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FURTHER EDUCATION AND TRAINING

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The Changing Labour Market Environment

The opinions expressed in this paper are not necessarily those of the Newfoundland and Labrador Department of Education nor of the Council of Ministers of Education, Canada

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1.0 EXECUTIVE SUMMARY

This paper was developed to facilitate discussion on *further education and training* for the Third National Forum on Education being held in St. John's, Newfoundland from May 28-30, 1998. The lead for the preparation of this paper was the Newfoundland Department of Education. From a list provided by the CMEC, the co-ordinator wrote a wide group of organizations and associations for input. The paper focusses on, as prescribed by the CMEC: employment services and entrepreneurial skills development; sector skill councils and standards and outcome measurement; and apprenticeship. From the input received, a number of policy areas requiring pan-Canadian action were developed. These policy areas are outlined below:

Employment Services & Entrepreneurial Skills Development

- ▶ The need to increase efforts to improve the employment prospects of all individuals.
- ▶ The need for special interventions and a continuum of supports for individuals "at risk" including: youth, women, older workers, native peoples, and persons with disabilities.
- ▶ The need to place greater emphasis on active employment measures to assist new graduates make the transition from school to work.
- ▶ The need for greater awareness of and exposure to entrepreneurship in the primary, elementary, and secondary school system.
- ▶ The need for postsecondary institutions to promote opportunities in entrepreneurship, and offer programs which provide the necessary skills to meet the current and future demands of the labour market.

Sector Skills Councils & Standards and Outcome Measurement

- ▶ The need to continue support for the development of Sector Skills Councils as one avenue to ensure that formal education and training and workplace skill requirements are consistent. All jurisdictions of Canada should be given the opportunity to participate on such councils.
- ▶ The need to provide opportunities for Canadians to develop generic skills.
- ▶ The need for occupational analyses to be continuously updated to reflect the changing needs of the labour market and measurable standards should be a component of all analyses. Analyses need to be conducted for all new and emerging occupational areas as well. To the greatest extent possible, there should be national certification standards developed for regulatory bodies.
- ▶ The need for extended focus beyond the education and training process to include measurable job performance outcomes.

Apprenticeship

- ▶ The need to strengthen the role of industry in developing national occupational standards.
 - ▶ The need to explore alternative apprenticeship models.
 - ▶ The need to develop links between high schools and the apprenticeship system.
 - ▶ The need to embrace new and emerging opportunities and make efforts to continue to expand the definition of apprenticeship to recognize more unconventional attachments to
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- the institutional programs and new forms of work arrangements including part-time employment.
- ▶ The need to continue to support apprenticeship as a proven avenue to provide a highly skilled workforce for the next century.

2.0 INTRODUCTION

It has been widely acknowledged that one of the key ways to greater productivity and competitiveness is through the development of human resources. This involves an investment in the knowledge, creativity, skills, and motivation of individuals. Canada has historically had a strong commitment to education and training which has been a vital source of the nation's economic success. The changing face of Canadian industry is characterized by global competitiveness, a profound shift in attitudes toward work and training, innovation through the application of technology to work, and an investment in people.

Individuals can no longer expect to acquire one set of skills to carry them throughout their working lives. Frequent retraining will be needed to ensure existing members of the workforce keep up with the changing workforce. Learning, training and education is a **continuous, life-long process**. In fact, it has been reported that, because of the pace of technological change, today's workers may have to be trained for three or four different careers during their working lives.

The provinces and territories have constitutional responsibility and provide the bulk of financial support for primary, elementary, and secondary education. The Federal Government has, for many years, supported higher education through transfers to the provinces and territories and research grants to universities. It is important, however, that priorities for the whole learning system strive for national consensus, where practical, especially to facilitate labour mobility and recognition of qualifications from province to province.

The purpose of this paper is to facilitate discussion on the topic - *further education and training*, for the Third National Forum on Education, the theme of which is *Education and Life - Transitions*. The objectives of the Forum are to: develop a common understanding of specific issues in education and a sense of shared responsibility; to encourage networking; and to provide the CMEC with an opportunity to present its national agenda. The information in the paper was the result of the contributions by a number of individuals and associations, a list of which is contained in the references section.

The scope of the paper, as outlined by the CMEC, addresses the role and importance of *further education and training* in: employment services and entrepreneurial skills development; Sector Skills Councils and standards and outcome measurement; and apprenticeship.

The paper begins by discussing a number of policy areas requiring pan-Canadian action in the above areas. This is followed by more in-depth discussion on each of the above mentioned topics.

The paper concludes with some suggestions for action and a list of information sources is included in the bibliography.

3.0 POLICY AREAS REQUIRING PAN-CANADIAN ACTION

3.1 Employment Services & Entrepreneurial Skills Development

Individuals who require employment services can be divided into two categories: Employment Insurance eligible clients and all others. Employment services in Canada are lacking for those who are not eligible for EI, that is those who have had no attachment to the labour force. Employment services in Canada, however, do not meet the diverse needs of all individuals including youth trying to make a successful transition from school to work, graduates, and other groups such as women, older workers, native peoples, and persons with disabilities.

Policy Issue: The need to increase efforts to improve the employment prospects for all individuals.

Studies indicate that special interventions and supports are needed for youth “at risk” to make a successful transition from school to work. Interventions such as, assessment and counselling, career planning, preparation for the labour market, and the provision of a continuum of supports over long periods of time.

Policy Issue: The need for special interventions and a continuum of supports for individuals “at risk” including: youth, women, older workers, native peoples, and persons with disabilities.

Studies have shown that, the higher one’s level of educational attainment, the greater the level of labour market success. Today, however, there are an increasing number of postsecondary graduates unemployed and underemployed. Graduates are finding themselves at the end of the day with a significant debtload and few employment prospects available to them to address it. It is important that employment services meet the diverse needs of all individuals, whether it be for those on EI or those trying to make a successful transition from school to work.

Policy Issue: The need to place greater emphasis on active employment measures to assist new graduates make the transition from school to work.

There is compelling evidence that the education system has an important role to play in contributing to economic development. Self-employment and entrepreneurship represent a growing segment of the labour force. The education and training system must provide individuals with the skills necessary to start and run successful enterprises. Studies show that students with the highest level of exposure to entrepreneurship in the primary, elementary, and secondary school system are more predisposed towards business ownership as a career.

Policy Issue: *The need for greater awareness of and exposure to entrepreneurship in the primary, elementary, and secondary school system.*

Studies also show that the more entrepreneurship courses a student takes in a postsecondary institution, the greater the likelihood they have of becoming an entrepreneur.

Policy Issue: *The need for postsecondary institutions to promote opportunities in entrepreneurship, and offer programs which provide the necessary skills to meet the current and future demands of the labour market.*

3.2 Sector Skills Councils & Standards and Outcome Measurement

Sector Skills Councils bring all stakeholders, including educators, together to improve human resource management; establish national occupational standards for the occupations in the respective sectors; develop curricula for training; and identify the requirements for careers in each sector. Across Canada, there is a recognized need for more industry involvement in decision making. Under the Sectoral Partnerships Initiative (SPI) of the Federal Department of Human Resources Development Canada, workers, employers and other stakeholders are brought together to address the human resource challenges facing the sector.

The changing labour market environment demands that virtually everyone today have credentials in their chosen occupation. Depending on the level of functioning required in an occupation, these may be at certificate, diploma, degree, or post-graduate levels. Institutions must understand labour market changes that are occurring across Canada and better position their programs to meet the needs of business and industry.

Policy Issue: *The need to continue support for the development of Sector Skills Councils as one avenue to ensure formal education and training and workplace skill requirements are consistent. All jurisdictions of Canada should be given the opportunity to participate on such councils.*

For a number of reasons, the way in which work is performed in today's environment is vastly different from the past and will continue to change at a very rapid pace. One of the greatest skills of the present day worker is the ability to adapt to change. This skill is not taught, but rather evolves with the development of knowledge and confidence.

Policy Issue: *The need to provide opportunities for Canadians to develop generic skills.*

As existing sectors evolve and new sectors emerge, such as the information technology sector, occupational analyses need to be conducted. Standards are developed not only for use in specific

sectors, but also in the secondary and postsecondary education systems and in regulatory bodies. The Federal, Provincial, and Territorial Agreement on Internal Trade (AIT) was established to eliminate barriers to the free movement of qualified labour across the country.

Policy Issue: The need for occupational analyses to be continuously updated to reflect the changing needs of the labour market and measurable standards should be a component of all analyses. Analyses need to be conducted for all new and emerging occupational areas as well. To the greatest extent possible, there should be national certification standards developed for regulatory bodies.

Confirming the skills that a person has acquired in the changing environment of the workplace requires the use of a variety of assessment mechanisms. There are diverse methods used among employers, among regions, and among provinces or territories.

With the labour market changing as it is, there is a critical need to adapt by using more comprehensive methods of standard setting and outcome measurement. Policies such as prior learning assessment, skill endorsement, sub-trade or specialized certification, and post-journey level training will better help to recognize and enhance the qualities and qualifications of workers, thereby permitting access to employment or advancement opportunities. Workers in this labour market may then better set career goals with confidence in attaining them.

Prior learning assessment and recognition is one way of enabling the work force to get the greatest benefit from the investment in our human resources. With greater national consistency and broader recognition of learning that occurs through work experience, there would be less duplication of resources on the part of learners and educational institutions.

Policy Issue: The need for extended focus beyond the education and training process to include measurable job performance outcomes.

3.3 Apprenticeship

There is one common thread throughout all jurisdictions that characterize change to the apprenticeship system - the need to strengthen the role of industry. Apprenticeship training and certification is based upon standards developed by industry through the composition and validation of National Occupational Analyses and Interprovincial Examinations.

Policy Issue: The need to strengthen the role of industry in developing national occupational standards.

In recent years, many large industries have been replaced by small employers. What was once a culture of true trainers for apprentices has today evolved into small specialized firms resulting in a limited range of experiences. This inability to provide a full range of training is having a negative impact on the quality of trades training.

Policy Issue: The need to explore alternative apprenticeship models.

It has been stated that, if apprenticeship is to continue to contribute to the development of a highly-skilled workforce in Canada, new and innovative ways to educate young people and their parents about the opportunities for exciting careers in the skilled trades must be explored.

Policy Issue: The need to develop links between high schools and the apprenticeship system to ensure that the transition to apprenticeship begins in the secondary school system.

The apprenticeship system is based on sound principles, evidenced by its survival over such a long period of time. The foundation of apprenticeship must be extended to include more co-operative approaches to training, certified work experience and distance education technology. The scope must be expanded beyond that of traditional occupations, move from time-referenced to competency-based programs, and include more generic skills training.

Policy Issue: The need to embrace new and emerging opportunities and make efforts to continue to expand the definition of apprenticeship to recognize more unconventional attachments to the institutional programs and new forms of work arrangements including part-time employment.

Business and industry must work in partnership with government and educational institutions to delineate the roles and responsibilities of each in providing for a highly trained workforce for the next century. Whatever the future face of apprenticeship, it must be dynamic and reflect the realities of a modern society, while contributing to the successful promotion of the apprentice as a significant player in the future economic development of Canada.

Policy Issue: The need to continue to support apprenticeship as a proven avenue to provide a highly skilled workforce for the next century.

4.0 ISSUES FOR IN-DEPTH DISCUSSION

4.1 Employment Services & Entrepreneurial Skills Development

Employment services describe the range of measures designed to help people having difficulty finding and keeping a job. The need to implement coordinated and sustained initiatives to address employment in Canada has been recognized and addressed by both orders of government through the Federal *Employment Insurance Act*, subsequent Labour Market Development Agreements, through the forthcoming Youth Employment Strategy, and other initiatives. Employment services in Canada focus primarily on those who are EI eligible, that is those who have had some attachment to the labour force. Employment services in Canada, however, do not meet the diverse needs of all individuals including youth trying to make a successful transition from school to work, graduates, and other groups such as, women, older workers, native peoples, and persons with disabilities. Experience has shown that effective employment services are those that suit the skills of individuals to fit “real” job opportunities. In Canada, too many individuals are receiving training for jobs that do not exist locally or at all. Experience has also shown that employment services should involve employers directly, focus on long-term employment, stress the importance of self-employment, and business development initiatives.

While unemployment is a serious issue for the entire country, youth are at a disadvantage for a number of reasons. The lack of work experience puts them in an endless cycle - no experience, no job; no job, no experience. Over the past year, Premiers across Canada have indicated that youth unemployment is unacceptably high (the national youth unemployment rate increased from 11.2% in 1989 to 16.4% in 1997) and that increased efforts are needed to improve youth employment prospects. Labour Market Ministers have a vision for Canadian youth wherein: *all Canadian youth participate fully in the economic opportunities of the twenty-first century.* Premiers, together with the Prime Minister, have committed to a national youth employment strategy designed to create opportunities for youth to develop the knowledge and skills for work, increase work opportunities for youth, help youth respond to the complex and changing nature of work, and address the cultural and social barriers that prevent youth from working.

Employment services must address the needs of youth who are trying to make the transition from school to work. Studies have identified a number of key factors needed to help students make this transition, including: the need for greater effort to develop alternate pathways in formal education (not everyone has the same career aspirations); the need to place greater effort on developing student career aspirations; the need to provide a link between education and work; the need to provide ways to overcome barriers for further education, particularly with respect to access and financial support; the need to prepare youth for the labour market based on the realities; the need for special interventions and a continuum of supports; etc. For youth who have left school, there have been some general approaches used to help them overcome employment-related problems including: help in finding a job; temporary work experience projects; employer wage subsidies; supports to self-employment; vocational training; and encouragement to return to school. Studies show that young people with more education do better than those with less. Broad approaches have been used to keep young people in school and help provide a bridge to

the world of work by providing help with academic performance, providing alternate work-oriented curricula, and offering school to work transition programs, such as cooperative education programs and in-school apprenticeship programs.

Manitoba Education and Training has compiled an *Inventory of Canada's Provincial/Territorial Youth Employment Programs and Services* on an annual basis. The programs and services identified as "best practices" are programs and services which:

- ▶ involve partnerships between governments, businesses, schools, and communities;
- ▶ have a greater focus on responding to the needs of employers, business and industry;
- ▶ provide labour market information, career planning, and employment counselling;
- ▶ increase emphasis on entrepreneurship for youth;
- ▶ focus on designated groups of youth;
- ▶ have a strong mentorship component;
- ▶ provide apprenticeship programs and services for youth;
- ▶ provide exposure to careers in science, technology and the environment; etc.
- ▶ provide preparation for the labour market;
- ▶ provide financial incentives;
- ▶ link education and training with jobs; and
- ▶ offer employer incentives.

Greater emphasis needs to be placed on employment services to address the needs of graduates of degree and diploma programs to help them make the transition from school to work. Research has shown that, the higher one's level of educational attainment, the greater the level of labour market success. That was true, more so in the past, than today. In the past, a university degree could almost guarantee a steady middle-class income. Today, there are an increasing number of graduates who are unemployed or underemployed. Not only are graduates finding it difficult to find work after completing postsecondary education, but they are also coming out with significant debtloads, and few means to address it.

According to Statistics Canada 77% of adults with intellectual disabilities live in poverty. Some of the barriers faced by individuals with intellectual and physical disabilities include: lack of access to postsecondary education institutions; inadequate training; inaccessible transportation; negative societal attitudes; loss of disability-related supports upon acceptance of a job; etc. Due to the diverse needs of individuals with disabilities, there is no one employment strategy that will work for all. A Federal Task Force on Disability Issues, formed in 1996, revealed that individuals with disabilities want: to have input into policy, programs and decision-making; to have a common approach to disability issues in all jurisdictions but one that is sensitive to individual needs; disability programs that are secure and predictable; etc. The needs of individuals with disabilities are similar to those of youth. They need career planning, assessment and counselling, and a continuum of supports. With regard to access to postsecondary education, services to accommodate the needs of individuals with physical disabilities, sensory impairments, learning disabilities, as well as those experiencing varying degrees of developmental delay, are needed.

The education and training system must also accommodate the needs of native peoples and must not be overlooked when employment strategies are developed. With regard to postsecondary education, some issues that have been identified for Native peoples include: community involvement; postsecondary accessibility; and the creation of Indian postsecondary institutions. New initiatives have been undertaken in various provinces to address some of these needs.

Self-employment and entrepreneurship represent a growing segment of the labour force. Statistics Canada's 1995 Survey of Work Arrangements suggests that the vast majority of individuals who are becoming self-employed are doing so because of the independence, higher pay, and flexible work hours. In 1988, Canada was the first developed nation to adopt a National Policy on Entrepreneurship. The policy objectives are to: remove obstacles to entrepreneurship; advance the interests of entrepreneurs and small businesses in the public and private sectors and society at large; encourage business start-ups; and pursue regional economic development. Different approaches have been undertaken to stimulate economic development and growth across the country. In June 1987, the Federal Government established the Atlantic Canada Opportunities Agency (ACOA) to carry out the Federal Government's economic development mandate in Atlantic Canada.

Education is very important to business owners because the skills and knowledge young people bring with them play a crucial role in the success of businesses. Research has shown that students with the highest level of exposure to entrepreneurship awareness and knowledge throughout their elementary and secondary school education are more predisposed towards business ownership as a career. The Federal and Provincial governments in the Atlantic Provinces have signed co-funded Cooperation Agreements to address entrepreneurship/enterprise education issues from Kindergarten to Grade 12. Research has also shown that, the more entrepreneurship courses students take in a postsecondary institution, the greater the likelihood they have of becoming entrepreneurs. Postsecondary institutions must offer education and training programs which focus on entrepreneurship skills development and reflect the skills needed in the changing labour market.

As world trading patterns change, Canadian entrepreneurs are competing for a larger segment of the world marketplace. Education and training institutions must provide individuals with the necessary skills to run a successful business. However, for training to be effective, entrepreneurs must be able to access relevant programs in a flexible, timely manner through enabling technology. Both distance education and telelearning drop-in centres provide ways to deliver training programs to entrepreneurs and/or their employees. Both provide the flexibility and convenience required for busy entrepreneurs who often spend up to 60 hours a week or more dealing with their business activities.

4.2 Sector Skills Councils & Standards and Outcome Measurement

All across Canada, employers and workers, in consultation with education and training institutions, governments and other groups, are tackling human resource priorities together to improve the skills of current and new workers, and to ensure a consistent standard across existing

and emerging occupations. The goal is to ensure that occupational needs, worker skills and current labour market needs are consistent to facilitate labour mobility and the recognition of qualifications.

The Sectoral Partnerships Initiative (SPI) is a strategy of HRDC that creates national sectoral alliances among management, labour, governments and educators, in order to develop comprehensive human resource development strategies that deal with human resource challenges facing industry. The objectives of SPI are: to develop effective partnerships in the private sector; to improve the relevance of the learning system; to foster a continuous learning culture in the private sector; to support the mobility of labour across Canada; and to contribute to Canada's labour market information.

There are almost 30 sector skills councils created to date, and at the end of 1997, 35% of the labour force was covered by Canadian Sector Councils. Some examples include: the Canadian Aquaculture Industry Alliance (CAIA); the Canadian Aviation Maintenance Council; the Canadian Automotive Repair and Service (CARS) Council; the Canadian Council for Human Resources in the Environment Industry; Software Human Resource Council; the Canadian Steel Trade and Employment Congress (CSTEC); the Canadian Tourism Human Resource Council; Women in Trades and Technology National Network (WITT NN); etc.

Even though the focus of Sector Skills Councils varies, their roles are the same. Sector Skills Councils bring all stakeholders together to: improve human resource management; establish national occupational standards for the occupations in the respective sectors; develop curricula for training; and identify the requirements for careers in each sector. Some activities of the Sector Skills Councils are outlined below.

- ▶ ***Sector Studies*** - Sector studies determine current and future human resource issues in various sectors and ways to address them.

- ▶ ***National Occupational/Skill Standards*** - An analysis of an occupation must reflect the needs of the evolving workplace and be national in context to permit mobility and standardization. It is recognized that it is not enough to know what a person does in a particular job, but at what competency level the work is performed. A standards document defines the skill requirements and the expected outcomes of training or experiential learning. In Canada, the validation of standards should include the participation of all provinces and territories where the specific trade or occupation is practised. This helps to identify the common skills and facilitates labour mobility and recognition of qualifications. In recognizing that required skills vary from one jurisdiction to another, it is crucial to be aware of and address these differences.

With the labour market changing as it is, there is a critical need to adapt by using more comprehensive methods of standard setting and outcome measurement. Policies such as

prior learning assessment, sub-trade or specialized certification, and post-journey level training will better help to recognize and enhance the qualifications of workers.

The Canadian Tourism Human Resource Council is coordinating the development of national occupational standards and a method to certify people who achieve them. Tourism and other sectors are working with schools and colleges to link education programs to these occupational standards. The Canadian Automotive Repair and Service (CARS) Council is now developing standards for Service/Assistant Service Manager, Service Advisor, Partsperson, Heavy Truck Technician, and Collision Repair Technician.

Standards are not only developed for use in specific sectors but also in the secondary and postsecondary education systems, and in professional associations. The Atlantic Provinces Education Foundation (APEF), a partnership between New Brunswick, Newfoundland, Nova Scotia, and Prince Edward Island, has identified common “Essential Graduation Learnings”. The Essential Graduation Learnings include such areas as: aesthetic expression, citizenship, communication, personal development, problem solving, technical competence, and spiritual and moral development. The Atlantic Provinces have also been working collaboratively on the development of common curriculum in a number of subject areas. The CMEC has coordinated the development of a Common Framework of Science Learning Outcomes and has plans to do so in social studies and fine arts, and the Student Achievement Indicators Program which is an assessment program in mathematics, science and language (in French as well) administered to 13 and 16 year olds.

The Federal, Provincial, and Territorial Agreement on Internal Trade (AIT) was signed in 1994. The purpose of Chapter 7 of this agreement is to eliminate barriers to the free movement of qualified labour across the country. Three main barriers to mobility have been identified including: imposed residency requirements; practices relating to licensing, certification, or registration of workers; and differences in how qualifications of workers are recognized and differences in occupational standards. Labour Market Ministers have recently agreed that the removal of barriers needs to be accelerated. Provincial and Territorial governments are being asked to develop a workplan providing details on current and future implementation activities. Regulatory bodies are also being asked to do the same. Health Ministers and the CMEC have agreed to facilitate implementation between the Forum of Labour Market Ministers and their respective regulatory bodies.

- ▶ ***Development of skills upgrading and/or certification programs*** - The Canadian Trucking Human Resource Council, “Earning Your Wheels” program.
 - ▶ ***Programs to identify and prepare new entrants to the sector*** - A number of sector councils have initiated projects under the Federal Sectoral Youth Internship (SYI), involving 11,000 young people. The Canadian Aviation Maintenance Council helps young people gain basic experiences in the aviation industry and then either join the industry directly or pursue further education. The Software Human Resources Council gives 1,300
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recent college and university graduates one year of combined classroom and on-the-job training.

- ▶ ***Improve career and occupational information*** - The National Occupational Classification, Jobscan, and CanWorkNet provide labour market information. The Canada Career Consortium - a four-way partnership involving HRDC, the sector councils, the CLFDB and Canada Career Information Partnership, develops products so individuals can better understand the labour market and make better career choices.
- ▶ ***Essential Skills Research Project*** - Profiles describe the essential skills required for particular occupations and how the skills are likely to change.

Sector Skills Councils play a role in employment services, entrepreneurial skill development and apprenticeship. With regard to employment services, Sector Skills Councils work with educators to help retrain workers as well as provide skills upgrading so as to improve their employment situation. With regard to entrepreneurial skills development, there are a number Sector Skills Councils in which small and medium enterprises are included. Sector Skills Councils in setting national occupational standards, work with apprenticeship authorities in all provinces and territories to ensure the needs of industry are met.

4.3 Apprenticeship

Each province and territory has the responsibility for apprenticeship training. Apprenticeship is defined as an agreement between a person (an apprentice) who wants to learn a skill and an employer who needs a skilled worker - “earning while learning”. Apprenticeship combines on-the-job experience with technical training to produce a certified journeyman. Upon completion of the specified training period, apprentices receive a Certificate of Qualification. The legislation permits each jurisdiction to designate occupations for apprenticeship. Designated trades are governed by regulations under the Provincial and Territorial Apprenticeship Act. These regulations outline the standards and conditions of training for specific trades. Employers, employer associations or unions can petition their provincial and territorial Director of Apprenticeship to have an occupation designated.

The changing face of Canadian industry is characterized by global competitiveness, a profound shift in attitudes toward work and training, innovation through the application of technology to work and an investment in people. In an information society, the development of human resources will become paramount. Job skills will be replaced by employability skills and short-term skill development replaced by life-long learning.

Education and training has a significant role in building and maintaining Canada’s competitive workforce. The apprenticeship training system in Canada has proven to be an effective method of providing workers with the skills needed to compete in a global economy. Because of its closely linked relationship with industry, it is a training system that can be used to ensure long-term labour force development.

In most European countries, apprenticeship is viewed as an extension of formal education more than as an employment training program. In North America, the emphasis has been on providing a level of service to industry. Currently, there are approximately 122,000 apprentices in Canada (0.9% of the workforce) registered in 169 occupations. By contrast, in Germany there are 1.8 million (4.5% of the workforce) participating in 488 apprenticeable occupations. Some of the major weaknesses of the apprenticeship system in Canada include the inability to attract school leavers, an exorbitant cost (almost twice that of Germany) and a dropout rate of approximately 40%. In Newfoundland, as in most other provinces of Canada, those who participate in the apprenticeable trades are almost exclusively white males; less than 20% of all apprentices and journeypersons are female.

If apprenticeship is to continue to contribute to the development of a highly-skilled workforce in Canada, new and innovative ways to educate young people and their parents about the opportunities for exciting careers in the skilled trades must be explored. Apprenticeship training must change its image of being a program for underachievers in yesterday's occupations and embrace new and emerging opportunities. One challenge is to increase awareness among young people that, although trades may not require a post-secondary degree, apprenticeships represent an entry path for highly-skilled, high-paying jobs. In Newfoundland, for example, a CD-Rom is being developed on Introduction to Apprenticeship. Provinces and territories should share resources and develop materials that have a pan-Canadian focus. It is especially important to target those who have no plans to attend a post-secondary institution, as they will be at high risk of unemployment and be trapped in low-skilled, low-paying jobs.

Careers: The Next Generation in Alberta - started by Syncrude Canada Ltd. in Fort McMurray, is connecting schools and businesses at the local level and has been successfully integrated with the provincial curriculum. The objective is to give high-school students the opportunity to try their hand at a trade and gain paid work experience while still in school. Those who stick with the program gain credit for the first year of their apprenticeship along with their high-school diploma. While the program is aimed at young people who do not plan to move beyond high school, it is designed to fit with related college and university programs to expand the options available to participants in later years. The *Aquaculture Science & Technology Internship Program* is available to Canadian businesses conducting work in the Aquaculture sector, including businesses and non-profit organizations. It is sponsored by the Canadian Aquaculture Industry Alliance (CAIA), its regional partners, and Human Resources Development Canada. Recent graduates (under 30 years of age) from college and university level science and technology programs are eligible with placements ranging from 4-12 months.

There is one common thread throughout all jurisdictions that characterize change to the apprenticeship system - the need to strengthen the role of industry. Apprenticeship training and certification is based upon standards developed by industry through the composition and validation of National Occupational Analyses and Interprovincial Examinations. The Canadian Council of Directors of Apprenticeship (CCDA) and the Provincial and Territorial Board Chairs provide a national voice for apprenticeship.

In recent years, many large industries have been replaced by small employers which are unable to provide a full range of training. For those apprentices who find willing employers capable of providing a full range of training, the absence of job opportunities after becoming a journey person presents a different challenge. Often apprentices will try to remain registered for an extensive period of time rather than proceed to journey person status and find themselves unemployed.

Several alternatives to the conventional apprenticeship model are being explored. The current system could be modified to reflect more extensive use of a modular approach to learning including the use of distance technology. This would provide for more flexibility, reduce the difficulties in assembling groups of apprentices, and make it easier for individuals to coordinate their training and work schedules.

Another approach that would require a departure from conventional thinking would be modelled after existing co-op programs in other areas of training. Such a model would see the majority of training delivered by the educational institutions with shorter industrial experiences used to reinforce the institutional training. Job experience would take place under the supervision of the institution. Such an approach would be closer to the continental European model.

Much debate has occurred over the past several years regarding the virtue of developing an internship system for trades training. Such a system would require that all institutional training be given for a prescribed period at the beginning of the apprenticeship term followed by an extensive industrial assignment.

The future role for industry and education and training institutions in the development of our tradespersons is not clear. There are those who could argue for full institutional training with little or no industrial experience. Such is the case now with many of the technology programs. Others argue just as convincingly that we should return to the original concept of trades training being industry specific, and hence, being the responsibility of the industries concerned.

Whatever the method(s) used to train tradespeople, the definition of apprenticeship should be expanded to recognize more unconventional attachments to the institutional programs and new forms of work arrangements including part time employment. As the demands of industry change, workers will be looking for avenues to transfer from apprenticeship to diploma and degree programs. This will require a careful examination of the knowledge and skills of current journey persons and the application of Prior Learning Assessment to maximize credit transfer. Apprentices should be encouraged to take more responsibility for their own training including post-journey upgrading, and institutions along with industry must provide the opportunity for them to participate.

The Interprovincial “Red Seal” Standards program has become a flagship for Canada in enhancing workforce mobility and demonstrating to the rest of the world how provinces and territories, as diverse as those found in Canada, can reach agreement on national standards.

The foundation of apprenticeship should be expanded to include more co-operative approaches to training, certified work experience and distance education technology. The scope must be expanded beyond that of traditional occupations, move from time-referenced to competency-based programs, and include more generic skills training.

Business and industry must work in partnership with government and educational institutions to delineate the roles and responsibilities of each in providing for a highly trained workforce for the next century. Whatever the future face of apprenticeship, it must be dynamic and reflect the realities of a modern society, while contributing to the successful promotion of the apprentice as a significant player in the future economic development of Canada.

The National Apprenticeship Committee of the CLFDB is employing a consultative approach to developing a *Best Practices Guide for On-the-Job Portion of Apprenticeship Training*. The CLFDB conducted surveys and interviews with employers, journeypersons and apprentices across Canada and identified a number of integral elements to successful on-the-job training, recognizing however, that each industry and job site is different. The integral elements to successful on-the-job training include: commitment to training; team work involving the employer, the apprentice and the trainer; clear training objectives; development of a training plan; monitoring of the training program; and fair and equitable treatment of all employees.

5.0 CONCLUSION

The Council of Ministers of Education in Canada (CMEC) has outlined its vision for education stating that education is a life-long process. The various jurisdictions share many common educational goals, and efforts are made to ensure greater harmonization in the ways they are achieved.

This paper, in its focus on employment services & entrepreneurial skills development, Sector Skills Councils & standards and outcome measurement, and apprenticeship, identifies a number of policy issues that require pan-Canadian action. A national focus is especially important and vital not only to an individual's labour market success, but also to the economic development of the country as a whole. This does not preclude the fact that many differences exist amongst the provinces and territories, but stresses the need for a coordinated approach, where practical.

It is recommended that strategies to address the pan-Canadian policy issues in Section 3.0 be developed, but not be limited to, the following:

1. Ensure that national and provincial employment strategies address the needs of all individuals in making a successful transition from school to work.
 2. Develop strategies to promote entrepreneurial skills development in the whole education and training system.
 3. Continue to form Sector Skills Councils especially in new and emerging sectors, such as Information Technology.
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4. Develop generic skills for Canadians that prepare them for a lifetime of learning
5. Continue efforts to eliminate barriers to labour mobility and recognition of qualifications across Canada .
6. Recognize experiential learning and incorporate Prior Learning Assessment and Recognition practices where possible.
7. Develop new and innovative ways to increase awareness and promote apprenticeship to young people and in specific groups, such as women and other minority groups.
8. Develop strategies to strengthen the role of industry in apprenticeship.
9. Provinces and Territories share resources for addressing pan-Canadian issues.

The Third National Forum on Education will provide an opportunity to discuss the role of *further education and training* in the changing labour market environment. The purpose of this paper is to present viewpoints on this topic and facilitate discussion at the Forum.

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Name of Organizations and Associations Contacted

ACTISEC

Assembly of First Nations

Association of Canadian Community Colleges

Business Council on National Issues (BCNI)

Canadian Alliance of Student Associations

Canadian Aquaculture Industry Alliance (CAIA)

Canadian Association for Adult Education

Canadian Association for Continuing Education, School of Continuing Education, Memorial University of Newfoundland

Canadian Association for University Continuing Education

Canadian Association of University Teachers

Canadian Catholic School Trustees' Association

Canadian Chamber of Commerce

Canadian Conference of the Arts

Canadian Congress for Learning Opportunities for Women

Canadian Education Association

Canadian Federation of Students

Canadian Hearing Society Foundation

Canadian Labour Congress

Canadian Labour Force Development Board (CLFDB)

Canadian National Institute for the Blind (CNIB)

Canadian Society for the Study of Higher Education

Canadian Vocational Association

Council for Canada-Wide Standards in Education

Department of Human Resources and Employment, Province of Newfoundland

Divisions of Institutional and Industrial Education, & Youth Services, Province of Newfoundland

Education/Training Provider Network Project, University College of Cape Breton

Federal/Provincial Labour Market Development Agreement Secretariat, Province of Newfoundland

Human Resources Development Canada (HRDC)

Learning Disabilities Association of Canada

National Action Committee on the Status of Women
Native Women's Association of Canada
The Conference Board of Canada