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Industry, Science and Technology Canada

Industrie, Sciences et Technologie Canada



RESULTS OF PHASE II

SERVICE INDUSTRIES



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COMMERCIAL EDUCATION AND TRAINING SERVICES SECTOR CAMPAIGN

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RESULTS OF PHASE II

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JAN - 6 1994 BZQT BIBLIOTHÈQUE INDUSTRIE, SCIENCES ET TECHNOLOGIE CANADA This report was prepared for the Business and Professional Services Industries Directorate, Industry, Science and Technology Canada by

George Tillman Consulting (July 1992)

INCLUSION VERSION

The views and conclusions expressed in this report reflect the contents of the various reports presented to Industry, Science and Technology Canada during the sector campaign. As such, this report does not necessarily reflect the official views of ISTC.

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1. Introduction

1.1. Purpose of the campaign

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. A sector campaign provides a comprehensive, strategic analysis of a targeted industry, and develops a set of initiatives designed to improve the competitiveness of the industry in both domestic and international markets.

In 1990, the Business and Professional Services Industries Directorate of ISTC observed that a growing number of ISTC clients in both the services and manufacturing sectors were recognizing the importance of further education and training for maintaining and improving their competitiveness, and were increasing their investment in training. Much of this training was contracted from outside trainers.

At the same time, the Directorate conducted a thorough review of industry needs and opportunities and examined government and industry objectives for the commercial education and training services sector by consulting with other federal departments, provincial governments, non-governmental organizations and key players within the sector. It concluded that the Canadian commercial education and training sector has considerable potential to improve its performance, and that this potential could best be realized through a coordinated and carefully focused process. It also concluded that an effective and well-developed commercial education and training services sector is a key element in assisting the development of other industries and in enhancing the competitiveness of the Canadian economy.

The Directorate also identified a number of impediments to the growth and effectiveness of the commercial education and training services sector:

- lack of access to information about training programs.
- lack of co-ordination, both within the industry, and with clients and governments.
- absence of recognized standards and "best practices".
- absence of a training culture in Canada.
- relatively low investment in and low incidence of training for workers in Canadian companies.

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Since a considerable amount of preliminary analysis had already been done, ISTC decided a Phase I was unnecessary, and to proceed directly to Phase II.

Consequently, in 1991, ISTC launched Phase II of a Commercial Education and Training Services Sector campaign to document the capabilities of suppliers of these services, and to identify both the problems they face in marketing their services and the needs of their potential clients. It was also designed to help identify "best practices" and marketing approaches to counteract the effect of the absence of a training culture.

1.2. Activities sponsored during Phase II

ISTC sponsored seven activities over eighteen months during Phase II:

- 1. Identification of Suppliers and Industry Capabilities.
- 2. Industry Consultations.
- 3. Establishment of a Committee of Industry Representatives.
- 4. Identification of "Best Practices" to Overcome Barriers to Industry Sponsored Training.
- 5. Development of Technology-Based Training.
- 6. International Capabilities Assessment.
- 7. A Communications Plan.

The Department managed all activities. A committee of representatives from a cross-section of private and public suppliers of commercial education and training services helped to identify issues, reviewed Phase II activities, and advised ISTC on further action. The communications plan comprised publicity about the campaign and the Department's role as a catalyst, distribution of contracted studies to participants and respondents, and preparation and distribution of this publication. The five other activities, which private contractors conducted, yielded a directory of suppliers of commercial education and training services and four extensive reports.

1.3. Reports of the contracted studies

The activities sponsored during Phase II have produced a considerable volume of detailed information in four reports:

• The Final Report of the Commercial Education and Training Services Industry Consultations and Survey by The Coopers and Lybrand Consulting Group reports and interprets the results of two activities it conducted:

- a mail survey of 3285 private sector organizations in Canada which provide education and training services to business. The survey produced 1220 usable responses.
- a series of 50 interviews and 17 focus groups (for a total of 209 participants) across Canada with private and public suppliers of commercial education and training services, and consultations with 18 purchasers (clients) of these services.
- Commercial Education and Training Services Sector Campaign: Best Practices Project by Hill Sloan Associates Inc. presents the results of 14 case studies of private and public suppliers who were identified as sharing a reputation for quality, innovation and excellence.
- Suppliers of Technology-based Workplace Training: Challenges and Opportunities by Anna Stahmer assesses the state of an important subsector. Its findings are based on discussions with over 40 companies, with federal and provincial government department representatives, and with German, Japanese and Singaporean officials and trainers. It also draws on reviews of recent reports on training in Canada, the U.S. and the European Commission's Development of European Learning through Technological Advance program (DELTA).
- Commercial Education and Training Services in Six OECD Countries: An Overview, prepared by George Tillman Consulting, reviews the general training environment and discusses the activities of a variety of suppliers in Australia, France, Germany, Sweden, the U.K. and the U.S. It is based on reviews of documents, reports and journal literature and on telephone interviews with firms.

The committee of industry representatives reviewed these reports and urged that this information be made available to the industry, its clients and other interested parties in easily accessible form.

1.4. Purpose of this publication

In response to the committee's suggestion, this publication summarizes the main results and conclusions of Phase II of the campaign. Sections two to five present the chief findings and recommendations of each of the four contracted studies. The concluding section gives a synthesis of the results of the campaign so far. An appendix lists the reports and directory which are available, and gives the contact address for requesting copies of these materials and for further information about the sector campaign.

1.5. Statistics Canada report on the sector

To complement the material produced by Phase II, ISTC has asked Statistics Canada to prepare a comprehensive sector profile using all the data collected by the Coopers and Lybrand survey. This profile will provide the information base needed to assess the current performance of the commercial education and training services industry and to track its future performance. ISTC and Statistics Canada expect to issue the profile late in 1992.

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2. The commercial education and training services industry - characteristics and challenges

2.1. The directory of suppliers of commercial education and training services

Data collected in the survey of suppliers have provided the base for compiling a directory. This directory will help industry and governments to find education and training services and identify potential partners for strategic alliances. It will also provide useful information for research, as it offers the only comprehensive national picture of the sector.

The directory has four sections:

- listings of 1265 private sector firms, derived from responses to the survey and from data provided by the Ontario Training Corporation's SkillsLink. Each listing comprises a statement by the firm of its main services, and complete details for contacting it.
- listings of 294 private career colleges, which offer pre-employment business, service, and technical trades courses. This information is drawn from a survey conducted by Dr. Robert Sweet. Each listing includes a statement by the college of its course offerings and complete details for contacting it.
- listings of 72 faculties or divisions of continuing education in Canadian universities, provided by the Canadian Association for University Continuing Education (CAUCE).
- 175 listings relating to services offered by community colleges, collèges d'enseignement général et professionnel (cégeps), and public technical institutes, provided by the Association of Canadian Community Colleges (ACCC).

The listings of public institutions include the contact point for inquiries about courses provided on a commercial basis to business and industry.

The rest of this section summarizes the information and opinions collected through the survey of suppliers and the focus group consultations with suppliers and clients. The report reflects the views expressed by respondents and participants. They reveal some major characteristics of the sector, and the main issues or challenges it faces.

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2.2. Supplier characteristics

Small firms dominate the sample of survey respondents, with 66% having five or fewer employees. Larger firms generally have other business activities; their education and training services generally account for up to one-fifth of their revenues. The sector is relatively new: 55% of the respondents were established after 1984. Specialized training companies tend to be the most recently established.

The sector relies heavily on part-time, contract and casual employees.

The main services provided include training program delivery, needs assessment and curriculum design, with training of trainers, planning and analysis, and design, evaluation and validation also frequently reported. Almost all respondents stated that they specialize in offering services within a particular field. Over half specialize in executive and management development, and just less than half target supervisory and computer related training. About one-third specialize in communications training, and one-quarter in sales and marketing training. A majority of firms customizes or tailors training to clients' needs, while in general, most suppliers also use traditional methods of program delivery (seminars, workshops, lectures and demonstrations, supported by print materials) in 80% to 90% of the time. They use videotapes about half the time, and other forms of technology-based training less than 25% of the time.

The survey and consultations revealed suppliers have a very diverse revenue and client base. Few rely on a single buying client group, with significant revenues being generated from both business and individual clients. Over onequarter of respondents reported an average annual growth rate over the past five years of between 1% and 10%; almost one-third reported a rate between 11% and 20%. Partnerships with other private sector suppliers, with independent self-employed trainers and with public institutions appear common.

The target markets reported in the survey also indicate a diverse client base, as no single industrial or service sector accounts for more than one-third of billings of any of the respondents. The agriculture, forestry, fishing and farming sectors, however, barely figure in the reported client base.

A bare majority of respondents have marketing plans. For most of them, word of mouth - personal contacts and referrals from previous clients - is the primary and preferred marketing technique.

2.3. Key issues and challenges

The consultations and survey addressed seven main issues:

- lack of understanding by Canadian industry of the benefits of investing in human capital.
- the nature of training needs.
- innovations in technology.
- development of business networks and strategic alliances.
- marketing, promotion and awareness.
- the lack of a training culture in Canada.
- international capabilities.

Three general categories stand out in the report which discusses the responses in the industry consultations to each of these issues: needs; problems (or challenges, or difficulties); and suggestions. The following summary organizes the reported responses according to these three categories.

2.3.1. Needs of the sector

The main needs expressed in the consultations and survey responses can be divided into three levels: the individual, the organization (employer), and the industry in general.

The individual level

Respondents perceived a number of types of skills which individuals need before they can acquire additional skills required in their jobs. The most important were **literacy and basic writing and mathematics skills** which employees need either to learn or to improve so that they can learn new business skills. Such basic skills must be reinforced to ensure employees understand instructions and can interpret results of operations they perform. And, as technology changes and its applications expand, individuals also need to improve and strengthen their **technical skills**.

The organization level

More generally, and equally important, all employees need training in communication and interpersonal skills, and in management and supervisory skills related to their responsibilities and career development. Training in the production process and supportive administrative **systems functions** also ranks high among the training needs of individuals. Firms and organizations need access to **training of trainers**, that is, training some of their own staff in basic training skills so that they can conduct in-house training.

When suppliers **customize training programs** to the specific circumstances of each client, they would like **clients to pay for the customizing**; while clients want **to be involved** (or should be) **in designing** customized programs.

Client organizations need cost-effective training which enables trained staff to apply their new skills fully after a minimum period of adjustment when they return to the job.

The industry level

Finally, at the level of the industry as a whole, clients and suppliers need **more** effective ways to find and to distribute information about suppliers and their competence. Suppliers need to understand the needs of clients and the factors in the client's workplace which affect training in order to market their services effectively. Suppliers also express the need for documented Canadian case studies demonstrating the value of training for profitability and productivity.

2.3.2. Problems and challenges of the sector

Before the survey and consultations were conducted, the lack of understanding by Canadian industry of the benefits of spending money on training had been identified as a main issue. The responses to this idea indicated that it is too simplistic. Few doubted that training can be beneficial. But it appears that noone has been able to give a convincing account of how training can contribute to productivity. As a result, investment in training is low. On the other hand, several large firms see training as an effective way to ensure cost efficiency during downturns, when highly-skilled and flexible employees can adapt to constraints better than others.

According to respondents, Canadian industry invests relatively little in training because it is not a factor in business plans. When specific problems arise, training may provide one solution, but it is treated as an added expense, rather than an investment in a firm's productive capacity.

Companies also fear they will lose any investment they make in training because trained employees will have greater job mobility, or because technology will change so fast that the training will be obsolete before the investment can

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be recouped. They resist paying for basic skills upgrading which they feel is a responsibility of the public school system.

Suppliers also reported that client firms often cannot assess their training needs. For example, they will ask for a particular type of training program which in fact will not meet their requirements.

Unfamiliarity creates resistance to technology-based training among clients and their employees who tend to prefer traditional classroom instruction styles (in this investigation, TBT included both training in the use of a particular technology and using technologies such as computers and automated interactive programs in training). Employers feel TBT is too expensive, while employees want instructors to provide personal feedback and motivation.

Suppliers report significant difficulties with marketing and promotion. Individual suppliers tend to lack the time, resources and expertise required for marketing, as most of their energy and resources go to product design and delivery. They feel increasingly apprehensive about competition from American suppliers entering the Canadian market with packaged products which have already been tested in the larger American market.

The sector as a whole lacks sophisticated packaging expertise and thorough market intelligence. Few suppliers engage in any generic promotion of training. The consultations confirmed the resulting low level of product awareness in the market.

These various problems and weaknesses can be understood as evidence of the lack of a training culture in Canada. Other factors cited in the survey and in consultations which indicate this lack include complaints about unfair competition from public institutions, the cost of bidding which offsets the value of training grants, preference by some clients for U.S. trainers over Canadians, the lack of standards or regulations for supplier qualifications, and the general lack of tax incentives related to training. Some respondents also expressed concern that training methods and programs are lagging behind changes in client needs.

2.3.3. Suggestions

Suggestions from respondents for strengthening the sector and the training environment ranged over all the issues identified at the beginning of the study. This section presents the main ones, organized into three general categories: research and development, promoting training and awareness of training, and effectiveness of training. Calls for cooperation and joint action of various kinds and at various levels underlie the majority of suggestions.

Research and development

Respondents called for research on the effect of training (including TBT) on profits and productivity. The results should be publicized with specific examples and used to develop criteria or benchmarks for evaluating training effectiveness.

Research is also needed on employee profiling and needs assessment and on the training needs of particular industries.

This research could be carried out jointly with industry associations, with support from the sectors concerned. Government should develop incentives for research and development on training and training issues, and in particular on appropriate technology-based training.

Promotion and awareness

Suppliers should target senior management responsible for authorizing spending when selling training services, emphasizing that training costs should be a fixed cost (for example, it should be factored into the cost of investing in technology). They should also work closely with clients in needs assessment and program design to help them develop a better understanding of the full scope of training services.

The survey and consultations revealed general agreement that suppliers need to develop information networks through existing associations, in order to share information on innovations and client needs. Communication networks with other industry associations would help disseminate more concrete information about training services and provide current information on training needs. Suggested tools to support networking included a directory, trade shows and a newsletter.

Suppliers should develop quality standards in collaboration with clients, and provide guarantees of enhanced performance. Respondents generally rejected the idea of accreditation by government or other public bodies, preferring industries to define required standards.

Partnerships in delivering services and collective action in gathering market information and dealing with regulatory bodies would help to strengthen the sector and heighten its image. Suggestions for governments primarily focus on creating and improving tax incentives for training, including tax incentives for research and development. Governments also should support the sector through general promotional campaigns, help gather market information and develop marketing strategies (especially at the international level), and organize or encourage national and regional forums on specific training issues. Some suppliers argued for reduced subsidies to public institutions, but most preferred the idea of collaboration or partnerships with them.

Effectiveness

Suppliers involved in the consultations and survey have their own wish-list of ideal features of training programs. They should be based on detailed assessments of individuals' actual skills before training begins, and designed to allow trainees to proceed at their own pace to acquire mastery of specific, measurable skills. Training should be related directly to the job, partly through on-the-job instruction, and partly through scheduling it so that the employee can use the new skills immediately (just-in-time training). Finally, suppliers would like to see more use of technology-based training (TBT), as appropriate TBT has been proven to reduce significantly the time needed to learn a new skill.

In general, most respondents felt that to be effective, **needs assessments** must involve the client directly. They must take into account the client's business plan. They also pointed out that suppliers can assess what training the purchase of a particular technology will entail, and at what cost. Such assessments can help identify training alternatives in addition to or to complement the program provided by the supplier or manufacturer of the technology.

After they have completed the assessment, suppliers must **design and deliver** training programs so that they mesh with the client's business plan, and clearly link to what employees do. They should also include a significant element of personal development for employees. For example, training for technology should develop a person's skills in innovation and improvement of processes as well as in operating the particular equipment.

To make training more affordable for small and medium sized companies, suppliers should consider providing training to a group of companies with common needs. Suppliers should also develop training programs for the production process and supportive administrative systems functions, as well as train-the-trainer programs.

Training on new equipment (or technology) should go beyond the vendor's generic courses by customizing the program to the client's particular circumstances. And it should be done on-the-job to help reduce fears of job loss.

Suppliers should provide ongoing support after the initial training program ends, in the form of evaluation, guarantees, supplementary training where not all skills have been mastered, and continuing assessment.

Employees and employers must have a joint commitment to training and share responsibility for it. This commitment means becoming involved in needs assessment, fine-tuning program design and evaluation, donating time and expertise in delivering courses, and recognizing and sharing the costs of each stage in the process.

3. Best practices in commercial education and training services fourteen case studies

This study presents fourteen suppliers with a reputation for quality, innovation and excellence. These represent a wide cross-section geographically, by organization size, by nature of their services and products, and by areas of specialization. Nine are private companies, five public institutions:

- the British Columbia Institute of Technology Pulp and Paper Technology Summer Institute.
- BC Tel Education Development Centre.
- Devcom Systems for Productivity Ltd.
- Holland College.
- the Humber College Business and Industry Services unit.
- the Institute of Advanced Technology.
- the Marine Institute of Memorial University.
- Le Groupe Micro-Intel Inc.
- On/Q Corporation.
- the Open Learning Agency Workplace Training Systems Group.
- Pearls of Wisdom.
- People Development Ltd.
- Softwords Research International Ltd.
- The Training Group Inc.

The final report consists of fourteen case studies, which cover (among other topics) business growth strategies, marketing and promotion issues, and product development strategies and issues. It also includes a summary of the key findings of the study and the implications of the findings for training suppliers.

3.1. Business growth strategies

These organizations have a confident and aggressive outlook, planning for a minimum 10% annual increase in revenues. Their growth stems from their commitment to excellence and innovation, their development of diverse products and markets, their organizational flexibility through participation in networks and alliances, and their giving priority to responding to market needs.

The sources of these organizations' **competitive strengths** vary. Some have extensive voluntary or in-kind input from external sources or partners. For example, a client industry may donate space, or members of advisory committees or other associates may distribute publicity for the supplier at no charge during their own business travel.

One supplier manages all the organizational and administrative services required for training programs, freeing up industry clients to concentrate on providing the resources to conduct the training. Suppliers in advanced technology areas (interactive media, artificial intelligence knowledge-based software, etc.) encounter very little competition.

All suppliers studied share a strong commitment to custom design of training, responding to the market, and using all available tools and methods to ensure high quality.

These suppliers face a wide range of **challenges to their continued growth** whose management has become a complex balancing act. They must deal with external factors such as rapid changes in technology and market demands, lengthy marketing cycles, the need to develop markets for new services and products, lack of financial support from potential investors and government, growing client expectations, and competition from American off-the-shelf products. Internally, they face pressures from the need to avoid excessive specialization, to keep staff and products up-to-date, to control costs, to diversify their client base, and to develop strategic alliances. The large private suppliers feel the pressure of competition from bodies with no bottom-line responsibility or whose public subsidy enables them to cut prices.

The **growth strategies** these organizations have used include collaborating with client sectors and trade associations to identify needs and develop joint ventures, applying rigorous quality control using criteria recognized by the client's sector, providing guarantees for their services and products, and targeting client executive staff for initial training contracts.

3.2. Marketing and promotion

The main **marketing challenge** for the case study organizations stems from clients' lack of awareness and understanding of training, and from the scepticism created by poor quality training services and products. More operational challenges include pioneering joint ventures between public and private sector suppliers, the time and energy required to follow up potential leads, the cost and time of preparing proposals (especially for government agencies), the danger of generating more leads than one can follow up, and the trade-off between project development on one hand and management and marketing on the other.

All the suppliers studied have found word of mouth, referrals and repeat business to be the most effective **marketing and sales strategy**. After-sales service, quality assurance and strong customer satisfaction policies also figure prominently among strategies to maintain and expand the client base. Most of these suppliers have general marketing plans which identify specific target sectors and include selective advertising targeted to a sector (i.e., not just to individual clients). At the same time, they are prepared to respond quickly to random opportunities as they occur.

Most suppliers are active or interested in the **international market**, but find the costs of marketing high. The United States and Europe are prime targets, especially for computer and technology-based training, while a number of organizations have been involved in overseas projects of the Canadian International Development Agency (CIDA).

3.3. Product development

Suppliers must work with clients to customize products so that they are effective and successful. The basic principles of **product development** include thorough needs analysis with the client, creating learner-directed resources, using proven adult education learning principles, providing hands-on practice and a coach or mentor system, and agreeing on observable measures of achievement, such as a performance checklist, to confirm competence in a skill. Training has to be integrated with other performance related programs (customer service, total quality management) and human resource factors (career development, performance appraisal, pay-for-performance). Ideally, a training program combines portable skills with job-related training.

Most organizations have to rely on their **own resources and expertise** to develop and fund their new products, marketing and growth strategies. Some firms have received external funds for research and development but do not rely on these sources, which are largely governmental. Professional associations such as the National Society for Performance and Instruction and some public agencies provide some help in the form of leads and advice on marketing and financial management. Little useful support comes from banks and professional marketing experts.

All the suppliers in the study **ensure product quality** with internal and external mechanisms. Internally, they use either recognized criteria for standards in the client industry or their own quality-control system, or a combination of the two. Externally, they depend on client feedback at all stages of a project. Some have secured course accreditation from public institutions and professional associations, and many are members of or collaborate with organizations that award credit or ensure industry performance standards.

3.4. Future directions and implications for training suppliers

A number of trends will drive the commercial training services sector over the next five years. Although many clients say they prefer instructor-led training, the demand for more hands-on training, the increasing cost-effectiveness of computer-based training and the growth of distance learning suggest that the market for various types of **technology-based learning** tools will continue to grow.

Concerns about productivity and the effective implementation of new technologies will increase the demand for workplace training. Greater consumer access to and familiarity with interactive personal technology will help computer-based training grow faster than instructor-led training. Changes in management culture leading to greater decentralization will open up the market for external purchasing of training services of all kinds, and particularly for coaching, training of trainers and supplementary services to in-house staff responsible for training.

The report concludes that the study reveals the following **implications for suppliers**:

• There is no recipe for success. Successful organizations demonstrate a commitment to excellence, innovation and to the client; have a willingness and ability to learn and constantly change and adapt; and are self-reliant for their operational funds. The strategies and experience used by the organizations in the study should be seen as benchmarks and guidelines.

The study also yields implications for governments:

- Government promotion and funding of the training supplier sector must focus support on training that is individualized (or customized) and performance-oriented, and whose results are measurable.
- The promotion of training has to be targeted at specialized sub-sectors, because the sector is heterogeneous.

- No one training supplier can meet the spectrum of training needs of any single client. Governments should therefore foster alliances, and ensure a fair set of rules which serves the interests of the clients.
- Governments should provide more support to international marketing of training services and products.

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4. Technology-based workplace training

This report reviews the nature of technology-based training (TBT), its potential for workplace training, and the opportunities and challenges faced by suppliers of TBT.

4.1. Technology-based training (TBT) in the workplace

4.1.1. The TBT potential

The main providers of workplace training and life-long learning (in-house departments, colleges and institutes of technology, equipment manufacturers and training consultants) use print and video materials in workplace training and life-long learning courses. They rarely or infrequently use other, newer technologies such as television, compact disc, computers and computer-based technologies such as multimedia.

The use of a new technology in combination with other tools and methods determines its training effectiveness. Effective **TBT** must provide suitable interaction between learners and materials, be relevant to learners' needs, and allow learners to start from their own knowledge base rather than from a predetermined point and to pace the learning process. It must also handle management tasks such as record keeping, progress reporting, and presenting suggestions for remedial learning.

TBT combines more interactive and administrative features in the design of training programs than do other technologies (print, lecture, etc.). It also allows for decentralizing learning programs and adapting courses to the individual learner's needs and abilities, while ensuring consistency of results among groups of learners. This flexibility makes TBT a powerful tool for literacy and numeracy upgrading and life-long learning, and for updating of technical knowledge in the workplace. Its high initial costs however make it most costeffective to deliver it in dedicated centres to avoid equipment scheduling conflicts.

The main training providers have not yet developed complete strategies for integrating or combining TBT with their existing delivery systems. The requirements for awarding credits tend to restrict TBT use by public sector providers, because it is most cost-effective where delivery is virtually completely individualized, rather than designed for a group or class. Corporate in-house training departments supply most workplace on-the-job training, using in-house classroom based lectures, demonstrations and videotape. They use computers to support training in computer-based skills. Although only about 3% of corporate training budgets are now allocated to TBT, this proportion is expected to grow quickly.

Equipment manufacturers are increasingly using **TBT** modules for dealer and customer training, while training consultants are using video and computers more often than in the past.

Technology-based training opens new market opportunities for trainers and suppliers to develop new materials, new delivery structures (just-in-time, decentralized, individual tutoring), and new software for training administration.

4.1.2. Small and medium-size enterprises and TBT

Small and medium-size enterprises (SMEs) generally lack the resources for inhouse training and for planning training. Their trainee base is often too small for cost-effective training in groups. Some influences however have recently begun to push them into using TBT: large corporate customers of small supply houses distribute training videos to help suppliers adhere to production standards, as do franchise operators; trade associations commission TBT materials for use by SMEs; and manufacturers supply TBT modules to support maintenance and operation of their equipment. SMEs will rent training videos and other off-the-shelf materials to keep staff up-to-date.

4.1.3. The economic environment

The federal government expects training expenditures in the private sector to double over the next few years. The potential **TBT** share of this market is estimated at \$150 million annually, which should generate 1,000 new professional jobs. Export sales will likely be ten times domestic sales.

Current government grants for training generally buy seats in established programs, pay on the basis of the number of days spent rather than on mastery of a competence or concept, do not apply to development costs, and require minimum enrolment levels. Some require links to accreditation. These criteria work against the adoption of TBT, as it reduces learning time, requires relatively higher initial costs, and does not require group learning. Similar constraints govern the allocation of budgets for training in corporate settings.

4.2. The situations of suppliers

This study categorizes six types of TBT suppliers: hardware manufacturers, courseware producers (including video producers), authoring systems producers,

administrative software producers, training providers, and training products distributors.

Hardware manufacturers provide equipment for TBT largely as a sideline to their main activity. This sideline can expand if industry standards can be agreed to ensure the compatibility of platforms and the transferability of software applications, two important and growing demands in training markets.

Courseware producers supply videos, teleconferences, customized and generic (off-the-shelf) materials. Most companies are small, with up to 30 employees, and hire free-lancers to provide supplementary skills as required. Many cannot survive on training and education applications alone, and feel they can only compete in niche markets. In general, they lack experience in managing large projects and in technical and workplace training. These weaknesses and a shortage of sufficient qualified in-house staff place them at a disadvantage in winning large contracts which would allow them to expand.

Authoring systems producers have strong growth potential as their product furnishes the base for producing and adapting courseware. But the sector needs to develop standards for compatibility among systems to allow this potential to be realized.

Administrative software producers supply applications for administrative support to training (in course design, delivery and catalogues), personnel management (in skills inventories and needs assessment) and course registration. This market also has strong growth potential.

TBT providers, pushed by the condition in most training grants that trainees receive credits and by the demand for portable skills, are seeking accreditation or developing a recognized measurement of learning for their training programs.

Training products distributors know workplace training and customer requirements, and are not tied to a single line of products. They can help SMEs in acquiring TBT products by amortizing payments, and help the market generally by repackaging existing products into new configurations.

4.3. The potential for growth of the TBT industry

4.3.1. The demand side

A number of obstacles on the demand side challenge the TBT industry: ignorance of the advantages of TBT; traditional budget and purchase practices; the drastic changes which using TBT may require in a company's training system; and the need to retrain trainers to use TBT effectively. TBT's flexibility and modular structure can help offset these obstacles.

Recommendations

The report suggests many ways to increase understanding and demand among clients and users (trainers). These include activities and measures to demonstrate and disseminate information about the value and potential of TBT; steps to develop standard learning goals and standards of quality and accreditation; suggestions for better financial support for access to TBT; and promotion of collaboration and partnerships among suppliers and with client sectors.

4.3.2. The supplier side

The majority of the hundreds of companies in this area produce off-the-shelf and generic courseware, and use computer-based technologies to develop authoring tools and administrative software. Distributors expect higher marketing costs because of TBT's expense. The development of digitization combined with the use in business of more sophisticated communications technology will also reduce physical distribution of materials as they can be downloaded through electronic networks into customers' computers.

Hardware manufacturers are typically large multinational firms; most Canadian-owned firms are small. The increasing skills requirements of TBT production (especially in multimedia) mean companies must generate annual sales over \$1 million to support the necessary high quality staff.

Recommendations

The report makes a range of recommendations to strengthen SMEs in the TBT industry. These include suggestions for complementary alliances and subcontracting, for collaboration with associations and colleges to develop accreditation standards and for management training programs for small suppliers of TBT; ways to strengthen marketing capabilities and generate more funding for development and purchase of TBT products; steps to improve SMEs' understanding of the workplace and encourage compatibility of authoring tools; and a call to give small suppliers a greater voice in the formulation and use of government research and development resources for TBT.

4.4. Priorities for action

The report closes with a summary of priorities for action:

To strengthen demand, educate users through demonstration projects, reports on best practices, awards for innovators, seminars and information services. Take these steps in coordination with and overseen by clients. Funds should be sought from ISTC, the Employment and Immigration Canada Innovations Program, the Department of Communications' Application Program, and the Canadian Workplace Automation Research Centre.

To support the growth of the TBT industry, review the funding practices in government-financed training programs in consultation with suppliers and staff of federal and provincial training bodies.

To help cover front-end costs, establish a revolving fund for customers and groups of customers of TBT. This fund might be administered by the Federal Business Development Bank.

To help establish common training goals, encourage the exploration by sector associations of common learning goals and of existing Canadian TBT materials which support them.

Promote closer cooperation among TBT suppliers so that their products supplement each other and give learners skills that are transferable and upon which they can build. TBT suppliers also should work with sector associations and councils to learn more about the realities and needs of workplace training.

Establish a non-profit body to coordinate activities of different interest groups, to improve recognition of TBT through studies, demonstration projects, advocacy and lobbying, and to highlight the capabilities and experiences of Canadian suppliers. ISTC should provide seed funding for a limited period, after which the organization should be self-financing through services to suppliers, customers and others.

5. Commercial education and training in Australia, France, Germany, Sweden, the United Kingdom and the United States

This study describes the main characteristics of selected private suppliers in the context of the main policies that shape the education and training markets in each country. The full report consists of separate chapters on each country, a summary of the main findings, and a series of conclusions. The following summary draws upon the report's findings and conclusions.

5.1. Findings

5.1.1. The provision of information and other marketing strategies

In general, efforts to improve and ease access to information about training opportunities combine some of the following elements:

- government supported data banks, directories and other information services which in some cases have moved to cost-recovery or fully commercial status. Some have counselling staff to advise clients.
- networks maintained by various industry and professional associations concerned with training and development, through regional and national meetings, trade fairs and conferences. These associations also provide directories and information services at cost or below cost to members, and at a higher price for non-members. These bodies also occasionally publish suggestions on how to select a training supplier.
- general directories sold by educational and trade publishers, sometimes in collaboration with professional associations.

These measures complement marketing by individual commercial providers, who have no general promotion strategy as an industry. Most of them depend upon targeted direct marketing plus word of mouth. A few large firms and professional associations, along with industry bodies (i.e., associations of manufacturers, etc.) and government agencies engage in general promotion of training, including training by private suppliers.

5.1.2. Co-ordination among the industry, clients and governments

Various forms of structured tripartite consultation exist in five of the six countries, the U.S. being the exception. In Australia and the U.K., consultations occur in response to widely-perceived problems in training and education. In the other three countries, permanent structures for such consultation develop and ensure standards for the content and process of training. Private training suppliers in these latter countries, however, rarely participate directly in these structures. They occupy a small niche in the market - most often in the areas of management, human relations/ communications and leading edge technologies.

In most countries, trainers and training companies belong to voluntary professional associations, both within sectors and nationally. The three Englishlanguage countries share a concern to develop a mature training culture.

5.1.3. Standards and "best practices"

France, Germany, and Sweden (and very recently the U.K.) have developed recognized standards for trainers. Australia is developing standards so that employers can ensure their training programs meet the legal requirements of recent training legislation. Training companies hire on the basis of earned credentials, specialized knowledge and practical experience.

Neither clients nor trainers however appear very concerned about trainees receiving formal qualifications. Clients buy training from commercial suppliers to solve a specific problem or develop a particular strength. Suppliers can build recognition into most programs, when desired.

No "good practice" guidelines - in the sense of standards above and beyond legal requirements - seem yet to have developed in any of the six countries. The closest surrogate to recognition of good practice - special awards given by governments and industry or professional associations - was identified in the U.K. and the U.S.

5.1.4. Training - social investment or corporate cost?

France, Germany and Sweden treat training as a fundamental investment in economic and social growth. It is a joint public and individual responsibility. Governments and leading industries in Australia, the U.K. and the U.S. complain that their economies in general treat training as a cost of the employer, and urge the necessity of creating a training culture for their economies to avoid stagnation.

In all six countries national, state and local governments have a recognized rôle in promoting or subsidizing training in some way. They commonly underwrite special programs for women, minority groups, the unemployed and the poor. Further government intervention, or consideration of it, provokes considerable debate.

5.1.5. The effects of government regulation

Legislation which mandates training or a training levy stimulates growth in the training industry. Other legislative measures and regulations seem to have little direct or long-term effect on the provision of commercial education and training services. Subsidies and incentives for training (benefitting employers or individuals) can influence market demand, and so may national standards and certification for training programs and trainers.

Governments do not pay particular attention to the commercial sector of the industry when they design training and education policies and programs.

5.1.6. The effects of cultural, social and political factors

Attitudes and values attached to the appropriate rôles and responsibilities of government, employers, different types of organizations and associations, and the individual help determine the structure of many programs. They also affect the functioning of joint or tripartite bodies. For example, Germany and Sweden place strong emphasis on the mutuality of interests among employers, workers and society. In contrast, Australia, the U.K. and the U.S. view employees and employers as having distinct separate interests which should be compatible, but are not always so. These factors must be considered carefully before trying to adapt any concepts or programs.

5.1.7. Lessons from the experience of other countries

The report notes a number of trends and experiences in these other countries which may suggest useful ideas and approaches for the Canadian industry.

- a growing emphasis on the training of trainers, both in specific training skills and in the management of training.
- the use of joint employer-employee and often tripartite bodies to develop and administer standards and certification for training and trainers. These standards and qualifications may be prescriptive or just provide reference points for "standard practice".
- the use of similar joint bodies within individual sectors to develop generic or model curricula/courses and tests, and ensure the appropriateness and timeliness of training.
- commercial suppliers concentrate on the quality of their product and of their delivery. Neither marketing nor follow-up or evaluation seem as important for their success.

- two major types of markets exist for commercial suppliers: small companies with no trainers on staff, and large companies with specific training needs related to organizational development. The former require needs assessment and training design as well as training programs. The latter, whose in-house trainers have become training managers, want supervisory staff and other volunteers trained in training skills, and all levels of staff trained in management skills.
- the costs of training are shared among employees, employers and government. Employers prefer to make voluntary contributions, while the majority of governments and most employees tend to favour some form of mandatory regulation. These factors affect the attitudes of potential clients towards buying training products and services.
- no direct proof exists that training produces increased profit. "Poaching" and the demand for a direct link between training and profits are viewed as symptoms of an immature training culture.

5.2. General conclusions

The report concludes with a number of observations about the place and evolution of training, and suggests some initiatives which could be further studied.

5.2.1. The place and nature of training

- commercial education and training firms supplement and complement public systems of education and training.
- the requirements of production processes and of organizational operations include regular and continuing staff training as an important input. Productivity and competitiveness will decline without it.
- integrating training into organizational strategy and into the workplace is a major part of establishing an effective training culture.
- without recognized standards, the training industry risks acquiring a poor image, and organizations will remain reluctant to integrate training into their strategic planning.
- defined national standards for specific defined qualifications provide a benchmark for some types of training, improve people's mobility, and provide an external, objective standard for evaluating performance.
- training is most readily evaluated if it is integrated into an organization's strategic plan. Performance can then be monitored by supervisors in regular reviews. This approach helps customize training to company needs and tells employees how training benefits them in their job.

• government concern and example foster employer commitment and provision. Similarly, the more education and training individuals have had in the past, the more they are likely to demand it in the future.

5.2.2. Initiatives for further investigation

- the structure and management of government supported data banks, directories and other information services, including personal counselling.
- the development of standards and qualifications for trainers, and the training of trainers, particularly in Australia, France, Germany and the U.K.
- the various French efforts to assess the value of training.
- the work of the European Centre for the Development of Vocational Training (CEDEFOP) and its national representative organizations.
- collaboration among commercial suppliers through associations such as the British Association for Commercial and Industrial Education.
- the education and training foundations of Victoria and New South Wales (Australia).
- the development of the U.K.'s National Vocational Qualifications Database.

6. Overview

The reports produced for Phase II of the Commercial Education and Training Services Sector campaign have generated a great deal of information and many suggestions. The following sections summarize some of the common themes and ideas which emerge from them, and which indicate future directions that could be taken by the sector and governments.

6.1. Industry characteristics

Small and medium-size firms dominate the emerging Canadian commercial education and training industry. The majority operate with a small core of permanent staff and hire part-time staff and independent consultants as needed for specific projects. Few firms derive all their revenues as yet from training products and services. Most specialize in a particular field, with executive and management development being the main area of specialization. At the same time, most have a diverse revenue and client base, including a significant proportion of individuals.

Most successful firms focus on strong involvement with their clients and ensuring the quality of their product and services.

The diversity of client needs has stimulated a growth in partnerships among suppliers, including partnerships between public and private suppliers, and an increase in supplier capacity to customize training programs. Most firms must absorb their research and development costs, although government sometimes supports them.

The demand for workplace training is increasing, but marketing presents problems. The marketing cycle generally is long (often about eighteen months). Few suppliers can afford to invest many resources in marketing, which tends to be conducted by word of mouth, through referrals and repeat clients.

Technology-based training (TBT) appears to be gaining gradual acceptance. Its flexibility and cost-effectiveness contribute to a strong growth potential for companies in this sub-sector.

In general, the Canadian industry mirrors its counterparts in the other six countries reviewed, particularly in the predominance of small and medium-size organizations side by side a handful of large and successful firms.

6.2. Needs and concerns of the commercial education and training services sector and its clients

On the client side, all employees need training in communication and interpersonal skills, and in management and supervisory skills. Some need to improve their literacy and basic writing and mathematics skills and technical skills before they can benefit from advanced training, for example, in new technologies. Training in the production process and supportive administrative systems functions also ranks high among the training needs of individuals. Firms and organizations need access to training of trainers. These trends again mirror the situation in other countries.

Suppliers feel that Canadian industry has a limited understanding of the value of training, and resists new techniques and methods. Industry has little understanding of the relationship between productivity and training, and suppliers have no solid documentation to explain it. Neither the suppliers nor governments produce much effective generic promotion of training. The European countries reviewed have developed a broader awareness of training and its contribution to productivity, but the situation in Australia and even more so in the U.S. resembles the Canadian scene.

Suppliers need more and better market intelligence, and better promotion tools. Clients need more effective ways to find information about suppliers and their competence. This problem of making efficient matches between suppliers and clients appears to be constant and universal. The information resources and tools in place in European countries provide useful help to prospective clients.

A few large firms feel that public sector institutions distort the market because they operate with subsidies which the private sector does not receive. This complaint appears in Australia and the U.S., but not in the other countries, where partnerships and *de facto* divisions of the market seem the rule.

Many firms have some international sales, but their export activities are limited by the cost of international marketing. The European Community provides funds to encourage international sales of training, and the Australian government provides education and training services the same support it gives other export commodities.

6.3. Suggestions

The following suggestions reflect points of view common to all of the reports, and are not a compilation of specific recommendations.

Suggestions for suppliers:

Suppliers should target senior management responsible for authorizing spending when selling training services. This strategy can increase the chances of generating repeat sales and help develop among clients a more sophisticated understanding of training.

Suppliers should develop information networks through existing sector associations.

Suppliers should develop quality standards in collaboration with sector associations.

Suppliers should form partnerships to deliver services and work together to gather market information and deal with regulatory bodies.

Suppliers should design training programs so that they mesh with the client's business plan, and clearly link to what the employee does.

Suppliers should consider providing training to groups of SME companies with common needs to spread the costs across a larger number of clients.

Suppliers should provide ongoing after-sales service.

Suggestions for governments:

Governments should create and improve tax incentives for training, including tax incentives for research and development.

Governments should support the sector through general promotional campaigns, help gather market information and develop marketing strategies (especially at the international level), and organize or encourage national and regional forums on specific training issues.

Suggestion for suppliers and clients:

Suppliers and clients should ensure that training is relevant and directly linked to what employees do.

Suggestion for clients:

Employees and employers must have a joint commitment to training and share responsibility for it. This commitment means becoming involved in needs assessment, fine-tuning program design and evaluation, donating time and expertise in delivering courses, and recognizing and sharing the costs of each stage in the process.

Suggestions for suppliers and governments:

The promotion of training should be targeted at specialized sub-sectors.

Research should be sponsored on the impact of training (including TBT) on profits and productivity, and the results should be publicized.

The sector should form a non-profit coordinating body with initial support from governments.

APPENDIX

Further information about the Sector Campaign and its future plans, and the following materials produced during Phase II may be obtained from:

Business and Professional Services Industries Directorate Service and Construction Industries Industry, Science and Technology Canada 235 Queen Street Ottawa, Ontario K1A 0H5

Materials available in English and French:

- Directory of Suppliers of Commercial Education and Training Services (available in hard copy or diskette).
- Final Report of the Commercial Education and Training Services Industry Consultations and Survey, by The Coopers and Lybrand Consulting Group.
- Commercial Education and Training Services Sector Campaign Results of Phase II, by George Tillman Consulting.

Reprints of consultants' reports, available in the language of the author only:

- Commercial Education and Training Services Sector Campaign: Best Practices Project, by Hill Sloan Associates Inc.
- Suppliers of Technology-based Workplace Training: Challenges and Opportunities, by Anna Stahmer.
- Commercial Education and Training Services in Six OECD Countries: An Overview, by George Tillman Consulting.