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THIRD NATIONAL FORUM ON EDUCATION **Education and Life - Transitions**

St. John's, Newfoundland May 28-30, 1998

THE RELEVANCE OF EDUCATION TO THE WORLD OF WORK, WITH A FOCUS ON YOUTH EMPLOYMENT

Reference document coordinated by the Association of Canadian Community Colleges for the sub-theme on School to Work and Work to School Transitions

The opinions expressed in this paper are not necessarily those of the Association of Canadian Community Colleges nor of the Council of Ministers of Education, Canada.

The relevance of education to the world of work, with a focus on youth employment

Last December, the Council of Ministers of Education, Canada (CMEC) launched a consultative process to ensure that education partners would be involved extensively in developing the content of the Third National Forum, to be held in St. John's, Newfoundland, May 28-30, 1998, through the preparation of documents. The Association of Canadian Community Colleges (ACCC) was asked to collaborate with CMEC and with individual provincial and territorial jurisdictions to coordinate one of twelve documents, all expected to stimulate reflection on the part of participants prior to the forum, and foster focussed and enriched discussions on site.

ACCC was assigned the coordination role for the preparation of a document falling under the subtheme **School to Work and Work to School**, on the topic of **the relevance of education to the world of work, with a focus on youth employment**. The following points for discussion were identified by CMEC:

- P The delivery of essential employability skills;
- P Responsiveness; and,
- P Cooperative education and partnerships with the private sector.

This document has been prepared in order to encourage debate on the issues mentioned above. Comments provided reflect various views on a number of topics and do not, and should not be considered as representing the collective opinion of the Association of Canadian Community Colleges.

For those who watch from afar - policy-makers, politicians, parents - the calculus of risk and reward attending the efforts of young workers has shifted significantly in the past twenty years. The rewards for success - stable, highly-paid and intellectually-fulfilling work - seem greater than before but far less certain. The alternatives to such success for the unlucky, and for those unable or unwilling to compete for positions in the labour market elite, have become less certain. No longer does a strong back and a will to work guarantee steady employment. "Uncertainty" is now a constant.

What must a young person do to succeed? To be sure, education is necessary for labour market success but it clearly is not sufficient. Where once a university degree virtually guaranteed a steady, middle-class income, we can now point to a large number of unemployed or underemployed graduates. Where once high school drop-outs might have found steady unskilled work in factories, in mines or on the ocean, they now must work - if they can find work at all - in low-paid, high-turnover service sector jobs. Young people have always faced the formidable task of discovering their capabilities and skills. Now they must also guess at which skills might remain in demand by future employers.

Symptomatic of the increased uncertainty facing young workers is the misnamed "school-to-work transition". In some imaginary or long-since vanished labour market, Canadians went to school until they stopped and, upon stopping, took up full-time work. In today's labour market, many students work and many workers study, so that the line between school and work has become quite blurred.

The Effectiveness of Employment-Related Programs for Youth: Lessons Learned from Past Experience, Evaluation and Data Development, Strategic Policy, HRDC, June 1997, SP-AH027E-06-97.

Canada is at a critical juncture in the rapidly changing, knowledge-based global economy. Ensuring our long-term prosperity as a nation, and the high standard of living we enjoy as individuals vitally depends on developing a highly skilled, science and technology literate, entrepreneurial workforce. We are losing our competitive advantage. It is imperative that we invest now in a system- and nation-wide solution for the critical skills shortage threatening our economic growth and prosperity. Business, governments, communities and individuals must work together to build a learning culture that understands and develops critical skills in all Canadians.

Dr. Tony Marsh, Forum Chair, Business and Education Forum on Science, Technology and Mathematics, National Business and Education Centre, The Conference Board of Canada.

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Executive Summary

Assessing the relevance of education to the world of work and, in particular, the youth labour market, is a formidable task. There are new features identified with the youth labour market, such as increased volatility of employment and increased underemployment, which accentuate the level of uncertainty associated with the youth employment situation in Canada. Shelves are stacked with studies profiling the youth labour market and a wide number of factors are listed as possible indicators to describe and explain that education is necessary for labour market success but that it clearly is not sufficient. Experts, scholars, researchers, and others agree that global competition and rapid technological advances have changed profoundly the nature and content of the world of work, along with the skills required to get the job done. Much higher education levels are now required for a large number of jobs. Even when youth have acquired the necessary education, their disadvantage relative to older workers is obviously the lack of seniority and/or experience. As long as this factor continues to carry significant weight, young people will continue to face greater vulnerability in the job market.

For many decades, questions relating to school-to-work transition and employability competencies received but passing attention in Canada and other parts of the world. The Conference Board of Canada's 1991 Employability Skills Profile renewed many people's focus on the competencies needed for successful entry into the workplace. This renewed focus on workplace competencies can be linked to national and international concerns about school reform and high rates of unemployment... There is, however, a tendency among educators, industry, labour, governments, and others to want to put their own stamp on their preferred employability skills set, to be seen to have created a new employability skills framework. Such motivations can be counter-productive. At the same time, regional and national professional bodies and sector councils have begun the development of industry specific and cross-sectional occupational or/and skill set standards. So, where does Canada stand on this critical policy issue? A passing grade, at best...

Part of the answer lies in the absence of integration of current initiatives under one pan-Canadian umbrella. Time is very limited and a sense of urgency is required. Simply put, a national consensus must be reached as quickly as possible, on the most efficient and effective means of accelerating the endorsement and ensuring the on-going evaluation and maintenance of a standard set of essential employability skills.

There are obviously a large number of success stories and leading edge Business-Education initiatives across the country, and certainly, enough good reasons to celebrate excellence. However, there are a number of recent surveys and studies that paint a different picture and which should be included in the CMEC Forum discussions. HRDC's evaluation of programs for in-school youth, taken from its June 1997 final report on the *Effectiveness of Employment-Related Programs for Youth: Lessons Learned from Past Experience* certainly sheds some light on the long-term impact of limited short-term results.

Traditionally, the debate on issues concerning responsiveness have usually been centred in terms of the education system's ability and capacity to adjust to the realities of the marketplace. While opinions vary greatly on where the response issue should actually rest, there is a pressing need to develop and endorse a responsibility and accountability framework for all stakeholders (students, parents, educators, business and labour leaders, public sector policy-makers and politicians) who have agreed to develop a common understanding and a sense of shared responsibility of issues in education. We therefore invite the participants of CMEC's Third National Forum on Education to consider the following recommendations:

- 1. The promotion of a *Stakeholders' Social Contract on Education*, to be used as a blueprint for further discussions on the roles and responsibilities of all stakeholders, leading to the endorsement of a national responsibility and accountability framework for youth programs in Canada.
- 2. The creation of a national coordinating body to oversee the development and implementation of a pan-Canadian strategy, supported by all levels of government, business, labour, and the education sector to:
- # accelerate the completion and ensure the on-going evaluation and maintenance of a standard set of essential employability skills as well as the required specialized skills, in appropriate competency profiles for all selected occupations;
- # provide direct universal access to a single (one-stop shopping) reliable, integrated and comprehensive source of information on future job opportunities, to assist young people in making informed choices about employment prospects;
- # provide timely evaluation and interpretation of data on opportunities and issues pertaining to all existing and future business-education programs and partnerships, to trends in the labour market, and to the overall cost/benefit performance of current and future youth employment programs, with recommendations, as appropriate.
- # secure long-term commitments and funding to monitor, research and seek continued improvements to the youth employment situation, with a focus on school-to-work and work-to-school transitions and, in particular, on work experience, cooperative and internship programs.
- # manage a new pan-Canadian umbrella youth employment communication program, regrouping all current youth employment communication programs (while maintaining existing resources in respective organizations and jurisdictions) to facilitate exchange on and promotion of lessons learned, best practices and outstanding achievements, using multi-media interactive applications.
- 3. Ensure that the topic of *Relevance of Education to the World of Work, with a Focus on Youth Employment* is maintained as a regular and permanent item on the national education agenda.

Introduction

Students, parents, educators, business and labour leaders, public sector policy-makers and politicians, all stakeholders and participants at the Third National Forum on Education, will spend a few days together at the end of May 1998, developing a common understanding and a sense of shared responsibility of issues in education. More specifically, they will focus their energies on issues related to transitions within and between the education and training system, as well as during employment years. This document seeks to illustrate some of these issues and is intended to provide a new perspective on the relevance of education to the world of work, with a focus on youth employment.

Assessing the relevance of education to the world of work, and in particular, the youth labour market, is a formidable task. Experts agree that the youth labour force participation rate, which fell dramatically during the last recession, has been continuing to decline during the current recovery. There are new features associated to the youth labour market, such as increased volatility of employment and increased underemployment, which accentuate the level of uncertainty associated with the youth employment situation in Canada. Shelves are stacked with studies profiling the youth labour market and a wide number of factors are listed as possible indicators to describe and explain that education is necessary for labour market success but that it clearly is not sufficient. Uncertainty is now a constant. Dealing with uncertainty does means looking at things we cannot see. This is why some of the assumptions and recommendations put forward in this document may be viewed by some as going against conventional wisdom. However, this is intentional.

Forum participants should feel free to re-engineer the way issues surrounding education and youth employment have traditionally been approached. This may require, for example, the fundamental rethinking and radical redesign of decision-making processes related to youth employment, in order to achieve dramatic improvements in critical measures of performance such as cost, quality, and speed. Fundamental rethinking, which means having to answer very basic questions such as "Why do we do what we do?" and "Why do we do it this way?" will force a look at the tacit rules and assumptions that underlie the current way of addressing youth employment issues. Radical means getting to the root of things and disregarding all existing structures and procedures by devising completely new ways of creating opportunities for Canada's youth. Dramatic means achieving quantum leaps in performance. It is not about making marginal or incremental improvements.

Section 1, which focuses on some of the major trends in youth employment and the labour market, and **Section 2**, which looks at the changing world of work, provide a backdrop for **Section 3**, which takes the relevance of education beyond what we can see. A number of questions will remain:

- # How do we improve our ability to report on the impact of anticipated workplace changes on existing and planned employment programs for youth?
- # How do we evaluate the relevance and ensure the continuing validity of "essential employability skills"?

- # How do we evaluate the ability and capacity of the education systems to deliver the predetermined skill requirements for employability?
- # How do we encourage and support the creation of new partnerships that will generate the desired improvements and results, with a focus on youth employment?
- # How do we ensure that the concept of employability skills is integrated in a broader context of a new Learning Society which includes arts, culture, the environment and other critical areas of lifelong learning?

Section 1 Focusing on Youth Employment - A Snapshot

A summary of major trends in the Canadian youth labour market is required prior to assessing the relevance of education to the world of work, with a focus on youth employment. The following background information was presented at the Canadian Labour Market and Productivity Centre (CLMPC) Board Forum, in October 1997.

Youth employment has risen in relation to overall unemployment.

The unemployment rate for 15-24 year olds has fallen from 17.8% in 1992 to 16.1% in 1996. However, the fall in youth unemployment rates has been less than that for all workers. Youth unemployment rates in relation to the overall unemployment rates have increased continuously since 1989. In 1989, the youth unemployment rate was 149% of the overall unemployment rate. By 1996, this figure had risen to 166%.

Unemployment is higher among those with less education.

In 1996, youth with a university degree had an unemployment rate of 10% compared to 34% for youth with only 8 years or less of schooling. A survey of school leavers showed unemployment rates were highest for school dropouts, with women, at 30% unemployment, faring worse than men, at 17% unemployment.

The employment rate of youth has fallen.

The proportion of the youth population that is employed fell precipitously between 1989 and 1993 from 63% to 52%. Since 1993, it has failed to recover and, in 1996, only 51% of 15-24 year olds were employed. These trends have been felt more among the 15-19 age group where the 1996 employment rate was 38%.

Labour force participation of youth is declining.

The proportion of youth participating in the labour force (either through employment or active job search) has fallen from 71% in 1989 to a twenty-year low of 61% in 1996. In 1989, the youth labour force rate was higher than the adult labour force participation rate. Since 1993, the participation rate

of youth has been below the adult rate, which was 65.2% in 1996. The decline in participation was more marked among the 15-19 age group.

The proportion of youth attending school is increasing.

As both employment rates and participation rates have declined, an increasing proportion of youth have attended school. Between 1989 and 1996, the percentage of youth attending school rose from 52% to 60%, an historical high. Among the different age groups, older youths (19-24 year olds) had the most pronounced growth in school attendance, reflecting the increasing importance of post-secondary education.

Part-time work among youth is increasing.

Between 1989 and 1996, the percentage of youth working part-time has risen from 33% to 46% and reflects, in part, the increasing attendance at school. Part-time work has increased among non-student youth, from 11% in 1989 to 20% in 1996, which is just above the average for all workers. Part-time work rose for all workers over the same period from 15% to 19%.

Work experience is harder to find.

In 1989, just under 1 in 10 had never held a job. By 1996, this had doubled to 20%; the experience was more marked for the 15-19 age group with 34% not having held a job compared to 18% in 1989.

School to work transition time has risen.

The school to work transition has become more complex as youths are staying in school longer and a higher proportion of students are combining school at work at an earlier age. The school to work transition has increased from 7 to 8 years between the 1980s and the 1990s, according to the OECD. The start of the transition is the age at which less than 75% of youths are only attending school. The end of the transition occurs at the age when greater than 50% are only working. Currently, the transition range is from ages 16 to 23.

Average earnings for youth have decreased.

The average earnings, adjusted for inflation, for all youths has fallen from \$11,000 in 1989 to \$9,400 in 1996. The earnings picture reflects, in part, the increasing incidence of part-time work among youth, and also the industries they are concentrated in. Non-student youth have also lost ground. In 1989, non-student youth made \$63 for every \$100 earned by all those of working age. By 1995, this had fallen to \$54.

Another critical aspect of our reflection has to do with the rapid changes taking place in the world of work. It's called "the moving target".

Section 2 The Changing World of Work - A Moving Target

Experts, scholars, researchers, and others agree that global competition and rapid technological advances have changed profoundly and will continue to drastically transform the nature and content of the world of work, along with the skills required to get the job done. In response to these changes, corporate leaders in Canada and around the world have performed major surgery on their organizations, through massive downsizings and restructurings. However, many do not really know whether such efforts will, in fact, be successful in sustaining a competitive advantage. The majority of revamped organizations are now moving, at varying speeds, towards high performance work systems. In turn, workers are being given more responsibility and are being asked to do more with less, often for less, in transformed learning organizations. Measuring the full impact of these changes on youth employment and on the relevance of education to the world of work requires a greater focus on the future.

Workplace Changes - The Next Decade

According to the HRDC study *Workplace Change: A Synthesis of The Evidence*, the OECD estimates, on the basis of the country reports prepared for the technological and organizational change/flexible enterprise programme, that about one-quarter of all enterprises are adopting new, more flexible organizational systems (OECD, 1997a,b forthcoming). The study states that these emerging systems constitute what the OECD calls a "loosely defined model" that, in a given organization, will incorporate some of the following strategic, structural, and behavioural features:

- P More job complexity, multi-tasking, and multi-skilling;
- P Increased employee qualifications;
- P Ongoing skill formation through enterprise training;
- P A minimization of hierarchy;
- P Greater horizontal communication and distribution of responsibility (often through teams);
- P Compensation incentives for performance and skills acquisition;
- P Increased focus on "core activities"; and,
- P More horizontal inter-firm links for sub-contracting and outsourcing.

The World of Work in 2020

Curtis E. Plott (President of the American Society for Training and Development-ASTD) and John Humphrey (Chairman of The Forum Corporation, Boston, Massachussets and Chairman of the Board of Directors of ASTD) have reported on a year-long effort to look at the future of their profession. They have presented some variables that will influence the future and examined the premises behind a vision of workplace learning and performance in 2020:

"We all know that change happens faster and is more complex and ambiguous all the time. For a sense of what lies ahead, try imagining the speed of change today accelerated for 25 years. Practically

everything we know about organizations will be different in 2020: their size, their structure, their human components, their role in people's lives. As radically different as the future workplace will be, we can still venture some assumptions. Here are some things we expect to be true:

- P The information structure will be worldwide and a majority of people will be connected through it, although not uniformly across cultures.
- P The ability to leverage connectivity will revolutionize the way business is conducted.
- P The basic organizing unit in the workplace will be one connected individual engaging in business with other connected individuals.
- P Products, services, and distribution channels will be "informationalized" and will become smarter with use. So will their creators and owners.
- P Managers will oversee processes or flows of activity, not tasks or people.
- P Competition will be liberated from time and space and will, therefore, be global.
- P Learning will be embedded in the technologies that serve us, entertain us, and help us do our work. Learning by doing, even if in simulation, will be the rule instead of the exception. The activity of teachers and the passivity of learners will be an ancient mode of learning. Learning will be a basic workplace skill.
- P There will be new organizational forms. At one extreme are "virtual companies" huge global holding companies with operating units in many different industries. At the other extreme are shifting networks of contractors or small companies of 5 to 10 people. The success of these shifting organizations will be measured not by how long they last, but by how well they perform.
- P The metaphor for the relationship of the employee to the organization will be that of bee to hive or bird to flock.
- P Power in 2020 organizations will not be at the centre of a circle or top of a pyramid, but at the periphery where people are using technology to engage the marketplace. Models of organizations will have to address the organization and the individual simultaneously.
- P Culture and language will still move between poles of traditionalism and modernism, but the far ends will come closer to the center. Even so, people will not give up the language that conveys their special ways of thinking.
- P There will be a universal business culture where companies intersect across nations, but within companies, there will still be culturally distinct forms of decision making, team work, and information sharing.
- P The "just-do-it" Western culture will be tempered by and blended with a "just-be-it" Eastern culture.

It is obvious that the relevance of education to the world of work will be greatly influenced by the ability of Canadians to integrate some of these futuristic views and assumptions into their decision making process. On the other hand, where does that leave youth, as they attempt to make informed choices about their future job prospects, when, at the same time, they are faced with such a moving target?

Section 3 Assessing The Relevance of Education

According to Claude Lavoie, of the Applied Research Branch, at HRDC, "in the final analysis, the greater vulnerability of youth to job loss must result in their own characteristics. The two major characteristics setting young and older workers apart are education and lack of seniority or experience. The level of education does not appear to be a significant factor. That leaves lack of seniority or experience as the main source of variance. As long as this factor continues to carry significant weight, young people will continue to face greater vulnerability in the job market." According to Mr. Lavoie, "the recovery from the recession of the early 1990s is not yet completed and a substantial amount of slack remains in the economy. This makes the "last-in" factor an important reason why youth employment is still weak. But there are other reasons. The industrial composition of output during the recent recession displays an unusually strong decline in youthintensive industries. Due to relatively weak consumption spending, those industries, especially the retail trade industry, were hit harder than other sectors. Some structural factors, such as a decline in relative demand for lesser-skilled labour, may also have caused a decline in the labour demand for young workers. Positive news is on the horizon. As the recovery, especially domestic consumption, gains momentum, it can be expected that labour demand for youth will start growing at a faster pace and that the youth unemployment rate will fall more than its adult counterpart in the coming years. The most recent projections provided by the Canadian Occupational Projection System indicate that there will likely be an excess demand for new workers in the skill groupings that correspond to college and secondary education levels. Around 70 % of the youth population falls into these skill groupings. That excess demand is expected to translate into a happy combination - a fall in youth unemployment and better working conditions."

Assuming that there is agreement on this important conclusion, the next step is to determine what can be done to improve on the three pillars of access to work experience: the delivery of essential employability skills, cooperative education and partnerships, and responsiveness.

3.1. Delivery of Essential Employability Skills - A Report Card

As the workplace becomes more complex, the work that people are employed to do, contract to do or volunteer to do has tended to become more specialized. In order for future workers to find work to do, they will probably have to have more than one specialization, or at least be broad generalists. With this in mind, and because the workplace is in a constant and rapid state of change, educators, business persons and others face the challenge of ensuring that high school, college and university students are provided with opportunities to develop the competencies necessary for successful entry into the workplace. To meet this challenge, it is necessary to determine the critical workplace competencies (CWCs), and to ensure that they are integrated and infused across their instruction throughout all curricula.

Dr. Michael Alpern, Alberta Education

The Corporate Council on Education, a program of the National Business and Education Center at The Conference Board of Canada, has been inviting and encouraging students, parents, teachers,

employers, labour, community leaders and governments, since 1991, to use the **Employability Skills Profile** as a framework for dialogue and action. According to the Council, all the skills listed in this profile are already either explicit or implicit in general educational goal statements of the provinces and territories. According to this profile, **employability skills** are the generic skills, attitudes and behaviours that employers look for in new recruits and that they develop through training programs for current employees. In the workplace, as in school, the skills integrated and used in varying combinations, depending on the nature of the particular job activities. According to the Corporate Council of Education, employability skills are developed in school and through a variety of life experiences outside school. The student, the family and the education system, supported and enhanced by the rest of society, share this responsibility. The Council recognizes the need for employers to accommodate individual differences and to provide equal opportunities for women, native people, visible minorities and people with disabilities.

The debate on employability skills has raged on since 1991. So, where does Canada stand on this critical policy issue? A passing grade, at best...

As illustrated by Michael Alpern, in a recent publication of the Canadian Vocational Association, Critical Workplace Competencies: Essential? Generic? Core? Employability? Non-technical? What's In A Name?, "For many decades, questions relating to school-to-work transition and employability competencies received but passing attention in Canada and other parts of the world. The Conference Board of Canada's 1991 Employability Skills Profile renewed many people's focus on the competencies needed for successful entry into the workplace. This renewed focus on workplace competencies can be linked to national and international concerns about school reform and high rates of unemployment... There is however, a tendency among educators and others to want to put their own stamp on their critical workplace competencies (CWC) set, to be seen to have created a new CWC framework. Such motivations can be counter-productive. Rather than advancing the field of knowledge about the CWCs necessary to facilitate school-to-work transition, multiple labels tend to confuse those attempting to use and make sense out of the plethora of CWC frameworks. The semantic confusion may be traced back to some three decades of research on the elusive core of common competencies." Dr. Alpern also confirms that, "the search for the competency set critical to employability is worldwide. While diverse stakeholders tend to agree on the importance of identifying these critical competencies, there is less agreement on what such a framework of competencies should be called." He concludes that, "the debate about what constitutes, and what to call critical workplace competencies will undoubtedly continue. The personal, social and economic impact of the debate is too important to ignore... Regardless of how individuals see the emerging workplace, there is general agreement that those who seek to work will continue to require CWCs."

A recent compilation of Lessons Learned: Effectiveness of Employment-Related Programs for Youth (SP-AH027-06-97, HRDC) gives more insight on this aspect of the moving target: "Not surprisingly, training programs are more likely to be successful when they are focused on skills in demand. The positive evaluation results from the Skills Shortages Program demonstrate that a tight focus on training in occupations in demand can substantially raise the impact of a training program. Admittedly, this is not easy to do. Skills needs can change rapidly over time, so it may be difficult

to anticipate requirements with any degree of precision where lengthy training periods are involved. Occupations in demand also vary from place to place. This may be particularly important in the initial job experiences of young people, who may not be very mobile due to family ties or financial constraints. It may be that the key strength of the CET (Center for Employment & Training, San Jose, California) model is the strong link to the local labour market that allows program administrators to identify and train for skills in demand locally. This would be very important if local employers use these programs as a method to screen for new workers. Finally, the nature of skills in demand may be changing. Employers are describing their needs less in terms of specific occupational skills and more in terms of generic skills - communications, teamwork, problem-solving - that help ensure a flexible and adaptable workforce." Interestingly enough, there is not a single reference to essential employability skills in this report.

The Conference Board of Canada launched the Employability Skills Forum in September 1996. This Forum brings together businesses, colleges, universities, school boards, government departments and non-profit organizations interested in conducting research and sharing information on practical and effective ways to develop and assess the employability skills of students and employees. The Conference Board is also working on *Employability Skills Case Studies*. To be published in 1998, the case studies will feature employability skills programs being implemented in corporations, universities, community colleges and government departments. The case studies will underline the importance of these programs and show the kind of challenges the various stakeholders are faced with in successfully implementing their program. Successes, innovative approaches and benefits to participating stakeholders will also be highlighted.

For the past 18 months, members of the Business and Education Forum on Science, Technology and Mathematics, a program of the Conference Board's National Business and Education Centre, representing business, formal and informal education and governments, have been developing a strategic response to the challenge of preparing a skilled workforce for the new millennium. Members of the Forum have proposed a systemic initiative, the establishment of a \$1 billion federal seed fund-the *Canadian Foundation for Critical Skills* (CFCS) - to be matched by partnerships between employers, educators, and governments, to develop critical workplace skills in young people from K-12 through post-secondary education. According to the Forum, "only such a collaborative investment in Canada's future can produce an effective, sustainable learning system. By bringing employers, educators and governments together in new co-operative relationships, *CFCS* will ensure that all Canadian students have an unparalleled opportunity to experience and embrace the excitement of science, technology and mathematics. This will enable them to successfully contribute to, and enjoy, the benefits of an innovative, productive Canadian economy and society."

HRDC's Essential Skills Research Project (ESRP) is a major research undertaking designed to describe employability skills used in over 100 entry level occupations in Canada. This project was part of a broader special five-year initiative called the Sectoral Partnership Initiative (SPI), begun in 1993. This research is designed to develop a standardized way of talking about essential skills and collect information on essential skills use in several occupations. The focus is on the essential skill requirements of entry-level occupations which are not fed from university, college or apprenticeship

nor from an internal progression ladder. It therefore includes occupations that are typically open to individuals with secondary education, incomplete post-secondary or incomplete secondary education, that is, all occupations at skill levels C and D of the National Occupational Classification (NOC). A pilot program is currently underway with the B.C. Ministry of Education's Centre for Applied Academics.

In March 1997, the Alberta Departments of Education and Advanced Education & Career Development joined with HRDC to host a pan-Canadian discussion on HRDC's Essential Skills Research Project. There were approximately 50 participants representing Ministries of Education, HRDC, CMEC, the Conference Board of Canada, the Canadian Labour Force Development Board (CLFDB), the Canadian Vocational Association (CVA) and Sector Councils. The purposes of the symposium were to:

- P Explore in detail the research findings of the Essential Skills Research Project;
- P Determine how the profiles can be used; and,
- P Identify common threads that could lead to collaborative projects among provinces and territories.

The *Proceedings Report* on the Symposium provides a summary of feedback from discussion groups, including issues and concerns, suggests uses for information gathered by the project, common threads for collaborative projects and recommends next steps for HRDC. This report also confirms that there are also, at the provincial level, a wide number of "essential skills" related activities and programs across Canada - all striving to achieve essentially the same results.

How, then, do we manage to complete this assignment and significantly improve our grade, in a timely and cost-efficient manner, and ensure the continuing validity and relevance of essential employability skills? Part of the answer lies in the integration of current initiatives under one national umbrella. The pooling of existing resources and allocation of new resources, if required, by all the stakeholders would certainly maximize the extensive efforts currently being generated across the country to address issues related to essential employability skills.

However, given the impact of increasing competitive pressures, of rapid technological change and of shifting consumer preferences on the labour market, time is very limited and a sense of urgency is required. Simply put, a national consensus must be reached as quickly as possible, on the most efficient and effective means of accelerating the development and ensuring the on-going evaluation and maintenance of a standard set of essential employability skills, and this, despite the obvious jurisdictional issues surrounding education. Appropriate evaluation tools must be developed and implemented concurrently, to measure the ability and capacity of the educational system to deliver the expected results.

3.2. Cooperative Education and Partnerships - A Success Story?

Never in Canada's 130-year history, have business leaders, politicians, educators and union bosses been so worried about the widening gap between the skills workers have, and the skills industry needs. They warn of a nightmare future - factories filled with equipment no one knows how to run or operate. When PEM Plant Engineering and Maintenance set out to study Canada's apprenticeship system, we hoped for an optimistic diagnosis. But after we talked with people from coast to coast, we found alarming symptoms: industry complacency, government indifference, and parent prejudice - to name a few. Experts predict the worst skills shortage is about five years away. We may have just enough time to train the skilled tradespeople we need to keep Canadian industry competitive.

Labour Pains: Canada's Skills Shortage Hurts Us All, Plant Engineering and Maintenance, a Clifford/Elliot Publication, Volume 22, Issue 5, November 1997.

Results of the **Youth School-To-Work Transition Projects**, undertaken by the various national Industry Sector Councils with the sponsorship and support of HRDC, are extremely encouraging. These joint initiatives of business, labour, government, school boards, community colleges and students are designed to strengthen the employability skills of youth through a format of innovative, high-impact strategies.

In December 1997, Chrysler Canada Ltd. announced an innovative if not revolutionary pilot program on apprenticeship. Chrysler Canada Ltd. is supporting a pilot program of 25 electrical skilled trade apprentices in a pioneering approach to apprenticeship education. The pilot project, in conjunction with St. Clair College of Applied Arts and Technology, Industry Canada, the C.A.W. and Chrysler Canada Ltd., is a youth employment initiative which has been developed to provide both youth employment opportunities and to address critical skilled shortages in the automotive industry.

On May 11, 1998, the seventh annual awards for business-education partnerships will be presented at an award dinner, to be held during the Conference Board of Canada's 1998 Business, Education and the Community Conference, with its main theme focusing on **Corporate Social Responsibility: Changing the Landscape.** Winners will be honoured with Royal Bank Partners in Education Awards, Post-Secondary Awards, Broad Community Collaboration Awards, NOVA Corporation Global Best Awards and the Awards For Excellence in Workplace Literacy.

There are a multitude of other success stories and leading edge Business-Education initiatives across the country, and certainly, enough good reasons to celebrate excellence. However, there are a number of recent surveys and studies that paint a different picture and which should be included in the CMEC Forum discussions. The following is a summary of HRDC's evaluation of programs for in-school youth, taken from its June 1997 final report on the *Effectiveness of Employment-Related Programs for Youth: Lessons Learned from Past Experience*:

School-based programs are an attempt to focus on prevention rather than remediation. The principal source of labour market preparation for young people remains the school system. Young people with more education do better than those with less. The most effective of the strategies reviewed are built

around keeping young people in school. Using the mainstream education system as much as possible is more efficient than building alternative program delivery infrastructures to deal with youth after they drop out. School-based programs aim at keeping students in school, and they try to build bridges to the world of work while young people are still in school, particularly for those who are not destined for post-secondary education.

Help with Academic Performance

Programs that help poor-performing at-risk students have been shown to be effective in raising the graduation rate for this group. Programs that are designed to provide on-going help during the school year have been particularly successful in increasing the graduation rate among disadvantaged youth. Programs that provide remedial academic assistance during the summer have produced short-term gains in terms of helping disadvantaged students keep up and avoid summer learning loss, but they have not had much impact on their graduation rates and on their subsequent employment.

Alternative Work-Oriented Curricula

Implementing alternative labour-market-focussed curricula has produced mixed results. These programs have tended to be targeted on disadvantaged and other at-risk populations. There are no rigorous Canadian studies of the impacts of this approach. Much of the discussion is simply a debate between the proponents of "contextualized" learning and those who ascribe little value to "alternative" curriculum elements based on work experience. In the US, there is some evidence that alternative curricula can lead to improved attendance and better grades, but success in raising high school graduation rates has varied considerably from program to program and within a program, by geographic location. The inclusion of work elements can either reinforce the value of schooling or it can reinforce the notion of work as a substitute for school.

School-to-Work Transition Programs

In Canada, experience is based on specific transition programs, usually small in scale compared to the mainstream school programs alongside of which they operate, and usually targeted on a specific student population (typically at risk or under-achieving students). Canadian transition programs aim at developing stronger connections between schools and the workplace. The most common examples are cooperative education programs and in-school apprenticeship programs. The evidence suggests that the effectiveness of such programs, at both the secondary and post-secondary levels, in significantly affecting the employment and earnings of graduates depends on the quality of the job experiences that are provided. The key is to provide young people with experiences which will be valued in the full-time labour market. In particular, there is no substitute for actual paid work experience in the private sector.

Programs that link school and work experience face significant barriers to expansion. Many educators in North America downplay the role of the education system in providing vocational preparation and, consequently, they are reluctant to develop opportunities for and to give academic

credit for work experience. Also, the number of work experience places is quite limited. The results of these programs have been mixed. There is some evidence that cooperative education leads to improved employment outcomes for those in post-secondary education. Longer term impacts are presently unknown for high school students. Additional research needs to be undertaken to explore long term impacts, particularly for high school students who pursue vocational or apprenticeship training. An alternative approach to providing students with work experience is to improve their access to summer jobs. However, while there is general evidence that work experience is an important determinant of later employment success, it is unknown at present whether summer jobs have any impact on the academic achievement or subsequent employment experiences of participants.

The HRDC study also lists a number of lessons that can be extracted from the review of material on Canadian and international experience with youth programs and highlights a number of key messages:

"Within the school system, greater effort needs to be placed on providing more clearly articulated pathways in and out of formal education, trying to reduce the stigma attached to vocational training, and providing innovative opportunities for young people to combine work and schooling. Even when programs produce positive results, their impacts are generally modest in size. Therefore, in launching any initiative, it is important not to oversell it. Young people's needs are many and varied. Therefore, no single intervention can be expected to deal with the full range of problems. Knowing for which particular groups a program works best allows the program to be more appropriately targeted.

Most effective programs for young people provide sustained adult contact. The key factors are that there be ongoing contact with an adult over an extended period of time and that it includes elements of monitoring, as well as support. Modest program impacts can be the result of very different targeting strategies. It is important to decide whether it is more important to provide broad coverage with a program or to provide help to those who need it the most. The most effective strategy for disadvantaged out-of-school youth would be one that is multi-faceted - combining a training component with strong links to the employer community, more formal training linked to on-the-job training and work experience, and for the most disadvantaged, job search assistance and transitional wage subsidies. For young people who drop out of school, it is important to intervene as soon as possible after school leaving.

Better preparation for the labour market increases the probability that young people will obtain and retain employment - but only if jobs exist. Supply-side measures cannot, on their own, solve youth labour market problems. The state of the economy -the availability of jobs- is an important determinant of program effectiveness. Parallel strategies on the demand-side, to ensure the availability of and access to employment opportunities, must be part of any coherent set of labour market policies. In this respect, government needs to engage the private sector in the provision of job opportunities for youth."

We must continue to promote, showcase and celebrate excellence in cooperative education and must renew our efforts to facilitate and increase business-education partnerships. On the other hand, we need to come to grips with some major policy and funding issues. Pan-Canadian leadership is needed urgently to provide direction and to ensure that all the stakeholders are pulling at the same end of the rope, instead of pointing the finger and passing the buck...

3.3. Responsiveness = Responsibility and Accountability

Traditionally, the debate on issues concerning responsiveness have usually been centred in terms of the educational system's ability and capacity to adjust to the realities of the marketplace. For example, a description of New Brunswick's Youth Apprenticeship Program provides the challenges, the **response**, the objectives, the basic principles, the characteristics, and the expected outcomes for employers, for schools-colleges and for students.

Under "The Challenges", one can find:

- P The economic development of the province will increasingly be dependent upon business and industry becoming and remaining competitive in the global economy.
- P Meaningful and rewarding employment will increasingly be in those occupations which demand highly developed technical skills and knowledge.

"The Response" is described as follows:

"The educational systems -both secondary and post-secondary- must respond to these challenges by:

- P accepting increased responsibility for preparing youth for future involvement with business and industry;
- **P** providing employers a means of participating directly in the education/training/learning process;
- P enhancing the employment readiness of high schools graduates with employment related skills, knowledge, and attitudes;
- **P** better articulating the secondary, post-secondary and employment phases of student development;
- P providing an organized transition from school to work.

If successful, the Youth Apprenticeship partnerships (employers, educators, and youth working together) will assist in developing a pool of educated and skilled workers capable of contributing to the productivity and competitiveness."

While opinions vary greatly on where the response issue should actually rest, the above description provides an excellent framework for the development and endorsement of responsibility and accountability profiles for all stakeholders (students, parents, educators, business and labour leaders, public sector policy-makers and politicians) who have agreed to develop a common understanding and a sense of shared responsibility of issues in education. Although not intended to be all inclusive, the following could serve as a starting point in the drafting and ultimate agreement on a "Stakeholders' Social Contract on Education":

Students agree to:

- P Accept and assume responsibility for preparing their future involvement in the workplace, by making informed choices about employment prospects based on an assessment of their abilities and potential, and by making every effort to acquire and improve the required employability and specialized skills, as described in appropriate competency profiles for selected occupations.
- P Ensure that student leaders receive input and feedback on opportunities and issues pertaining to the educational system, so that, in turn, student association and federation representatives can represent their views and play an active and productive role in the decision making process, in different forums.

Parents agree to:

- Accept and assume responsibility for preparing their children for future involvement in the workplace, by helping them to make informed choices about employment prospects, by facilitating the assessment of their children's abilities and potential, and by making every effort to ensure that their children acquire and improve the required employability and specialized skills, by providing them with appropriate support, by monitoring their progress, and by meeting regularly with educators.
- P Ensure that local politicians receive input and feedback (not just on election day) on opportunities and issues pertaining to the educational system, so that, in turn, politicians can represent parents' views when debating issues and making decisions that best represent the majority of constituents.

Educators agree to:

- Accept and assume responsibility for providing the appropriate environment that will allow students to prepare their future involvement in the workplace. Educators will assist and guide students in making informed choices about employment prospects, based on an assessment of students' abilities and potential. Educators enhance the employment of students by helping them to acquire and improve the required employability and specialized skills, based on appropriate competency profiles for selected occupations.
- P Ensure that student leaders receive input and feedback on opportunities and issues pertaining to the educational systems, so that, in turn, student association and federation representatives can share the information with the students they represent.
- P Facilitate the work of parents by providing them with appropriate support and by meeting with them on a regular basis, to provide feedback on progress towards stated objectives and to receive input on opportunities and issues pertaining to the educational systems.
- P Ensure that governments (politicians) receive timely information on opportunities and issues pertaining to the educational system, so that, in turn, politicians can represent educators' views when debating issues and making decisions on the future of the educational systems.

- P Seek input and feedback from business leaders on opportunities and issues pertaining to their business, as it relates to the educational systems, so as to integrate business leaders' views in the decision making process governing the educational systems.
- P Accept and assume leadership in the inception, development, ownership, operation, evaluation and communication of business-education partnerships to create and nurture mutually beneficial relationships between employers and educators that enhance learning for students and other learners.
- P Provide facilities so that students can get direct access to a reliable, integrated and comprehensive single (one-stop shopping) source of information on future job opportunities.

Business and labour leaders agree to:

- P Accept and assume responsibility for identifying future job opportunities, to assist students in making informed choices about employment prospects, and by making every effort to clearly identify the required employability and specialized skills, in appropriate competency profiles for selected occupations.
- Provide input and feedback to educators on opportunities and issues pertaining to their organizations, as it relates to the educational system, so that, in turn, educators can integrate business and labour leaders' views in the decision making process governing the educational systems.
- P Accept and assume leadership in the inception, development, ownership, operation, evaluation and communication of business-education partnerships to create and nurture mutually beneficial relationships between employers, unions and educators that enhance learning for students and other learners.

Public-sector policy-makers agree to:

- P Accept and assume leadership in the inception, development, ownership, operation, evaluation and communication of high performance systems that will accelerate the development and ensure the on-going delivery and maintenance of a standard set of essential employability skills as well as the required specialized skills, in appropriate competency profiles for selected occupations.
- P Accept and assume responsibility for providing direct access to a reliable, integrated and comprehensive single (one-stop shopping) source of information on future job opportunities, to assist students in making informed choices about employment prospects.
- Provide timely evaluation and interpretation of data to educators on opportunities and issues pertaining to the labour market and to youth employment, so that educators can integrate public sector policy-makers' views in the decision making process governing the educational systems.

Governments (politicians) agree to:

P Provide pan-Canadian leadership in all aspects governing the educational systems in Canada.

P Ensure that appropriate resources are allocated to support national programs that will enhance learning for students and other learners, and facilitate the work of parents, educators, business leaders and public-sector policy-makers as they build a new Learning Society.

As stated earlier, opinions may vary greatly on where the responsiveness issue should actually rest. However, the above provides some of the required elements for a responsibility and accountability framework for all stakeholders. While it is not intended to be all inclusive, it is a potential starting point in the drafting and ultimate agreement on a "Stakeholders' Social Contract on Education".

RECOMMENDATIONS

We invite the participants of the Third National Forum on Education to consider the following recommendations:

- 1. The promotion of a *Stakeholders' Partnership Contract on Education*, to be used as a blueprint for further discussions on the roles and responsibilities of all stakeholders, leading to the endorsement of a national responsibility and accountability framework for youth programs in Canada.
- 2. The creation of a national coordinating body to oversee the development and implementation of a pan-Canadian strategy, supported by all levels of government, business, labour, and the education sector to:
- accelerate the completion and ensure the on-going evaluation and maintenance of a standard set of essential employability skills as well as the required specialized skills, in appropriate competency profiles for all selected occupations;
- provide direct universal access to a single (one-stop shopping) reliable, integrated and comprehensive source of information on future job opportunities, to assist young people in making informed choices about employment prospects;
- provide timely evaluation and interpretation of data on opportunities and issues pertaining to all existing and future business-education programs and partnerships, to trends in the labour market, and to the overall cost/benefit performance of current and future youth employment programs, with recommendations, as appropriate.
- secure long-term commitments and funding to monitor, research and seek continued improvements to the youth employment situation, with a focus on school-to-work and work-to-school transitions and, in particular, on work experience, cooperative and internship programs.
- ♦ manage a new pan-Canadian umbrella youth employment communication program, regrouping all current youth employment communication programs (while maintaining

- existing resources in respective organizations and jurisdictions) to facilitate exchange on and promotion of lessons learned, best practices and outstanding achievements, using multi-media interactive applications.
- 3. Ensure that the topic of *Relevance of Education to the World of Work, with a Focus on Youth Employment* is maintained as a regular and permanent item on the national education agenda.

List of Reference Material

100 Best Business-Education Partnerships, 1997 IdeaBook, The Conference Board of Canada.

100 % Success: Just Say "Yes" to Student Success, Report of ACCC Task Group on Student Success and Retention, June 1997.

ACCC Survey of College and Institute Participation in Youth Employment-Related Programs, ACCC, 1997.

After High School: The First Years - The First Report of the School Leavers Follow-up Survey (1995), HRDC & Statistics Canada, September 1996.

An Assessment of the Youth Initiatives Program, Surveys of Recent and past Participants of the Youth Internship Canada and Youth Service Canada Programs, prepared for HRDC by COMPAS Inc., Multi-Audience Research, December 1997.

Applied Academics: Education for the Real World, Center for Applied Academics, Vancouver.

Arts Education for life and Work, Educational leadership, The Getty Education Institute for the Arts, Educational Leadership, November 1997.

Assessing the Needs of Post Secondary Co-operative Education Employers: A Survey of Co-op Employers' Perceptions and Experiences with B.C. Post Secondary Co-operative Education Programs, May 1996.

AWAL - Applications of Working and Learning, Centre for Applied Academics, February 1998.

Balancing Real-World Problems with Real-World Results, Rick Gordon, The Phi Delta Kappan, Volume 79, 1998.

Bridging the Gap. Post Secondary Co-operative Education in British Columbia and the Yukon, Association for Co-operative Education BC/Yukon/NWT, Fall 1997.

Canadian Lifelong Learning, The Learning Link, Nov-Dec 1997.

Case Studies of Alternative Working Arrangements and Changes in Working Time, Canadian Labour Market and Productivity Centre, April 1997.

Catching The Wave: Framework for Youth Entrepreneurship Success, Working Group on Youth Entrepreneurship, 1996.

Changing Times, New Ways of Working, Alternative Working Arrangements and Changes in Working Time, Canadian Labour Market and Productivity Centre, April 1997.

Community College Review, Volume 25, No. 3, Winter 1997.

Co-operative Education Fund of British Columbia (CEFBC) 1996/97 Annual Report, December 1997.

Critical Workplace Competencies, Dr. Michael Alpern, Canadian Vocational Journal, CVA.

Employability Skills for British Columbia, Executive Summary of the report of a project sponsored by HRDC, the British Columbia Labour Force Development Board and the British Columbia Institute of Technology, October 1996.

Employability Skills Profile, The Conference Board of Canada.

Enhancing Transitions, Centre for Curriculum, Transfer & Technology, British Columbia Ministry of Education, Skills and Training, 1997.

Essential Skills Research Project: Pan-Canadian Discussion, Proceedings Report, March 21-22, 1998.

Evaluating Business-Education Collaboration: Value Assessment, Michael R. Bloom, The Conference Board of Canada, April 1993.

Facing the Future, HRDC's Role in Addressing Human Resources Issues, Presentation of Ian Green to the CSTEC 1998 Annual Conference, March 30-31, 1998.

From Best Intentions to Best Practices: The First-Year Experience In Canadian Postsecondary Education, National Research Center for The Freshman Year Experience & Students in Transition, University of South California, Monograph Series, Number 22, 1997.

Human Resource Study of the Canadian Grocery Products Manufacturing Industry, Prepared for the Canadian Grocery producers Council by the Canadian Labour Market and Productivity Centre, December 1997.

Labour Pains: Canada's Skills Shortage Hurts us All, Plant Engineering and Maintenance, Volume 22, Issue 5, November 1997.

L'Alternance Travail-Études, un projet de collaboration, Gouvernement du Québec, Ministère de l'Éducation, 1997.

La Relance au collégial, Situation au 31 mars 1997 des sortantes et des sortants diplômés de l'enseignement collégial en 1995-1996: formations préuniversitaires, Gouvernement du Québec, Ministère de l'Éducation, janvier 1998.

L'école, tout un programme, Énoncé de politique éducative, Gouvernement du Québec, Ministère de l'Éducation, 1997.

Indicateurs de l'éducation, Édition 1996 et 1997, Gouvernement du Québec, Ministère de l'Éducation, 1997.

La Relance au Secondaire en Formation Professionnelle, Données sur l'intégration au marché du travail de 1995 à 1997 de personnes diplomées, Direction générale de la formation professionnelle et technique, Direction de l'organisation pédagogique, Gouvernement du Québec, Ministère de l'Éducation, 1997.

Lessons Learned: Effectiveness of Employment-Related Programs For Youth, Evaluation and Data Development, Strategic Policy, HRDC, June 1997.

Mobilizing for the Future: Educational Technology in Canada's Community Colleges and Technical Institutes, Association of Canadian Community Colleges, May 1997.

Moving On, Summary of a Report to the Minister of Education, Skills and Training on Secondary to Post-Secondary Transition, Government of British Columbia, February 1997.

Ontario Community Colleges - Employability Skills Program, developed by the Heads of Access Committee (HOA) & Senior Adult Training Officers (SATO) of the Association of Colleges of Applied Arts & Technology of Ontario (ACAATO), June 1994.

PLA, PLAR, PLR: What's Going On?, College Canada, Newsmagazine of the Association of Canadian Community Colleges, Vol. 2 Issue 4, 1996/1997.

Prendre le Virage du Succès, Plan d'action ministériel pour la réforme de l'éducation, Gouvernement du Québec, Ministère de l'Éducation, 1997.

Preparing The Workforce of the Future, Proposal for the establishment of The Canadian Foundation For Critical Skills, The Conference Board of Canada.

Putting the pieces together: Toward a coherent transition system for Canada's labour force, Report of the Task Force on Transition into Employment to the Canadian Labour Force Development Board, 1994.

Reader's Guide to Essential Skills Profiles, Standards, Planning and Analysis Division, HRDC.

Sectoral Activities Update Report, HRDC.

Stay: Strategies to Assist Youth, YMCA Canada 1992.

Structuring Public Education for the New Century, Ensuring Quality Education for Saskatchewan Students, Saskatchewan partnerships, Saskatchewan education, August 1997.

Student Employment, Hoops Harrison, The Canadian Alliance of Student Associations, February 1997.

Take On The Future - Canadian Youth in the World of Work, Report of the Ministerial Task Force on Youth, HRDC, June 15, 1996.

Technical and Vocational Education in Canada: An Overview and Some Future Challenges, Tom Norton, Association of Canadian Community Colleges, March 25, 1997.

Technology for the 21st Century - Technological Education, Canadian School Boards Association (CSBA).

The Forum, Forum for International Trade Training (FITT), Volume 3, Issue 1, Winter 97-98.

The Workplace in 2020: Three Scenarios, Patricia Galagan, American Society for Training and Development.

Training Services That Meet Your Workplace Needs, Canadian Steel Trade and Employment Congress, 1997.

WITT National Network's Construction Technology for Women, Canadian Vocational Journal, CVA.

Work and Learning (work in progress), Selected Indicators on Youth in the Labour Market, Canadian Labour Force Development Board (CLFDB), March 1998.

Work Experience Education Guidelines, Saskatchewan Education, March 1989.

WorkKeys System: Canada, College Canada (ACCC), School-to-Work Programs, 1997.

World Population Growth and Movement: Towards The 21st Century, Michael Shenstone, DFAIT, June 1997.

Youth and the Labour Market: Background Information for CLMPC Board Forum, October 30, 1997.

Youth and Work in Troubled Times: A Report on Canada in the 1990s, Richard Marquardt, Canadian Policy Research Networks Inc., Working Paper No. W 01, 1996.

Youth Apprenticeship Program, Ministry of Education, New Brunswick, 1997.

Youth Employment and Education Trends in the 1980s and 1990s, Gordon Betcherman and Norm Leckie, Canadian Policy Research Networks Inc., Working Paper No. W 03, 1997.

Youth Employment: Some Explanations and Future prospects, Claude Lavoie, Applied Research Bulletin, Vol. 2 No.2, HRDC.

Youth Employment Strategy, HRDC.

Youth School-To-Work Transition Project, Electricity & Electronics, Gregg Murtagh & John Horton, 1998.