familiarise developing countries with the potential problem and proposing solutions.

4.3.3 Issues and Answers

What is the level of connectivity in the country since a significant absence of connectivity (access to Internet) can scuttle even the best of projects? The infusion of innovative information technology projects will especially benefit those developing countries already having reached a degree of development. To a certain extent, the project could be successful even without widespread connectivity and one of its attributes or selling points would be that it could actually spur on the degree of connectivity in the country.

Keep in mind that INFODEV has a small fraction of the World Bank budget and usually only funds projects up to $250,000 US. More expensive projects have to await the donors annual meeting to know their fate.

The INFODEV approval process consists of a two stage evaluation and comments are structured around three main questions: What are the strengths of the proposal? What are the weaknesses of the proposal? What questions about the proposal does the proponent need to clarify? Some proposals can be fast-tracked especially if they are time sensitive (a planned conference or activity) but those that are approved after second stage evaluation usually go into the highly rated proposals bin and are funded as money become available.

It is also clear that whatever the objective of the INFODEV activity, the activities themselves should be left where possible to private sector implementing organisations. Moreover INFODEV projects seek to strengthen private sector involvement in development issues. The main executing role should not be left in the hands of government itself and should also serve to strengthen civil society.
Solutions/Lessons Learned.

You do not need to be a large company to approach IFIs in the information technology field. In fact, many of the most innovative information technology firms are small with no more than 5 to 10 employees as is the case with the present Canadian client.

Few INFODEV contracts are awarded to one organisation alone. Partnerships are viewed as necessary and positive especially when there is already a contribution mechanism agreed to by the partners in the consortium.

When advising the Canadian client, you may wish to present a checklist of evaluation criteria that they will have to meet: Leverage of three types - partnering or synergy amongst organisations, resource leverage commitment or contributions from participating organisations (cash contribution, in-kind or quality of involved staff), learning leverage complementarily of the idea with existing initiatives or degree to which the project can be replicated elsewhere*, political-institutional-technical feasibility, innovative nature of the idea and quality of design.

* In our example, the Canadian consortium will have successfully shown that the virtual employment market can be replicated in other countries and regions of Latin America.

4.4 THE CASE 4- INTERNATIONAL FINANCIAL INSTITUTIONS PROJECTS (IFIS) - PROVISION OF SERVICES

4.4.1 Road play

March 1999, a Commercial Officer (CO) from the East Africa Division of DFAIT, covering for trade issues with Kenya/Uganda/Tanzania, receives a call from the Director Market Development of VOCATRAIN. **VOCATRAIN is seeking advice on how best to pursue a business opportunity they identified as part of a project in Kenya to be financed by the World Bank.**

4.4.2 Background

The company

VOCATRAIN Inc. is a Vancouver based consulting firm that specialises in the development of professional training programs. It also delivers tailor-made training sessions to its clients. VOCATRAIN is established since 1985. The company's primary market has been British Columbia before expanding its business to a wider Canadian market. In 1994, VOCATRAIN participated in its first international project. The Company was selected by CIDA to participate in a Technical Skills Development Project in Kenya.

In 1997, VOCATRAIN was retained by a World Bank official, using the Canadian Consultant Trust Fund facility, to participate in the preparation of an Education/Training project in Indonesia. VOCATRAIN had previously met that same World Bank official in Kenya in 1995 while working on the CIDA-funded project.

VOCATRAIN is renowned for the quality and relevancy of its work. The company is interested in expanding its international presence, but internal resources to develop the market are limited. They have been tracking IFI-financed projects in East Africa on a sporadic basis for about a year now. VOCATRAIN believes it finally found the right project.

4.4.3 The project

Project Name: Human Resources Development Support - Kenya
Implementing Agency: Ministry of General and Professional Education

Projected Appraisal Date: November 1999
Projected Board Date: January 2000

Objectives: To provide assistance to the Ministry of General and Professional Education to reform general and vocational education in order to:

i) bring about greater efficiency and cost effectiveness;
ii) improve participation and quality standards;
iii) improve flexibility and market-relevance of vocational training;
iv) preserve and improve the equity of the system.

Description: Policy Redesign and Capacity Building ($10 million): This component would build capacity at the national level to advance priorities for education and vocational training modernisation through the development of new policies, services and procedures for: (a) the monitoring and improvement of educational quality through linking testing and assessment with desired learning outcomes; (b) the collection and dissemination of education statistics and indicators; (c) modern teacher and education management training systems; (d) the improvement of skilled labour training. Policy Modernisation Education Fund and a Vocational Training Fund to provide financing on a competitive basis for regions which demonstrate a capacity and willingness to implement a matrix of policy actions based on the Government's education modernisation agenda.

Contact :

INFOSHOP, the World Bank, 1818 H Street, N.W., Washington, D.C. 20433. Tel: (202)458-5454, Fax: (202) 522-1500

The component of interest to VOCATRAIN is **«improvement of skilled labour training»**

4.4.4 Issues and Answers of the case 4 – International Financial Institutions Projects – Provision of services

1) Initial contact with DFAIT

VOCATRAIN called DFAIT seeking advice on how best to track the development of this World Bank project in Kenya in order to respond adequately and promptly to bids to be issued for this project. The Company has already taken the decision to seriously track the project, and is requesting appropriate assistance from the Department. Information about the project will be faxed to the CO.

The CO indicates to VOCATRAIN that their call is timely particularly since he is currently working on the preparation of a trade mission to Eastern and Africa. The mission will take place in May 1999 and will be lead by the Secretary of State. He then suggests that VOCATRAIN considers joining the mission, at least for the portion in Kenya, to meet with country officials and better understand the education/training sector.

Inquiring about VOCATRAIN's experience with the IFIs, the CO explains the business climate in Kenya and assesses the Company's preparedness in working with the IFIs (he is not familiar with IFIs but remembers a few things from an IFI session he had a year ago about World Bank operations). He asks questions such as: Company's experience overseas, knowledge of the IFI market, contacts established to date, resources dedicated to the project, etc. The CO suggests to VOCATRAIN to contact the Office for Liaison with the IFIs in Washington to pursue the discussion and to gather more information about the project. He concludes by advising the Company that there is still lots of time ahead since the project is not expected to start before Spring 2000, and that VOCATRAIN should treat this business opportunity similarly from commercial and other opportunities. He finally reiterated the invitation to VOCATRAIN to participate in the upcoming mission.

2) Contact with OLIFI

The OLIFI in Washington explains the importance of early contact with the Bank to gather intelligence about the project. OLIFI also provides, in general terms, information about the project cycle (referring the Company to the Bank's web site), and since VOCATRAIN is a consulting firm, suggests that they register with

DACON, the registry of consulting firms used by the World Bank and other IFIs to prepare short-lists of firms or to simply get details about their expertise and experience.

At the request of VOCATRAIN, OLIFI gets in touch with the person in charge of the project at the Bank. A week later, VOCATRAIN receives a fax from OLIFI with the following information.

3) Improvement of Skilled Labour Training (estimated budget US$1,2 million)
This component of the project would improve competencies of skilled workers through the establishment of an autonomous, flexible and effective demand-driven training system.

a) The **establishment of a performing vocational (professional) training system** would be achieved through the creation of a small, autonomous institution - the Office for Vocational Training (OVT) - managed by an independent board.

b) **Competencies and skills** would be developed through (i) support for management and the initial financing of a Vocational Training Fund (VTF) which would finance one part of the expenses of training linked to the execution of sub-projects and respond to needs identifies in the labour market; (ii) support for the development of training modules which lead to a qualification and the training of the trainers; and (iii) support the reorganisation of existing vocational training institutions in order to develop autonomous management, as well as modular programs adapted to the labour market.

As a result of the project, apprentices and workers would improve their qualifications and increase their productivity in the workplace. This would be achieved through the establishment of a competitive, demand-driven system based on sub-projects designed jointly between employers and trainers, delivered through short ad hoc modular programs, and using existing training facilities in the country.

For more information, contact: Bill Ramsay, Team Leader, tel. : (202) 444-4444, fax: (202) 444-4445, Bramsay@Worldbank.org

4) Follow-up
VOCATRAIN is excited by the information received. The component of the project they are interested in fits exactly the Company's expertise. The Director Market Development immediately sends an Email to the Team Leader seeking details about the project, but gets no reply after a week. He calls to find out that Mr. Ramsay is gone on a 4-week

mission. Meanwhile, VOCATRAIN has to decide whether it will participate in the trade mission and will continue deploying efforts to bid on the project. Disappointed and frustrated, the Director at VOCATRAIN contacts the CO (East Africa Division) again and explains the situation. The Commercial Officer tells VOCATRAIN that a colleague from the IFI Division will get in touch with him as soon as possible to put the process back on track.

Two days later, the IFI Division contacts and confirms that participating in the trade mission was essential in order to:

- establish contact with the Ministry of General and Professional Education and the Office of the World Bank in Nairobi and notify them of your interest;
- investigate thoroughly the status/direction of the project (including terms of reference);
- promote your expertise/competence to the Ministry and the Bank; and seek co-operation from the Commercial Officer at the High Commission in Nairobi

The IFI Division also recommends to VOCATRAIN to stop in Washington on its way back to meet with the World Bank Team Leader (Bill Ramsay), report about the visit in Nairobi and express a clear interest in the «Improvement Skilled Labour Training» component of the project.

To help VOCATRAIN prepare for its mission, the IFI Division explained in details the key features of the IFI market place, how bids relate to the project timetable, the bidding process(and modes of bidding), the World Bank selection procedures and criteria for consulting services (stating that quality of service remains the critical factor in selecting a consultant), and the importance of maintaining a good channel of communications amongst key players.

VOCATRAIN participated in the trade mission in Kenya, had productive sessions with the relevant persons in charge of the project, and also visited the World Bank in Washington. During the Fall 1999, VOCATRAIN maintained contacts with the World Bank, the Ministry of General and Professional Education, inquiring about the status of the project, and kept DFAIT staff informed of the Company's actions.

4.4.5 Solutions/Lessons Learned

February 2000, VOCATRAIN receives from DFAIT (IFI Division) copy of the General Procurement Notice (GPN) for the Human Resources Development Support project in Kenya. The GPN referred to consulting services required to support the effort of the government in the project, and stated that Specific Procurement Notices will be announced, as they become available, in Development Business and in Kenyan newspapers.

In April 2000, the Specific Procurement Notice is faxed to VOCATRAIN from the Commercial Officer in Nairobi. In May, VOCATRAIN submits its proposal on time, emphasising the experience and personnel of the firm, key personnel assigned to the job, as well as on the technical content of the proposal (including VOCATRAIN's understanding and approach to the assignment).

Although VOCATRAIN was not selected as the winning consulting firm for the «Improvement of Skilled Labour Training» component of the project, the Company was ranked second. Considering the encouraging result of this first trial, VOCATRAIN decided to keep an eye on the IFI market, and prepare for the next proposal since the IFIs are very active in the Education/Training sector.

Informed by VOCATRAIN of the final result, the IFI Division indicated to the Company that their decision to remain in the IFI business was reasonable. VOCATRAIN must analyse reasons why it came second and learn from the experience for subsequent attempts.

Clearly, the experience shows that VOCATRAIN could not treat the IFI market separately from commercial and other opportunities. Pursuing IFI business opportunities is a long-term and persistent process requiring significant time and cost-consuming efforts coupled with a well-organised international marketing strategy. Although a project is at early stage of preparation, it is never too early to establish contacts or start planning future action.

VOCATRAIN's final performance was more than satisfactory, but the Company should not be the only one who must learn from experience. Should VOCATRAIN have contacted DFAIT in October 1999, their final ranking could have been worse.

The CO who first received the call from VOCATRAIN should have contacted both the IFI Division and OLIFI at the same time to discuss the best approach. Although he was not familiar with the IFI market and process, the CO could have suggested that he be kept informed of all exchanges of communications between DFAIT staff and VOCATRAIN since the project was on its territory and to ensure that records of all exchanges are kept in a single place in case other DFAIT staff would change Division during the summer.

Since this was VOCATRAIN's first international proposal, and because the IFI selection process in highly competitive, VOCATRAIN should have been advised to submit a highly professional proposal by quoting similar assignments completed, references and all important factors such registration in DACON, language, etc.

Other key recommendations should include: i) pay particular attention to selection of the team leader and other personnel. If possible, engage local consultants and offer free on-the-job training to the implementing agency; ii) to improve chances of winning a contract, consider submitting a proposal in partnership with a local, shortlists company; iii) consider hiring an agent to maintain regular contact with the implementing agency.

Foremost, DFAIT staff should describe in detail the IFI process (especially the bidding process) and advise Canadian firms about the importance of establishing early contacts (with those preparing the specs) to :

- ensure your technology is not excluded
- ensure they have up-to-date information
- influence thinking
- discover what is being prepared

4.5 THE CASE 5 - CORPORATE TRAINING

4.5.1 Road play

You are working as a Commercial Officer in the Arabian peninsula and the Ambassador informs you of a an oil company executive that he met during a farewell party for one of his colleagues. Over dinner, he mentions that Exxon's training unit has decided to change focus and is looking to buy training services from abroad to train its expatriate mid managers and provide access to higher education for its employees and their children. The Ambassador has asked you to follow up with Exxon. **The company views this step as necessary to ensure higher productivity, better training and renewal of the management team and ensure retention of personnel and their families within the company operations.**

4.5.2 Background

Corporate training is one of the fastest growing sectors of the Education and Training Industry world wide. Its size and volume make it an interesting market for companies and educational organisations offering everything from crisis management seminars to quality control.

This particular case is not dissimilar from many large oil companies around the world. Many have operations located in remote areas of the world where higher education and corporate education and training are not immediately accessible.

Corporate training is at the hub of the knowledge-based economy since it uses some of the most modern techniques in information technology and telecommunications. This fact means that Canada in many ways has an advantage given the strength of this sector with companies like Northern Telecom, Teleglobe and others. Corporate training then is big business and usually involves some element of distance education. This is the case in the Exxon example.

Can Exxon afford not to provide corporate training to its managers and engineers? The answer is 'no' and the reason is quite simple. The knowledge-based economy has put the emphasis on the quality of the company's human resources and their education in order to keep a competitive edge over its competition. Business is all about knowledge and training and whichever firm possesses it will be able to cope with new innovations in the marketplace or perhaps lead them.

One of the corporate training courses that Exxon is seeking is called 'Crisis Management'. This course is designed for the upper level manager identifying procedures that impede timely decision making in times of crisis, and teaches managers to solve complex problems in record time. It is often used as a training module for mid-level managers about to make the step to upper management. Within the corporate training world itself many organisations have developed methods such as the 'Just in time' pedagogical approach.

4.5.3 Issues and Answers

Responding to this request will probably require two executing agencies since there are two types of different training contained in one. Either an educational organisation takes the lead and hires a private sector partner to do the corporate training segment or vice-versa. In some cases, the educational institution can attempt to combine both. Once again we see that partnerships are essential in order to deliver high quality education and training.

The request for access to higher education modules is required since North American or European based higher education is not available in the field. Although some companies like British Aerospace have actually created small universities, this is very costly and most large companies will buy educational programs delivered by electronic means. Actually bringing professors to the Arabian peninsula is also very expensive and not very practical so other means employed by distance education need to be employed.

In order to respond effectively to the Exxon request, the Canadian commercial officer will have to act promptly. If Exxon has mentioned this to you then he has probably contacted others. There are two things you must do to move this file ahead. First you should request a meeting with Exxon to find out more about their request and its origins. This first contact is necessary to indicate interest on behalf of Canadian companies and to develop a coherent message that can be transmitted to Canada. The more precise the information, the better you chances of success.

Parallel to this, you should contact any educational advisors in the region at one of the missions. this person can help articulate the request and is a key link to the Canadian suppliers - educational institutions and private training companies

You may also want to effect a preliminary search of Canadian capabilities (educational institutions and Canadian companies) by consulting the CD ROM Study in Canada! and by consulting the web site Strategies (Comet) which allows you to develop a list of Canadian companies in corporate training. They should all be registered with the WIN Exports data bank.

Website of strategics (Industry of Canada)
http://www.strategis.ic.gc.ca

You also link up with the International Business Opportunities Centre and advertise this opportunity electronically :

http://www.dfait-maeci.gc.ca/iboc-coai

At an early stage of this process, either you or the educational advisor should contact the Education and Services Training Group at DFAIT (ACET) to inform them of this opportunity

For educational organisations, you can also consult or contact the Association of Universities and Colleges of Canada (AUCC), the Association of Canadian Community Colleges (ACCC), the Canadian Bureau of International Education, the CEC network and some provincially-based organisations all of whom represent Canadian educational institutions and have close links to them. They too would be in a position to advertise the opportunity.

http://www.aucc.ca
http://www.accc.ca
http://www.cbie.ca

If a Canadian bid goes forward, you will play a key role in putting together the Canadian expertise with Exxon's training requirements and should a mission be mounted to the region your liaison with Exxon will be crucial

4.5.4 Solutions/Lessons Learned

More than any other types of training, corporate training is the one that is the most time sensitive and the promptness with which the request is formulated will always be a key to the success or failure of a Canadian bid. Your cannot control the quality of the bid but you can render a service in advising Canadian organisations about its existence.

Corporate training is very competitive and is constantly being revolutionised by advances in distance education and innovative communications technology. Failure to innovate will result in loss of market share.

Because of its competitive nature and the sums involved, it is also important that you learn to identify opportunities with routine visits to foreign and Canadian companies in your countries of accreditation. In this case study, it is vital that you keep this information strictly confidential until such time as Canadian organisations have had time to respond to the request. By discussing Exxon's request with others, you may be compromising the Canadian bid.

4.6 CASE 6- INTERNALTIONAL FINANCIAL INSTITUTIONS (IFIs) PROJECTS - PROCUREMENT FOR GOODS

4.6.1 Road play

On August 26, 1999, at the request of TEXTOPLUS Ltd., the Trade Commissioner responsible for IFI issues at the International Trade Centre in Montreal meets with the President of the Company to **discuss how best the ITC could assist in responding to bids soon to be issued for the supply of textbooks and learning materials in Nicaragua.**

4.6.2 Background

The Company

TEXTOPLUS Ltd., is an editing company established in Montreal since 1975. The Company supplies textbooks and learning materials that range from Pre-school to College. Main products include: Pre-school (information kits), Primary (Maths, Social Science, Music, French, Spanish, Geography). TEXTOPLUS also publishes reference and library books (Grammar, Dictionaries, Essays, Atlas).

The Company is active in Canada (Quebec, Ontario and the Maritimes), the USA and abroad (Jamaica, Mexico, Costa Rica). With the exception of the US market, international contracts have always been on a sole source basis.

Five years ago, TEXTOPLUS made an attempt to penetrate an IFI market. They submitted a bid for the supply of textbooks as part of a project in Senegal (financed by the African Development Bank), but did not win the contract. Their bid did not comply with the required specifications. Since then, the company has decided to keep focussing on the Latin American and Caribbean market.

The Project

Project Name:	Basic Education - Nicaragua
Implementing Agency:	Ministry of Education, Culture and Sports (MED)
Financing:	10 million US$
Approval Date:	September 1998
Objective:	The objective is to improve the development of human capital

Description : The project would improve the quality and efficiency of the basic education system (Refurbishment including furniture of the primary school infrastructure, provision of textbooks and other educational materials in sufficient quantities both for classroom and individual life long learning, provision of in-service training for primary school teachers with special emphasis on multi-grade teaching, implementation of a performance-based system of incentives to primary school teachers, targeted scholarships for poor children attending grades 4-6 and expansion of coverage of community pre-schools.

Promote continued institutional strengthening and modernisation of MED including support to expand and strengthen primary school autonomy, provision of training for teachers, school principals and parents, financial incentives for teachers and strengthening the supervision and evaluation systems.

Contact :

INFOSHOP, The World Bank, 1818 H Street, N.W., Washington, D.C. 20433 Tel (202) 458-5454, fax (202) 522-1500

4.6.3 Issues and Answers

Initial Contact with ITC - Montreal

During the meeting with the Trade Commissioner, TEXTOPLUS explained that they first found out about the project in September 1998 while searching the DFAIT's IFInet database. Since the project met the firm's basic requirements (i.e., products and region), they decided to pursue this business opportunity and made arrangements to obtain copy of the Project Information Document (PID) from the World Bank library. The key information of interest to TEXTOPLUS was the following taken from the Procurement Section:

Textbooks and Instructional Materials.

Textbooks and instructional materials (US $700,000) will be procured through International Competitive Bidding. the contracts will be in conformity with standard World Bank documents. Reference books and library books (US $100,000) estimated to cost less than US $20,000 equivalent per contract up to an aggregate amount not to exceed US $100,000 would be procured through International Shopping, and contracts will be in conformity with standard World Bank documents. Distribution of textbooks and materials to schools will be procured through National Competitive Bidding.

The procurement schedule indicated that **Textbooks and Instructional Materials** would be procured in the second half of 1999.

The PID also provided indications as to the priority factor affecting the quality of basic education (in terms of teaching-learning materials). The PID was stating that the priority factor is:

Varied, adequate and sufficient teaching-learning materials, defined as follows:
«The teaching-learning materials are varied, adequate and sufficient when: 1) there are textbooks for each subject, 2) the materials are adapted to the curriculum and relevant to the local context and 3) each pupil and each teacher can wield the appropriate teaching-learning materials.»

The Trade Commissioner reviews the IFI bidding process in general terms emphasising the importance, at this stage, to be in contact with the implementing agency (the buyer). He also describes that competition in this market is fierce, and that TEXTOPLUS must ensure that there are no loose ends. Before concluding the meeting, the Trade Commissioner suggests that co-ordinated actions would benefit the firm in its current endeavour. The Trade Commissioner and the President of TEXTOPLUS agree on the following steps to be undertaken as quickly as possible:

ITC-Montreal will contact by E-Mail the key players within DFAIT (OLIFI Washington, the IFI Division, the Central American Division, and Canadian Embassy in Costa Rica) to establish the network and seek co-operation on proposed actions (indicating that time is of the essence if the bid process is soon to begin). TEXTOPLUS will be copied on the E-Mail.
TEXTOPLUS will do the necessary to ensure they have the resources to prepare a bid.

TEXTOPLUS will contact their agent in Mexico and arrange for him to fly to Nicaragua to meet with the implementing agency (to gather intelligence and promote TEXTOPLUS's products and expertise).

Follow-up from Key Players
A few days later, OLFI replies by faxing the following General Procurement Notice to interested parties and by sending to TEXTOPLUS a copy of the World Bank's Guidelines: Procurement under IBRD Loans and IDA Credits. OLIFI further notes that

TEXTOPLUS must understand that the basis of the firm's rights as a bidder are contained in the procurement guidelines. However they should know that it is the bid document language, not the guidelines, that governs the bid and the contract.

General Procurement Notice

Loan no. 2465 - Basic Education Project

The Government of Nicaragua has received a loan from the World Bank towards the cost of the Basic Education Project. The proceeds of the loan will be applied to eligible payments under the contract for the procurement of textbooks and instructional materials.

Procurement of contracts financed by the loan will be conducted through the procedures specified in the **World Bank's Guidelines: Procurement under IBRD Loans and IDA Credits**.

The bidding documents for the above item are expected to be available on or about October1999 subject to payment of a non-refundable fee.

Interested bidders from member countries of the World Bank are invited to register their interest as potential bidders with the :

Project Implementation Unit :

Basic Education Project Ministry of Education, Culture and Sports Centro Civico, Modulo L.Apdo. 108, Managua JR fax no. (505-2) 655-5555

The IFI Division proposes a series of useful bid preparation tips to TEXTOPLUS and suggests contacting the company directly to clarify certain key tips (especially in the context of their unsuccessful experience in Senegal when their bid was disqualified on technical grounds).

Key tips are :

- Be certain to understand both commercial and technical requirements, and follow them in bid preparation

- Review documents thoroughly to spot ambiguities, contradictions or restrictive clauses
- Seek clarification from the implementing agency and the IFI regarding questions or doubts prior to preparing the bid
- Comply fully with all requirements in the invitation for bid and follow instructions stipulated in the documents precisely

To raise the level of awareness with the last item, he mentions the recent case of a large Canadian firm with strong international experience that submitted a bid for an IFI contract, but instead of complying with the requirements specified in the bidding documents, the firm decided to propose to the client (the Ministry of Transport in this case) an alternative - cheaper and technologically more appropriate solution. The bid was rejected, and the company also lost in its appeal. In other words, do not use this bid to change the system.

In his message, the Officer also explains the relevant bidding procedures, namely International Competitive Bidding (ICB) and International Shopping. He then sends by mail copies of Standard Bidding Documents in order for the TEXTOPLUS team to familiarise itself with the World Bank terms and conditions (all bid documents on World Bank projects have the same terms and conditions).
The Officer responsible for Nicaragua in the Central America Division suggests that when the bidding documents become available, TEXTOPLUS pays DFAIT (Ottawa) directly so the Embassy's representative in Costa Rica will in turn buy and forward the documents directly to TEXTOPLUS promptly. He adds that may save up to 3 to 5 precious days in the whole process.

As the initial contact, the ITC ensures that the 'network' is effective and proactive, and that the company is satisfied with the service it receives.

On September 27th, the company's agent meets with the Director of the Project Implementation Unit in Managua to notify interest in the project and to introduce the firm's products and expertise. He reports back that at least 3 other firms (USA, Spain, Mexico) have expressed interest in the supply of textbooks. The agent ensures that the name of TEXTOPLUS will appear on the list for International Shopping. He also meets with the World Bank representative, from whom he learns that the country might be developing a Second Basic Education Project in the coming years.

4.6.4 Solution/Lessons Learned

On October 16, 1999, the Embassy representative in Costa Rica sees in a Nicaraguan newspaper the Specific Procurement Notice for the supply of Textbooks and Instructional Materials, and faxes it directly to TEXTOPLUS with a note indicating that the fee to buy the bidding documents is US$ 100 (payable to DFAIT in Ottawa). He also specifies that bids must be submitted on or before 9:00am (local time) on November 30th.

While awaiting the documents TEXTOPLUS makes sure the team is prepared to complete the bid, including all the details related to it such as the bid security. The President ensures that the bid fully complies with all the requirements and the proposal is presented in a well organised and structured document. The package is sent by courier to the agent in Mexico, who then hand delivers the bid on November 29th to the Project Implementation Unit.

By the end of January 2000, TEXTOPLUS is informed that it is the successful bidder. The company prepares for contract negotiations with the executing agency. Meanwhile TEXTOPLUS notifies ITC-Montreal and the other players involved. The company is most thankful of the work, co-operation and professionalism (advice to raise the level of preparedness and to save on time) demonstrated by members of the network.

The company decides to keep an eye on the development of a second Basic Education Project in Nicaragua since contacts have already been established and the experience successful.

The initiative of ITC-Montreal to quickly set up a network of key players proved to be an excellent decision to assist TEXTOPLUS.

Companies not familiar with IFI commercial practices, especially the ones with limited resources, are the first to benefit from a proactive network of trade, IFI and country experts.

As experienced as they may be, DFAIT officials must remember to be selective in the information distributed to companies. Information overload, when time is of essence, is unproductive. In this case, the Guidelines, Standard Bidding Documents, Procurement Notices were correctly provided and contained the key information.

For the company, keeping DFAIT officials informed about the success favours continued co-operation for future assistance, and indirectly benefits other Canadian companies.

4.7 CASE STUDY 7 – IT TRAINING AND PROCUREMENT

4.7.1 Background

In late Fall 1997, the Ministry of Communications of a small Latin American country went to bid with a sizeable contract to redesign and overhaul different sectors of the state communications network. This involved a combination of sophisticated telecommunications equipment (the telephone system had to be entirely remodeled) including communication to internet via state of the art information technology. There would also require an after sales service schedule and considerable amounts of training.

A large Canadian telecommunications company was informed by on site partners of the bid and they sent bidding documents to Canada. The Embassy was informed of the impending bid and began to prepare meetings for the inevitable site visits from Canada. During the run up to the bid, the Embassy provided valuable market intelligence through its contacts with the Ministry.

In the Summer of 1998, amidst strong European and American competition, the Canadian bid was chosen. The contract itself contained no mention of education hardware-computers, wiring of schools and training. The Canadian company won the bid based on its innovative technological proposal and the only weakness of the bid was on the training side. Parallel to this event, this same Latin American country had just completed negotiations with the Inter-American Development Bank to modernise their educational system and infrastructure and make it more responsive to labour market demands. Let us quickly look at what was being proposed in the Terms of Reference (TORS):

4.7.2 Resume of TORS:

The program would support the reform and modernisation of vocational and technical education. It would do so by the development of a network of Professional Education Centres (CPs) adapted to labour market needs. Sample activities and outcomes would be :

- provide flexibility in educational strategy to workers
- develop a curriculum according to occupational competencies required in each sector
- promote private sector involvement and means of certification to facilitate entrance and exit from the system
- retrain the unemployed
- to enhance information and evaluation systems
- procurement of didactic materials and equipment including refection of buildings and essential infrastructure works
- undertake surveys to determine the usefulness of CPs
- develop a public information campaign about CPs and their role
- instigate reform and expansion of general education at the middle school level to improve its academic quality and relevance
- implement state plans to reorganise professional education through institutional reorganisation and management, curriculum improvements, legislative changes.

One of the companies that decided to bid on this project was EDUTECH, a dynamic Canadian information technology (IT) firm with a track record of success in the education marketplace especially as a provider of goods and training. EDUCTECH contacted the Canadian Embassy and asked the Commercial Counsellor about their chances of success, the possible competition and how to improve a possible bid. Although there was no generic link between the telecommunications project and the IDB education project, they clearly had to be part of an overall national development strategy. Linking the two Canadian firms would result in a better bid and invite economies of scale. Moreover the IT component of the IDB project relates directly to the activities involved in the larger telecommunications project for the modernisation of the telecommunications system. The training component present in both projects could overlap and create conditions for the success of both. Moreover the larger project could stand to improve their training profile that had been considered somewhat lacking in their bid in the Fall of 1997.

Accordingly the Embassy official gave the co-ordinates of the Project Team to EDUCTECH who then contacted them through the Embassy. They decided to bid on the IDB project together believing rightly that the presence of one large Canadian project can provide a strategic platform for others. This Team Canada approach to marketing abroad is largely successful in obtaining maximum benefit and visibility for Canadian exporters. In this case, the distinction between products and services becomes blurred in as much as both are required for the success of the projects and both are inextricably linked to the selection process.

EDUTECH lost its WB bid but was able to sub contract on some of the consulting work flowing from the two projects. In the end, the first successful project in the telecommunications field paved the way for more Canadian IT training contracts and the fact that Canada was helping to overhaul the state telecommunications network offered new opportunities for IT training on Canadian technology..

4.7.3 Issues and Answers

The multimedia interactive training market, estimated at $60 billion in North America alone, represents a significant opportunity for Canadian firms wishing to export IT that have the potential to set the standard and become a leading developer and user of high technology training schools

Why IT training now? 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 include instructional consistency, privacy, effectiveness, increased retention, motivation, access and interactivity.

The world market for education and training is growing. Canada's reputation for professional, high-quality IT services and reliance on lifelong learning offers Canadian companies the potential to become major players in the international market. Latin America represents an emerging market, and offers good opportunities such as English as a second language, French as a foreign language, curriculum development for vocational and technical programs, university studies, corporate in-house training and educational goods and infrastructure.

4.7.3 Solutions/Lessons Learned

- One Canadian project in the region can often provide impetus for other Canadian companies and nowhere is this more true than in the IT industry

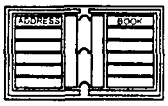
- Bids are competitive and economies of scale with a local partner are important in the selection process

- Embassy officials can play key roles in bringing Canadian companies possessing complementary expertise together. In the preceding case study, it was the Embassy that was able to orchestrate a joint venture that strengthened both projects and won Canada valuable exporting points.

- Even if you do not win the contract, often it is useful to continue to apply for other projects in that country in order to become better known

There is a clear demonstrable link between products and equipment, and training. A strong training component can make the difference and tip the balance in favour of an infrastructure bid and vice versa.

5. REFERENCES

Address : 

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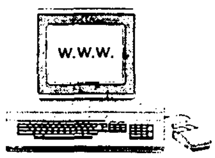
Websites 

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