

COMMERCIAL EDUCATION

AND

TRAINING SERVICES SECTOR CAMPAIGN

SERVICE INDUSTRIES

Canada

COMMERCIAL EDUCATION

AND

TRAINING SERVICES SECTOR CAMPAIGN

PHASE II

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Prepared by:

The Business and Professional Services Industries Division Service and Construction Industries Branch

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April 16, 1991

"At all levels ... business education and training must be revamped to provide the knowledge and skills needed to build competitive businesses. Canada must develop a national competitive advantage in its people."

New Visions for Canadian Business: Strategies for Competing in the Global Economy The Kodak Report

"In the new world economic order, the countries that invest in their human capital - in educating and training their people - are going to win in the global competitive wars."

Remarks made to the Conference Board of Canada on Sept. 26, 1990 by Walter Light, Retired Chairman of Northern Telecom Ltd.

PREFACE

In keeping with its mandate to promote international competitiveness and excellence in Canadian industry, the Department of Industry, Science and Technology Canada (ISTC) has launched a series of sector campaigns within a limited number of industry sectors. The purpose of a sector campaign is to provide a comprehensive, strategic analysis of a targeted industry, and to develop a set of clearly articulated initiatives designed to improve the competitiveness of the industry in both domestic and international markets.

The sector campaign in commercial education and training services has come about as the result of a thorough review of industry needs and opportunities, and an examination of government and industry objectives for the sector. This assessment was based on preliminary consultations with other federal departments, provincial governments, non-governmental organizations, and key players within the industry. It was concluded that there exists considerable potential to improve the performance of the Canadian commercial education and training sector, and that this could best be achieved through a co-ordinated and carefully focused process.

In view of the fact that a considerable amount of preliminary analysis had already been done, there was no need for a Phase 1 campaign, and it was decided to proceed directly to Phase 11. The seven activities of Phase 11 have been designed to provide an in-depth analysis of the industry and its competitive environment, and to develop an action plan to improve Canadian performance. This will take place over an eighteen month period, from April 1, 1991 to September 30, 1992. Once Phase 11 has been completed, consideration will be given to proceeding with a Phase 111, which involves the development of a final action plan and its implementation.

ISTC has made a commitment to strengthening Canada's commercial education and training industry, and has approved the funding necessary to carry out the Phase 11 sector campaign. While ISTC will act as a catalyst in ensuring that campaign objectives are met, the overall success of the campaign will depend upon the interest and commitment of Canadian institutions and industries.

To date we have benefited from the time and energy devoted by a wide range of industry and institutional representatives. We are confident that with continued co-operation over the next eighteen months we can enhance the growth potential of Canada's dynamic and exciting commercial education and training sector.

TABLE OF CONTENTS

			Page	
EXECUTIVE SUMMARY i				
	I.	INTRODUCTION	1	
	II.	SECTOR DESCRIPTION	5	
	III.	CANADIAN CAPABILITIES	8	
	IV.	SECTOR CAMPAIGN FOCUS	. 10	
	v.	SECTOR CONSTRAINTS	. 11	
	VI.	SECTOR OPPORTUNITIES	. 14	
	VII.	THE SECTOR AS A VEHICLE FOR TECHNOLOGY ADVANCEMENT	. 20	
	VIII.	RELATIONSHIP OF THE SECTOR CAMPAIGN TO OTHER INITIATIVES	. 23	
	IX.	THE RATIONALE FOR A SECTOR CAMPAIGN	. 28	
	х.	THE ACTIVITIES OF A SECTOR CAMPAIGN	. 29	
	XI.	VISION	. 38	
		ANNEXES		

EXECUTIVE SUMMARY

The commercial education and training sector consists of establishments engaged in the commercial delivery of education and training services. These services are provided outside the formal public education system and are provided on a fee or contract basis. For the most part, these services are delivered by private firms and training institutions, although community colleges and universities also play a role.

The sector offers a wide range of services in areas ranging from petroleum industry training to management training. Suppliers of commercial education and training services are able to respond quickly and in a targeted fashion, and can provide custom-designed programs to meet individual client needs. In the delivery of its services, the sector is developing expertise in the use of technology-based teaching methods.

One cannot underestimate the importance of the role to be played by commercial education and training services in meeting the challenges encountered by Canadian industry in the development of its human capital. There is wide-spread concern that Canada may not be equipping itself with the human resource skills needed to help make Canadian industry more competitive in the international marketplace. At the same time, however, the capabilities of the commercial education and training sector are not well known among Canadian industries, largely because the sector has not adopted a well-planned and aggressive approach to the marketplace.

The Phase II sector campaign was developed in order to document the capabilities of suppliers, identify client needs, and identify the problems faced by the sector in marketing its services.

Specifically, Phase II will accomplish the following objectives:

- a) accurately determine the size and capability of the commercial education and training sector, and identify all suppliers;
- b) identify and catalogue the current, and, to the extent possible, the future needs of client industries;
- identify the major issues facing the sector;
- d) identify approaches to address some of the known constraints impeding the effectiveness of the sector;
- e) provide a focal point for a more co-ordinated approach by key players within the sector;
- f) make client industries more aware of domestic education and training capability; and,
- g) encourage the development and application of technology based training tools by suppliers within the sector, and the use of these tools by client industries.

These objectives will be achieved by carrying out seven distinct, but complementary, activities. These are as follows:

1. Identification of Suppliers and Industry Capabilities

This activity will result in the production of a directory of the capabilities of the commercial education and training industry. This will help suppliers make their services better known, and will assist client industries in accessing the expertise required to upgrade the skills of their workers and managers. This activity will also result in the production of a comprehensive and reliable profile of the commercial education and training industry, outlining the capabilities of the industry, and providing the foundation for a permanent statistical base to track industry performance.

2. Industry Consultations

Consultations will be undertaken with a cross-section of suppliers to identify strengths/weaknesses of the sector, and to determine action to be taken to address client needs. This will result in an action plan to address the issues facing the sector.

3. Establishment of a Committee of Industry Representatives

This will provide a forum to represent and promote the interests of the sector. The Committee will develop a series of industry-wide activities to encourage a more co-ordinated marketing approach.

4. The Identification of "Best Practices" to Overcome Barriers to Industry Sponsored Training

An examination will be made of approaches which could be adopted by the commercial education and training sector in order to overcome identified barriers to the purchase of their services. This study will recommend approaches which could be adopted by Canadian suppliers in order to improve their marketing strategies.

5. Development of Technology-Based Training

This activity will examine the potential for the application of new technologies to the delivery of commercial education and training services. This will assist the industry to identify ways of adopting technology-based delivery mechanisms, and to market these more effectively to client industries.

6. International Capabilities Assessment

This activity will determine the "best practices" applied by the commercial education and training sector in other countries, and will examine the potential for applying foreign experiences to the Canadian context.

7. The Communications Plan

The communications plan consists of two parts, and has the overall objective of ensuring that all suppliers are aware, and kept informed, of this initiative. The first part, early in the campaign, will serve to publicize the role of ISTC as a catalyst in bringing together industry interests, and will build awareness among the many firms in the sector of the goals and activities of this sector campaign. (Although not a direct objective, to the extent that other sectors become aware of this campaign, the publicity will encourage a commitment to the building of a training culture, and to utilizing the services of the commercial education and training sector.)

The second part of the communications plan involves dissemination of the findings of the other activities of this campaign, and will take place towards the end of the sector campaign.

These activities will be carried out between April 1, 1991 and September 30, 1992

COMMERCIAL EDUCATION AND TRAINING SERVICES SECTOR CAMPAIGN

PHASE II

I. INTRODUCTION

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Commercial education and training services have a significant role to play in meeting the challenges encountered by Canadian industry in the development of its human capital. The success of all industrial sectors (in both services and manufacturing) will be increasingly dependent on the quality of their human resources. Greater access to education and training programs for workers and managers will lead to increased productivity in the workplace, which in turn will help make Canada more competitive in the international marketplace. As we move towards what is becoming known as the "global information economy", human resource investments are becoming critical to our entire process of economic development.

The importance of the "human factor" to economic well-being has received attention from Canadian policy makers in all sectors. During the 1989 annual conference of First Ministers, concern was expressed that Canada may not be equipping itself with the human resource skills needed to prosper in the emerging information-based and globally competitive economy of the twenty-first century. All ten provincial Premiers agreed with the Prime Minister that further study and initiatives need to be undertaken to enable Canada to meet these challenges.

The sector campaign will support the efforts of Employment and Immigration Canada (CEIC) to encourage industry-led training. Over the past decade, important developments have emerged from CEIC, which reflect federal government efforts to shift emphasis from income support to human resource development. As a result, CEIC has been placing greater emphasis on employer-provided training. In doing so, CEIC has been concerned with the **demand** side, that is, the training needs of industries and individual workers. This sector campaign in commercial education and training will address the **supply** side, in that it will enhance the capacity of the sector to respond to identified training needs.

This sector campaign will also be responsive to the concerns of provincial governments, such as those expressed in the 1990 report of the Premier's Council of Ontario, "People and Skills in the New Global Economy." This report addresses Ontario's "skills dilemma", and examines ways in which industry, educators, labour and government can work together to ensure that tomorrow's workforce is equipped with the skills they need to compete.

Similar concerns have been expressed by private industry and non-governmental organizations, as reflected in reports published by the Canadian Labour Market and Productivity Centre (CLMPC), the de Grandpre Advisory Council on Adjustment, the Economic Council of Canada, the Conference Board of Canada, the Fraser Institute, Kodak Canada Inc., the Canadian Chamber of Commerce, and the Canadian Manufacturers' Association. The bibliography in Annex 1 of this document provides a good overview of the wide range of materials which have been written on the subject of labour force development.

The question of skills development is also a preoccupation of the Canadian public at large. An Environics survey conducted in July 1990 showed that education and training was rated highly as a contribution to competitiveness, with the majority of Canadians believing that training should be carried out by companies in the workplace. (See Annexes II and III).

Human resource development is a key issue on the policy agendas of other industrialized nations, including the United States, Britain, Germany, Australia and Japan. In anticipation of the challenges and opportunities of an integrated market, the European Community has strengthened its commitment to workforce competence. At the same time, multilateral bodies, such as the OECD, are devoting a great deal of attention to the converging functions of education and the economy.

Within Canada, a number of sectors are now or soon will be experiencing difficulties in finding employees with the mix of skills they seek. CEIC human resource sector studies carried out between 1986 and 1989 indicated a shortage of qualified workers in the following industries: electrical and electronic manufacturing, automotive service and repair, textiles, foodservices, and trucking. In all cases, it was noted that these industries faced a difficult challenge in ensuring the availability of the human resources necessary to maintain and build

on their competitive positions. Skilled labour shortages are being experienced in a number of other occupations such as aerospace engineers, software programmers, air traffic controllers, systems analysts, electrical engineers and some of the skilled trades, such as individuals capable of operating the latest in computer assisted machinery. The Canadian Tooling Manufacturers Association has expressed concern about the lack of qualified machinists, with some firms reportedly having to look overseas to find workers possessing the skills needed to operate a machining tool, maintain quality control standards and meet required delivery dates.

It is widely acknowledged that there is a need to increase the skill level of the Canadian electronics industry, which employs almost 180,000 workers and has annual sales of close to \$18 billion. Within this industry, rapid technological change requires a constant upgrading of skills in order to ensure the viability of the industry and to enable Canada to compete internationally.

In order for Canada to achieve a sustainable competitive advantage, there is a need to develop new and different approaches to every aspect of conducting business, including the management of human resources. The on-going debate on human resource development has focused largely on the public education sector, addressing issues such as the adequacy of our schools, colleges, and universities to provide well trained and educated individuals. There has also been considerable interest in the question of on-the-job training and retraining provided by industry to upgrade the skills of its existing labour force.

On the other hand, there has been relatively little attention devoted to the commercial education and training sector, although this particular sector has an important role to play in filling the gap between public education and on-the-job training. In meeting this need the commercial education and training sector has the potential to provide many of the training services required by industry and governments. By doing so it can provide leadership in the improvement of training programs and can help overcome skill shortages.

At the same time, the suppliers of commercial education and training services acknowledge the need for a more organized approach to the marketplace. The key players within the sector generally agree that there is a need for further exploration of many of the issues which they collectively face. This sector

campaign responds to this identified need, in that it will provide some practical solutions to questions which have been raised by suppliers.

Within Canada, there is a need for a commercial education and training industry which is developed to world class standards. This cannot be accomplished unless special attention is given to the establishment of a responsive and co-ordinated training capability which will recognize and meet the needs of Canadian industry.

A sector campaign in commercial education and training services will be instrumental in building one important facet of Canada's training capability. Phase II of the sector campaign will document the capabilities of suppliers, identify client needs, and identify the problems faced by the sector in marketing its services. During Phase III, the sector campaign would assist the sector in addressing these problems, and would implement specific measures to enable the sector to focus and strengthen its marketing efforts.

A sector campaign will be of benefit to not only the education and training sector in particular, but will also be welcomed in all industry sectors. By strengthening the capacity of the commercial education and training sector to provide better services to other sectors of industrial activity, the sector campaign has the advantage of being broadly-based and of relevance the all of ISTC's industry-based clients.

The importance of the education and training sector is evidenced by the requirement that all of ISTC's sector campaign proposals deal with the human dimension of competitiveness. However, to date there has been no direct focus on education and training as a valid sector in its own right. A sector campaign, in commercial education and training will provide that much-needed focus, and will ensure that the human resource development requirements identified in other sector campaigns will be better met.

II. SECTOR DESCRIPTION

The sector consists of establishments engaged in the commercial delivery of education and training services. These services are provided outside the formal public education system and are provided on a fee or contract basis. There are four major components to the commercial education and training sector:

1. Firms which specialize in providing education and training services

This involves individual consultants as well as larger firms such as Educansult. These firms provide a diversity of services including: the assessment of training needs, curriculum design, the production of manuals and training videos, and train- the- trainer programs. Domestic clients include companies and government departments seeking to upgrade employee skills and productivity. Internationally, these firms provide services through contracts received from aid and development organizations such as the Canadian International Development Agency (CIDA), the World Bank, and the Asian Development Bank. These services are also purchased directly by foreign governments and companies on a purely commercial basis.

2. Businesses which provide education and training to purchasers of their products or services, or on a stand-alone basis

This includes Canadian companies whose principal activity is part of another industrial sector, and who provide education and training services as part of the sale of equipment or on a stand-alone basis. For example, most Canadian telecommunications equipment manufacturers provide training programs to the purchasers of their equipment, in order to assist with the technological transfer resulting from the sale of telecommunications systems, in both domestic and foreign markets. The provision of these services is usually necessary to ensure that these companies secure a long-term competitive position in their markets.

A number of professional service firms (consulting engineers, chartered accountants and management consultants) teach specialty courses based on

their own professional expertise. These courses include areas such as forestry management, environmental protection, fisheries development, and project evaluations of technical training needs.

3. Private schools and training institutions

There are about 675 such institutions in Canada. The highly-specialized, industry-focused technical training institutes attract both Canadian and international students for a variety of industry-related skills development and upgrading. For example, the Petroleum Industry Training Service (PITS) has a \$12 million training facility in Edmonton that offers specific programs to new and career employees of the oil industry. This non-profit centre is jointly sponsored by Alberta oil companies.

A number of technology institutes have been set up by federal and provincial governments, in cooperation with the private sector. Other initiatives are under consideration. For example, the concept of a Canadian Centre for Plastics Productivity (CCPC) has been developed jointly by industry, ISTC, the NRC, and two universities. This concept, essentially, is to bring together the available resources at government labs and key universities, and the technology diffusion elements of the Canadian Plastics Institute. This will enable plastic processors to gain better access to more relevant technologies, train existing employees, and increase the availability of graduates with a solid knowledge of polymer processing.

4. Specialty courses and services of universities and community colleges, which are sold commercially, usually apart from mainstream diploma or degree programs.

Many of Canada's 89 universities and 127 community colleges have become involved in the domestic commercial education market in response to the demands of Canadian industry. These institutions deliver short-term seminars and specialized training programs in areas ranging from small business management to automotive technologies. For example, the Cabot Institute of Applied Arts and Technology in St. John's, Newfoundland provides on-site training for the Iron Ore Company of Canada's electricians in Labrador City.

Many of the courses offered by universities are aimed at middle-level and senior managers, often in the form of executive development seminars, which are provided for Canadians as well as for an overseas clientele. For example, in the summer of 1990, York University organized an intensive nine-week course on capitalism for 129 East Bloc managers. The participants were first oriented to the realities of a market economy, and then worked alongside Canadian corporate executives in their day-to-day operations. This program is expected to become an annual event, largely because more than \$500 million worth of business deals were made as a result of this initiative.

Some post-secondary institutions actively market their services overseas, often with the assistance of their representative associations, which include the Association of Canadian Community Colleges (ACCC), the Association of Universities and Colleges of Canada (AUCC), and the Canadian Bureau for International Education (CBIE). These associations are nongovernmental organizations (NGO's) which act as brokers of the education and training services provided by public institutions, and, to a lesser extent, by the other three components of the industry. The commercial delivery of services is not the major preoccupation of these NGO's. Therefore, the sector does not have the benefit of working within the framework of a well-established industry association.

The largest export market for these institutions is the enrolment of international students. In the Fall of 1989, there were 70,891 such students in Canada, of which 68% were enroled at post-secondary level. Although many of these students are enroled in mainstream diploma or degree programs, they are considered part of the commercial activities of public institutions, largely because they pay much higher tuition fees than their Canadian counterparts. As such, international students are often actively recruited by education institutions which, among other considerations, view these students as a source of revenue.

III. CANADIAN CAPABILITIES

Responsive to Industry Needs

The commercial education and training sector offers a wide range of services and possesses the expertise and experience to develop new training services to meet the changing needs of the labour force and to address the training problems of Canadian industry. Suppliers are able to respond quickly and in a targeted fashion, and can provide custom-designed programs to meet individual client needs. Most suppliers of commercial services can provide training in the workplace. This ensures the provision of more work-relevant training, avoids the additional cost and lost productivity usually associated with sending employees to attend off-site training courses, and responds directly to some of the training concerns of small business.

Subject Matter Expertise

The commercial education and training sector has developed the capacity to provide a variety of specialized services. Because of Canada's expertise in subject areas such as forestry, petroleum, mining, fishing, and telecommunications, Canadian organizations have been able to provide expert programs in these areas to meet both domestic and foreign training needs.

Technology-Based Training

Some suppliers are able to deliver their services not only through traditional methods (eg. classroom instruction) but also through more sophisticated technology-based delivery mechanisms (eg. interactive video). Some courses are designed so that employees can learn at their own pace while on the job, often with the use of their own personal computers.

In delivering its services, the sector is becoming adept at the use of a number of technologies, such as: computer enhanced learning, interactive video, audio tapes, radio and television. Canada has acquired a particular strength in the development and application of technology for distance education services, as evidenced by the decision, on the part of governments of the

Commonwealth and La Francophonie, to establish multilateral distance education centres in Vancouver and Quebec respectively. These centres will coordinate the development and distribution of distance education materials designed to meet the needs of Commonwealth and Francophone countries.

In combining subject-matter expertise with technology-based delivery mechanisms, Canada is well-positioned to deliver highquality and responsive training services on a commercial basis.

However, the sector's capabilities are not well known among Canadian industries, largely because the sector does not have a well planned and aggressive approach to the market-place. As is noted by the Canadian Labour Market and Productivity Centre (CLMPC) in its study on "Management Training for Small Business in Canada":

"The lack of a simple and inexpensive source of information on available training programs in Canada further impedes small businesses from taking advantage of affordable training opportunities. Small businesses often lack the time and resources required to assess their training needs and identify appropriate training courses and programs. Consequently, many remain unaware of the various training services available to them."

Similarly, larger businesses remain unaware of the full range of training capabilities offered by the commercial education and training industry. This includes the provision of consulting services to identify and assess training needs, which will provide businesses with the knowledge base needed to select appropriate training programs. A sector campaign will help ensure that Canadian suppliers market their services in such a manner as to ensure that their capabilities are fully recognized and utilized by client industries.

IV. SECTOR CAMPAIGN FOCUS

The sector campaign will focus on education and training services which are sold on a commercial basis. In doing so, the campaign will lead to the solution of training problems which cannot be adequately or effectively addressed by the public education system.

Specifically, Phase II of the sector campaign will do the following:

- a) accurately determine the size and capability of the commercial education and training sector, and identify all suppliers;
- b) identify and catalogue the current, and, to the extent possible, the future needs of client industries;
- c) identify the major issues facing the sector;
- d) identify approaches to address some of the known constraints impeding the effectiveness of the sector;
- e) provide a focal point for a more co-ordinated approach by key players within the sector;
- f) make client industries more aware of domestic education and training capability; and,
- g) encourage the development and application of technology based training tools by suppliers within the sector, and the use of these tools by client industries.

Through these activities it will be possible to identify new market opportunities and to enhance existing marketing efforts of the sector.

While the sector campaign will focus primarily on the domestic market, the question of **international** marketing of commercial education and training services, is being addressed in a separate initiative. In partnership with External Affairs and International Trade Canada ISTC recently published a document entitled Education and Training Services Industry: International Marketing Strategy. The purpose of this discussion paper is to present suggestions for new marketing approaches by industry and government, and to serve as a starting point for developing a consensus on joint action in the marketing of Canadian education and training services internationally.

The initiatives to be undertaken during the sector campaign will serve to meet the industry's domestic and international objectives. Specifically, the membership of the Committee of Industry Representatives will be drawn from with the committee which was established in March 1991 to advise on international marketing activities. The study of domestic and international "best practices" will also examine approaches to exporting, and the review of the development of new applications of technology will also serve international ends. Overall, the activities developed to strengthen the sector domestically have been designed so as to have a positive effect on its ability to compete internationally.

V. SECTOR CONSTRAINTS

Lack of Information

Our capacity to strengthen the capabilities of the commercial education and training sector has been hampered by a lack of reliable information about the size and capabilities of the sector. Education and training has traditionally been viewed as a "public good" and a government responsibility. It is only within the last decade that it has been acceptable to speak of education and training as an "industry" with the ability to offer services on a commercial basis. There has been little inclination to construct a profile revealing factors such as: sales, revenues, employment, regional distribution, and exports. As a consequence, little is known about the economics of the sector, and it has not been possible to track the performance of this industry in any systematic and reliable manner.

Industry statistics for commercial education and training are often incomplete or non-existent. Statistics Canada's Standard Industrial Classification (SIC) does not provide for a separate, easily identifiable category of organizations providing education and training services on a commercial basis. The SIC does not capture those industries whose primary output is another service or good, but through which education and training services are delivered. Such services cut across all industrial sectors and have traditionally not received separate statistical analysis.

Our experience and observations to date have provided an overview of the sector which amply demonstrates its existing capabilities and its potential for further development. Nevertheless, a more solid information base is needed if we are to fully understand and track the potential and the development of the industry.

Lack of Co-ordination

The sector encompasses a great diversity of players, ranging from individual consultants to larger firms such as IBM and Lavalin, and including various components within our colleges and universities. These entities have unique capabilities and differing approaches, and do not have a history of working collectively to co-ordinate their approach to the marketplace.

Since there is no industry association to represent the interests of the suppliers of commercial education and training, there is no one entity with the leadership or resources to undertake an initiative of the scope envisaged in the sector campaign. In fact, the sector campaign is the first-ever effort to treat commercial education and training as a distinct sector. Through this campaign ISTC will act as a catalyst to bring together the various sector interests, so they can develop a more cohesive and cooperative approach to the issues they collectively face in the marketplace.

The Absence of a Training Culture

In order to more effectively market its services to Canadian industry, the commercial education and training sector will have to convince businesses to improve their performance with respect to training. The sector campaign will assist in identifying "best practices" and marketing approaches which can address the impediments imposed by the absence of a training culture.

A recent study by Employment and Immigration Canada found that only one-quarter of private firms provide formal training for their employees. The incidence of employer-sponsored training in the Canadian economy varies by industrial sector, as is demonstrated in Annex IV.

It is notable that not one of these sectors even approaches the fifty percent mark. Overall, Canadian industry still views investment in human resources as a public responsibility, and is hesitant to purchase education and training services, however needed these might be.

The low incidence of training in Canadian companies becomes even more apparent when comparisons are made with other industrialized nations. The Advisory Council on Adjustment reports that, while the average Canadian worker participated in 6.7 hours of formal training during 1988, Australian workers received an average of 17 hours of training, Swedish workers 170 and the average Japanese worker 200 hours of training. As is pointed out by the Ontario Premier's Council, U.S. industry spends more than twice as much per worker on training as Canadian firms do. West German employers spend four times as much - about 1.2 percent of GNP, versus .3 percent in Canada.

It has often been said that Canada lacks a training culture and fails to recognize that investment in human resource development is just as important as investment in plant and equipment. As is noted in a report commissioned by Kodak Canada Inc., "...Canadian businesses have to learn to address their education and training agendas with the same level of competence and attention they now devote to the financial and capital budgeting processes."

This poses a challenge for the education and training sector, which must develop "best practices" and marketing approaches to compensate for the absence of a training culture, and to find ways of overcoming some of the barriers to training.

VI. SECTOR OPPORTUNITIES

The nature of work is changing radically within Canada, and will require a radical change in the way in which industry views the development of its human resources. These changes mean increased opportunities for the suppliers of commercial education and training services, who are ideally suited to help address the human resource issues facing Canadian industry.

The sector as a response to the domestic "skills crisis"

The demand for highly skilled workers is expected to increase significantly. Forecasts of occupational structure indicate that almost half of new jobs created between 1990 and 2000 will require more than five years of combined education and training beyond the completion of high school. This is a fact of considerable import, particularly when one considers that at the present time more than half the new jobs in Canada require only a Grade 12 education or less.

The more industries modernize, the greater will be their demand for highly trained people. For instance, in Ontario's auto parts industry, about 62 percent of the work-force was unskilled five years ago. Today, after heavy investments in automation, only 33 percent of these jobs can be classified as unskilled. This pattern extends throughout the entire Canadian economy, as is indicated in Annex V.

Moreover, the skills that are being learned now will become obsolete at a more rapid pace than ever before, meaning that there will be a need for lifelong training and retraining.

This situation is compounded by the problem of a **shrinking skills supply**. Canada must deal with the reality of demographic changes such as declining birthrates, the aging of the labour force, a significant decline in the number of new labour force entrants, and a decline in the intake of skilled workers through immigration.

The supply problem becomes even more serious when one considers that many workers will require training in the most basic of skills before they can be expected to take more advanced training. An extensive survey by the Southam news group in 1987 revealed that at least 24 percent of Canadians aged 18 or over were functionally illiterate in English or French, and/or unable to do simple arithmetic.

This "literacy deficit" is estimated to cost Canadian businesses \$4 billion a year in errors, retraining, work-related accidents, and foregone productivity. A recent Conference Board of Canada survey found that nearly 75 percent of Canadian companies report problems with employee illiteracy, yet only 24 percent of responding companies have systematic policies or training programs to deal with illiteracy.

However, some Canadian employers have turned to the commercial education and training sector for assistance in tackling their literacy problems. For example, BP Canada Inc. of Calgary, in conjunction with the Alberta Vocational Centre, has developed an advanced oral communication course, and reports significant improvement among its workers.

The demand and supply conditions within Canada have led to a **skills mismatch**. In the mid- and late- 1980's unemployment remained relatively high despite an increase in job vacancies. The Canadian Labour Market and Productivity Centre (CLMPC) estimates that the number of job vacancies as a percentage of the labour force averaged 4.7 percent in 1988, up from 3.8 percent in 1987, which suggests that there is a growing mismatch between the jobs available and the people looking for work.

Surveys confirm that a lack of skilled labour is a problem for industry. As is shown in Annex VI, Statistics Canada's Business Conditions Survey found that the production activities of 14 percent of firms in manufacturing were impeded by a lack of skilled labour. Similarly, the Canadian Federation of Independent Business reported that, in 1988, shortages of qualified labour were a major problem for 43 percent of small businesses.

Clearly, this situation presents many opportunities for the commercial education and training services sector, which can provide the job-related training needed to increase employee productivity, give disadvantaged workers a second chance, and help workers adjust to technological and other change.

Moving towards a more favourable environment

The commercial education and training sector should be able to capitalize on opportunities which will be created as a result of recent government and industry efforts to improve business performance with respect to training. One interesting development has been the formation, within the Canadian electrical and electronics industry, of a "Skills Council" made up of equal representation from business and labour. The main activity of the Council will be the creation of a Training Fund for the benefit of employees and companies in the industry. The cost of the fund will be shared by the workers (25%), employers (25%), and government (50%).

As is demonstrated in Annex VII the federal government is a major purchaser of training courses. The government's new Labour Force Development Strategy will place even greater emphasis on training, involving \$800 million in new funds each year for employer-provided training and other initiatives. This strategy is to be carried out on a sector-by-sector basis with industry.

A survey carried out by the Conference Board of Canada in the summer of 1990 found that larger Canadian companies are spending an average of \$475 a year per employee on formal training. Some companies spend more. For example, Xerox Canada Ltd. and IBM report training expenditures of \$1600

and \$3000 per employee per year respectively. Nearly 60% of the 446 companies surveyed expect to spend more on training this year than last. Moreover, it was found that Canadian companies rely heavily on outside trainers.

Overall, there is evidence of a tendency towards greater expenditures on training, with these dollars being spent on outside trainers. Clearly this presents considerable opportunities which could be developed by the commercial education and training sector.

A sector campaign in commercial education and training will support and enhance government and industry initiatives by improving the capacity of the sector to respond to the training needs identified by employers. At the same time, the sector campaign will help suppliers of education and training services take advantage of new market opportunities created as a result of such initiatives.

Domestic Market Opportunities

The domestic market for commercial education and training services is relatively new. While there has always been a domestic need for these services, they have been traditionally supplied either through the formal public education system or by in-house training programs provided by employers. However, employers are becoming disenchanted with the public education system and are sceptical of its ability to provide "work ready" graduates. Moreover, many firms do not have the capacity to provide good in-house training at a time when the need for specialized training is growing.

Over the past decade there has been a remarkable growth in the domestic market for commercial education and training, as suppliers enter the market to fill the niche created by the gap that exists between the formal education process and the workplace. Suppliers, both institutional and corporate, have developed services, offered on a commercial basis, to meet specific education and training needs.

At the present time, market demand is large, and is expected to grow. The Human Resource Training and Development survey administered by Statistics Canada in 1987 found that employers spent \$1.4 billion on education and training in 1986. Since this includes only employer sponsored training, it is estimated that overall expenditures on training by industry, institutions and government could be much higher. IBM Canada alone spent \$36 million on employee education in 1986. The Canadian banking industry spends \$130 million a year on training.

Programs to upgrade employees' skills must, by necessity, become a greater priority for Canadian industries. Without increased emphasis on training, the labour shortages that emerged in the 1980's will become more severe in the 1990's. In view of this situation there will be an on-going demand for the type of services provided by the commercial education and training sector. The sector campaign will assist suppliers of commercial education and training services to capitalize on these opportunities.

At present, there is little foreign competition in domestic markets, as these have been served relatively well by domestic suppliers. However, there are signs that foreign competition is increasing, particularly from the US, in part through takeovers, but also because rapid changes in technology facilitate the cross-border delivery of such services.

International Market Opportunities

While there are no data on the size of the worldwide market for commercial education and training services, budgets of some international financial institutions give an idea of the potential market for Canadian suppliers. In 1987, the World Bank contributed more than US \$450 million to educational projects in developing countries. In the same year, the Asian Development Bank contributed more than US \$100 million to similar projects. In addition, there are educational components included in most IFI projects in developing countries.

For Canada, many overseas opportunities have occurred in developing countries, often with the support of the Canadian International Development Agency (CIDA) which has identified and developed marketing opportunities, as well as provided direct financial assistance to Canadian exporters. To date, Canada has participated in a large number of international projects, and has become recognized as a leader in the delivery of commercial education and training services in forestry, petroleum, mining and fishing.

In the newly industrialized countries (eg. Saudi Arabia, Singapore, Thailand) there has been increasing emphasis on human resource development, as these countries seek to develop the educational infrastructure necessary to ensure their continued economic and industrial progress.

Opportunities for export have already been identified as a result of an ISTC mission to Southeast Asia in 1989, and as a result of this Department's ongoing participation in the Canada-Saudi Arabia Joint Economic Commission. The ASEAN and Middle East countries, and increasingly the Eastern European nations, offer excellent opportunities for Canadian suppliers. There also exists the potential for down-stream benefits to other sectors of Canadian industry, as the provision of Canadian education and training services can lead to the development of broader and longer term trading relationships.

The largest export market for education and training institutions continues to be the enrolment of international students. The presence of international students in Canada represents a substantial source of foreign revenue. It is estimated by the Vancouver Board of Trade that each international student contributes about \$10,000 to the Canadian economy each year. Given the 1988-89 enrolment statistics, this would mean that international students contributed nearly \$600 million to the Canadian economy. Moreover, these students - many of whom come to attain positions of power in their own countries - are instrumental in forging stronger commercial ties with Canada.

While there are many export opportunities, it is evident that Canada is not capturing its fair share of the market. For example, Canada contributes about 4.5 percent of the overall budgets of IFI's, but receives only about two percent of contracts awarded by these organizations.

The export potential of commercial education and training has long been recognized by our major competitors: Britain, the United States, France and Australia. These countries have adopted aggressive, co-ordinated, on-site approaches which have had results. In Australia, the growth in exports of education has been spectacular. The Bureau of Industry Economics has estimated that foreign exchange earnings from education in 1987 were about \$120 million. An independent study undertaken for the Industries Assistance Commission calculates that earnings would have at least doubled in 1988 to between \$240 million and \$270 million. Estimates of future export earnings of around \$500 million are considered realistic.

Clearly, there exists considerable export potential for Canada's commercial education and training services. The sector campaign, by strengthening the industry domestically, will have a positive effect on the capacity of the industry to capture a larger share of world markets.

VII. THE SECTOR AS A VEHICLE FOR TECHNOLOGY ADVANCEMENT

There is a growing relationship between the use of technology and the development of the commercial education and training industry.

This is occurring in two distinct ways:

- 1. in the delivery of education and training services
- 2. in the application of technological transfer to other sectors of the economy

1. Technology-Based Service Delivery

As we have pointed out, the commercial education and training sector is becoming adept at the use of a number of technologies such as: computer enhanced learning, interactive video, audio tapes, radio and television. The sector stands to gain from the enormous potential for the application of new technologies to meet the training needs of the work-place. A 1985 study by the Conference Board of Canada, *Trends in Corporate Education and Training*, reports that new technologies are increasing instructional effectiveness. They make it easier to provide on-demand, individualized training, which is faster, more highly motivating, and results in better retention of information.

Whether or not such training is less costly than traditional methods of delivery depends on a number of factors, such as the size of the firm, the type of training required, and the level of technological sophistication already attained by the firm. Generally speaking, delivery of technology-based training is less expensive than traditional delivery, but requires considerable front-end investment in development. However, the training mechanisms being created by technological advances can also promote co-operative efforts such as joint ventures and cost sharing - making the new technologies more attractive for smaller and medium-sized businesses.

Nevertheless, there is still a reluctance on the part of many businesses to make use of technology-based training, largely because the benefits of these modes of instruction have not been adequately show-cased. There is enormous potential for the commercial education and training sector to develop a twenty-first century high-technology industry, and to market it more effectively to client industries.

2. The Application of New Technologies

Not only is the commercial education and training sector a user of high-technology, but it also has a role to play in assisting other industries to become effective users of new technologies.

One of the major problems facing Canadian industry is the displacement of workers due to technological change. This causes major disruptions and

necessitates massive re-training for workers and managers to enable them to adjust to new technologies in the work-place.

The education and training services sector is an excellent vehicle for linking technology advancement to industry retraining programs. What has come to be called the "new human resource management" embraces a range of policies and practices designed to enhance the skills and adaptability, the motivation and the performance of people in the workplace. By equipping people to cope with adjustment to change, this approach minimizes both personal and organizational costs and, in addition, ensures the fullest exploitation of the potential of new technologies. As is noted in a recent study by the Economic Council of Canada (Two Steps Forward: Human Resource Management in a High-Tech World), "many contend that there is a powerful synergy between a well-prepared workforce and the best possible technology."

To illustrate this thesis, the Economic Council study presents the case of the Ford Motor Company's Essex Engine Plant, which opened in Windsor in the early 1980's. The company was faced with the challenge of preparing experienced auto workers to work in a technologically more advanced plant, to increase productivity, and to meet the Japanese competition. The story of "People Make Quality 'Job No. 1" shows how the company trained its experienced auto workers, and developed a more cooperative union-management relationship. This case illustrates the importance of training to increased productivity, which may be the very key to survival in the uncertain environment of the automotive and other industries.

Another success story emerges from the partnership between the Open Learning Institute (OLI) of British Columbia and Western Pulp's Squamish operation. In the late 1970's Western Pulp began planning for a new \$200 million plant to replace an antiquated bleach plant. Since the new plant would feature modern, automated, electronic technology, the existing mill operators would require massive retraining. A partnership was established whereby Western Pulp would provide the technical content of the learning modules, and OLI would translate this information into training language, design and write the course modules based on open learning techniques, and deliver them. This project was an enormous success, with benefits to both

sides. For Western Pulp, it meant that industry personnel could act as resource persons rather than having to dedicate several hours to direct instruction. Moreover, workers were able to receive training without having to leave the work-force, thereby reducing costs to both workers and the company. OLI was able to demonstrate that educational institutions can deliver on time and within budget. In other words they can compete on a commercial basis.

These examples demonstrate the potential for the commercial education and training sector, coupled with technological innovation, to enhance the productivity of the manufacturing sector. The education and training sector has an important role to play in assisting industries to train their employees to make more effective use of new technologies by shifting to a system of production that maximizes interdependence between human factors and technology.

VIII. RELATIONSHIP OF THE SECTOR CAMPAIGN TO OTHER INITIATIVES

1. Employment and Immigration Canada

The sector campaign will take account of the programs of Employment and Immigration Canada, such as the Canadian Jobs Strategy (CJS) and the Labour Force Development Strategy (LFDS), which have initiated a reorientation of federal efforts in training.

In accordance with the "National Training Act 1982", the CJS provides funding to training institutions, firms, workers, associations and community groups for apprenticeship, institutional and industrial training, along with income support. In 1987-88, CJS training funds totalled \$924 million, of which \$438 million went towards institutional training costs, involving 133,300 participants. Private training institutions receive a significant amount of funding under this strategy.

The CJS funding, combined with the \$800 million from the LFDS, represents a significant contribution towards workforce training. While CEIC will be concerned with the demand side, the sector campaign will help ensure the involvement of suppliers who can meet identified demands.

The Labour Force Development Strategy provided for the establishment of seven Task Forces under the auspices of the Canadian Labour Market and Productivity Centre (CLMPC). The consolidated report of the CLMPC Task Forces called for the federal government to set up a national training board, comprised largely of business and labour representatives, to provide the federal government with guidance and direction on national training policies and programs. As a result, the federal government announced in January 1991 the formation of the Labour Force Development Board, along the lines of the CLMPC proposal.

CEIC officials are currently working on turning the recommendations of the CLMPC Committee into workable programs. Consultations will be undertaken with CEIC to ensure that the activities of the sector campaign will be compatible with any new initiatives developed by CEIC.

2. Department of Communications

The Department of Communications undertakes research and develops applications relevant to distance learning and computer based training. DOC is working with CEIC, suppliers and employer groups to help organize pilot projects in order to demonstrate to industry the benefits of technology-based training. DOC is also facilitating partnerships between courseware firms and other industries to take advantage of emerging opportunities for new kinds of training products and services.

DOC has indicated its support of the sector campaign, which is expected to complement current and future DOC efforts.

3. Secretary of State

The Department of the Secretary of State has established a National Literacy Secretariat which funds literacy training as well as studies on literacy. These activities are of interest to the sector campaign, as literacy training is important in itself, and as a pre-requisite to effective work-force training.

4. Industry, Science and Technology Canada

Within ISTC a Departmental Working Group on Education and Training and a Working Group on People have been established. In June 1989 this Committee produced a discussion paper and an action plan on "The Human Dimension of Competitiveness", which addresses the central role of human resources in international competitiveness, recognizes human resource development as a government priority, and reflects our clients' concerns on the need for ISTC involvement in these crucial issues.

To date, ISTC programs in education/training matters have largely focused on the university sector through initiatives such as the Networks of Centres of Excellence Program and the Canada Scholarships Program. Such programs will ensure more productive university-industry linkages, and will contribute to the training of more highly qualified scientific personnel. There are, however, no equivalent programs to foster the competitiveness of the education and training sector as a legitimate industry in itself.

The Information Technologies Industry Branch of ISTC is conducting Phase II of a sector campaign which is aimed at the creation of a favourable business environment for the software products industry. This initiative will help complement a sector campaign in commercial education and training, in view of the increasing use of educational software in the provision of technology-based training.

As the commercial education and training sector must at all times be responsive to local needs and conditions, it will be important to have a regional perspective on the issues to be examined. Therefore, the regional offices will be consulted on an on-going basis.

5. ISTC Collaboration with External Affairs and International Trade

In conjunction with EAITC, this Department conducted an extensive series of across-Canada consultations to gain a better understanding of the sector's international operations. Discussions with provincial governments, companies, colleges, universities and NGO's revealed the need to further strengthen the industry domestically in order to enhance its international competitiveness.

Following up on this process ISTC took the lead role in producing a discussion paper to address these findings. Education and Training Services Industry: International Marketing Strategy suggests approaches to international marketing, and seeks to stimulate discussion and consensus among the industry and government as to which approaches and activities should be implemented, and how. Industry feedback on this paper has been very positive. It has confirmed the need for further exploration, not only of international, but also of domestic issues affecting the commercial education and training sector.

The sector campaign offers the ideal vehicle for a systematic examination of domestic issues. This will ensure that the sector is better positioned to compete internationally.

6. The Role of the Provinces

Provincial governments provide funding for the delivery of adult education and training through their financing of public colleges, technical institutes, vocational schools and specialized institutions. There are no consolidated figures available on expenditures or the extent of provincially funded training programs, but there is a considerable amount of activity at the provincial level.

Provincial governments fund and regulate apprenticeship training and tradesperson upgrading, and administer labour market programs which are often targetted at specific industries, labour force groups, and other training priorities. For example, the Ontario government has set up the Ministry of Skills Development, which spends more than \$280 million annually, mostly on industrial training. The British Columbia government has established a

"Discovery Training Network" - a network of local agents throughout B.C. which will be able to access, through a central data base of resources, the appropriate training programs to meet local training needs, using modern technology such as computers and interactive video programmes.

Many of the labour market and training programs delivered by colleges and other provincial agencies are cost-shared with, or funded by, the federal government. For example, the federal government provided \$84.5 million for training and \$80 million for income support for 47,500 apprentices in 1987-88; provinces contributed \$30.9 million in 1985-86 toward apprenticeship course costs and upgrading.

The sector campaign will build upon the broad range of initiatives at the provincial level, and will take account of regional variations in the application of services offered by the commercial education and training sector. At the same time, it is acknowledged that provincial governments, as well as universities and community colleges, are generally sensitive to federal initiatives in areas relating to education and training. However, extensive consultations already undertaken with respect to the international marketing strategy indicate a broad range of support for federal activities aimed at strengthening Canada's commercial education and training sector.

During the proposed campaign, the consultative process would be continued, and strengthened, with input to be sought from ISTC regional offices as to the most appropriate approaches to be adopted within individual provinces and regions. Overall, the delineation of responsibility is not expected to be an issue in the sector campaign, since most commercial education and training services are provided by private firms and institutions outside the public education system.

7. The Role of the Non-governmental Sector

The critical importance of labour force training has been emphasized in reports published by a diversity of non-governmental organizations, including: the Canadian Labour Market and Productivity Centre (CLMPC), the de Grandpre Advisory Council on Adjustment, the Economic Council of Canada, the Conference Board of Canada, the Fraser Institute, Kodak Canada Inc., the

Canadian Chamber of Commerce and the Canadian Manufacturers' Association.

Other reports focus more specifically on a single sector. For example, a report entitled "Vision 2000" provides the Ontario government with a sweeping blueprint to reform the province's 22 community colleges. Among other things, the report addresses the need to better equip graduates to meet the needs of the marketplace.

A sector campaign in commercial education and training will have a broad appeal, in that it will address concerns expressed by a wide range of players, including first ministers, governments, business and labour.

IX. THE RATIONALE FOR A SECTOR CAMPAIGN

An important part of the larger picture

The sector campaign will contribute to the solution of some of the well-documented problems associated with the development of Canada's human resources. It is evident that there has been considerable discussion of the issues. What is now needed are prescriptive measures to address some of the identified problems. The sector campaign will become a pro-active vehicle for providing practical solutions to questions deemed to be of utmost national importance.

A Responsive Approach to ISTC Clientele

A growing number of ISTC clients recognize that the development of human resources, through new directions in education and training, is fundamental to improving Canada's international competitiveness. In the course of consultations the department undertook on its mandate, and at events such as the National Forum on Post-Secondary Education and the National and Regional Conferences on Technology and Innovation, ISTC's industry-based clients repeatedly expressed concerns about the need to improve the knowledge, skills and flexibility of the Canadian labour force.

The sector campaign will complement the work which ISTC's Science Sector has been doing to address the concerns of the Department's academic and university-based clients regarding the shortage of funding for post-secondary education and research. Some of these concerns have been put forward in a report to the Prime Minister from the National Advisory Board on Science and Technology.

The sector campaign will also serve the interests of colleges and universities wishing to further develop their commercial education and training services. In this respect, the campaign could assist these institutions in offering services on a profit basis at a time when such institutions are being encouraged to reduce their reliance on public funding.

A Co-ordinated Approach to the Commercial Education and Training Sector

The sector campaign will be the first-ever effort to treat the commercial education and training industry as a distinct sector. Through this campaign ISTC will act as a catalyst in bringing together the various industry interests, so they can develop a more cohesive and cooperative approach to the issues they collectively face in the marketplace.

X. THE ACTIVITIES OF THE SECTOR CAMPAIGN

Activity No. 1: Identification of Suppliers and Industry Capabilities

In order to determine the size and capability of the Canadian education and training industry it will be necessary to develop a comprehensive information and data base about the sector. This will be carried out in two separate steps.

Identification of Suppliers

Firstly, there is a need to identify the suppliers of commercial education and training services, and to describe the type of services offered by each supplier. A considerable amount of information already exists, in the form of annual reports, company brochures and lists established by the Business and Professional Services Industries Division. In addition, some provinces, such as Ontario and British Columbia, have established data bases of skills development courses offered within the province. It is expected that this existing information base will be supplemented through input from the ISTC regional offices.

However, this information needs to be assembled, interpreted, and packaged so as to produce a comprehensive and reliable listing of the services offered by the education and training industry. A consultant will be engaged to undertake these tasks, and to identify information gaps which could be filled in the course of interviews to be conducted under Activity 2.

The consultant will then use this information to develop a directory of industry capabilities which will include variables such as: company name, address, telephone number, contact person, and a summary of education and training programs offered.

Once this directory is completed it will be translated, printed and distributed to potential client industries, many of whom will have been identified by Activity No. 2.

This directory will provide the first comprehensive listing of education and training programs offered on a commercial basis. It will help suppliers make their services better known, and will assist client industries in accessing the expertise required to upgrade the skills of their workers and managers. In this manner the directory will provide an important link between suppliers and clients and will lay the foundation for possible Phase III activities.

Phase III of the sector campaign would provide for the updating and improvement of the directory.

Development of an Industry Profile

Once the directory has been developed, discussions will be undertaken with Statistics Canada to ensure that provision is made for an on-going measurement of the capabilities of the commercial education and

training industry. As a result of the Service Industries Studies Program (SISP), Statistics Canada has been asked to upgrade its statistical data base regarding those service industries whose activities are central to Canada's international competitiveness, including the commercial education and training industry.

In consultation with Statistics Canada, the information contained in the directory will be used as the basis for the development of an industry profile to include variables such as: sales, revenues, employment, exports, and delivery mechanisms. This will provide the information base needed to assess the current performance of the industry, and to track its future performance. This information will also allow for a clearer identification of the capabilities of the industry, and the areas where it might be strengthened.

Activity No. 1 will assist in improving the state of our statistical measurement of the commercial education and training sector. In doing so, it will provide the first step towards the establishment of a permanent statistical base. Moreover, this activity will generate the knowledge needed to enhance our ability to react to developments affecting the competitiveness of the sector.

Activity No. 2: Industry Consultations

Consultations will be carried out with a cross-section of suppliers and clients in order to validate our perception of the issues, to fill in the information gaps identified during Activity 1, to identify the strengths/weaknesses of the sector, and to determine the action which must be taken in order to address client needs.

Commercial education and training sector

The consultations with the commercial education and training sector will be carried out in the form of interviews to be conducted with key industry players, as well as with smaller industries identified during Activity 1. Individual consultations could be augmented with a series of focus groups made up of participants from the various components of the

industry, eg. suppliers of plastics technologies training, suppliers of management training. This would have the added value of providing some indication of the ability of the industry sub-sectors to work together on the identification and solution of common problems.

Client Industries

In order to better assess the demand for commercial education and training services, consultations will be carried out with selected client industries.

These consultations will be undertaken in order to supplement the reports and surveys previously conducted to identify the training needs of Canadian business and industry, such as the CEIC industry studies, and the CLMPC's survey report on "Management Training for Small Business" in Canada (April 1990). The consultative process will provide an additional perspective on training needs, and will identify issues which have not been fully addressed in existing documentation.

The results of the consultations will be used to assist the suppliers of commercial education and training services to more accurately identify their potential clients and to target their marketing efforts accordingly.

All industries to be interviewed during Activity No. 2 will be selected by the staff of the Business and Professional Services Industries Division, in consultation with regional offices. The interviews will be conducted by consultants, with provision for ISTC staff to attend selected meetings to monitor work in progress, and to get industry feedback.

Activity No. 2 will result in an action plan to address the issues facing the sector. From this action plan it can be expected that elements for phase III of a sector campaign would be identified.

Activity No. 3: Establishment of a Committee of Industry Representatives

There is a need for a working group to ensure that the broad objectives of the sector are translated into strategies that will produce the desired results. Therefore, Activity No. 3 provides for the establishment of a Committee composed of representatives of the private suppliers of commercial education and training and of universities and community colleges.

It is expected that this Committee will develop a series of industry-wide activities to encourage a more co-ordinated marketing approach. For example, this group could identify ways of increasing co-operation among the diverse players of the sector, so as to maximize market opportunities. The committee could identify practical solutions such as strategic partnering and joint venture formation. This committee will provide a focal point for discussion, and create a network which up to now has been lacking in the sector, due to the absence of any sort of industry association.

The notion of such a Committee for international matters was put forward in our discussion paper Education and Training Services Industry: International Marketing Strategy, and received support from a number of key players in the sector. As a result, ISTC agreed to fund the establishment of this Committee, which held its first meeting on March 20, 1991.

It is logical to draw upon the membership of the international committee in order to represent and promote the interests of the sector in **domestic** markets. ISTC will continue to fund the initial meetings, and will encourage the industry to "buy into" the process and to fund subsequent meetings. Members of the Committee have been selected by the Business and Professional Services Industries Division, in consultation with industry representatives. It is expected that agenda items will be identified in the course of consultations undertaken during Activity 2.

The administrative tasks associated with the organization of meetings will be carried out by consultants. The activities recommended by this Committee

will be reviewed by the ISTC in terms of their cost and feasibility. Those activities deemed realistic and "do-able" would be carried out during Phase III of the sector campaign.

Activity No. 4: The Identification of "Best Practices" to Overcome Barriers to Industry Sponsored Training

The absence of a "training culture" in Canada is one of the barriers which the commercial education and training sector must overcome if it is to be successful in selling its services to Canadian industry. Existing research has already identified many of the reasons why industries and businesses are reluctant to invest in training. The problems are well documented, but there has been little effort to find practical solutions.

Under Activity 4, an examination will be made of "best practices" and approaches which could be adopted by the commercial education and training sector in order overcome identified barriers to the purchase of training services. This will involve a review of "success stories" within the industry, as well as interviews with selected suppliers, clients and industry associations. The "success stories" and interviewees will be selected by the staff of the Business and Professional Services Industries Division, whereas the actual interviews and analysis will be carried out by consultants.

This study will recommend approaches which could be adopted by Canadian suppliers of education and training in order to improve their marketing strategies and encourage industry to purchase their services. In this way Activity No. 4 will assist the commercial education and training sector to better promote itself to potential clients. The approaches thus identified would be implemented during Phase III.

Activity No. 5: Development of Technology-Based Training

This activity will examine the potential for a more innovative and widespread use of advanced technologies to the delivery of commercial education and training services. This will be done with a view to determining which technologies are the most effective at addressing the training needs of industry, especially small businesses. An assessment will then be made of the

costs and benefits of supplementing traditional methods of program delivery with advanced technologies.

Activity No. 5 will provide for a special focus on those firms which use technology-based training in order to determine which methods have been most effective. In addition, attention will be devoted to firms which have the potential to apply advanced technologies in the delivery of their training programs. These firms will be identified in the course of Activities 1 and 2.

Consultants will be engaged to conduct interviews and produce an analysis and action plan. In view of the specialized nature of this activity it will be necessary to employ consultants with experience in the application of advanced technologies to education and training.

Activity No. 5 will address some of the problems identified by client industries in the course of consultations conducted during Activity No. 2. For example, Activity No. 5 will identify ways in which advanced technologies could be made more attractive to client industries, especially small businesses, for whom technology-based training may not be perceived as accessible or cost-effective. Therefore, an examination will be made of ways of reducing delivery costs through initiatives such as joint ventures and cost sharing among clients. The interests of clients in such initiatives will be gauged through interviews with selected firms.

This activity will assist the commercial education and training industry to identify ways of adapting some of its more traditional delivery methods to technology-based delivery mechanisms, and to market these more effectively to client industries. This will lay the groundwork for Phase III which will result in the development of high-technology products and services, as well as the plans to ensure the application of effective marketing strategies.

Activity No. 6: International Capabilities Assessment

This activity will involve research to determine the "best practices" applied by the commercial education and training sector in other countries. It will identify those countries where a distinct commercial education and training industry has already been developed, and will examine factors (both strengths and weaknesses) which have characterized the development of the industry. Particular attention will be given to those factors which have enhanced the competitiveness of the industry in domestic markets.

Information will be gathered through a literature search, meetings with foreign embassies in Ottawa, and discussions with individuals (such as Canadian academics) who have participated in study tours or research projects involving commercial education and training initiatives in other countries.

If the research activities demonstrate that there is potential for applying foreign experiences to the Canadian context, then it is proposed that on-site investigations be carried out in selected countries.

Activity No. 6 would be undertaken using a combination of outside consultants and in-house expertise.

The appropriate "best practices" identified during Phase II would be implemented with selected Canadian industries during Phase III.

Activity No. 7: The Communications Plan

This two part communications plan will serve to publicize ISTC's role as a catalyst in bringing together industry interests, and in working with all stakeholders to build bridges to reach mutually acceptable objectives.

The first part of the plan, to be delivered at the beginning of the campaign, will be designed to build awareness within the sector of the existence of the campaign, its objectives, and the activities that will be undertaken over the coming months. It will be designed to encourage an industry-wide commitment to the campaign and its objectives. It will encourage direct participation in the campaign activities and will seek independent feed-back from suppliers to the consultative committee and to ISTC.

The second part of the communications plan involves dissemination of the findings of the other activities of this campaign, and will take place towards the end of the sector campaign.

The Consultative Process

A considerable amount of consultation has already been undertaken, and indicates wide support for a more concerted approach to the commercial education and training sector.

The sector campaign includes provision for on-going consultation with the industry, largely through the establishment of the committee of industry representatives.

On the domestic side, the key federal government departments (ISTC, DOC, CEIC) will meet on a regular basis to exchange information.

ISTC will continue to participate in the work of the Interdepartmental Committee on International Education and Training, chaired by External Affairs. This will ensure that the international marketing strategy is moved forward in a manner consistent with the objectives of the sector campaign.

Within ISTC there will be ongoing consultation with Policy Co-ordination, the Information Technologies Industry Branch (ITI), the Science Sector, and the Regional Offices. Industry-specific sectors (eg. automotive, textiles) will be asked for their advice on training issues and approaches affecting their sectors. The Regional Offices will be asked to assist in the identification of suppliers and clients, and, for all activities, will be asked for advice as to the most effective approaches to be adopted within their respective regions.

Management of the Activities

The management of Phase II will be led by the ISTC Business and Professional Services Division. It is foreseen that a Departmental network will be established to manage the communications activities, thus providing a focal point for exchange of information across regions and sectors.

The Phase II activities will be carried out using a combination of existing resources from ISTC, and consulting resources from the private sector. Given the special fixed term administrative activities required by the campaign, a project manager will be engaged on a full-time basis to assist in

the preparatory work and in the management of the activities. The seven activities will be undertaken between April 1, 1991 and September 30, 1992, as indicated in Annex VIII.

XI. VISION

Education and training will continue to be a major factor affecting the competitiveness of other sectors of the Canadian economy. Industries in all sectors are faced with the reality that most new labour force entrants, as well as older workers, will require significant training and skills upgrading over the course of their working lives. However, most industries, particularly small businesses, do not expect to acquire the expertise or the resources necessary to provide "inhouse" on-the-job training. Moreover, the public education system is not equipped to provide "work-ready" graduates. Indeed, there are many who would argue that this is not an appropriate role for our schools and post-secondary institutions.

Unless these training needs are met by the commercial education and training sector, then Canadian industries will be plagued with the same problems they face today; a shortage of qualified workers, reduced productivity, and declining competitiveness.

The sector campaign in commercial education and training will enable ISTC to work with the industry to assess the sector's existing capabilities, and to identify ways of overcoming weaknesses. As a result the sector will be better positioned to work with other industries to determine their training needs and to ensure that these are met.

It is expected that Phase II activities will produce a solid profile of the range of services offered by the commercial education and training industry, and will result in a better understanding of the constraints and opportunities faced by the sector. Phase II will also identify areas which must be strengthened in order to ensure that the sector is positioned to provide the high quality education and training services required to meet the human resource needs of Canadian industry.

Phase II will assist the commercial education and training sector in identifying target markets, with emphasis on how the federal government can assist the sector in overcoming its weaknesses and in developing new opportunities, particularly in the application of technology-based training methods.

Should a Phase III be warranted, it would focus on the implementation of activities identified in the course of Phase II. Depending on the outcome of Phase II, these activities could include:

- a) national or regional trade shows to enable suppliers to showcase their capabilities
- b) publication of Canadian capabilities guides
- c) establishment of a data base to track sector performance
- d) establishment of strategic partnerships among suppliers
- e) establishment of joint ventures between suppliers and clients
- f) development of case studies on "success stories" for presentation in industry fora
- g) implementation of "best practices" in selected industries of the sector.
- h) development of new technology-based training products and delivery mechanisms

The sector campaign will provide a number of long-term benefits to the commercial education and training industry. It will result in an industry which is better organized and which can work together in a more co-ordinated fashion. As a consequence, the industry will be able to adopt more effective and cost-efficient approaches such as joint ventures or strategic partnerships. The industry will be better able to meet the needs of client industries, will have the capability to make

better use of new technologies, and will be better positioned to compete in international markets.

At all stages of the sector campaign, measures will be taken to ensure that activities are consistent with the joint ISTC/EAITC strategy being developed for the overseas marketing of Canadian education and training, including the integration of activities from the two initiatives where this is possible and advisable. Activities of the sector campaign will be undertaken with a view to maximizing their positive impact on the international marketing strategy, in such a way that the steps taken to strengthen the sector domestically will have a positive effect on its ability to compete in international markets. At the same time, activities planned for the international markets will be evaluated in terms of their contribution to the objectives of this sector campaign.

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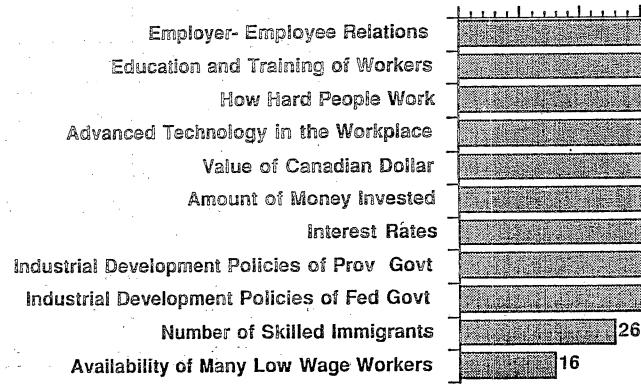
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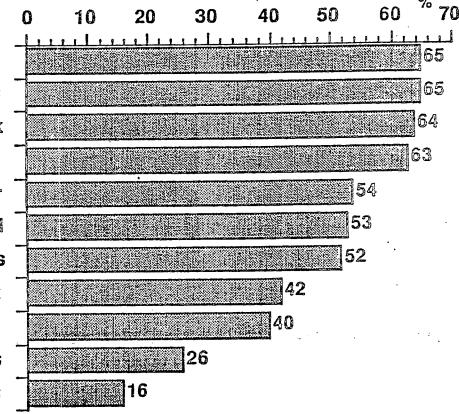
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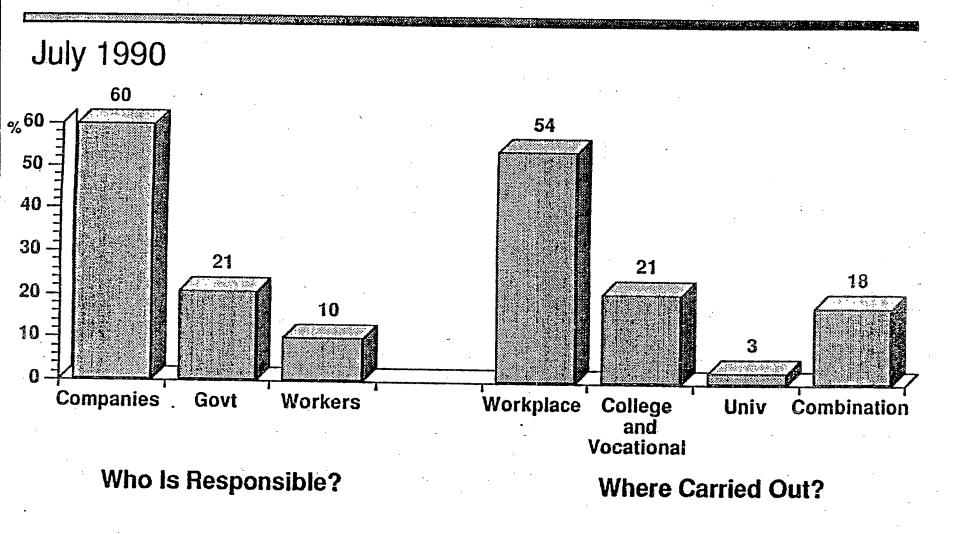
Contributions to Competition

A Great Deal July 1990



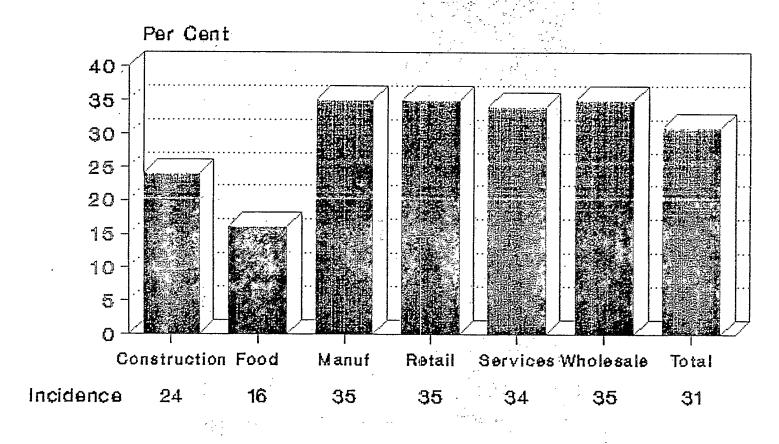


Skills Training



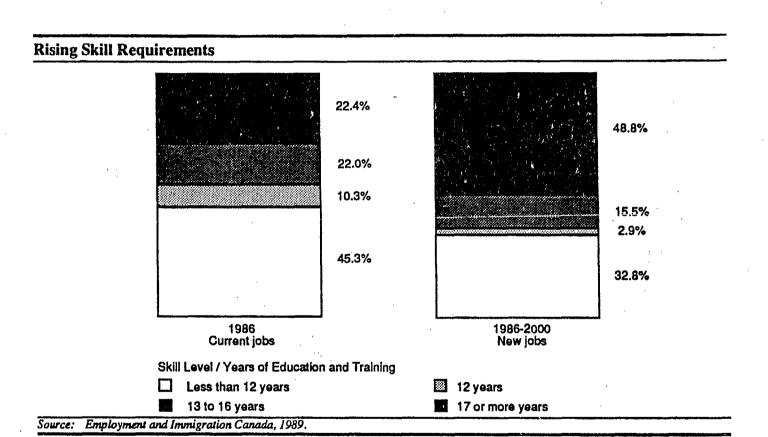
Source: Environics Survey, July 1990

Incidence of Employer-Sponsored Training by Industrial Sector



Incidence

Source: Statistics Canada 1990



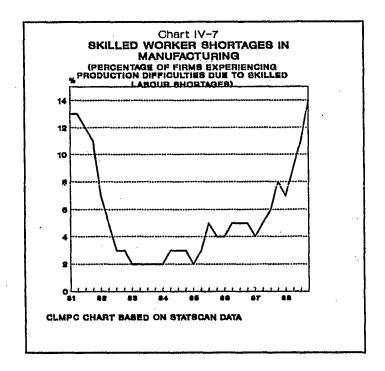


TABLE I	/-3
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Federal Government Expenditure on Training, 1976-77 to 1987-88 (in millions of dollars)

Fiscal	A Total ¹	B Income	C Industrial	D Direct	E	F	G	H Other ⁵
Year	(B + C + D + H)	Support ²	Support _:	Purchase of Courses ³ (E + F + G)	Purchase of Apprentice Courses	Purchase of Skill- Related Courses	Purchase of Other Types of Courses	* ***
1976-77 ⁶	545.0°	200.2	59.5	265.5	47.8	135.4	82.3	19.8
1977-78 ⁶	588.6	209.7	76.7	282.4	51.7	145.9	84.8	19.8
1978-79 ⁶	635.1	219.7	83.7	300.9	50.2	165.7	85.0	30.8
1979-80	669.7	221.5	102.1	320.3	49.1	188.3	82.9	25.8
1980-81	770.0	261.4	1 13.6	366.4	55.5	20476	106.3	28.6
1981-82	829.8	272.2	137.7	403.7	69.2	231.2	103.3	16.2
1982-83	925.9	315.0	110.2	469.8	88.5	260.5	120.8	30.8
1983-84	1021,3	337.2	131.2	505.8	85.4	288.6	131.8	47.1
1984-85	1089.8	335.4	156.3	501.6	79.1	283.4	139.1	96.6
1985-86	1013.7	372.3	76.4	510.8	79.4	283.2	148.2	54.1
1986-87	999.1	417.8	58.1	479.1	76.5	289.6	113.0	44.1
1987-88	924.5	398.5	60.5	437.8	84.5	253.5	99.8	27.7

Source: Department of Employment and Immigration.

Note: 1. excludes the government summer student program Challenge
2. includes use of UI section 39 funds
3. excludes provincial administration costs
4. other types of courses include language training, basic life skills, and occupational orientation courses and is derived as a residual

(D-E-F)

5. other includes training support program such as Skills Growth Fund and provincial administration costs (1976-77 to 1985-86) and is derived as a residual (A-B-C-D)

6. excludes Training Improvement Program (TIP)

Timing of Phase II Activities

May June July Aug Sept Oct Nov Dec Jan Feb Mar Apr May June July Aug					·				Tec	hnology	Based	Traini	ing					
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Identification of Best Practices									Ident	ificati	on of I	Best Pr	actices		12 T			
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