The Summative Evaluation
of the
Labour Market Information
Strategic Initiative
Profiles of Selected Projects

March 1999
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Introduction

This report presents 15 profiles of projects funded through the LMI Strategic Initiative. The profiles were developed for the Summative Evaluation of the Labour Market Strategic Initiative. Each profile contains a complete description of the project and how it was carried out, information on the impacts, or potential impacts of each project and the lessons learned by people who were involved in each project about collecting, producing or disseminating labour market information resources. The information for the profiles was collected through interviews with people involved in carrying out the project, and in some cases, with users, or people with a knowledge of the impact, or potential impact of the project.

The table below gives a breakdown of the 15 projects according to the component of the Initiative that funded the project. The projects were selected because they were expected to reveal useful lessons on collecting LMI and producing and disseminating LMI resources, and to illustrate a range of different types of projects funded by the Initiative. They are not intended to be a representative sample of the 100 or so projects funded by the Initiative. Seven were community-based projects, which focussed on the local community or a specific sector. The remaining eight were provincial in scope and were distributed over the other four components of the Initiative. Further information about the Initiative, and about the evaluation, is available in the evaluation Final Report.

Projects Profiled from Each Component of the LMI Strategic Initiative

Community-Based Information Partnerships Projects:
  • Valley Links: Comox Valley Community Information System Network
  • What can you Do with a Degree? Website
  • Central Island Employment Net Website
  • Community Skills Centres Get Web Help
  • Learning Works Web Guide
  • Getting into the Act: A Practical Guide to Arts Careers Trends in British Columbia: Brochure and Website
  • CD ROM: Xplore Science Careers

New and Enhanced Information Products Projects:
  • Work Futures: BC Occupational Outlooks and Work Scene: BC Work Futures for Youth
  • Making Career Sense of Labour Market Information manual and facilitator’s guide

Implementation of New Technologies Projects:
  • BC Work Info Net (BC WIN) Website
  • Tourism Career Connections Website

Research and Data Development Projects:
  • BC Regional Employment Projection model
  • On Track: Private Training Outcomes Survey

Training, Standards and Certification Projects:
  • Career Gateways: Applying Labour Market Information in a Changing World
  • Accessible LMI for Persons with Disabilities
Overview: Valley Links is an ongoing network of linked websites containing economic, demographic, labour market, tourism and community information about the Comox Valley, as well as links with information outside the community.

www.valleylinks.net

LMI Strategic Initiative funding: $74,566

Purpose

The Comox Valley Community Information System Network, referred to locally as Valley Links, was established to help bring the social and economic advantages of the internet to all citizens of the Comox Valley. The goal is to provide the public, including investors, business people, and people doing career planning, with the information they need to make good decisions. Direction for Valley links is provided by the Comox Valley Community Information System (CVCIS) Society, a non-profit society that is committed to providing access to all forms of community information through both internet and public access terminals. The Society concentrates on assisting non-profit agencies without the means or expertise to go on-line by "developing content" for them and with deploying public access terminals that are capable of supporting access by citizens regardless of their technical knowledge or physical capabilities.

Description

Valley Links is an ongoing network of linked websites that are intended to provide a range of information about the Comox Valley. The home page provides the user with links to the following pages:

- Community and Events
- Health
- Economy and Jobs
- Youth@valleylinks
- Learning
- Volunteer
- News
- Suggestion Box
- Online help and Resources
- Local Travel and Tourism
- Weather

The Economy and Jobs page provides links to a variety of sites with information on the local economy through links to the various Chambers of Commerce in the valley, as well as the Comox Valley Economic Development Society and the local HRCC. It also
provides links to agencies that provide job search and career development assistance, and links to sites with career planning and labour market information, including the BC WorkInfoNet site.

Background

The initial work that eventually led to the creation of Valley Links began before the LMI Strategic Initiative, with the development of a database on local employers. This project was initiated in the early 1990s by a group of partners, including the local HRDC, school district and college, as well as the local Chambers of Commerce and the Economic Development Commission, who formed the Comox Valley Database Society.

Method

The Initiative provided funding to improve the database with up-to-date information on local employers, such as willingness to be mentors or provide co-op employment for students and to enhance the features of the database. The database was distributed on a set of diskettes to local schools, the college, and other partners involved in the project.

The second project funded by the Initiative was to create a community information system for the internet, to increase access to the information collected in the database. The funding was used to plan and facilitate community meetings to determine needs and to develop a vision for the future. The Comox Valley Database Society was dissolved and the Comox Valley Information System Society established, which took over the database and incorporated it into the new website.

The Valley Links network went active in July 1997. Funding for the creation of the website came from various sources, in addition to the Initiative. Site construction was commenced by three HRDC Job Creation Partnership participants after they received Internet authoring training. These individuals and their successors worked with non-profit agencies to bring their information onto the site. Four Co-op Education students from North Island College assisted the Society by contributing their programming expertise.

Status at the End of the Initiative

The Society continues to operate with funding from various sources, such as Industry Canada’s Community Access Program and Human Resource Development Canada’s Job Creation Partnership Program. Other key support has come from BC Ministry of Education, Skills and Training, Upper Island/Central Coast Community Health Services Society and North Island College. The Society employs an Executive Director to oversee the work of the Society, including maintaining and expanding the website and installing public access terminals throughout the Valley.

As of the Spring, 1999, there were over 150 agencies, organizations and programs profiled on the Community Network Site. In addition, a student programmer was developing a prototype Public Access Terminal for people with disabilities. Under HRDC Job Creation Funding the Society is launching a Consumer Health Information...
Project. In cooperation with local Health Care Professionals and Agencies CVCIS will be developing extensive Health Care related on-line resources to assist citizens interested in adopting more healthy lifestyles or who have concerns or questions about health issues. In the Spring of 1999, the Society was awarded Communities Connect Funding under the BC21 Program, which will used to assist partnered agencies such as the Comox Valley Services Directory bring their information on-line.

**Cost Effectiveness**

Those who participated in the project felt that it had a number of features that made it cost effective: partners worked together on a range of projects, with each project contributing to the benefits provided by the network; funding from a number of sources was combined; partners provided in-kind contributions; Valley Links shares a server with another organization; and co-op students were used when possible.

It is possible to operate more cost effectively with the improvements in internet technology and software that have occurred since the project began. Hence future work can be more cost effective. Since working on the project could be a valuable learning tool, a closer partnership with the College could also improve its cost effectiveness.

**Lessons Learned**

Participants offered a variety of lessons learned through the project:

- The Society is a volunteer organization, so there is a need to recognize that it takes time to accomplish things. Funding also limits what can be done.

- It is important to have a shared vision amongst the partners. Since getting buy in is crucial, potential partners need to be approached in a non threatening way. They did this by hiring students to visit each organization and explain the project and invite them to participate. Also need to engage the community to be successful.

- Funding often requires a contribution from the funded organization, which can be in-kind. Partners are critical to being able to provide in-kind contributions.

- Since the database is very comprehensive, the cost of maintaining the information is high. To be able to keep the information up-to-date, they have had to reduce the amount of information that is kept on the website, compared to what was originally provided in the database. It is important to plan carefully about what information can be maintained in the long term.

- Doing the original database taught the participants to work directly with the programmer, rather than with consultants who work for a firm who employ the programmer. When updating the database they employed a programmer directly to avoid the communication difficulties that were caused by going through the consultant interface.
Impacts of the Project

Those involved in the project felt that the information provided on the website addresses a variety of needs. It provides local labour market information in one place and provides one place to communicate information about the Valley. It gives job seekers information so they can make appropriate choices. The information is really important for economic development in the area. It makes it easier for people to access services, such as health care and social services, by providing information on these services. In addition, the college uses information provided at the site for strategic planning. Valley Links fills a need because no one else collects the information.

The information provided in the website can, in the words of one community partner, “empower citizens to take care of themselves and their family.” This makes it possible for them to contribute to their neighborhood, and from there to the larger community.

Partners felt that the project was also very useful in bringing them together. This process built understanding of each organization, which has facilitated continued working relationships. This is particularly significant given that the Comox Valley is a fragmented collection of small communities.

The project has stimulated other projects by demonstrating what can be done. The Vision of Valley Links grew with the realization that they could use the internet to bring all kinds of community information together. Hence Valley Links continues to expand.

The project has also been really successful in providing people in the community, especially those who worked on the project, with a wide range of work experience in the technology area.
Overview: This project created a searchable database of real job postings that were no longer current, to assist post-secondary students, or those planning a post-secondary education, to determine the employment potential of various degree programs.

http://vaughan.fac.unbc.ca/counsel/jobarchiv/ or through the UNBC Counselling Centre’s home page.

LMI Strategic Initiative funding: $17,650

Purpose

The purpose of the database is to provide concrete information that is relevant to those thinking of entering a university or choosing programs and electives and for those seeking employment upon graduation. Students can use the information to determine what education and experience will be needed for the kind of employment they hope to get. Graduates and near graduates can use the database to get information on some employers, and industries that might hire someone with the education they have just completed so they can pursue a more targeted job search.

Description

The database contains information on job listings that have been available in the last two years. The job listings were taken from major national and local newspapers across the Canada, as well as from job bank websites and other sources.

The database can be searched by degree level, degree program or area of concentration. The user can specify all three, or just one or two. The search engine will return an overview of all the job listings matching the criteria that were found. This overview provides the job title, the expiry date, the name of the employer, and the type of employment, such as part-time, contract or summer employment. Using the mouse, the user can click on any job of interest to get details about the job. The details can include, depending on what information was in the original job listing, wages, number of hours, location, academic requirements, and other information such as job responsibilities and required skills and qualifications.

This degree and job matching database is at the website of the counselling centre of the University of Northern British Columbia (UNBC). It complements other types of information provided at the website. For instance, the user can get a list of different career possibilities for most of the programs offered at UNBC. The website also has a job bank of current jobs. This website also provides other information for career planning, including a brief description of some career information resources, such as Work Futures. It also provides a link to the Work Futures website.
The website is promoted by the Counselling Centre at UNBC by telling students, and potential students and their parents, about the site when they contact the centre. There is a link between the counselling centre's home web page and the site and others may find out about the site by chance when searching the web.

**Method**

The project was directed by the counselling department of UNBC. Information on job postings was taken from major national and local newspapers across the Canada, as well as from job bank websites and other sources. All the information in each relevant job posting was put into a database. Each posting was classified according to the academic requirements in the posting. Postings that did not have a university requirement were not included. Where possible, the posting was also classified by the program of study required, or desired, using UNBC and other BC universities programs.

A technical person who works at UNBC was hired as technical advisor to the project. Two computer programming students worked under the supervision of the technical advisor. A relational database was created, although initially a non-relational database had been set up. A relational database was needed to handle more sophisticated searches than had originally been anticipated.

Various students worked on the project, for work experience related to their area of study. Students were either paid or earned academic credit for their work. Students were trained on how to classify job postings and how to enter the postings.

**Status at the End of the Initiative**

The database integrity is maintained by the UNBC technical person who was advisor to the project. Work study students in the counselling department continue to enter new job listings. Recent efforts have focussed on reviewing and editing the existing data to ensure consistency with the classification system.

There is no funding for ongoing maintenance and updating of the database. Work students are used and the head of the counselling department provides instruction and oversees the work. The department hopes to get a summer student employment grant to continue the work in the summer.

**Cost Effectiveness**

The original concept for the database was for a non-relational database with a simple text retrieval tool. This was implemented, but as the project progressed, the concept changed. It was realized that more sophisticated search requirements would be needed than be supported by a non-relational database. Hence the initial work had to be abandoned. The costs would have been reduced if the design had been well understood before work on implementation began. Other aspects of the project were cost effective, such as hiring students using work study funds, or for academic credit. The technical advisor, who works for the university, continues to provide support for the site at no charge to the project.
Lessons Learned

In addition to the lesson, described in the previous section, on developing the design fully before implementation, there were other lessons learned around technical issues:

- Clearly consider all needs before beginning work, including all fields that would be needed for searching. This means deciding on all the categories that will be used for searching.
- Use an editing program for entering the data into the database to ensure consistency of abbreviations, capitalization and punctuation.
- The system was programmed in Pearl, rather than in a graphical interface. Students with training in Pearl are in short supply and won’t take jobs for $10 per hour. Had a graphical interface been used, more people would be available with the necessary training and willing to work for $10 per hour.

Impacts of the Project

The UNBC counselling department sees benefits of the project in a number of ways. One of the benefits of using the site is that it reduces the amount of time students need to spend on career planning, by providing this information in one place. This will save them time searching for information and thus give them more time for their studies. It also shows students the potential value of their area of study. By providing information about real jobs, not generic information, the database provides a “dynamic link between generic and specific labour market information.”

The counselling department has noticed a shift in thinking within the university community; faculty are more concerned about their graduates getting employment than they were in the past. The website is one example of the desire to provide students with information and support to be successfully employed when they graduate.

The technical advisor to the project noted other benefits: computer programming students received experience working with real customers and lots of students received experience using the web to input data.

A senior student was very enthusiastic about her experience using the database to explore career opportunities for someone studying forensic psychology. She found the database easy to use and learned that there were a broad range of job opportunities for her, but most of the jobs that interested her required a graduate degree. Using the database helped her determine relevant courses and specialization, and what work experience she should get. She would use it again, if she were doing career planning, and she has told her friends about it. What she has learned from using the site has given her confidence in what she is doing, so she can pursue her studies without the stress of doubting her choices. In her words, she has learned that she is “not wasting her time and money” on her education.

Although it was not an intended use, the database is also useful as a recruitment tool for the university. It has also been used by some high school counsellors in the local area.
**Central Island Employment Net**

**Overview:** The Central Island Employment Net is a comprehensive information network encompassing a database of programs, services and information available for unemployed people of the Central Vancouver Island area.

http://www.island.net/~cien/

LMI Strategic Initiative funding: $50,000

**Purpose**

The purpose of the Central Island Employment Net was to increase communication, cooperation and coordination among agencies that provide services to the unemployed in the Central Vancouver Island area.

Clients of these agencies must be able to find the right agency with the right service to meet their individual needs. As government services decentralize to private and non-profit organizations, they are also fragmenting. The Central Island Employment Network (CIEN) set out to put the big picture back together electronically — primarily for the staff of the agencies, but also for the general public.

**Description**

The CIEN website provides information on services to the unemployed for the Central Vancouver Island area. It organizes the information in two ways: through descriptions of 16 local agencies and their services; and through types of services available, such as academic upgrading, career exploration, job search techniques, personal development, service needs determination and skill training programs. Other relevant sources of information on the internet are linked to the site within the body of the site’s text. CIEN also provides information on job postings in the area.

In addition to the website, the project created a “listserv” for service providers which allows them to communicate quickly and easy amongst themselves and enables them to remain up-to-date on the services and activities of member agencies.

**Background**

The CIEN project was initially funded under the Assessment and Referral Centre of Nanaimo, which is administered by the Nanaimo Employment Opportunity Advocacy Society, a not-for-profit society addressing the employment and working needs of Nanaimo and the area. A need was seen for employment service providers to be set up with e-mail and internet access to improve communication and cooperation. Once the website, with home pages for each of the agencies involved, and the listserv were developed, funding from the LMI Strategic Initiative was used to continue the internet connection and expand and maintain the site.
Method

A contractor with technical background was hired to set up the website and listserv. The contractor worked with the agencies to develop their home pages on the site, after ensuring they had the necessary technology. He also provided them with technical support and training in using the system and updating their pages. During the funding period, agencies were provided with internet time and home pages free of charge.

Status at the End of the Initiative

The agencies continue to use the listserv to communicate with one another. They have found this to be a very useful tool in their work. Most agencies also regularly update their home pages on the site, however some agencies have not maintained their home pages and some of the links on the site have broken. The agencies are responsible for paying for their own internet time and maintaining their home pages on the site.

Lessons Learned

Those who had a role in the project had various suggestions about what was learned through the process:

• The listserv provides an easy communication device, through which users can be updated on program developments of member agencies and through which meeting agendas, meeting minutes and notices can be distributed.

• Provisions for longer-term maintenance should be established so that once the government funding runs out, the site can still be updated regularly.

• A little knowledge is a dangerous thing. Earlier in the project, five agencies did major revisions to their pages, which created a system-wide crash requiring a significant amount of work to fix.

• Lack of skills for using the technology initially meant that the resource was underutilized by some members. Some service providers were not very proactive about learning the necessary skills and did not take advantage of the fact that a contractor was available for technological training and support. One person commented during the project that “The learning is painfully slow. They are trying to play baseball without the basic skills of catching and throwing and hitting.” It is therefore important for agencies to buy in to such a project and remain committed to using it, including acquiring the appropriate skills, as necessary, to do so.

• Service providers did not have access to technological support once the contractor’s term expired and they generally could not afford such support, but at the same time, several did not use the resource (i.e., the contractor) that was made available to them while it was there. Many agencies also could only afford lower quality technology, which created additional problems.

• There was some concern about duplication of mandate between CIEN and the Assessment and Referral Centre (ARC), as both were established to overcome the fragmenting of services that comes with government
decentralization and to increase communication and cooperation among service providers. They differ in that ARC creates a physical co-location with some centralized functions such as assessment and referral, whereas CIEN accepts the notion of decentralized services but attempts to overcome fragmentation by linking the agencies in cyberspace, with a philosophy of moving information on clients and programs around, rather than either the client or the service. ARC has since taken over responsibility for some components of the CIEN.

**Impacts of the Project**

A key benefit of the CIEN project has been to provide an opportunity to bring the agencies involved into the age of technology, and to develop their computer skills by providing experience with e-mail, HTML and the internet. A lot of the agencies were not on-line and were somewhat fearful of learning new technology, but now every agency has internet access and e-mail. The project was a motivating factor to get the agencies on-line and staff trained in using the technology.

The listserv has improved communication between service providers, and it furnishes every service provider with a mechanism to ensure other service providers are aware of their programs and services. Because the information is more immediate than it would be in print, it is more timely and relevant to the service providers.

Growth opportunities for the participating agencies have emerged as a result of the CIEN project. Services to clients are enhanced because of access to more labour market information via the internet and because of the communication links with other agencies. Assessment referrals in particular have been facilitated, as all of the career development professionals are now aware of what every service provider is offering and are kept in the loop as programs develop. An added benefit has been a realization of the need to develop programs to make LMI more relevant to clients and a focus on making programs more responsive to clients’ needs.

The project not only provides easy public access to information on programming targeted at the unemployed, but it also creates a centralized resource for such information. For instance, an unemployed native teenaged single mother would have had to go to a number of different agencies to find all the services applicable to her situation, but with the CIEN, she (or a service provider assisting her) can determine in one central location the best services available to meet her needs.
Overview: The Labour Market Information Online Guide, on the website of the Community Skills Centres Consortium of British Columbia, helps internet users to understand labour market information, to find the information they need for career planning, to determine how best to sell their skills and experience to employers, and to use the internet to find the information they need. An interactive map of the province on the Consortium site also links visitors to the websites of the Community Skills Centres throughout the province.

http://www.skills.bc.ca

LMI Strategic Initiative funding: $25,000

Purpose

The objectives of the project were: to establish an online LMI user tutorial; develop an LMI search tool for clients to create an individual LMI “roadmap” that would help them identify the LMI they need; establish an interface between the website of the Community Skills Centres Consortium of British Columbia (CCSCBC) and the LMI Road Map Builder that would link the user to websites with current career and labour market information; and establish links between the consortium’s website and the websites of all the province’s Community Skills Centres (CSCs). The goal was to support independent use of LMI resources by CSC clients and assist them in making sense of the plethora of resources and sites available on the internet.

Description

The CCSCBC website features the Labour Market Information Online Guide and an interactive map with links to the websites of all of the province’s CSCs. Clicking on a community name on the interactive map brings visitors to the website of the Skills Centre in that community. Some of these websites were developed with the assistance of the contracted web designer who created the consortium’s website.

The CCSCBC site also provides a link to the BC WorkInfoNet site, as well as other LMI and career sites, and the LMI Online Guide. The guide consists of four parts: Using LMI; Finding LMI; Using the Internet; and Taking the Next Steps. The first page, “Using LMI,” defines LMI and describes how to use it by leading the user to pages on Taking Stock of Yourself, Understanding the World of Work, Exploring Careers, Finding Work, Learning — Education and Training, Starting Your Own Business — Self Employment, and Using Community Resources. Each of these pages provides a brief overview of the topic, and links to other relevant websites, with short descriptions of the purpose of each of the linked sites. The “Finding LMI” page provides a brief overview of where to obtain labour market information. “Using the Internet” offers the beginner an internet tutorial, with topics such as how to use search engines, links for more information on
using internet resources, how to use e-mail, where to learn more about mail lists and internet etiquette. “Taking the Next Step” recaps the steps in beginning the career planning process and encourages users to contact HRDC with any questions on career planning.

Method

The Consortium had identified a need for all CSCs around the province to have websites and make local LMI accessible on them, and approached a website designer for a proposal, in order to seek funding from the LMI Strategic Initiative. The original scope of the project was to create web page templates on the CSCCBC website for each CSC, with a mechanism to update the local LMI monthly, and establish hyperlinks between the CSCCBC site and each CSC site, as well as develop a search engine for the site. Each CSC was to be responsible for providing the web designer with the information required to develop their pages. In addition, the initial plan called for the development of an internet training guide to present information on LMI resources. The content required by the web designer from the Consortium and the CSCs (outlined in the contract as their responsibility to provide) was not supplied, which prevented the designer from meeting all of the objectives for the site.

With the realization that, due to lack of resources, the CSCs were not in a position to systematically and consistently update local LMI on their respective websites, the concept for the project was modified extensively. The Consortium submitted a revised proposal to delete the local LMI component and at the same time expand the project to include an interactive on-line LMI training guide, with a search tool for users to create an individualized LMI career planning “Road Map” which would link them to active, current sites on self and career assessment, LMI, education and training and job search.

Status at the End of the Initiative

Following the end of the Initiative, there has been no formal mechanism to ensure that the information on the CSCs’ sites is updated regularly. In addition, the Consortium does not have the resources to update the on-line LMI guide, in particular to establish links as new information and LMI sites become available on the internet. The CSCCBC website still remains on the web designer’s server, but is no longer being paid for. The Consortium does plan to move the site to a local server.

Keeping each site current is the responsibility of its respective CSC, and the capability of each CSC to do this varies considerably. Some sites are updated regularly by the CSC’s staff and contain a wealth of information on local LMI and services offered, but others have become out of date and links both to pages within their site and to other sites have been broken or have become corrupted.

Lessons Learned

Participants in the Community Skills Centres Consortium LMI Online Guide learned a number of things from this project.
• Capital funding should be backed up with operational funding. As one person involved in the project commented, “Quit giving us money, we can’t afford it... The government is good at providing money for startup but they’re not very good at maintaining the energy behind it.” Particularly for labour market information, updating a resource must be a priority. LMI is dynamic and resources providing it need to be updated regularly. Job seekers need current information for it to be of assistance. One project participant felt that a full-time job for one or more people should have been created to ensure updating occurred on the CSCCBC and CSCs sites.

• It was very difficult to get the CSCs to respond to requests for information for the website. Project participants offered a number of possible explanations. Perhaps the CSCs did not all have sufficient resources to do this. A sense of ownership over the project was also likely lacking for the CSCs. The fact that the Consortium was in the middle between the contractor and the CSCs probably increased the delays in supplying the contractor with the necessary information to build the site. One person suggested it might have been more effective to obtain this information directly from the sources of local LMI, such as local HRCCs. It would also be useful to create some mechanism to have the organizations who supply local LMI update the information on the websites.

• The site would have been more useful, and would have filled a gap, if the original intent to provide local labour market information for the whole province had been met. “It wasn’t a one-stop site for the whole province and that would make it more valuable,” said one participant in the project.

• The whole project centred on one person at the Consortium, whose communication with the board was not very good. Accountability would have been better if the project had been the responsibility of a committee or the board rather than one individual. One participant felt some sort of monitoring, perhaps on a monthly basis, should have been built into the process rather than simply reporting at the end of the project. Because responsibility for the project belonged to only one person at the Consortium, no one else was aware of or could rectify the fact that the web designer was not receiving the needed information.

• Ensuring a site is easy to navigate is important, as it will increase use.

• Partnerships are extremely valuable. “You can get more work done working together than working by yourself.” In addition, partnerships ensure a greater audience size and enhance awareness of the resource.

• It is much more resource-efficient (time and money) to have a clear outline and plan for a project before funding is sought. Before a project using technology is undertaken, the project planners and coordinators should be aware of the limitations of the current technology. The original plan called for a custom search engine that would have cost hundreds of thousands of dollars to develop.

• A thorough assessment of the LMI resources already available should be done before a project like this is planned. In many ways it duplicated the work occurring for the BC WIN site. Had its original intent to furnish local LMI for communities across B.C. been achieved, new and different information would
have been made available, but that did not occur in a comprehensive way for the entire province.

- Marketing website resources is important, although it can be difficult. “If people don’t know about it, it won’t help anybody.” More work is needed to get people comfortable with looking for LMI on-line. The fact that many unemployed people do not have access to computers may be problematic, however.

**Impacts of the Project**

The CSCCBC website has made general LMI more accessible, particularly through the creation of the on-line LMI guide and tutorial. While one of the original goals of this project was to provide internet access to local LMI for all areas of the province, this goal could not be achieved and was thus dropped. Nonetheless, this objective has been partially achieved, as some of the CSCs have been able to provide local LMI on their website.

By partnering with the BC WorkInfoNet, primarily by establishing links between the two sites, awareness of the CSCCBC site was increased. It also allowed the model to build on existing resources rather than re-creating information that is already available elsewhere, and it provided a new approach by organizing access to LMI geographically (through the interactive map linking visitors to the CSC sites).

Clients of the Community Skills Centres are more aware of the availability of LMI on the internet as a result of this project. The partnership with BC WIN increased traffic to their sites, and therefore awareness of the centres was improved as well. CSC staff now have access to information about the activities and services of other Skills Centres across the province, as well as some local LMI for other communities.
Learning Works Web Guide

Overview: This pilot project developed a database and website of education and employment support programs for adults in Greater Victoria.

http://www.camosun.bc.ca/~learnwks/

LMI Strategic Initiative funding: $25,000

Purpose

The purpose of the project was to provide a centralized database for adult learners and people seeking employment with information about the program choices available in Greater Victoria, as well as information on how to pursue these opportunities. The goal was to improve access to academic and employment support programs in Greater Victoria.

A secondary purpose was to provide the service providers with information about what services and programs were available to their clients. This would allow them to make appropriate referrals and to identify gaps in programming that they may wish to address.

Description

The database consists of two components: agency contact information and a classification scheme used for searching for information. A user can search for information on programs and services using a number of factors, such as eligibility information, like age, or membership in an equity group; and the type of service, such as career exploration, courses, or skills sought.

Agencies are responsible for entering their own contact information and using the classification scheme to categorize the services and programs they deliver. The database does not contain information about specific programs, but agencies who have their own web page can link their page to the database. They can use their own web page to provide program information.

Agencies are charged a fee to be part of the database, but anyone can use the database to search for information on programs and services, or about agencies providing services.

Background

The Learning Works Society of Greater Victoria received a grant from the Initiative to produce the database and website. Learning Works is an association of educators and public and private service providers. The goal of the not-for-profit society is to increase quality and access to programs and services for adult learners in the Greater Victoria
area. The agencies provide academic upgrading and employment support services to adults.

The recognition of the need for a centralized database grew out of a community forum that was held on January 25, 1996, called “Work: What’s Learning Got to Do with It?” A large number of learners attended and expressed their concerns about not knowing where programs were, and not having information such as program descriptions, cost and eligibility criteria. Service providers were aware of problems where a program at one agency would be cancelled for lack of interest, while a waiting list existed for the same program at another agency.

Method

The Board of the Learning Works Society directed the project, which began in June 1997. A contractor was hired to develop the database and search tool, and to train service providers on its use. The first step was to collect information to develop the classification scheme and to get general agreement on the terms to use, and their meaning. With this information, the database and classification system were developed and the website was created.

The contractor provided training to the 28 agencies who had signed up. The purpose of the training was to show the agencies how to classify their programs and enter and change data on their agency. Training was also provided on use of the internet for internet novices.

Another contractor was hired to promote the project. The website was launched at a forum held on January 7, 1998 at Royal Roads College, with about 50 to 60 agencies in attendance. This event was announced in the Times Colonist and agencies were invited to attend. A press release of the launching was sent to the media, and the event was reported on in the Times Colonist on the following day. Other coverage was provided in local newspapers. A colourful brochure describing the database was created to promote the database and encourage agencies to join.

Use of the database is free to people who are looking for information. From January to June 1998, agencies were charged a nominal fee of $50 to be on the database. Since then, the fee structure has been based on the size of the agency, as determined by the number of students enrolled in a year. Agencies with less than 200 students pay $50 per year. Agencies with from 200 to 999 students pay an annual fee of $100 and organizations with a 1000 or more students pay an annual fee of $150.

Status at the End of the Initiative

There are about 20 agencies with paid-up registration to the database until June 1999. The registration fees have been used to keep someone on contract to look after membership fees and for contacting agencies to keep them involved. The Society does not have the resources to maintain the site, and some of the links have been lost. The Society has been seeking additional funding to develop the database further and promote its use among agencies and clients. In the April 1999, BC WorkInfoNet agreed to take over the database, update its contents, and place it on their website.
Cost Effectiveness

Those involved in the project felt that it was done very cost effectively by using in-kind donations to supplement the funding from the Initiative. A number of members of the Society volunteered a lot of time to the project, especially in the design phase, and in promoting it. Some of the agencies had made donations to help get the project going. Royal Roads and the Greater Victoria School District donated space for meetings and Camosun College has provided their server to house the database.

Lessons Learned

Those who had a role in the project had various suggestions about what was learned through the process:

• A project of this nature needs a champion, someone to provide leadership and advocate for the project with potential funders.

• Clearly specify target dates and deliverables at the beginning.

• Make sure to have someone who has the time to work with the contractors. Since everyone was doing the project off the side of their desk, they were not always able to provide input to the contractor in a timely fashion.

• Agencies don’t have staff with the expertise, and staff are busy and don’t have the time, or even remember to keep their information up to date. They need additional training and support until they are more comfortable using it and see the benefits of using it, such as increased referrals.

• When applying for funding, there is a need to consider how the project, and the database, will be promoted. Also consideration of how ongoing maintenance will be carried out is necessary.

• The Board of the Learning Works Society directed the contractor to create a database structure that was portable, so it could be shared with other groups and put on any computer system. This had cost implications and meant that more money was spent on developing a portable database; hence there was less money available to enhance the database and make it easier to use.

• The project probably began before there was a threshold of readiness for internet use. Not all agencies were comfortable with the internet or had computers that clients could access.

Impacts of the Project

The database was launched at a time of tremendous change in the adult education and employment support program sector. Some of these changes have meant there is even greater need for a centralized resource of this kind, as government is no longer purchasing training in blocks and clients are expected to find their own training.

Internet use has grown considerably since the project began, but many agencies did not have the technology, or were not internet literate and hence were either unable, or
unwilling to participate. A number of agencies also ceased business during this time due to changes going on in the sector. Other agencies have had difficulty staying involved when the staff person who had been trained in using the database had left.

The result of these changes is that the database has not yet achieved the impact that was expected. The general public was not aware of the database, and only about 20 agencies were registered on it as of the Spring of 1999. It is expected that moving the database to the BC WorkInfoNet website will increase its profile. This should make it easier to promote among agencies. The high use of the BC WorkInfoNet website will mean that more end-users will find out about it even without additional promotion of the website. The increased access to and use of the internet for career planning purposes will likely increase the use of the database. As its use increases, more agencies are expected to join, as they see the benefits of participation.

At least one agency involved would rather spend their advertising budget on keeping their information in the database current, as in the long run it should be more effective by increasing client referrals. As one service provider commented, “This is the most economical and efficient way of getting the news out.”

One benefit that the project has already realized is the enhanced ability to collaborate among member agencies of the Learning Works Society. This was their first project; it demonstrated that they can cooperate and achieve something. They now work to advocate for trainers. They expect that their increased collaboration will also benefit their clients, as they can better serve their needs.

The project also increased awareness of using the internet, increased their knowledge of what is available through the internet, and made them aware of the potential benefits of using it with their clients.

The project provides a prototype that could be implemented in other communities. One participant commented that the project was “an opportunity that other communities would really want to look at.”
Getting Into the A.C.T.: A Practical Guide to Arts Career Trends in British Columbia

Overview: This project developed a booklet and website examining career trends in the cultural industries of motion picture production, music and new media development and technology.

http://www.artsjobs.bc.ca

LMI Strategic Initiative funding: $68,750

Purpose

The purpose of Getting Into the A.C.T. was to provide young people interested in careers in the arts with practical insights into the working world of the motion picture, music and new media industries in British Columbia. Virtually no labour market information existed for the sector prior to this project, and it was intended to fill the gap.

Description

The 27-page Getting Into the A.C.T. booklet is written simply in a conversational style to appeal to young people. It first discusses employability skills in the film, music or new media industries, as well as the importance of developing an entrepreneurial approach and business skills, such as marketing oneself and networking. The booklet goes on to devote a section to each of the three industries, describing types of jobs, providing insider tips on getting into the industry and discussing practical steps like volunteering, researching the industry, obtaining training and ways to get your foot in the door. A section on career profiles provides a comprehensive table of jobs in the industries, along with their associated skills, and a section on education outlines the various public and private post-secondary institutions in the province and whether they offer programs related to any of the three industries. Finally, the booklet provides some general advice on succeeding in the cultural industry, such as focusing on goals, applying oneself and following one’s passion.

The Getting Into the A.C.T. website expands on the information in the booklet, with an even more conversational style and in a format designed to grab the user’s attention and interest. In addition to this information, the website features an interactive component through which visitors can enter their skill set to discover jobs in the industry for which they are suited or qualified. It also provides links to websites of the province’s post-secondary schools and various industry associations, and has an on-line question form. The website tells users that through the site they will:

- Discover the "working" nature of the motion picture, music and new media industries as they exist in BC;
- Develop an awareness of both the personal and job-specific skills required in each of these industries;
• Understand how work within these industries is inter-related;
• Develop an understanding of the possible career pathways for specific occupations within these industries;
• Develop an awareness of the educational programs available in BC for training for work in each of these industries; and
• Probably enjoy themselves!

Background

The Pacific Music Industry Association (PMIA) received a grant from the Initiative to produce the booklet and website. PMIA is an association devoted to promoting the music industry in British Columbia. Some of its ongoing programs include the Canadian Pacific Music Industry Directory, administering grants and loans for musicians on behalf of the province, holding professional development workshops, producing a newsletter for people in the industry and hosting music band competitions.

Method

The first phase of the project involved producing the booklet; the website was created in the second phase. A contractor, whose background as a secondary school teacher tied in well with the target audience of the project, was hired to produce the booklet. Because almost no labour market information on the arts and culture industry existed, the contractor went directly to the industry for the facts about how a person best begins a career in the field.

The contractor spoke to professional members of the film, music and new media industries to gain an understanding of industry organizations, including their mandates and memberships. The contractor also set out to discover: types of jobs within career groupings; definitions of various jobs in the industries; skills and abilities sought by employers; where to get training and education that is recognized by the industries; what on-the-job training opportunities exist; and how youth can prepare themselves for a career in any of these industries. Focus groups with industry people were held to evaluate the draft of the booklet and ensure the information was accurate.

After the booklet had been produced, it was distributed free of charge to HRDC offices, post-secondary institutions, industry groups and associations and secondary schools. Despite confusion over responsibility that resulted in no media launch, demand for the booklet was much higher than anticipated, requiring a second printing.

The website was produced by the same contractor who wrote the booklet, although an additional contractor was hired as a web designer. An on-line question form, which is answered directly by the contractor, was built into the site and links to BC WIN and other relevant websites were added.

Status at the End of the Initiative

The Getting Into the A.C.T. project has been completed. The Ministry of Education plans to print and distribute more copies of the booklet, as demand for the second printing was also quite high. As of the Spring of 1999, the PMIA was attempting to
locate a new host for the website, as the existing arrangement was set to expire. The association was also attempting to find the means to fund maintenance and updating of the site.

**Cost Effectiveness**

Those involved in Getting Into the A.C.T. felt the project was operated cost-efficiently. However, they felt time efficiency could have been improved had they been provided with an information package from the funders on standards and protocols for publications and for websites. This could have provided information on such protocol issues as where to place logos, the order of funding agencies in the credits and the information to be included about the funding agencies. Actually establishing some guidelines for government website projects for these same sorts of protocol issues would also be valuable, and would ensure greater consistency.

**Lessons Learned**

Those who had a role in the project had various suggestions about what was learned through the process:

- It is very difficult for organizations who undertake such projects with Initiative funding to come up with the funds themselves for maintenance, after the deliverables have been produced. Building a regular maintenance schedule into such projects, with the corresponding funding required, would result in more valuable products in the long run, particularly for websites.

- Going straight to the source for the labour market information was a highly effective way of collecting the information, and ensured the information was relevant, up-to-date and of very good quality.

- The internet is a very effective means of getting the information out to young people. It is important to create a resource in a format that appeals to the audience, however.

- Demand for the printed resource was severely underestimated. More copies should have been produced, although the second printing allowed for the inclusion of the new website’s address in the booklet.

- Clarity in the responsibility for distribution at the project’s outset would have been beneficial. It was assumed by PMIA that the Ministry of Education would send the booklet to schools, but the Ministry expected PMIA to complete this step. This problem was complicated by the fact that there had been no distribution system set up to get the resource into the schools.

**Impacts of the Project**

All of the project members consulted agreed that Getting Into the A.C.T. filled a huge need for labour market information on the arts industry. That it provides this information all within one source is an added benefit. It also created a practical source of information for young people, and others, interested in pursuing a career in the industry.
Businesses, associations and unions within the arts industry now have an information piece to give to people inquiring about career opportunities, which is a more efficient use of their time. It has also provided career counsellors with an easy-to-read resource they can offer to clients interested in this field.

The project helped the industry understand where the gaps were in their own information, and provided some direction on how the industry can contribute more labour market information. Because of the participation and cooperation of people in the industry required for the project, the industry realized that a mechanism, such as a sectoral council, is needed to track and collect labour market information. The project has also served as a catalyst for the music, film and new media industries to better organize and promote themselves. Several industry organizations have been established, and the industries have also created planning committees, workshops and linkages with post-secondary institutions.

The project has validated the arts industry to a certain extent, demonstrating that it is a growing industry with numerous job opportunities, many of them well-paying. It also gives reassurance to people working in the cultural industry that it is not a dead-end industry, but one with depth, variety and opportunities for advancement.

Post-secondary institutions have begun to examine their programs to ensure that they complement the industry’s needs, as the institutions have become more aware of the need to provide their graduates with useful, relevant skills for the industry. At the same time, the project has led to a better understanding by industry of post-secondary programming offered in the province and the skill levels of graduates, as well as the necessity of forming links to ensure programming meets the industry needs.

*Getting Into the A.C.T.* validated K-12 fine arts programs, as well as the core curriculum, showing value in the learning by linking skills gained through education to skills required for jobs in the industry, and by demonstrating that skills acquired in arts programs have practical application in a job setting.

PMIA now has a database of secondary and post-secondary schools, as well as private centres offering retraining and employment counselling services that can be used in the future for disseminating labour market information.

As part of the evaluation, respondents were surveyed to find out what resources they used, and how useful they found them. Figure 1 gives the percentage of each group of respondents who had used *Getting Into the A.C.T.* About 25 to 30 percent of respondents in each group had used the resources except for contractors and counsellors. No counsellors had used it, and slightly less than 20 percent of contractors had. Figure 2 provides views on the usefulness of the resource of those who had used it. A large proportion (from 20 to 100 percent in each group) did not know how to rate its usefulness. Clients were the most favourable, with around 60 percent finding it useful, followed by secondary students and analysts and planners, at about 50 percent each.
Figure 1
Respondents Who Had Used *Getting Into the A.C.T.*

<table>
<thead>
<tr>
<th>Category</th>
<th>Percent of Respondents Who Had Used Resource</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary Students</td>
<td></td>
</tr>
<tr>
<td>Post-Secondary Students</td>
<td></td>
</tr>
<tr>
<td>Clients</td>
<td></td>
</tr>
<tr>
<td>Field Personnel</td>
<td></td>
</tr>
<tr>
<td>Analysts &amp; Planners</td>
<td></td>
</tr>
<tr>
<td>Teachers</td>
<td></td>
</tr>
<tr>
<td>Contractors</td>
<td></td>
</tr>
<tr>
<td>Counsellors</td>
<td></td>
</tr>
</tbody>
</table>

Figure 2
Usefulness Ratings of *Getting Into the A.C.T.*

- Very Useful
- Adequate
- Inadequate
- Don't know

Percentage of Respondents
Overview: Xplore Science Careers is an interactive, multimedia CD ROM that profiles eight women working in science and technology jobs.

LMI Strategic Initiative funding: $33,925

Purpose

The purpose of the project was to provide a portable and flexible information tool about the variety of careers available to women working in science and technology.

Description

The Society for Canadian Women in Science and Technology (SCWIST) received funding to produce a CD ROM with career and role model information on women in science and technology fields. Profiled on the CD ROM are eight women with the following jobs: Aquatic Biologist, Biology Instructor, Bio-medical Engineer, Environmental Consultant, Lab Technician Landscape Architect, Multimedia Producer, and Telecommunications Engineer.

At the beginning of the CD ROM the user has three modules to choose from: Knowing yourself, Women at Work, and Career Resources. The “Knowing Yourself” module is a brief self survey of strengths and interests. The user can do the survey and compare her results with those of the women profiled. From here the user can go directly to the profiles module, “Women at Work”. This module can also be accessed directly from the opening menu.

The “Women at Work” module contains profiles of the eight women. Each profile includes a graphic career path with a photo of the woman and a brief overview. The profiles are organized into three sections. “The Path”, which describes the path the woman took from childhood to her current career. This section of the profile contains text and two sound clips about how the woman chose her career. The second component of the profile is “What its Like”, a description of the work the woman does, including two sound clips of the woman talking about what her job is like, and how she integrates her career with family responsibilities. Photos of the woman in her workplace are included, as well as video and audio clips about specific aspects of the job.

The final section in each profile is “Things to Know”, which is advice from each woman about pursuing a career in the science and technology. Two sound clips of advice are included in each profile.

The third component of the CD ROM, “Career Resources”, contains brief lists of organizations and websites with information relevant to careers in: computer science, engineering, life sciences, physical sciences, technology. Information on other websites of interest is also provided, as well as information about SCWIST.
Method

The basic concept behind the CD ROM was to provide role models of women as “human” rather than “superwomen” that girls could never imagine themselves becoming. The profiles show that some of the women had failures, second thoughts and setbacks and succeed due as much because of their hard work and determination, as their natural talent. The profiles were kept simple and personnel to appeal to the tastes and interests of young girls. The CD ROM was designed to work with the most basic computer equipment.

Due to cost constraints, the project team began with the work already done for the SCWIST website, Explore Career Pathways. For the website, interviews had been conducted with six women. Sound clips, images and text created for the website were compiled for the construction of a prototype of the CD ROM.

The prototype of the CD ROM was tested with a group of girls aged nine to thirteen in a computer lab at Simon Fraser University in 1997. The girls viewed the CD ROM and provided feedback by completing a survey. This feedback was used by the contractor in designing the final product.

All the original interviews were re-done in a sound studio, due to the poor quality of the original recordings. Additional photos were taken of the women in their work places and two additional women were interviewed. The CD ROM was completed and packaged by June 1998.

The CD ROM was launched at the annual general meeting of SCWIST in 1998. At the meeting some of the women featured in the profiles participated in a panel discussion. SCWIST has created a brochure about the CD ROM, which it distributes at venues such as science fairs, and conferences for science teachers. The CD ROM was promoted with at SCWIST’s displays at the ’98 Science Career Fair and at displays at Simon Fraser University (SFU) during the Science and Technology week. The CD-ROM was also promoted at Catalyst, the provincial meeting of Science teachers in the spring of 1998 at SFU. In addition, Xplore Science Careers was demonstrated at many of the LMI workshops held throughout BC in the Spring of 1998. The CD ROM is available through SCWIST for $15 for members and $20 for non-members.

Status at the End of the Initiative

SCWIST is seeking funds to promote and market the CD ROM. It continues to promote the CD ROM at venues where SCWIST promotes its organization.

Cost Effectiveness

The original budget for the project severely underestimated the costs and complexity of producing an interactive multimedia product. As a consequence, project participants decided to build on work that they had done for the SCWIST website, Explore Career Pathways. Interviews with six women had been done for the website; these were used as the foundation for the CD ROM. Some of the work on the CD ROM was donated, as was the cover graphics.
Lessons Learned

Those involved in the project offered these lessons:

• Budget carefully and realistically and prepare for contingencies. They had planned to use tapes of previous interviews, but because of the poor quality of the tapes, the interviews had to be re-recorded in a sound booth, at additional costs. A great deal more money would be needed to do the CD ROM as they had originally envisioned.

• Material that had originally been collected for the website was not suitable for the CD ROM. The interviews were done on a hand-held Dictaphone and the quality was poor and could not be used for sound clips on the CD. In addition, few photos had been collected. Hence additional work had to be done. All original interviews were re-done and photos were taken of the women in their workplaces.

• The original prototype used 16-bit sound, but research showed that low end computers that were common in schools and libraries would have trouble with 16-bit sound. Hence 8-bit sound was used in the final products, despite to lower quality, to ensure that the sound clips would be accessible to all users.

• A distribution plan should be in place before the work begins. A web-site is a really good way to promote the CD ROM and keep it up to date.

Impacts of the Project

Limited distribution of the CD ROM has occurred, so there is no information on the impacts of the CD ROM on its intended audience, girls between the ages of nine and fourteen. The CD ROM can be used by schools, communities and SCWIST volunteers to show the wide range of job opportunities for women in the science and technology fields. Those involved in the project felt that the benefit of the CD is that it provides young girls with access to women’s stories and experiences, and provides role models of women in science and technology, which girls may not have access to otherwise. The profiles provide “examples of how it is possible to have a career and a life.”
**Work Futures: BC Occupational Outlooks and Work Scene: BC Work Futures for Youth**

Overview: *Work Futures: BC Occupational Outlooks* provides information about nearly 200 occupations in BC, including information on working conditions, educational requirements, and employment outlooks. *Work Scene: BC Work Futures For Youth* presents the occupational profiles in a quick-reference, easy-to-use format designed for youth.

http://workfutures.bc.ca

http://workinfonet.bc.ca/workscene

LMI Strategic Initiative Funding for the *Work Futures* resource and facilitator’s guide, and the publishing tool: $401,730

LMI Strategic Initiative Funding for the *Work Scene* resource, facilitator’s guide and lesson plans: $97,310

**Purpose**

The purpose of *Work Futures* was to provide a comprehensive view of present and future labour market conditions about occupations in BC for people doing career planning, and career practitioners assisting career planners. *Work Scene* was intended to make this information more accessible for a youth audience.

**Description**

*Work Futures* begins with a “How to use” guide, containing information on how to use the information in Work Futures for career planning. It includes information about doing a self-assessment, how to use labour market information for career planning and how to prepare an action plan. The guide also includes information about skills needed for today’s workforce.

The 182 occupational profiles are organized into ten chapters, with at least 25 occupational profiles in each. Within each chapter, profiles are organized by skill level, based on the amount of education or training needed for the occupation.

Each profile in *Work Futures* contains the following information:

- Data summary table, with a snapshot of the main statistical information discussed in the profile, such as employment trends until 2005, main industries of employment, and the proportion of people employed in the occupational group who are employed in each region of BC.
• Nature of work, providing a general description of the occupation, the kinds of firms that hire in this area, the main duties and examples of job titles.
• Education and training required for the occupation, including length of training programs and where the training is offered at public post-secondary institutions in BC. Also included are the experience and employability skills employers prefer.
• Working conditions covered are annual earnings, whether the work is usually full or part time, and self-employment and unemployment rates. Information on the gender and age mix in the occupational group is also provided.
• Employment prospects are provided both in statistical and narrative form.
• References to related occupations in Work Futures is also provided.

Appendices include general career information, information on apprenticeship, and a Guide to Public Post-Secondary Education in BC that summarizes the programs offered in BC, indicates where they are offered and the types of accreditation awarded upon completion.

An on-line version of Work Futures was also created, with the same information, following the same organizational structure as the print resource. The on-line version also allows for keyword searches and links within the resource, making it easy to navigate within the resource.

Work Scene: BC Work Futures for Youth, is a re-written version of Work Futures containing the same occupational groups, organized into the same 10 chapters. The information has been simplified and the language written to a grade 10/11 literacy level. Each profile in Work Scene includes detailed descriptions of the occupation as well as data on annual growth of job openings, average full-time earnings, employment by region, and other statistics. The book also includes photos and information on individuals working in each occupation. A PDF (Portable Document Format) version of Work Scene is also available on the internet; an interactive on-line version has not been created.

Method

Work Futures is an expansion and update of the BC Job Futures. The occupations profiled in Work Futures are based on the National Occupational Classification (NOC) system, which is a hierarchical organization of occupational groups. The 182 occupational groups that were profiled in Work Futures were selected to provide information on occupations representing the most employment in the province, and occupations with above average growth rates in persons employed compared to all occupations in BC.

Statistical data for the profiles was gathered from the 1991 Census of Canada and from the Canadian Occupational Project System (COPS), developed by HRDC to provide historical, current and projected data on occupational needs and supply trends to 2005, on a national and provincial basis. Projections of occupational growth are based on economic and employment forecasts and market intelligence, using the COPS.
projections, the analysis of other trends and expert advice from those knowledgeable about the sector.

A survey company was hired to do industry consultations. They collected feedback on the information in NOC and COPS on each occupational group from the respective industry association or major employer in the sector, to determine whether they agreed with the information. A team of analysts/writers were hired or assigned to the project. Some of these were personnel from the BC/Yukon regional office of HRDC or MAETT or its agencies, and others were hired on contract to the provincial government specifically for this project. Each writer did the profiles for a set of related occupational groups. They used the statistical information, together with the information from the industry consultations to develop the profiles. In a number of cases, the writers also consulted with representatives from the industry to complete the profiles.

A publishing tool was developed that would take the information and create both a print-ready version for publication and on-line version of *Work Futures* for the internet.

In addition to being on the internet, the print version was widely distributed, free of charge, to schools, post-secondary institutions, HRCC and Skills Division offices throughout BC, as well as career practitioners on contract to the federal or provincial governments. The print version is also sold through the Open Learning Agency.

*Work Scene* was written after *Work Futures* had been released. The main difference between it and *Work Futures* is that information in the profiles is condensed and a more consistent format was used for each profile. It was written to a grade 10/11 reading level, using point form where possible. Icons and simple symbols were also used. A lot of the additional material at the front and back of *Work Futures* was omitted. To make it appealing to a youth audience, pictures of people in various occupations were added.

One person with experience writing for youth was hired to write the profiles. They were edited by someone with experience analyzing labour market information. Yes Canada, BC, was hired to design the resource and produce the final product for printing.

**Status at the End of the Initiative**

Because of the scope of *Work Futures*, and its broad use, keeping it up to date is a priority. In the Spring of 1999 discussion was underway about updating *Work Futures* with the latest Census and COPS data. Resources, both funding and people, will be needed to do this.

**Lessons Learned**

Those involved in the project provided the following lessons about producing this type of resource:

- The division of work among the analysts/writers worked well. Each had a set of profiles to do that were for related occupational groups and another person worked exclusively on collecting the education information.
• The project team was split between Vancouver and Victoria, posing some communication challenges. Conference calls were used to save on travel time and cost, but this was not the most effective way to develop a coordinated approach to the project.

• Some people were hired specifically for this project and could dedicate all their time to it, while others were regular staff who had other responsibilities and sometimes had difficulty completing work for the project on time. This caused delays in the project. Work of this nature would be done more effectively if it is not done off the corner of people’s desks. Analysts/writers need to be able to focus their time on the work. Other delays were caused by the need to wait for statistics or for the publication tool to be finished.

• There was no advisory committee for this project, as it was started before advisory committees were in common use for Initiative projects. Based on experience on other projects, an advisory committee would have been a useful asset to provide input on the needs of end-users.

• Some of the writers felt that it would have been more effective if they had done the industry consultations for the sectors they were writing themselves. They found that they needed additional information or clarification and hence had to contact the industry anyway.

• It would have been more effective if the template for the format of the profiles had been developed at the beginning, before any writing had been done.

• The user interface for the publication tool was difficult to use. Writers ended up using a word processing program to write the profile in, and then copied the content into the publication tool.

• It will be easier to update Work Futures, given the work that was for the first edition, than it was to create. Style guides developed for the first version can be used again, and a lot of descriptive data will not need to be changed. However, most of the people who worked on the project are not working in the field any longer, so the project cannot benefit from their experience.

• Some participants felt that it would have been more effective to update parts of the work on an ongoing basis, perhaps one third of the profiles each year. This way, no profile would be more than three years old. The updated profiles could be posted on the internet version, and a new print version could be created every three years. This process would make it possible to keep staff working on the project on an ongoing basis, ensuring continuity and that the expertise developed in the process is not lost. This would make it easier to keep contact information current, and avoid the need to re-create the process each time the resource is updated.

• The approach to doing Work Scene was fragmented, with different people working on different aspects of the project. There was some confusion over responsibilities, with roles not being well defined at the beginning. This approach took more time and resulted in some communication problems, especially around how the resource was to be printed. Clearer definition of roles and responsibilities was needed at the beginning and better communication processes were needed throughout.
**Impacts of the Project**

*Work Futures* provides occupational information collected from a variety of sources in one place. Without it, career planners and career practitioners would need to use a variety of sources to get the same information. As such it is a valuable reference for analysts and planners, as well as career practitioners.

The research for *Work Futures* gave those working on the project a better understanding of labour market information and an opportunity to build their knowledge about collecting and analyzing labour market information. This project also brought federal and provincial personnel together and is an example of a major collaboration. It demonstrates what can be accomplished with this level of cooperation.

Data collected for the evaluation of the Initiative provides proof that the resource is well used. Figures 3 and 4 provides information on the proportion of respondents in each group who had used *Work Futures* and *Work Scene*, respectively. Use of *Work Futures* was very high among career practitioners; over 80 percent of field personnel, contractors and counsellors had used it and about 70 percent of teachers. Over 80 percent of analysts and planners had used it as well. Use by clients and students was lower, with about 70 percent of post-secondary students, about 50 percent of clients and slightly less than 40 percent of secondary students having used it. Use of *Work Scene* was lower overall. For professionals, use was highest for contractors, at about 85 percent and lowest for teachers at about 50 percent. For end users, use ranged from about 35 percent for clients and secondary students, to about 50 percent for post-secondary students.

Figures 5 and 6 provides ratings on how useful respondents had found each resource. The majority of users of *Work Futures* found it useful, with 60 to 70 percent of most groups finding it very useful. Most users of *Work Scene* also found it useful, although fewer gave it ratings of very useful.
Figure 3
Respondents Who Had Used *Work Futures*

Figure 4
Respondents Who Had Used *Work Scene*
Figure 5
Usefulness Ratings of Work Futures

- Very Useful
- Adequate
- Inadequate
- Don't know

Secondary Students
Clients
Post-Secondary Students
Counsellors
Analysts & Planners
Field Personnel
Contractors
Teachers

Percentage of Respondents

Figure 6
Usefulness Ratings of Work Scene

- Very Useful
- Adequate
- Inadequate
- Don't know

Clients
Secondary Students
Post-Secondary Students
Analysts & Planners
Teachers
Contractors
Field Personnel
Counsellors

Percentage of Respondents
Overview: *Making Career Sense of Labour Market Information* is a manual that introduces career practitioners to key socio-economic and labour market concepts, trends and issues, while providing practical examples on researching and using LMI in the job search and career development process. The Facilitator’s Guide is a companion publication used to train trainers and career practitioners on the uses of LMI in career development.

http://workinfonet.bc.ca/lmisi/making/Mcstoc.htm

LMI Strategic Initiative funding: $66,968

**Purpose**

The purpose of the project was to teach career development practitioners how to gather, evaluate and use current labour market information with their clients. Intended to enable the incorporation of LMI into career counselling, *Making Career Sense of Labour Market Information* was designed to: provide a general overview of the labour market and how it can influence career decision making; generate interest in labour market information so that career practitioners would use it with clients; and suggest resources for practitioners to use with clients to help foster understanding of how the labour market operates as a context for client decisions.

**Description**

*Making Career Sense of Labour Market Information* consists of a manual and facilitator’s guide, which were produced approximately one year apart. The course introduces career practitioners to key socio-economic and labour market concepts, trends and issues. It reviews the effects that demographics, technology, increased competition, globalization and structural economic change are having on the labour market. The resource highlights the occupations and skills required in a changing economy as well as occupational classification and forecasts used to describe the changes. Practical examples are provided on researching and using LMI in the job search and career development process.

The facilitator’s guide, a companion publication to the manual, has been used to train trainers on incorporating LMI in career development. Training for trainers using this material has been jointly delivered by the LMI and the ACR Initiatives, with training costs covered by the ACR Initiative. In addition, *Making Career Sense of Labour Market Information* facilitator’s guide has formed the basis of one-, three- and five-day courses offered around the province for career practitioners, including teachers and career counsellors in the K-12 school system and career counsellors in social agencies and government.
The Douglas College Continuing Education department was contracted by HRDC and MoEST to organize training sessions throughout the province for career practitioners using the *Making Career Sense of Labour Market Information* facilitator’s guide. Training sessions were delivered to staff in regional Ministry of Education, Skills and Training (MoEST), HRDC, and Ministry of Social Services/Ministry for Children and Families (MSS/MCF) offices, Community Skills Centres (CSC), and school districts.

**Method**

A first draft of the manual was initially produced by the Canadian Guidance and Counselling Foundation (CGCF), with collaboration from Algonquin College in Ottawa in 1991. The collaboration between CGCF and partners in B.C. evolved through a fortunate synergy of needs and efforts. At the time that CGCF had completed the first draft of the text, the LMI Strategic Initiative was already underway. It became apparent that there was a strong match between the vision of the Initiative and what CGCF hoped to achieve through the manual, and a partnership was formed that resulted in an end product that otherwise would not have been possible.

The LMI Strategic Initiative provided funding for producing an expanded version of the manual, as well as a facilitator’s guide. An HRDC economist was seconded to expand and reorganize the manual. An advisory committee provided guidance for the revisions, after which the draft manual went back to CGCF for production. A consulting firm was hired to do editing and desktop publishing for the manual.

While the manual was still in draft form, the companion facilitator’s guide was written by a British Columbia contractor with a background in adult education. Lesson plans and instructions on how to deliver the lessons were included in the guide, which was intended for professionals who already have the ability to train trainers. The contractor worked with an advisory committee to produce the lessons and then pilot-test them.

A few problems were encountered regarding authorship and credit for the end products. In addition, one partner felt that although the manual could stand alone, the facilitator’s guide should only be presented in conjunction with the training and therefore should not be posted on the internet. The other partner did not share this view, and it was posted anyway.

Douglas College’s coordination of the training for career practitioners throughout the province began with an informal needs assessment on the training each government office would require and what session length would be needed; however, because this was done in the summer, staff were difficult to reach. There was an attempt to coordinate the sessions with the MoEST skills development coordinator to prevent scheduling conflicts between other training opportunities, but this proved problematic because schedules kept changing.

Several logistical concerns had to be taken into consideration in setting up the training sessions. In order to reduce travel time for participants and to ensure that all staff members of an office could take the training, sessions were offered several times throughout the year in each location. Sessions held north of 100 Mile House had to be scheduled at a time of year when travel would not be dangerous, which reduced the
options for delivering training in those regions of the province. Class sizes were limited to 20 participants and in each area of the province, seven seats were assigned for HRDC, seven for MoEST, two for MSS/MCF, two for CSC, and two for school districts; however, because each area of the province had up to 25 school districts, this meant that the two seats allotted did not fill the need. No contact system for the school districts existed, so it was also difficult to inform teachers, career counsellors and other relevant secondary school staff about the training. Furthermore, because the training was being delivered on behalf of both HRDC and MoEST, it was sometimes difficult to marry their two different sets of needs and organizational cultures.

The trainers delivering these workshops commented that participants new to the field were quite happy with the training, while people who had been in the field for a while were often disappointed because they were already familiar with the information. “Some people thought it didn’t meet their needs. Other people saw it as confirmation that they knew what they needed to know to use LMI for career counselling, and the ones who were new to the field thought it was great.” At the same time, some trainers felt that the diversity of participants’ backgrounds ended up benefiting the training sessions to a certain degree because those with experience using LMI could reinforce and amplify the information the trainer was delivering.

Status at the End of the Initiative

Training using these two resources is ongoing. It is used in college career development programs, university certificate courses and graduate level courses, as well as workshops that are given to guidance counsellors and school boards.

Making Career Sense of Labour Market Information has been incorporated into the Gateways CD-ROM, which should increase and continue its usage. The Canadian Guidance and Counselling Foundation is considering producing an updated version of the manual.

Lessons Learned

Those involved in the various stages of the Making Career Sense of Labour Market Information project had a number of comments regarding lessons they learned during the process.

- Some sort of mechanism is needed for informing users of the resource (recipients of the manual or participants in training sessions) of changes in LMI. As new resources emerge and new ways of using existing resources are developed, there needs to be a way to disseminate the information. Suggestions included updates such as holding one-day updating training sessions every six months, or preparing a monthly newsletter. A listserv may also be a good way of disseminating new information.

- Simple is good. The manual is simply written, in simple language, and it is well-used.
• Authorship and other credits should be negotiated early on in a project. There were many issues that arose quite close to production time over who would get credited for what.

• One project participant felt the project could have benefited from involving people in the committee who were not as close to the information presented, to evaluate it more critically. The people who produced the information used in the manual and guide were part of government, and as a result, the information was quite neutral and avoided controversial questions that should have been addressed (e.g., effects of technology on job loss).

• Collaboration between various organizations, in particular because of the different views brought to the table by the various partners, resulted in the production of a good quality resource that was useful for a wider audience than would have been created without the collaboration. The partnership between the Canadian Guidance and Counselling Foundation and the B.C. Ministry of Skills, Training and Labour, with additional support from HRDC, was highly effective.

• It can be difficult to coordinate a project when one or more of the key players is not able to meet face to face with the committee. The representative from the CGCF was based in Ottawa, while the meetings took place in British Columbia, and working long-distance with the partners was difficult.

• It would have been useful to examine a greater diversity of clients for labour market information in the manual and guide. LMI in general is more accessible and ideal for clients who are younger and have a competent level of literacy. Examining how this information translates to other more marginalized groups such as unemployed people over the age of 50 or unemployed immigrants would have been useful.

• Developing training workshops to go along with the manual stimulated use of the manual. Training is a useful way of disseminating information, because it creates awareness and energy around the product. It would not have been as effective to simply provide practitioners with the manual alone.

• Some informal needs assessment had been built into the process through the career practitioner members of the advisory committee, but this was insufficient as needs changed over time. When the manual was written, there was a great need for career practitioners to learn to use LMI with clients, but by the time the manual had been published, the facilitator’s guide had been produced and the training sessions had been organized and carried out, most career practitioners were already using LMI with clients.

• It is important that the objective of training sessions be clear to participants, as a number were not satisfied with the workshop because they felt they were already familiar with this information. The training met the need that it was intended to meet, but in many cases it didn’t meet the participants’ needs, or their expectations for the course.

• The training sessions for career practitioners on using LMI could have better met participants’ needs if a formal needs assessment had been carried out when the training materials were initially developed. Training session coordinators tried to identify the learning needs of students in each session, by
talking to the trainees' managers while setting up the training around the province. This was not adequate because of the diversity in participants' knowledge and skills. The training may have been more useful to participants if split into two levels, one for beginners and one for more sophisticated uses of LMI.

- Although the training was originally designed for five-, three- and one-day sessions, there were insufficient numbers able to participate in five-day sessions (due to inability to leave work for that length of time) and only two were held. It had been planned that participants in the five-day sessions would be used as co-facilitators in the shorter training sessions around the province, to give them experience in delivering the training, but again an inability to be absent from work prevented this.

- Using a variety of trainers provided the added benefit that they were able to “compare notes.” Having such a team of instructors was useful; it would have been beneficial had there been more opportunities for trainers to meet together.

- By incorporating hands-on activities into the training sessions, participants learned how they could use LMI in a practical sense. Simply having a trainer standing at the front of the room lecturing would have been much less useful.

- Ensuring that proper training facilities are arranged for workshops, and that the locations are clearly advertised to participants, is important to the success of training.

- Establishing partnerships with colleges throughout the province could provide a mechanism for delivering such training regionally. Participants’ needs could be better met if training were offered locally.

**Impacts of the Project**

*Making Career Sense of Labour Market Information* provides people without a background in using LMI with a simple explanation of LMI and how to use it. When the manual was produced, LMI was little used by career practitioners; people involved in this project said that at the time, career counsellors tended to shy away from LMI. The manual took away the mystique of LMI, however, by explaining what it is, providing a single source describing what resources are available and clarifying what LMI means to the clients of career counsellors. It filled a gap in sources of information for career practitioners on how LMI works, how to find resources and how to work effectively with them. It also gave practitioners practical tools to address different types of client issues with different sources. “It made what had formerly been a daunting area for practitioners an area that could be more readily embraced.”

The project provided career practitioners with a context for labour market information and how to use it with clients. The link between clients and what LMI means to them had been lacking. For clients, most LMI seems dry and boring; the manual and training sessions attempted to find ways for career practitioners to present the information to clients in an interesting way.

The Making Career Sense manual and training provided practitioners with the tools to know how and where to access the latest LMI. Because labour market information
goes out of date so quickly, this offered a much more useful resource than if it had simply provided the labour market information, which would have been out of date by the time the manual was printed. An environment was created in which practitioners could put the pieces together for themselves, providing a gateway to the whole domain of LMI resources.

Some participants in the training sessions simply wanted to be handed a piece of paper with all the sources of LMI listed, but the workshops showed them that LMI is available everywhere — in the newspaper, at the mall or downtown, talking to a friend about work over coffee. The training helped to move practitioners from taking a passive approach about LMI to giving them the tools, excitement and motivation to obtain the information on their own.

According to one person involved in this project, *Making Career Sense of Labour Market Information* helped to make career and labour market information a more legitimate and important area that practitioners need to learn about. It contributed toward bringing LMI in career development services more into the mainstream and establishing it as a competence required for career practitioners.

Although not all career practitioners who participated in the *Making Career Sense of Labour Market Information* workshops were satisfied with the training, it did provide common points of reference and enabled the use of the same terminology. A consistency in terminology and knowledge of what labour market information consists of was therefore established among practitioners through the training.

Evaluation findings on how many respondents had used the manual and the facilitator’s guide are provided in Figures 7 and 8, respectively. About half the teachers had used the manual, around 70 percent of counsellors, analysts and planners, and about 90 percent of contractors and field personnel. Use of the facilitator’s guide was lower. Just over 40 percent of teachers, and between 55 and 65 percent of counsellors, field personnel and contractors had used it. (Analysts and planners were not asked about their use of the facilitator’s guide.)

**Figure 7**

![Bar chart showing usage of the manual by different groups.](chart.png)
Figures 9 and 10 provide ratings of the usefulness of the manual and facilitator’s guide. Most contractors, analysts, planners and counsellors had found the manual useful, as had about three-quarters of field personnel and about 45 percent of teachers. Some respondents were uncertain about the usefulness of the facilitator’s guide and ratings of usefulness were somewhat lower than for the manual. None the less, the majority of counsellors, contractors and field personnel found the guide useful, as did about a quarter of the teachers who had used it.
Figure 10
Usefulness Ratings of *Making Career Sense of LMI* Facilitator's Guide

- Very Useful
- Adequate
- Inadequate
- Don't know

- Counsellors
- Contractors
- Field Personnel
- Teachers

Percentage of Respondents
Overview: The BC WorkInfoNet website comprises annotated links to labour market and career information websites throughout BC and Canada.

http://workinfonet.bc.ca

LMI Strategic Initiative funding: $674,429

Purpose

The purpose of the website is to provide "one-stop" access to labour market and career information in electronic form in BC. Direction for the website is provided by the British Columbia Work Information Network Society, a collection of partnerships between funders, producers and users of labour market and career information. The mission of the British Columbia Work Information Network Society is to make useful on-line labour market and career information accessible to British Columbians.

Description

The website provides one-stop access to a wide range of resources and services. Some of the links that are available at BC WorkInfoNet include:

- Changing Times, a career and labour market information webzine developed by, and for, career practitioners.
- Career Paths, the annual Career Planning Guide for BC and the Yukon, which provides career and labour market information, and self-assessment tools to help students and youth make relevant and informed career/life plans.
- Motiv8, the Official School-to-Work Transition Newspaper and Webzine for BC and the Yukon, is a lively source of information to help students and youth navigate their school-to-work and school-to-more-school transitions.
- Realm: Creating Work You Want, a new national magazine and webzine designed to ignite the enterprising spirit of young (aged 18 to 29) Canadians.
- What Works, a quarterly work search newsletter, published in five regional editions, targeted to young people who are out of school and out of work.
- Career Gateways, an on-line application designed for a broad audience of career practitioners, that incorporates publications such as Work Futures and Career Paths, as well as a "navigational road map" to key resources in BC.
- Work Futures provides information about BC occupations, including information on working conditions, educational requirements, and employment outlooks.
- Work Scene: BC Work Futures For Youth presents nearly 200 occupational profiles in a quick-reference, easy-to-use format designed for youth.

The BC Youth site is also linked to BC WIN. The youth site is aimed at a 15 to 29 year-old audience. To assist users in making better use of the website, BC WIN has an on-
line tutorial, *Surfing for Work in B.C.* The tutorial gives a brief introduction to how the Internet can be used as a tool to help people find work in the province and to use on-line resources for developing their careers. The website also provides information on resources available, on-line and in print, and how to obtain them. In addition, the site has a listserv for career practitioners with over 600 members.

The website is managed by an employee under contract through YES Canada, BC. The website is promoted by its partners, especially through activities intended to promote the youth site. BC WIN is also exhibited at conferences for career practitioners.

**Background**

The Joint Committee for Enhanced Labour Market Information provided the initial spark for BC WorkInfoNet. Community forums were held to test the need for high quality labour market and career information, and assist business, labour, community organizations, governments, schools and individuals to make informed choices. Through the forum it became clear that more and better information was indeed required, and that it would not be very useful unless it was available in both print and on-line formats.

These efforts culminated in the organization of a province-wide Working Forum that brought together stakeholders with an interest in providing labour market and career information via the Internet and/or using the Internet as a tool to facilitate communication between information producers and users. Discussion groups were struck to build consensus for the common vision of a labour market and career information system for BC. The key conclusions of the forum were that:

- BC should participate in the national Canada WorkInfoNet initiative. BC's participation should be based on a province-wide partnership, providing all stakeholders with an opportunity to get involved.

- The BC website should offer "one-start shopping" for career and labour market information and should be responsive to the needs of both users and contributors.

By June 1996, an interim Steering Committee with representation from a variety of organizations was established to create and manage a BC WorkInfoNet website, and to take the other steps necessary to make BC WorkInfoNet a reality that could be of real service to British Columbians.

**Status at the End of the Initiative**

At the end of the Initiative, BC WIN lost its stable source of funding. As a consequence, it has had to shut down some of its services, including “Ask a Counsellor” and “Career Explorer.” “Changing Times” no longer displays BC specific content; instead it links to the information provided on the CAN WIN site, which is national in scope.
Evaluation of the LMI SI

As of the Spring 1999, funding sources for BC WIN included Human Resources Development Canada; the BC Ministry of Advanced Education, Training and Technology; the BC Ministry of Education; and Can WorkInfoNet. The funding has allowed for continued development of the site, but at a reduced level. On April 13, BC WIN launched a new user interface at its annual general meeting. The interface organizes the website for each user group.

Cost Effectiveness

The initial implementation of BC WIN was not cost effective. Initially contractors were engaged to develop and maintain the site. Now the Society has reduced costs by hiring an employee of one of the partners to manage the site. Expertise is growing in this area so it is getting less expensive to hire experts to develop and maintain the site. BC WIN can be a cost effective method of mounting and maintaining material on the web, since many agencies pool their resources rather than each agency having to develop their own infrastructure to do this. BC WIN benefits from its partnerships through promotion of the site. Working in partnership is cost effective in others way as well. Tools developed by one organization can be used by partners. For example, to put the Learning Works database on the BC WIN site, the database tool developed for Career Resources 98 will be used. BC WIN is also examining ways to bring in revenue through the site, possibly through banner advertising and posting book reviews.

Lessons Learned

Those involved in the project had a variety of lessons to offer:

- Working in partnerships encourages buy-in and leads to a better results in the long run. Partners become champions of the site and help build acceptance in the community by advocating for their group to make sure it is relevant to their needs. Partners also provide the content.
- It is important to develop a mandate and mission to provide direction. This needs to be revisited annually to determine its continued relevance.
- Need to be clear that BC WIN is not a developer. It can assist others in development by working with them to get information on-line in a cost effective manner.
- Being a not-for-profit society gives BC WIN autonomy from government and allows for greater joint ownership by the partners.
- Need to stay focussed on the needs of the audience. Need to review this on a regular basis. Need to make sure the users are involved on the Board and to do focus testing during development.
- Need to recognize that literacy levels and computer literacy will vary, so the site should not be too complicated.
- Need also to address disability access, but this is a cost issue. Also need to develop more content for equity groups such a people with disabilities, aboriginal people and women.
- Sustaining the site will require some government funding as it cannot be self-sustaining. Since BC WIN enables the distribution of LMI, it is serving a public good and should be eligible for continued funding.
- Need to allow time to grow. It isn’t possible to do it all at once.
Impacts of the Project

From July 1998 until April 1999 user sessions increased from approximately 27,000 to 48,400 per month. Partner websites of *Career Gateways*, *Changing Times*, and *Work Futures* have also experienced significant increases in the number of uses. Over 15,000 users a week are now accessing BC WIN and partner websites, almost double over the previous nine months.

Figure 11 shows the percentage of respondents in this evaluation who had used the BC WIN website. A large proportion of career practitioners had used the site. The users’ ratings on the usefulness of the site are provided in Figure 12. Most users had found the site useful, with more than half rating it as very useful to their needs.

**Figure 11**

Respondents Who Had Used the BC WIN Website

<table>
<thead>
<tr>
<th>Group</th>
<th>Percent of Respondents Who Had Used Resource</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary Students</td>
<td>30%</td>
</tr>
<tr>
<td>Clients</td>
<td>40%</td>
</tr>
<tr>
<td>Post-Secondary Students</td>
<td>50%</td>
</tr>
<tr>
<td>Contractors</td>
<td>60%</td>
</tr>
<tr>
<td>Analysts &amp; Planners</td>
<td>70%</td>
</tr>
<tr>
<td>Counsellors</td>
<td>80%</td>
</tr>
<tr>
<td>Teachers</td>
<td>90%</td>
</tr>
<tr>
<td>Field Personnel</td>
<td>100%</td>
</tr>
</tbody>
</table>

In addition to the obvious benefits of BC WIN as a place to find labour market and career development information, those involved are aware of other benefits of the site:

- BC WIN is working to generate a sense of community and networking between people scattered through the province;
- Partners can use the website as a communication tool, as the LMCIA did for their Spring 1999 conference;
- It has helped raise the profile of career development and awareness of what career development is; and
- Those involved have developed a new skills set, partnership development.

One of the career practitioners involved in the project described BC WIN as empowering by giving career practitioners the sense that government is listening to them and wants their feedback. This respondent added that “Overall [BC WIN] went a long way to develop capacity of the career development community and thereby,
hopefully develop the capacity of individuals” around the collection, production and dissemination of career development and labour market information.

**Figure 12**

**Usefulness Ratings of the BC WIN Website**

![Bar chart showing the usefulness ratings of the BC WIN Website for various groups.](chart)

- **Secondary Students**
- **Clients**
- **Post-Secondary Students**
- **Counsellors**
- **Teachers**
- **Contractors**
- **Analysts & Planners**
- **Field Personnel**
Tourism Career Connections Website

Overview: The Pacific Rim Institute of Tourism’s Tourism Career Connections website is a comprehensive information source for tourism career development with an electronic labour exchange that was under development when the Initiative ended.

http://www.prit.bc.ca

LMI Strategic Initiative funding: $153,350

Purpose

The project has two purposes. One is to disseminate career and labour market information about the tourism sector using new technology. The site is intended to raise awareness of the tourism industry labour market and to provide a realistic picture of its employment opportunities. The second purpose is to ultimately link job seekers with employers in the industry through an electronic labour exchange.

Description

The Pacific Rim Institute of Tourism (PRIT) Tourism Career Connections website is an extensive resource for those interested in a career in B.C.’s tourism sector. Some of the topics covered on the site include:

• **Is Tourism Right for Me?**, with a checklist of skills and interests;

• **Opportunities**, which provides lists of job types in accommodation, food and beverage, transportation, travel trade, adventure tourism, events and conferences, attractions and tourism services; and

• **Tourism Career Action Plan**, which provides sources of information about the industry and looks at educational opportunities at the secondary and post-secondary levels and opportunities for workplace-based training, apprenticeships and self-learning.

The site also features a bookstore through which visitors can order resources on the industry.

In addition to developing the website, PRIT was funded under the LMI Strategic Initiative to determine the feasibility of an electronic labour exchange for the industry. The PRIT site also contains an electronic labour exchange demonstration on which employers provided feedback. When complete, the job bank will provide industry-specific employment opportunities and on-line worker job matching services. It will consist of occupational skill checklists, as well as employee résumés and descriptive job summaries. The tourism occupational skill checklists, used by both employers and
job seekers to create job or skill profiles, will map to the corresponding checklists on HRDC’s National electronic labour exchange.

**Method**

To develop the Tourism Career Connections site, existing labour market information on the tourism industry was collected, including employment opportunities and occupational standards. The majority of this information was in print form. Choosing how much information to include on the site was a challenge, as was determining the most effective format for presenting it on-line.

When HRDC approached PRIT about the potential for linking its on-line job bank with the national Electronic Labour Exchange, the scope of the project was broadened considerably, as the original plan had been to create an electronic labour exchange for just the B.C. tourism industry. In addition to the demonstration electronic labour exchange on which approximately 200 employers provided feedback, surveys and focus groups were held with tourism employers to discover their needs regarding such a job bank.

PRIT piloted an industry-specific on-line job bank with tourism employers to discover their needs around an electronic labour exchange. The research phase of this component of the project is complete, and PRIT has been working with HRDC and Industry Canada to develop an on-line job bank linked to the national Electronic Labour Exchange, based on the information PRIT gained from employers in the industry.

**Status at the End of the Initiative**

PRIT maintains the website. When staff at PRIT prepare any new information, materials or resources, they consider how it can be incorporated into the website; putting the information on-line increases and enhances public access to LMI on the tourism industry. Tourism Career Connections contains a great deal of information for career seekers, but PRIT would like to improve the information targeted to employers and educators and trainers. PRIT continues to market the site through all of its activities, including presentations at secondary schools and industry presentations.

PRIT is working with software developers to create the on-line tourism job bank from the model created and incorporate it into the national Electronic Labour Exchange that should be operational by the summer of 1999. Usage patterns and feedback after the on-line tourism job bank is used will enable the modification of the site over time to better accommodate its users.

**Cost Effectiveness**

From the point of view of Initiative funding, the project was cost effective in that PRIT contributed considerable human resources to complete the project. From a cost-benefit point of view, PRIT felt that greater funding would have improved the project by improving PRIT’s ability to provide the support needed for the project.
Working in partnership was a way to be cost effective. Establishing more partnerships would improve cost effectiveness. “For a project of this size, the more funding sources you have the better. Partnerships lighten the load for everybody. They also build more awareness in the industry, because more people are involved, which helps at the marketing stage.”

The electronic labour exchange component is unique in that it will be self-sufficient and may even become revenue-generating over time. In Industry Canada’s experience, all of the electronic labour exchange sites put up have become self-supporting in a relatively short period of time. “The site is able to continue indefinitely. This won’t be a black hole for more HRDC or Industry Canada money…The beauty of it is the initial investment is all it needs. It’s a good investment, one that has an equity component to it.”

Lessons Learned

Project participants offered a number of suggestions regarding lessons they have learned in the process.

- The human resources required to take an inventory of the huge volume of tourism labour market information available in print and create an effective resource on-line were significant. One of the project participants commented that with the benefit of hindsight, she would have hired someone full-time to work on the project.

- Any project involving the internet must be considered a long-term, flexible project. On-line resources are quite different from print resources. “It’s not like a brochure or manual that once it’s printed, it’s done. They are on-going projects.”

- The strategy adopted by PRIT to develop the Tourism Career Connections site was to take a targeted approach to the key groups affected: job seekers, employers (the industry) and educators and trainers. The feedback of job seekers has validated this approach.

- Working with PRIT helped HRDC to focus its vision for a tourism electronic labour exchange. It would have been helpful had HRDC had a clearer vision at the start of the project.

- HRDC caused delays for PRIT because it hadn’t worked out in advance such issues as software licensing and ownership, and maintenance and housing for the system. Because the software had already been developed for Industry Canada’s National Graduate Registry, however, it did save money.

- The electronic labour exchange was such a new idea for the tourism industry that it took quite some time to get to the stage where software could be developed. All of the proper steps were taken, however, so this will not simply be a one-off project, but will become a sustainable resource for the long-term.
Impacts of the Project

The Tourism Career Connections website has helped to raise awareness of the tourism industry and provide a realistic picture of its employment opportunities. As a result of the project, information is available on the internet to those interested in pursuing a career in this sector. The research conducted to develop the site has also served to illuminate occupational standards for the industry.

The availability of this labour market information on-line allows PRIT and tourism employers to refer inquirers to the website. This capability saves staff time and ensures that more consistent information is disseminated. People who contacted PRIT before the site was developed would not have received the same level of information. PRIT’s target markets are quite comfortable accessing information on-line, and many inquirers ask if PRIT provides such information on a website.

This project allowed PRIT to jump into the world of disseminating information electronically and establish an on-line presence sooner than the organization would have otherwise been able. It enhances access to information that was already available by offering it through a new medium accessible from anywhere in the province, and, in fact, anywhere in the world.

A wealth of information on industry employers’ thoughts regarding an electronic labour exchange has been gathered. Not only will this ensure the creation of a resource that meets the needs of the industry, but it also enhances the credibility of the resource in the industry’s eyes because it has had input into the resource’s development. The on-line job bank will also provide employers with a lower cost option for advertising jobs. “It will let busy employers that don’t have the time or money to do traditional forms of recruiting, such as advertising in the paper or hiring a recruitment agency, a real quick and cheap method of recruitment right from their desktop, and it will provide labour market information as a consequence.”

When the electronic labour exchange is operational, the federal government will be able to provide much more detailed labour market information on the tourism sector. This information will allow skill gaps in the labour market and training needs to be addressed. It will also enable more accurate descriptions of salary information and hiring trends across the country for the tourism industry. Trends will be able to be reported such as what jobs are in demand, whether they are full- or part-time jobs, where the jobs are (restaurants, hotels, cruise ships), whether demand for certain jobs types is growing or declining, the geographical locations of job vacancies and the demand for skill sets. As use of the resource increases, the labour market information available for the sector and its quality will also increase. A large portion of the employees in this industry are young, and the on-line job bank will provide a great deal of information as well on this demographic group that is “not great at filling out forms.”

The labour market information obtained through the electronic labour exchange will be generated mainly by the users themselves, which is a highly efficient and accurate method of data collection. Job seekers will enter information on the type of job and salary they want, and employers will provide company profiles, the kinds of employees they want, the types of jobs they have available, the duration of the jobs and the salary.
All of this information will assist in the generation of LMI by Statistics Canada. It is anticipated that the LMI generated on the tourism sector will begin to be reported six months after the on-line job bank’s launch. This will be the first “real-time” LMI for the tourism sector, as Statistics Canada information is up to five years old because it relies on census data. “It’s real-time information right from the horse’s mouth: the people looking for work and the people wanting to hire them.”

Working with PRIT has given HRDC better access to the sector for gathering LMI, because PRIT has much better communication with tourism employers and workers. This access will only increase as PRIT promotes the resource to the sector.

The on-line job bank is expected to enhance access to job opportunities for job seekers and to link employees to a larger pool of potential employees. This should facilitate job seekers in locating jobs in the sector, and employers in identifying suitable employees.

Figure 13 shows the proportion of respondents who had used the Tourism Career Connections website and Figure 14 gives their ratings on the site’s usefulness. Less than 40 percent of respondents in any group had used the site, with contractors and field personnel being the highest users. A large proportion (about half for most groups) could not rate the site’s usefulness. Of those that could, the majority had found it useful.

Figure 13
Respondents Who Had Used Tourism Career Connections Website

<table>
<thead>
<tr>
<th>Group</th>
<th>Percent of Respondents Who Had Used Resource</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary Students</td>
<td></td>
</tr>
<tr>
<td>Post-Secondary Students</td>
<td></td>
</tr>
<tr>
<td>Clients</td>
<td></td>
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<tr>
<td>Field Personnel</td>
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<td>Contractors</td>
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<tr>
<td>Teachers</td>
<td></td>
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<tr>
<td>Counsellors</td>
<td></td>
</tr>
</tbody>
</table>

Percent of Respondents Who Had Used Resource
Figure 14
Usefulness Ratings of Tourism Career Connections Website

- Very Useful
- Adequate
- Inadequate
- Don't know

Percentage of Respondents

- Post-Secondary Students
- Secondary Students
- Clients
- Counsellors
- Contractors
- Field Personnel
- Teachers
Overview: An econometric model to predict employment changes at the sub-provincial level for various sectors of the economy of BC.

LMI Strategic Initiative funding: $50,000

Purpose

The purpose of the model is to assess the impact of economic changes at the local level, by making it possible to make employment projections by region within BC and industry.

Description

The BC Regional Employment Projection Model (REPM) provides a projection of employment by region by taking forecasts of direct employment and calculating the indirect and induced employment impacts of changes in the direct employment numbers.

There are eight potential input variables. The primary input variable is direct employment by industry, followed by indirect multipliers, which are used to calculate the amount of indirect employment and are generally assumed to remain constant throughout the projection period. Three input variables are used for determining the amount of non-basic employment: average after-tax wages, the number of non-basic jobs per million dollars of basic employment, and the dollar value of after-tax income from the five non-employment sectors. Three other input variables are used as data checks: BC employment figures are used to ensure the sum of regional projections produced by REPM sum to the provincial total; the population of people 15 and over by region, and the regional labour force participation rates to ensure that employment numbers are consistent with population projections.

Anyone one of these eight variables can be changed and the model can produce a difference result that compares the model prior to the changes with the model resulting from the changes. For instance, it can show the impact on employment of a mine closure where 500 people will be laid off.

Method

The BC Regional Employment Projection Model (REPM) was developed by BC Stats, based on previous work done on community dependencies by the Ministry of Finance and Corporate Relations for the Forest Resources Commission, and the Round Table on the Environment and the Economy.

Income flows into a community are grouped into basic or non-basic category, depending on the source of income. Basic income includes employment in resources
sectors, where the output is usually exported outside the community that produces it and hence the income is from outside the community. Non-basic income includes income from most retail sales and from services provided to other members of the community.

The model includes 31 industry groups and 30 regional districts in BC. The primary source of data was the 1991 Census information on Experienced Labour Force by Detailed Industry. Based on the census data, all income from activities in a region was classified into basic sectors of agriculture, forestry, mining, fishing and trapping, tourism, government, health, and other basic industries and into the non-basic service sector.

REPM can calculate the indirect and induced employment impacts of changes in the direct employment numbers. Indirect effects are those that arise through industry linkages, whereas, induced effects are those spin-off effects associated with the recirculation of household income. Employment multipliers were developed to calculate the indirect employment effects of an impact on direct employment. A matrix is developed containing the indirect employment multiplies for every industry linkage. The multipliers are industry specific and take industry linkages into account. They are calculated by taking the ratio of the sum of all employment attributable to an industry plus the portion of employment from other industries that exists only to serve the industry in question, over the employment from that industry alone. The model assumes that these ratios remain constant throughout the projection period, but they can be modified at any point in the projection if it is known that there will be a structural change that will alter the ratios.

To calculate indirect employment, the model takes the product of the indirect employment multipliers and direct employment, and then sums over the industries to get indirect employment by industry. Induced, or non-basic employment, is determined by calculating the income from direct, indirect and non-employment sectors, and multiplying this by the number of non-basic jobs per million dollars of basic income.

**Status at the End of the Initiative**

In the Spring of 1999, BC STATS was in the process of updating the model with 1996 census data. The multipliers had been calculated, but programming changes were still needed. Additional funding would be needed to complete the updating, as BC STATS cannot do this within their regular budget. The model needs annual updating of the input assumptions about growth in the driver industries in each region. BC STATS does not have the resources to do this annually.

Discussions were held in the Fall of 1998 with potential users of the model about their needs with respect to regional employment forecasting and where improvements could be made. The model as developed can be used by econometricians. Further development is needed to make it easy for program planners to use. Although the model can be used to provide employment forecasts for regional districts, in various combinations, for some sixty industrial groups, these forecasts are based on a provincial-level set of industry distribution coefficients. The model could be improved by producing sets of industry distribution coefficients at the sub-provincial level.
Discussions were underway about the possibility of securing funding for these improvements.

Cost Effectiveness

The funding provided by the LMI Strategic Initiative was used cost effectively because BC STATS contributed their own staff to work on developing the model and used funding from the Initiative to hire the programmer.

Lessons Learned

Those involved with the development of the model, as well as some of its potential users, identified a few lessons that were learned from this project:

- The initial planning for the model should have taken into consideration the end user, especially about the type of user interface that would be needed.
- Communication and how to market the model should also have been planned for at the beginning.
- There is a need to show the policy relevance of the outputs of the model to potential users, that is policy developers and program planners. This can help to sell them on the value of looking at the future, not just the present.
- May need to provide training in its use, as there is an interpretive element to using it. Users will need to understand the assumptions and the factors that influence the assumptions.
- The model needs a champion to provide vision and get the commitment at the executive level needed to sustain it.

Impacts of the Project

The audience for this model are planners and researchers who need information about potential future employment in local communities. The economic pressures in BC since the model was developed resulted in a reduction in the size of the research and analysis functions in government, reducing the audience for the model. In addition, the need to update the model with 1996 census data, and the need for a more user-friendly interface, has resulted in few users of the model. Once updated with the new census data, the model can be expected to remain useful for five years, until the next census data is available.

Since the economic conditions in BC are not uniform throughout the province, there is a need to be able to predict impacts of changes in the labour market at the local level. This model will address this need. With more planning and accountability for programs being moved to the regional level, there is more demand for regional information.

The value of REPM is its ability to measure the effects of various “shock” scenarios at the community level. It can calculate employment projections for a community, based on an anticipated economic shock, such as the expiration of the contract for ore, resulting in a mine closure. One disadvantage of the model is that it does not deal with cross regional impacts, that is, impacts of a shock in one region on other regions.
Potential users of REPM include government agencies that deliver programs to address the needs of displaced workers, including Forest Renewal BC, the Ministry of Forests, and the Skills Division of the Ministry of Advanced Education, Training and Technology.

One of the potential users of the model felt that the model “would provide a critical piece of information” for their planning because it would give them some idea of the demand to expect and allow for better budget allocations to the regions. Without the model, planning is based on projections from the Canadian Occupational Projection System (COPS), with qualifications based on local information. REPM would be an improvement because it would provide a better picture of the impact in each region.

Another potential user indicated that without the model they use estimates made by field staff in each community. She felt that once finished the model “would be extremely useful.” A third potential user felt that the model was good for corporate policy and planning. Without the model, they use whatever information they can get, as well as guess work. One of the advantages of REMP is its ability to tie in with the provincial economic model.

According to the survey results for the evaluation of the Initiative, some analysts and planners had used the model, perhaps during the demonstration phase. Eleven respondents rated its usefulness; all had found it useful.
On Track: Private Training Outcomes Survey

Overview: This was a pilot project to test the feasibility of collecting education and employment outcome information from former students of private post-secondary institutions in BC.

http://www.ceiss.org/edresearch/ontrack

LMI Strategic Initiative funding: $327,026

Purpose

The main objectives of the project were to collect labour market information regarding private sector training and to measure training outcomes of private training institutes. The data obtained can be used for the following purposes:

• to assist government/funders in making training expenditure/referral decisions;
• to provide clients with information to make decisions about which field of study to take and which institute to attend;
• to provide private training institutes with survey information which could be used as a marketing tool; and
• to provide the general public with labour market and training information.

Description

The On Track: Private Training Outcomes Survey, is an on-going follow-up survey designed to capture outcome information from graduates from BC private training institutions. The outcomes survey data provides demographic information about the graduates, their employment outcomes, the relevance of their training to their employment, and level of satisfaction with the program they graduated from.

Method

The Private Training Outcomes Survey project began in the summer of 1995. A steering committee consisting of representatives of each of the following organizations was responsible for delivering the project:

• The Ministry of Education, Skills and Training (MoEST), which was represented by the Centre for Education Information, Standards and Services (CEISS);
• Human Resources Development Canada (HRDC);
• The Private Post-Secondary Education Commission (PPSEC); and
• The Private Career Training Association (PCTA).
A larger advisory committee, consisting of people from MoEST, HRDC and other stakeholder groups, provided advice to the steering committee. In addition, seven working groups were formed at the beginning of the project to focus on the following aspects of delivery:

- Private sector buy-in: to promote participation of private sector training providers in the pilot project;
- Cross reference coding: to co-ordinate the coding system used for public sector programs, private sector programs and PPSEC coding;
- Survey questions and data analysis process: to develop the survey questions and to determine the process to be used for data analysis;
- Survey frequency, access to information and format of data: to determine at what point after graduation the survey would be conducted; to establish who would have access to what level of data and to determine the format for the report;
- Contract negotiation process: to determine the terms of reference for the Request for Proposals used to select the survey contractor and to do the initial screening of potential contractor proposals;
- Ongoing administration and costs: to determine how the project could be continued once the Initiative funding was exhausted; and
- Evaluation of the project: to evaluate the project to ensure that the original goals for the project were being met and recommend changes where necessary.

The eligibility criteria, and other aspects of the survey, were developed by the working groups. In early 1996, a researcher from Statistics Canada was hired to design the survey instrument, in consultation with the working groups and the project steering committee. For the pilot project the eligibility criteria were restricted to programs of at least 25 hours in duration, in 11 program areas. Programs were selected based on what prior research suggested were the areas of greatest enrollment.

All full-time and part-time students in these programs, who had graduated or completed at least 75% of their program before leaving, were eligible. International students, those in correspondence courses, individual courses, or in other programs were not eligible. Also excluded were students who had left their program before completing at least 75% of the requirements. Due to privacy concerns, individual programs with fewer than 10 trainees in a year at a given institution were also not eligible, although similar programs at the same institution could be combined to reach the eligibility threshold.

A survey company was contracted to conduct the telephone survey. In May of 1996, information packages were mailed to institutions and follow-up calls were made to answer their questions and determine their willingness to participate. An article announcing the study was published in the PPSEC newsletter prior to the initial mailing. Other articles were published periodically in the PPSEC newsletter.

The survey instrument was pilot tested in June 1996. In September, 1996, the survey company began surveying trainees who had completed their training from six months to one year prior to being contacted. Normally, graduates are surveyed six months following graduation, but a number of institutions did not get the names of the
graduates to the company in time for the six month follow-up, so some were contacted up to one year following graduation.

Participating institutions are provided with statistical tables of their data each quarter, consisting of aggregated information on each question asked. A preliminary report summarizing the results of quarter 1 and 2 was released in April 1997. The first complete survey report, on the results of quarters 1, 2, and 3 was released in August 1997.

**Status at the End of the Initiative**

The On Track project continues with funding from the Ministry of Advanced Education Training and Technology and from Human Resources Development Canada (in a two-thirds, one-third split).

CEISS acts as a sponsor and partnering agency for the Survey, along with the British Columbia Career Colleges Association, the Private Post-Secondary Education Commission, and others. Human Resources Development Canada and the Ministry of Advanced Education Training and Technology fund the survey.

The survey publishes two reports per year; the most recent survey report is the March, 1999 edition. This report presents data from March 1998 to February 1999, during which 3773 graduates from the September 1997 to August 1998 time period were surveyed. The report also includes longitudinal analyses of key employment outcomes from September 1996 to February 1998. Previous reports were released in November 1998, June 1998 and November 1997.

Reports are distributed to committee members, participating institutions and those indicating an interest in participating. They are also distributed to HRCC and Skills Development field offices. The report is also available on-line at the CEISS website, and will be linked to the BC WorkInfoNet site.

Graduates from over 130 institutions were surveyed in the period covered in the March 1999 report. Since then participation has increased to over 150. Some recent changes are expected to increase participation further. The project has expanded to cover all program areas whose objective is employment. By August 2000, the federal and provincial governments will only provide funding to accredited training institutions. This includes qualifying for student loan designation. Accreditation is done by PPSEC; as of April 1, 1999, institutes are required to participate in the On Track survey as part of their requirement to provide outcome information on their programs. On Track is being used to ensure that objective, consistent outcomes data is available on each accredited institution.

**Cost Effectiveness**

Through the period of the pilot, administrative processes have been streamlined. As a result, institutions do not need as much support as they used to. As more participating institutions get computers and internet access, more of the information dissemination is being handled electronically. This saves both time and money.
Lessons Learned

Those involved in the project, including government personnel and private trainers, offered a variety of lessons learned through the project:

- In order to get private institutions to participate, they need to be involved in the process. The outcomes project followed the model of its predecessor, the outcomes research in the public college and institute system. Participation grows slowly as confidence in the process grows.

- To ensure that private training institutions will participate, they must not perceive the study to be punitive. Since this is the private sector, it is important to ensure that no institution is compromised by the data; they will not participate unless it is in their best interest.

- Marketing, and creating a name for the study, increased the participation significantly.

- How to categorize programs has been an issue. In the beginning there were so few schools participating that programs were categorized together when their content was different, or the level of training was different. This makes comparison of outcomes meaningless. Now the Canadian Institutional Program (CIP) codes are being used, and new codes are being developed as needed.

- To ensure that the data are valid, there needs to be a mechanism to ensure that no institution is able to provide only the names of the graduates that they think will likely do well. To prevent this, changes were made to have institutions provide the names of students when they enroll, rather than at graduation. The requirement of participation for accreditation should improve the reliability of the data, since institutions can be audited. An audit would discover if an institution had withheld names of students who did not do well.

- More communication is needed to ensure that relevant people in government are aware of On Track, particularly case managers in the field for HRDC and the Skills Division of the MAETT.

Impacts of the Project

Government personnel and private trainers identified a number of benefits and impacts of the project:

- The pilot project demonstrated the feasibility of collecting outcome data on the private training sector.
- Because of On Track, there is now data available on the outcomes of private training that did not exist before.
- This information can provide accountability for public funds that are used for private training and can also be used for program improvements.
- The information can also be used in career planning, by providing information on employment opportunities and well as information on relevant training.
- The project has helped increase the credibility of the private training sector, by demonstrating the effectiveness of private training. This objective,
independent study has shown that the private training sector compares favorably with the public sector.

• The data from the project has been used by the sector to respond to issues when dealing with government, particularly the Training Accord with the provincial government and with the federal government around the devolution of training. As a result they have formed an advisory committee to the Deputy Ministry on the Training Accord.

• Private trainers have found the results useful in identify areas needing improvement. As one private trainer stated, “For the price, those who are not using it are wasting an opportunity to service their clients better.”

Survey results for the evaluation provide an indication of how many respondents had used On Track, and what they thought of its usefulness. These findings are provided in Figures 15 and 16, respectively. On Track had been used by about half the field personnel, analysts and planners, around 30 percent of clients and secondary students, and around 20 to 25 percent of the other groups. A high proportion could not rate its usefulness, but the majority who could rate it, had found it useful. Analysts and planners had found it more useful than did other respondents, with about 80 percent rating it as useful.

**Figure 15**

**Respondents Who Had Used On Track**

<table>
<thead>
<tr>
<th>Group</th>
<th>Percent of Respondents Who Had Used Resource</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post-Secondary Students</td>
<td>![Graph showing usage]</td>
</tr>
<tr>
<td>Secondary Students</td>
<td>![Graph showing usage]</td>
</tr>
<tr>
<td>Clients</td>
<td>![Graph showing usage]</td>
</tr>
<tr>
<td>Field Personnel</td>
<td>![Graph showing usage]</td>
</tr>
<tr>
<td>Analysts &amp; Planners</td>
<td>![Graph showing usage]</td>
</tr>
<tr>
<td>Contractors</td>
<td>![Graph showing usage]</td>
</tr>
<tr>
<td>Teachers</td>
<td>![Graph showing usage]</td>
</tr>
<tr>
<td>Counsellors</td>
<td>![Graph showing usage]</td>
</tr>
</tbody>
</table>
Figure 16
Usefulness Ratings of On Track

- Very Useful
- Adequate
- Inadequate
- Don't know

Secondary Students
Post-Secondary Students
Clients
Analysts & Planners
Field Personnel
Contractors
Teachers

Percentage of Respondents

Evaluation of the LMI SI
Career Gateways CD ROM and On-Line Application

Overview: Career Gateways: Applying Labour Market Information in a Changing World is a CD-ROM and on-line application that is designed for a broad audience of career practitioners, and incorporates a significant number of LMI resources, such as Work Futures and Career Paths, as well as a "navigational road map" to key resources in BC.


LMI Strategic Initiative funding: $65,000

Purpose

The purpose of the Career Gateways is to maximize the use of existing LMI resources by providing a user interface for career practitioners to access information on specific topics in various LMI resources. The CD ROM provides electronic access to LMI resources for those who do not have internet access. It is intended for career practitioners in the K to 12 school system, and the post-secondary system, as well as those in the community providing services to government clients.

Description

Career Gateways: Applying Labour Market Information In a Changing World incorporates nine existing LMI resources that have been organized, linked and annotated by career practitioners from three areas: the K to 12 school system, the post-secondary system and contracted service providers. Career practitioners who work with students or clients are the primary audience for Career Gateways, but it can also be used directly by people doing career exploration.

Career Gateways incorporates and organizes information found on nine previously published LMI resources:

- A Guide to the BC Economy and Labour Market: This book provides basic information on the industrial building blocks of BC’s economy and the characteristics of employment in these, including projected job growth.
- Career Paths: This includes articles found in the Fall ’97 edition of Career Paths, a publication of YES Canada.
- Career Paths Facilitator’s Guide Fall ’97: This support guide is intended to help teachers, counsellors and other career practitioners integrate activities and/or use articles found in the Fall ’97 edition of Career Paths.
- Closing the Skills Gap Guide Book: This guide provides a series of activities aimed at high school students, but is useful and has activities which can be modified for any clients group.
- Facilitator’s Guide to A Guide to the BC Economy and Labour Market and Work Futures: This guide provides a series activities and suggestions on ways...
to use the two books: A Guide to the B.C. Economy and Labour Market and Work Futures.

- **Making Career Sense of Labour Market Information**: This document provides important conceptual information about labour market information and how it can be used in career planning.
- **Making Career Sense of Labour Market Information - Facilitator’s Guide**: This is the companion document to *Making Career Sense of Labour Market Information*.
- **Using LMI-The Virtual Tool Kit**: The Facilitators Guide for the Virtual Tool Kit contains detailed lessons and activities related to the application and understanding of Labour Market Information.
- **Work Futures: British Columbia Occupational Outlooks**: This publication provides employment facts, information about trends in today’s labour market in BC, and future prospects, organized into about 190 occupational profiles.

From *Career Gateways* home page the user can go to “Suggestions for Using Career Gateways” for ideas on how *Career Gateways* can be used by the career practitioner, or can go to the “Library” for annotated information on the resources used in the CD ROM, as well as many others. Alternatively, the user can go directly into one of three activity modules: “K to 12”, “Post-Secondary”, or “Community Practitioners.”

Each of the three activity modules provides an introduction on the module, and information on career planning and labour market information organized into the following topics: self awareness, introduction to LMI, occupational information, labour market trends, skills for the new economy, education and training, action plan, and career log. By clicking on a topic the user will find a description of the topic, and a set of activities and LMI resources related to the topic. The activities are presented in a list, with keywords and a brief description of each activity, and links to the actual activities and lessons in one of the five facilitator’s guides on the CD. For each topic there is also a set of links to relevant information in various LMI resources on the CD ROM.

The “K to 12” module also contains lesson plans and learning outcomes for each activity. The module was designed with the intent that the activities and assignments can be used to meet a variety of learning outcomes in various subjects, including Career and Personal Planning (CAPP), Career Preparation Programs, Co-operative Education, Business Education and Social Studies. A team of secondary teachers selected, annotated, and organized elements from the LMI resources that seemed appropriate for use with secondary students.

The “Post-Secondary” and “Community Practitioners” modules are organized in the same way, although the annotation, activities and links may be different to meet the needs of the different audiences. The information for the “Post-Secondary” module was selected and annotated by professionals working at post-secondary institutions, while career practitioners working in the community (usually for agencies who provide services to government clients) did the “Community Practitioners” module. In addition to activities and resources, the “Community Practitioners” module also contains two additional links: one to a list of community resources in the lower mainland, and another to information on facilitation skills for the career practitioner.
The “Library” module contains a range of information, organized as follows:

- Resources by Title: contains links to 21 LMI resources.
- Websites: contains links to relevant websites, which are organized alphabetically or by topic.
- All resources by topic: contains links to all the resources on the CD ROM, organized by topic.
- All resources by title: contains links to all the resources on the CD ROM, alphabetically by title.
- Community Information Sources: contains contact information for various services in BC, such as drug and alcohol support services, immigrant support services, and services available for people with disabilities. This does not contain information for each community, but provides sources where someone could find out what is available in their community.

Background

With funding from the LMI Strategic Initiative, the Career Education Society had previously created the Virtual LMI Toolkit, a CD ROM designed to provide secondary school staff and students with access on the CD-ROM, or via the Internet, to Making Career Sense of Labour Market Information and other LMI resources including Making Career Sense of LMI, Facilitator’s Guide to Making Career Sense of LMI, Work Futures: BC, Guide to the BC Economy and Labour Market, BC Colleges and Institutes Student Outcomes, Career Resources for Practitioners, Labour Market Information Resources for Career Practitioners, Career Paths, Canada Prospects, Occupational Outlook Series, A Guide to Programs in BC’s Post Secondary Institutions and Industry Sector Studies.

The Virtual LMI Toolkit provides a guide to accessing and using these materials, and includes lesson plans and additional support materials to teachers for using these publications in a school setting. The Toolkit is intended to ensure that the basic principles for analyzing labour market information can be integrated into the Career and Personal Planning Program (CAPP), and other career related courses, so that students can apply these principles in designing their career and education plans.

Based on feedback obtained on the Virtual LMI Toolkit, the Career Education Society, with additional funding from the LMI Strategic Initiative, improved and expanded on the CD ROM, creating Career Gateways.

Method

A group of writers, consisting of secondary school teachers, post-secondary counsellors, and career practitioners, were hired. The writers and the project leader spent three days on Bowen Island writing the material. The writers worked in teams,
one team on the K to 12 school system, one on the post-secondary audience, and one for community career practitioners. Each team, from the perspective of the audience they were addressing, reviewed the resources that were being included, identified sections in each resource that were relevant to the topics being covered and wrote brief annotations for each selection on each topic. The topics covered were taken from *Making Career Sense of Labour Market Information*.

The CD ROM was launched at the CES conference in November 1998. The CD has been sent, free of charge, to all secondary schools in BC, as well as provincial Skills Centres, HRCC offices, post-secondary institutions and public libraries. A total of 2000 CDs have been distributed free, and another 1000 were produced to CES to sell on a cost recovery basis at $24 each.

A beta version of the CD was demonstrated at the 22 community forums that were held around the province by the Initiative in the Spring of 1998. Flyers about the CD were sent to various organizations of career practitioners (the Association of Service Providers for Employability and Career Training; Networking, Education and Training for Workers in Employment, Rehabilitation and Career Counselling; and the Victoria Employment Agency Network). The material on the CD ROM is also available at the BC WorkInfoNet website.

**Status at the End of the Initiative**

The Career Education Society continues to promote the CD at conferences for career practitioners. In the Spring of 1999, the Career Education Society began providing hands-on training on the CD ROM as a resource for career planning. Training sessions are being provided in local communities throughout the province, with funding from the Government of Canada’s Youth Initiative. Evaluation of the CD is being done during the training.

The CD ROM will need to be updated when the resources in it are updated. The online application needs more ongoing maintenance to ensure the links to the various resources work. There is no funding for this purpose and no immediate plans to create an up-dated version of the CD ROM.

**Lessons Learned**

Those involved in the project identified a variety of lessons they learned from doing this project:

- The major lesson was to involve the technical team at the beginning of the project. The technical team should spend time at the beginning with the writers to get a full understanding of what is intended, and to provide the writers with information on what is technically feasible, and what could be done with the budget available.

- By bringing together career practitioners from each client group, they were able to understand the needs of each group and develop a consistent approach to addressing these needs. They did thorough planning at the beginning to
develop common objectives, while making sure that the unique needs of each group were addressed.

• The short time frame for the project meant that they could only work with a limited number of writers who were available at the time.

• Given the short time frame, coordination was a challenge. Each resource in the CD had to be completed before the links could be done.

• Spending three days working together was very effective. Everyone was able to focus on the project, and complete a lot of work in a short period of time.

• People are busy and may not have even opened the CD. In-service on the use of the CD ROM will be needed to make sure career practitioners set aside the time to learn how to use it.

• There were a lot of hidden costs that were absorbed by CES, who provided a lot of additional time to complete the project, such as time spent on creating links and testing them.

• Doing a revision would be more cost effective if the same people could be involved, both the technical team and the writers, so they can benefit from the experience they gained on this project.

**Impacts of the Project**

Those who were involved in developing the CD ROM identified a variety of benefits of Career Gateways:

• The primary benefit of the CD is to increase use of the LMI resources by providing a method of organizing the material and providing activities on how to use various aspects of the resources.

• The CD ROM provides another form of one-start shopping for labour market information by providing a number of resources on CD ROM. This improves access for those who do not have internet access.

• The CD ROM should increase awareness and use of other LMI resources on the CD.

Through the evaluation, information was collected on how many respondents were using Career Gateways, or its predecessor, the Virtual LMI Toolkit and how useful they had found the resource. These findings are provided in Figures 17 and 18, respectively. Between 40 to 50 percent of contractors, field personnel and teachers has used one of these resources, as had between 30 to 35 percent of end-users and about 10 percent of teachers. Between 20 and 40 percent could not rate the usefulness of the resource they had used. Of those that could the majority had found it useful, although around 20 percent of students, contractors and teachers had found it inadequate.
Figure 17
Respondents Who Had Used *Career Gateways*, or its predecessor, the *Virtual LMI Toolkit*

![Bar chart showing the percent of respondents who had used Career Gateways, or its predecessor, the Virtual LMI Toolkit. The categories are Clients, Secondary Students, Post-Secondary Students, Teachers, Field Personnel, Contractors, and Counsellors. The x-axis represents the percent of respondents who had used the resource, ranging from 0% to 60%.](chart17)

Figure 18
Usefulness Ratings of *Career Gateways*, or its predecessor, the *Virtual LMI Toolkits*

![Bar chart showing the percentage of respondents who found Career Gateways very useful, adequate, inadequate, or don't know. The categories are Post-Secondary Students, Secondary Students, Clients, Counsellors, Contractors, Field Personnel, and Teachers. The x-axis represents the percentage of respondents, ranging from 0% to 100%.](chart18)
The Accessible LMI for Persons with Disabilities

Overview: The Accessible LMI Project was a study of the accessibility of available labour market information to persons with disabilities which included the development of recommendations to enhance accessibility.

http://workinfonet.bc.ca/lmisi/jointcom/AccessLMI/index.htm

LMI Strategic Initiative funding: $60,500

Purpose

The purpose of the Accessible LMI Project was to ensure that the considerations of persons with disabilities are included in the work of the Joint Committee for Enhanced Labour Market Information, to improve the content and delivery of labour market information to its audiences. Accessibility is of particular concern to persons with disabilities, who remain significantly under-represented in the labour market. Accessibility, as it relates to the community of persons with disabilities, is multi-faceted, encompassing not only the delivery, but also the content of the information.

The project set out to:

- get a sense of what projects were underway in terms of labour market initiatives for persons with disabilities;
- identify the range of barriers between persons with disabilities and relevant labour market information;
- develop a “prototype” for the delivery of relevant LMI across the disability community (a model of accessible LMI); and
- develop a set of guidelines to serve as a “disability lens” for the development of standards regarding the production and delivery of LMI.

Description

The BC Office for Disability Issues (ODI), in partnership with Vancouver Hospital’s Health Sciences Centre-GF Strong Rehabilitation Centre and BC’s Educational Association of Disabled Students, undertook community consultations to determine the LMI needs of the disability community. The project was conducted in four phases:

Phase I - Investigative Review identified existing activities relating to the production and delivery of LMI to persons with disabilities. Field inquiries and a scan of existing electronic LMI sites revealed a profile of the status quo regarding LMI and persons with disabilities.

Phase II - Community Consultations involved individual and group discussions with LMI practitioners and persons with disabilities to identify the needs and interests of persons with disabilities in their efforts to access LMI. This consultation phase also examined
the extent to which LMI content, delivery methods and media were appropriate and effective from a cross-disability perspective.

Phase III - CLFDB Standards Review consisted of a review of the Canadian Labour Force Development Board (CLFDB) criteria, guidelines and performance indicators for LMI products and services from a disability perspective. It included revisions and additions to the CLFDB standards for electronic LMI that reflected the considerations and concerns of persons from across disability categories.

Phase IV - A Framework for the Coordinated Delivery of LMI to Persons With Disabilities shows how to put into practice what was learned during the community consultations. The framework outlines a step-by-step approach to the community-based delivery of labour market information and services. It incorporates the barrier-reducing features related to information content, language, format, and delivery options. The framework became a replacement for the objective to create a prototype or model of an accessible electronic LMI resource, as the project members discovered in the course of the project that there were more issues than could be addressed by it.

The findings and/or recommendations of each phase of the Accessible LMI Project are described on the project’s website. An Executive Summary for Accessible LMI for People with Disabilities in BC was released in the Spring 1999. It provides a sampling of recommendations around various models, frameworks and initiatives that can be used to make LMI more accessible, and a compilation of the best sources of existing information on the core issues facing people with disabilities and their access to LMI.

Method

A contractor was hired to carry out the research and to write the reports for each phase. The executive summary document was written by another contractor who drew from the information already produced for each phase of the project.

Phase I involved an environmental scan of seven electronic LMI websites, as well as existing initiatives, literature and other projects involving LMI, with a focus on accessibility issues for persons with disabilities. A total of 28 projects were identified in this phase, through key organizations and individuals, as well as on-line searches. Not every project identified specifically targeted disability issues — although the majority did — but all had implications for persons with disabilities. It’s purpose was simply to identify the projects out there rather than to examine them closely.

Community consultations were held throughout the province for Phase II. The ODI worked in partnership with the GF Strong Rehabilitation Centre to carry out consultations with persons with disabilities (consumers) and service providers in both rural and urban settings across BC’s six regions. ODI’s focus, under the Accessible LMI project, was on accessibility of LMI to persons with disabilities, whereas GF Strong attempted to determine the usefulness of LMI to them.

A total of 233 LMI consumers who were interested in, actively seeking or engaged in employment, education and/or training were consulted in 11 communities. There were 107 LMI service providers — representing practitioners working in government or
community-based agencies, in disability-specific community support agencies and in educational facilities responsible for providing support services to students with disabilities — consulted in six communities. Researchers met with these participants personally or in group settings. Standard survey information was collected through individual interviews, group discussion or survey.

Based on the findings of the Accessible LMI community consultations, a disability lens was applied to the voluntary standards for electronic LMI products and services recently developed by the CLFBD. This review resulted in numerous suggestions for additions and/or elaboration of existing criteria/guidelines and performance indicators for each principle of the CLFBD standards (privacy and ethical practices, accuracy and adequacy, accessibility, relevance, user self-reliance, technical features, jobs and recruiting, training and education, programs and services, and labour market forecasts).

Initially the project had been intended to focus on accessibility issues around electronic LMI, but it became clear during the project that such issues were relevant to all LMI resources. The focus therefore evolved as project members delved more deeply into the issues facing people with disabilities for accessing LMI.

**Status at the End of the Initiative**

This project is complete. In addition to the information on the four phases reported on the website, an executive summary document was very recently released. The website will continue to be maintained by the ODI.

**Lessons Learned**

Those involved in the project offered a number of insights stemming from their experience with the Accessible LMI project.

- The timeline for collecting information in Phase I was too short and therefore prevented a comprehensive review of LMI projects. With additional resources and time, other models and methods could have been examined more closely.

- Creating partnerships for the community consultation phase of the project was a more cost-effective means of carrying out this research.

- Actually speaking to people across the province through the community consultations was a valuable process, both to get accurate information and to provide a sense of validation to people who participated and gave input. It brought the voices of people with disabilities to the table.

- Many participants in the consultations expressed skepticism that their participation would make a difference. “If people come forward hopefully and they never see anything again…it makes them less inclined to come out the next time.” Such projects are more valuable with continuity.

- The funders’ fiscal year-end created a problem. Fiscal year-end flexibility — roll-over funding — would have helped the implementation process.
• This project was based on a needs assessment of where the holes or problems were. A product’s usefulness and how it will fill the gaps or address the needs must be considered down to a detailed level. Material can end up being over-produced if a needs assessment was not linked with the audience.

• Aggressive marketing to generate consumer interest in the products produced is needed. Demand for and interest in the Accessible LMI Project was primarily generated by raising awareness through the community consultation process.

• Effective delivery must be local, meaningful and it must have local buy-in and should not just “parachute” someone in from outside the community.

• It was difficult for many involved because their work on the project was off the side of their desks, especially for government staff.

**Impacts of the Project**

With respect to the needs for labour market information of persons with disabilities, the project, in the words of one person involved, “*has contributed very well to the understanding of those needs, but it doesn’t fix them, unless you actually use the tools to do it and buy in philosophically and have the resources.*”

Awareness of the issues around accessing LMI by persons with disabilities has been raised as a result of the project. While it did not lead to any concrete impacts in terms of enhancing accessibility during the Initiative, raising awareness means that future resources are more likely to meet the needs of persons with disabilities. It has also contributed to a greater sensitivity, on the part of producers of LMI, to persons with disabilities and practitioners working with them.

Because of this project, a “one-stop” resource detailing the requirements of work-seekers with disabilities has been created. Labour market practitioners and service providers now have access to a clear and specific picture of the opportunities, support, skill development and career enhancement needs of persons with disabilities. The framework guides the thinking of practitioners around using labour market information with persons with disabilities.

The Accessible LMI Project has served as somewhat of a catalyst to begin addressing the needs of persons with disabilities and LMI. Some of the discussions that have taken place with one of the project managers, whose work involves disability issues, include: his nomination to the BC WorkInfoNet board; his involvement in work implementing standards; and his participation in the BC Career Information Partnership, a loose association of the federal and provincial governments, service providers and employer representatives for career orientation.

It is difficult to identify concrete, measurable impacts of the project, as it produced a document and website offering recommendations to enhance accessibility to LMI by persons with disabilities that was only completed near the end of the Initiative. However, one participant commented that “*the potential impact is significant*” if the recommendations begin to be implemented.