F u t u r E d

**LIFELONG LEARNING IN CANADA:
VISIONS FOR THE FUTURE**

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EXECUTIVE SUMMARY

Canadians are the process of developing formal lifelong learning policies and strategies in the context of human resources development and global citizenship. While Canadians have always been lifelong learners, until recently, formal education and training institutions and practices have marginalized non-formal and informal learning. In the context of rapid societal change, however, emerging policies and strategies have placed an increasing emphasis on continuous learning for the individual and collective good of Canadians. There is increasing recognition that learning takes place in all environments – the workplace, the community, the home and family, leisure activities and travel.   The concept of lifelong learning is now used to encompass new approaches to teaching and learning, to the assessment and recognition of learning, to the management of learning, to the learning requirements of the knowledge-based economy and to quality assurance in education and learning.

This paper begins with an overview of the current status of lifelong learning in Canada including:
> common and competing definitions used
> the societal context and the need for lifelong learning in Canada
> a snapshot of learning opportunities and participation rates
> the challenges to change and barriers to lifelong learning
> key federal and provincial government policies and strategies
> key conceptual initiatives in support of lifelong learning
> organizations that promote lifelong learning and sources of more information

Lifelong learning is linked to such closely allied concepts as adult education, continuing professional education, labour force development, learning cultures and learning organizations. As well, lifelong learning in Canada is linked to such emerging practices as PLAR (Prior Learning Assessment and Recognition, i.e., the assessment of non-formal, experiential learning), electronic labour market information and learning records, applications of learning technologies and the Information Highway, and education for sustainable development. Finally, there is a discussion of such related issues as the skills and knowledge requirements of knowledge workers and global citizens. This discussion of the present circumstances forms the basis for visions of the future.

The second part of the paper sets out visions for a future for lifelong learning in Canada, and potentially in other APEC economies.   While there may be numerous possible and/or probable futures, this paper only sets forth some preferred futures. Among the various visions, for example, are the view of educational and telecommunications technocrats, the policy goals of the federal government in the context of human resources development and economic development, the perspective of individual Canadians, and the preferred future set out by futurists.   Emphasis is placed on the FuturEd Transformation Model as a means of getting to a preferred future, i.e., the questions to ask to ensure a holistic, systemic change strategy.

For purposes of this paper, the discussion of lifelong learning is framed by the concepts of social development and human resources development (HRD) – the overarching concepts of this APEC conference. This paper is intended to be illustrative and makes no claims to be all-inclusive of lifelong learning policies, programs and practices in Canada. The opinions expressed are those of the author.

1. THE STATUS OF LIFELONG LEARNING IN CANADA

An overview of the current status of lifelong learning in Canada includes the following: common and competing definitions used; the societal context and the need for lifelong learning in Canada; the challenges to change and barriers to lifelong learning; key federal and provincial government policies and strategies; a sample of provincial and institutional practices; key conceptual initiatives in support of lifelong learning; and organizations that promote lifelong learning and sources of more information.

1.1.   Defining "Lifelong Learning"

Discussion, definitions and policies for lifelong learning in Canada have emerged largely from the fields of adult and continuing education; however, many different definitions are used in Canadian policy and research documents. The various definitions – and subsequent visions of lifelong learning -- reflect different approaches to learning and different policy environments, for example:

> *Lifelong learning is a continuous process which stimulates and empowers individuals to acquire all the knowledge and skills they will require throughout their lifetimes, and to apply them with confidence and creativity.* (Learning and Literacy Branch of HRDC, 1998)

> *Lifelong learning is a conceptual framework and organizing principle for imagining, planning and implementing reform of the existing education and training systems to enable purposeful and systematic learning opportunities for individuals throughout their lives; to enable individuals to learn wherever, whenever, and in modes appropriate to their learning styles and needs; and to enable use of the total education and training resources (both formal and non-formal sectors) of the nation. It is also a social goal which envisages a learning society in which the pervasive culture values, facilitates and celebrates learning in all forms.* (Office of Learning Technology of HRDC, 1995).

> *Lifelong learning presupposes the development of a learning society, one where active, ongoing learning of a higher order will be embraced.* (APEC - Human Resources Development in Industrial Training, 1997)[1]

Terminology and approaches to lifelong learning are greatly influenced by Canada's active participation in such organizations as UNESCO (United Nations Education, Scientific and Cultural Organization), the OECD (Organization for Economic Co-operation and Development),

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[1]   Hatton's theory of lifelong learning, presented to the 1997 APEC HURDIT conference, can be found at
http://www.apec-hurdit.org/lifelong-learning-book/hatton.html - top

and other Euro-centric agencies. Some of the definitions that Canada draws from, and sometimes contributes to, are the following.

> *Successful participation in lifelong learning may be said to display four characteristics: individuals are motivated to learn on a continuous basis; they are equipped with the necessary cognitive and other skills to engage in self-directed learning; they have access to opportunities for learning on a continuing basis; and they have the financial and cultural incentives to participate.* (Education Policy Analysis Branch of the OECD, 1998)

> *Lifelong learning is the development of human potential through a continuously supportive process which stimulates and empowers individuals to acquire all the knowledge, values, skills and understanding they will require throughout their lifetimes and to apply them with confidence, creativity and enjoyment in all roles, circumstances and environments.* (European Lifelong Learning Initiative, 1996)

> *The term "lifelong education and learning" denotes an overall scheme aimed both at restructuring the existing education system and at developing the entire educational potential outside the education system; in such a scheme men and women are the agents of their own education.* (UNESCO, 1976)

Typically, Canadian definitions and policies try to incorporate all the definitions. That having been said, there is not a commonly-used or understood definition of the concept of lifelong learning for policy-making and program delivery purposes. Faris (1995) says*: the term "lifelong learning" has become a popular and ill-defined concept. To some it means lifelong education, to others, continuing professional education, and to yet others all learning which occurs outside the formal education and training system.*

In the absence of a formal and widely-recognized definition of lifelong learning, the following elements are common to most definitions:

> the recognition that learning happens in more than the formal education system, i.e., there is formal, non-formal and informal learning;

> the emerging understanding that learning is continuous need over a person's lifetime;

> the knowledge that more than formal learning is needed to cope with change in contemporary society;

> the awareness that a fully lifelong learning organization or society is a preferred future state;

> the recognition that both individuals and their communities, local and global, need to be involved in determining lifelong learning needs;

> the notion that lifelong learning is both a product of and driver for the widespread use of information technologies;

the concept that both individuals and whole societies benefit from lifelong learning.

The debate about definition centres on the following unresolved issues:

1. whether or not the formal education system is included in lifelong learning, or if the concept refers only to non-formal and informal learning;
2. how to recognize non-formal and informal learning, i.e., whether to accredit them in the formal accreditation process or create a new system to record learning;
3. whether lifelong learning is an investment or an expense, a public good or a business opportunity, an individual responsibility or a right.

These debates are currently under way in Canada, with an end to arriving at a working definition for lifelong learning that can serve to develop and implement a lifelong learning society in the very near future. They are driven by a host of changes in all aspects of Canadian life.

1.2.   The Societal Context of Lifelong Learning In Canada

The context for the emerging lifelong learning policy in Canada is characterized by:

a rich heritage of informal learning through, e.g., public radio and public libraries, and non-formal learning in the workplace, the family and the community;

an extensive formal education system providing for pre-school through to post-graduate education, and a well-established bureaucracy to support it;

considerable innovation in learning technologies and distance education, particularly reflective of Canada's immense geography and leadership in telecommunications;

a pervasive social value on schooling and a concurrent recognition that higher education typically results in financial rewards;

considerable debate about the future of Canada, both as a political unit and as a social community with a tradition of providing for the least advantaged;

unavoidable involvement in the global economy and the pressure to remain competitive at all cost;

the need for new knowledge-based products and services for market.

The need for lifelong or continuous learning in Canada is not, however, any different than anywhere else on the globe. Significant social, political, environmental and economic change has affected all aspects of Canadian life; and there are profound changes in the nature of work,

the workforce, family and community life, evidenced by the following indicators from Statistics Canada.

> In the late 1940's, 60% of the Canadian labour force worked in the goods sector - natural resources, manufacturing and construction. By 1990, over 70% of workers were employed in the service sector.
>
> The participation of women in the workforce has risen steadily since 1976. By the year 2000, 47% of the labour force will be female, compared to 33% in 1971. Of all women of working age, 61% will be at work or looking for work in the 1990's.
>
> Self-employment, at home or elsewhere, is a growing trend. In 1971, 540,000 workers were self - employed; in 1991 the number was 1,109,000, reflecting a growth that outpaced paid workers (105% - 70%). Overall, self-employment accounted for 8.4% of total employment in 1991.
>
> Many Canadians are in need of retraining, as most new jobs created in Canada are short–term. Of the jobs begun between 1991 and 1994, 64% lasted less than 12 months.[2]

Learning to deal with these workplace trends requires individual change – changed skills, knowledge and attitudes. The only positive way to deal with externally-imposed change is to learn to deal with it, perhaps to even manage or shape it.   According to Industry Canada (1996), l*ifelong learning is both an ideal and a future necessity... In the very near future, rather than thinking of learning as an educational experience completed early in life, Canadians will view it as an enriching lifelong process vital to continuing employment and success.*

Even more specific issues may be driving the move toward formal lifelong learning policies in Canada. According to Hatton (1997), drivers for lifelong learning policies are freer trade, higher technology, and increased competition combined with increasing variety and choice in learning opportunities. He says: *there is now and will in the future be no avoiding the taking of positions for and against concrete propositions pertaining to lifelong learning and public expenditures.*
From a different perspective, the move to continuous or lifelong learning is a monumental business opportunity. The need for new learning products and services creates an unprecedented economic develop opportunity for enterprises of all sizes. This has been clearly recognized and explained by both Industry Canada[3] and the Canadian Department of Foreign Affairs and

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[2] Information gathered from Industry Canada at http://strategis.ic.gc.ca/SSG/bp0519e.html - lifelong
[3] *The Learning Industries* at http://www.strategis.ic.gc.ca/cgi-bin/bas

International Trade.[4] The Office of Learning Technology has noted that, in the context of learning technologies for lifelong learning: *Canadian businesses also have a role to play: they must carve out a lasting niche as leaders and innovators in the application of technology to learning — and use those very tools to develop and maintain a skilled workforce in a rapidly-changing global marketplace.* From this position, consumer protection and quality assurance emerge as logical governmental roles and priorities.

In short, Canadians must be prepared to deal with constant change; and lifelong learning is a strategy by which to do that. It is no longer possible to acquire an education and then go off to work for a lifetime, as in the past. In recognition of this, various citizen and interest groups, government ministries, and educators are hoping to develop and implement a lifelong learning culture in Canada.

1.3.   A Snapshot of Lifelong Learning Opportunities and Participation Rates

Lifelong learning opportunities, particularly formal and non-formal, exist in abundance in Canada. In terms of adult learning, the 1993 Adult Education and Training Survey (Statistics Canada, 1993) revealed that educational institutions were the main provider of adult education and training activities. They accounted for one third (34%) of all providers followed by employers and commercial suppliers who share two fifths of the market each (21% and 20%, respectively). More generally, a survey of partners and interest groups on human resource development in Canada in 1990[5] identified more than 200 principal partners and interest groups involved, in varying degrees, with education, training or the promotion of learning in Canada. Over 40 federal government agencies, departments, crown corporations, boards and councils at that   time had either broad or specific interest in learning or training. Over 150 non-governmental organizations (NGOs) were involved in seeking project or core funding for their activities as well as the opportunity to influence government policies and programs.   In all likelihood, these numbers are substantially higher in 1998, particularly with the proliferation of private and commercial education/training agencies and enterprises.

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[4] *Overview of the Canadian Education Industry* at http://www.drait-maeci.gc.ca/culture/educationmarketing/over-e.htm
[5] Reported by Faris (1995), found at http://olt-bta.hrdc-drhc.gc.ca/info/online/part1.html - can

For the many reasons listed above, and others, Canadians are avid lifelong learners. The report Adult Education and Training in Canada (Statistics Canada, 1994)[6] reveals the following.

> In 1993, 5.8 million or 28% of Canadians aged 17 and over participated in adult education or training activities. This represents a one percentage point increase from 1991. On average, Canadian adult learners participated in 1.6 activities or 103 hours per individual.
> The majority of adult learners (71%) participated in job-related education or training. Among these learners, 70% received employer sponsorship.
> Higher education stimulates adults to participate in the learning process. The participation rate for adults with high school education or less was 17% compared to 50% for those with a university degree.
> In general adult learners are not studying to obtain a degree or diploma. They are involved in part-time courses to acquire specific skills. Half of the learning was concentrated in courses concerning management/administration, engineering/applied science technologies, and trades and health professions.
> In 1992, the percentage of Canadians, when asked, who had read in the previous week, a newspaper - 82.8 %, a magazine - 61.8%, and/or a book - 43.9%.

Across Canada, public libraries in communities of every size are recognized lifelong learning centres that helping people to make informed personal decisions. Library advocates assert[7] that the lifelong learning needs of users are not limited to the workplace dynamic. The library plays an essential role in providing for the information needs of people in search of answers to 'real' life questions: health concerns, personal development and enrichment, family crisis and other pressing issues. For example, a summary of studies sited by Fitch and Warner (1997) conducted in over 30 public libraries found that patrons use the library 1.2 times per capita annually to solve day-to-day problems related to travel, shopping, etc; 1.1 times per capita annually to address a personal/family crisis; 1.6 times per capita annually to find information for self-help or hobbies. In an Ontario study, an impressive 92% of respondents thought public libraries are either very important or fairly important in furthering the education of adults after their formal schooling has been completed. The public library offers Canadians resources and services that contribute to the acquisition and improvement of personal skills, competence and knowledge and foster personal creativity, motivation, confidence and self-improvement -- skills needed for the economy of the 21st century.

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[6] Available in full at http://www.hrdc-drhc.gc.ca/arb/research/rsctoc_e.html
[7] Taken from Fitch and Warner (1997), available at http://www.nald.ca/fulltext/dividend/page10.htm

Community based lifelong learning approaches which promote a wide variety of delivery alternatives have been among the most significant achievements of the lifelong learning champions. Community education developments in Prince Edward Island, the long successful history of community adult learning councils in Alberta, the literacy programming nationally and the growth of the open and distance education learning infrastructure provide second chance access to first rate learning opportunities for more and more people.

1.4. Challenges To Change And Barriers To Lifelong Learning

In the development of a lifelong learning culture in Canada, many existing practices must be challenged and changed, particularly but not only in the systems that deliver formal learning opportunities. These changes and challenges, for systems and for individuals, form barriers to the development of a lifelong learning culture in Canada.

The most obvious barrier to implementation of a lifelong learning society is the lack of a formal policy. One of the reasons why Canada does not yet have a formal lifelong learning policy is that it is defined differently by various and competing interests. More importantly, in Canada's system of governmental levels with discrete responsibilities, it is impossible to have a national or federal policy on lifelong education and/or training. And there is no mechanism to create the same lifelong learning policy in each and every province/territory. The solution appears to be a national lifelong learning policy that reflects the needs of individual Canadians as lifelong learners and not the needs of the providers of lifelong learning opportunities.

A second major barrier is the prevailing view of learning as a formal education activity. The existing system of delivering formal learning opportunities is highly entrenched in legislation and custom, and forces with vested interests make change very difficult. The terms "learning" and "education" have been used synonymously until recently; however, clear distinctions are now made between, for example, (1) education, training, and learning; (2) education/training systems and learning systems; (3) formal, non-formal and in-formal learning. These distinctions are important because, for most, the "creation" of lifelong learning culture or society requires:

de-coupling education/training and learning, with the former being a formal system of provision and the latter being the attributes (acquired or changed levels of skill, knowledge and attitudes) of the recipient, the learner;

finding means to assess and recognize or valuate all forms of learning, whether they are acquired in formal education/training systems (e.g., publicly- and privately-funded education systems, K-12 through to advanced post-secondary), non-formal training and learning environments (e.g., paid and/or volunteer work, family and community responsibilities), or informal learning environments (e.g., travel, reading).

The concept of lifelong learning essentially changes the focus from the providers and venues of learning opportunity – whether formal, non-formal or informal – to learners themselves. The established formal public education and training system does not welcome this change of focus, as it raises questions about their exclusive right to grant credentials.

A related barrier to the implementation of lifelong learning in Canada is the glacial pace of education reform in Canada. A study by Faris (1994) concluded that Canada lags far behind other developed economies in making the necessary changes to remain competitive in the global knowledge-based economy, i.e., it has yet to establish national education/training goals and objectives, a lifelong learning strategy, or national curriculum and standards.   Canada has made rudimentary gains in developing closer links between education and the economy, and in encouraging greater system efficiency through use of learning technologies. Despite that, dissatisfaction with the current education system is high. In 1993, it was noted that *Canada spends more than $44 billion a year on formal education, which is equivalent to 6.2% of our GDP, ranking fifth among OECD countries… Despite these high expenditures, there is growing concern among Canadians that our educational system is mediocre and off-target.*[8]   Without a national office of education and training, education reforms are piecemeal and highly resisted.

A different set of barriers to lifelong learning exist for learners themselves. A study by the Canadian Association for Adult Education (1982) found that individuals faced considerable obstacles presented by high fees and insufficient personal finances, institutional practices like scheduling and residency requirements, attitudinal barriers like lack of self-confidence, physical and geographic barriers to access, lack of support systems and lack of information. A study by the Women's Reference Group to the Canadian Labour Force Development Board (1994) reinforced these conclusions, grouping barriers around access and entry, finances and other

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[8]   Quoted from *Creating Opportunity: The Liberal Plan for Canada* (1993) by Campbell (1996).

necessary supports, and the quality of the training.[9] The main barriers to job-related training needs reported by employees were the lack of time and money, followed by inconvenient time or location, absence of the desired course or program and lack of employer support.[10]

The societal context for lifelong learning is two-sided: necessity on one side, and opportunity on the other. Both create challenges for Canada. With the emergence of the Knowledge-based Economy, we have begun to understand that learning must keep pace with other societal change, and that appropriate learning opportunities must be provided, together with the necessary supports. The role of a lifelong learning policy and of governments is to (1) remove those barriers to lifelong learning that can be removed; (2) circumvent those which can't be removed; and (3) work to change attitudes that perpetuate barriers.

1.5.   Key Federal And Provincial Government Policies And Strategies

In Canada, the 13 provincial and territorial governments have jurisdictional responsibility for the formal provision of education and training. The federal government has distinct and different responsibilities; and the promotion of lifelong learning in embedded in strategies and policies related to national human resource development (HRD), social, economic and cultural development. In essence, the federal government acts on behalf of individual Canadians who access various systems and services.   Clearly, provincial and federal governmental policies and strategies will be different, but they often partner on initiatives that they can agree to. For example, the Pan-Canadian Indicators Project[11] is a joint federal-provincial initiative to measure the success of parts of Canada's education system.

1.5.1. Key federal government lifelong learning initiatives

Canada's federal government can concern itself with "learning" as an individual activity through, e.g., financial supports for post-secondary students and unemployed workers, research related to occupational skill standards, and innovation specific to the knowledge-based economy; and with the provision of informal and non-formal learning through, e.g., public radio and TV, and support to libraries, the electronic telecommunications infrastructure, and industry sectoral councils. The

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[9] The entire inventory of barriers is reproduced in *Gender and Lifelong Learning: Enhancing the Contributions of Women to Small- and Medium-sized Enterprises in Canada for the 21st Century* (Barker, 1998), available at http://www.futured.com/

[10] *Adult Education and Training in Canada* (Statistics Canada, 1994).

[11] Information on this and other pan-Canadian education and training initiatives is available at http://www.cmec.ca/

federal government works with the provinces and other partners to *build a stronger Social Union,*[12] and to particularly assist children, workers, persons with disabilities, aboriginal peoples, and seniors to live lives as full participants in Canadian society.

In the context of lifelong learning, HRD and social development, key initiatives are undertaken by Human Resources Development Canada (HRDC).   With a stated commitment to promoting human development, the objectives of HRDC are to help Canadians prepare for, find, and keep work; assist Canadians in their efforts to provide security for themselves and their families; promote a fair, safe, healthy, stable, cooperative, and productive work environment that contributes to the social and economic well-being of all Canadians. Within these objectives, and aimed at promoting lifelong learning, HRDC specifically provides the following:

> targeted programs for designated equity-seeking groups: women, visible minorities, aboriginal peoples and persons with disabilities;
>
> special initiatives for children, e.g., through family literacy initiatives, and youth, e.g., through youth employment strategies;
>
> considerable research and information specific to employment, occupational and career development;
>
> a particular focus on literacy and other aspects of lifelong learning to help Canadian adjust to a changing society, and to equip them to participate fully in the knowledge-based economy;
>
> efforts to promote a strong workplace learning culture, e.g., in partnership with labour organizations, and community-based learning networks;
>
> initiatives to understand and utilize the Internet and electronic communications to increase learning opportunities and access to information;
>
> support to youth and adult students to further their education and/or access post-secondary education; and
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> research and innovation in the assessment and recognition of prior learning (PLAR), essential skills for knowledge work, and quality assurance in education/training.

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[12]   Taken from a key HRDC document, typically alludes to addressing the issues of child poverty, child development, and employment opportunities for disadavantaged and/or equity-seeking groups.

HRDC is discussing formal lifelong learning policy that would incorporate and reflect it's mission *to enable Canadians to participate fully in the workplace and the community*[13] through an integrated, lifecycle approach to human development, with a particular focus on those at risk. It will implement preventative measures that enable Canadians to identify risks and opportunities earlier, make better choices, contribute to economic growth, and gain access to resources; and community-capacity building and new partnerships.

As a partner in building a culture of lifelong learning, the federal government established the Office of Learning Technologies (OLT) within Human Resources Development Canada (HRDC). The OLT's job is to raise awareness about the opportunities, challenges and benefits of technology-based learning and act as a catalyst for innovation in the area of learning and skills development enabled by technologies. The OLT's vision is to: *contribute to the development of a lifelong learning culture in Canada* and its mission is to *work with partners to expand innovative learning opportunities through technologies.* Among its key activities is help to develop policies and strategies to guide the evolution and application of learning technologies in ways that best meet the lifelong learning needs of Canadians.

Another key initiative in support of lifelong learning is the development and promotion of the "Information Highway" by Industry Canada and its partners. Industry Canada assembled an Advisory Council on the Information Highway (IHAC), of which one working group focused on learning and training in the context of electronic and telecommunications.[14] It's vision that lifelong learning become a defining feature of Canadian society and that lifelong learning has served as a key design element of the Internet or electronic information highway (Faris, 1995). The report of the Learning and Training Working Group concluded that:

> Canadians must prepare for successful participation in the emerging competitive, knowledge-based global economy of the 21st century through creative and affordable access to lifelong learning opportunities on the Internet or "information highway."
> Like other OECD countries, Canada is making major financial commitments to create readily accessible "information highways" and associated lifelong learning systems. To enable learning, a significant portion of the information highway must become a "knowledge highway" in which data is informed and organized by human intelligence.

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[13] From *Making a Difference in Human Development: A Vision for HRDC* (1998), available at http://www.hrdc-drhc.gc.ca/dept/mission/mission.shtml
[14] More information is available at http://olt-bta.hrdc-drhc.gc.ca/info/online/highway.html

New technologies increase access to learning systems and support services for learners, regardless of their geographic location, socio-economic status, gender, racial origin or disabling condition.

Electronic communications will enable more cost-effective, productive and relevant education and training through increased opportunities for home-based learning, training options closer to home, training in the workplace, customized training services to industry, just-in-time learning, and school-to-work-to-school transitions. It is expected at global telecommunication systems and information technology will enhance access through international recognition of vocational and academic credentials, data banks for student records and program information, advisory and counseling services, and distance delivery of world-class learning resources.

Industry Canada has subsequently developed many telecommunications-based initiatives in support of lifelong learning, e.g., SchoolNet, the Computers for Schools Program, the National Graduate Register and the Community Access Program.[15] Industry Canada also supports private training enterprise as a growth industry.

1.5.2. Provincial education initiatives related to lifelong learning

In Canada, education has always been a provincial jurisdiction and training has recently become a provincial responsibility in most provinces and territories. Therefore, policies and programs that are aimed at lifelong learning are under the rubric of education: typically adult education, continuing education, and sometimes, labour force training and development.

What is important, for purposes of this paper, are the following observations:
> all provinces provide extensive formal education and training institutions and programs;
> most provinces have an age-related notion of education and training, i.e., different programs and services depending on age;
> most provinces have an interest in exploring the concept of lifelong learning beyond traditional education and training;
> all provinces have consistently supported non-formal and informal learning;

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[15] Information on all these programs is available at http://www.strategis.ic.gc.ca/

most provinces/territories participate as partners with the federal initiatives listed above; and

most provinces/territories participate either as partners or innovators in the conceptual initiatives in support of lifelong learning listed below.

Canada's education ministers are represented at Ministerial Meetings of the Education Committee of the OECD. At a 1996 meeting,[16] education ministers – ostensibly Canada's provincial education ministers acting through a representative, agreed to the following:

to strengthen the foundations for learning throughout life, by improving access to early childhood education, particularly for disadvantaged children, revitalizing schools and supporting the growth of other formal and non-formal learning arrangements;

to promote coherent links between learning and work, by establishing pathways and bridges that will facilitate more flexible movement between education and training and work, aimed in particular at smoothing the initial transition between the two, and by improving the mechanisms for assessing and recognizing the skills and competencies of individuals – whether they are acquired through formal or non-formal learning;

to rethink the roles and responsibilities of all partners – including governments – who provide opportunities for learning; and

to create incentives for individuals, employers and those who provide education and training to invest more in lifelong learning and to deliver value for money.

The actual implementation of these commitments varies between and among provinces, as evidenced by the compendium of provincial policy documents found in Appendix A.

1.6. Key Conceptual Initiatives in Support of Lifelong Learning

A large number of important initiatives, developed as concepts across jurisdictions and with multiple partners, are key in the development of a lifelong learning culture in Canada. The concept of lifelong learning is now used to encompass new approaches to:

teaching and learning, e.g., the learning organization, innovative applications of learning technologies;

the assessment and recognition of learning, e.g., through PLAR and SKP;

the management of learning, e.g., ELE/LMI and gender-based analysis;

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[16] Making Lifelong Learning a Reality for All at http://www.oecd.org//news_and_events/reference/nw96-7a.htm

the learning requirements of the knowledge-based economy, e.g., essential skills, employability skills; and

quality assurance in lifelong learning, e.g., training standards, consumer's guides.

In all of these areas, Canadians are pursuing innovations and interesting initiatives, sometimes leading the international community, sometimes following.

1.6.1. New approaches to teaching and learning

Traditional approaches to teaching and learning, as reflected by the formal education system, have set teachers up as experts and students recipients of their wisdom. New approaches to teaching and learning in Canada include, but are not limited to (1) the development of learning organizations and (2) innovative applications of learning technologies.

First, within Canada, businesses and public institutions are exhorted to become learning organizations, [17] and to model lifelong learning. In the context of lifelong learning, a learning organization:

1. can be a company, a professional association, a university, a school, a nation or any group of people, large or small, with a need and desire to improve performance through learning.
2. invests in its own future through the education and training of all its people.
3. creates opportunities for, and encourages, all its people in all its functions to fulfil their human potential as employees, members, professionals or students of the organization; as ambassadors of the organization to its customers, clients, audiences and suppliers; as citizens of the wider society in which the organization exists; and as human beings with the needs to realize their own capabilities.
4. shares its vision of tomorrow with its people and stimulates them to challenge it, to change it and to contribute to it.
5. integrates work and learning, inspires all its people to seek quality, excellence and continuous improvement in both.
6. mobilizes all its human talent by putting the emphasis on learning and planning its education and training activities accordingly.

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[17] The principles of the learning organization as enunciated at the First Global Conference on Lifelong Learning, in December, 1994 in Rome.

7. empowers ALL its people to broaden their horizons in harmony with their own preferred learning styles.
8. applies up-to-date open and distance delivery technologies appropriately to create broader and more varied learning opportunities.
9. responds proactively to the wider needs of the environment and the society in which it operates, and encourages its people to do likewise.
10. learns and relearns constantly in order to remain innovative, inventive, invigorating and in business.

HRDC itself – as evidenced by the 1998 HRDC Mission -- is attempting to become a learning organization in its mission to promote a lifelong learning culture in Canada, leading by example.

Secondly, Canada's extensive telecommunications infrastructure and expertise in education is evidence of new approaches to teaching and learning. Canada has a premier reputation for blending the fields of distance education, learning technologies, and telecommunications – all in aide of lifelong learning, social cohesion, and economic development. For example, the Office of Learning Technology (OLT) of HRDC holds this view of the challenge of lifelong learning and the use of learning technologies in promoting lifelong learning.[18]

> *Our traditional views on learning and work are constantly being challenged; people today face the reality of changing jobs several times in the course of their working lives. Adults everywhere are upgrading and expanding their skills - in the workplace, in colleges and universities, in community courses and in their homes. The key to this exciting world is to understand that learning - be it upgrading work skills, preparing for a new career, developing a hobby or enriching our personal lives - is a lifelong process. Learning technologies help Canadians meet this challenge. Learning technologies can help Canadians adapt to the new knowledge-based economy. People coast to coast are already using these technologies to access learning opportunities they wouldn't otherwise have. Computer-assisted training and telelearning are just some examples of how this can be done; other uses in this cutting-edge field are constantly emerging. The challenge for today's lifelong learners lies in learning the potential of these technologies -- what they offer, how and where they can be applied and how best to take advantage of them.*

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[18] Taken from the OLT home page at http://olt-bta.hrdc-drhc.gc.ca/about/backgrnd.html - change

Information and resources to apply learning technologies in support of lifelong learning are available from, e.g.,

> the Office of Learning Technologies,[19]
>
> the Knowledge Connection Corporation,[20]
>
> Industry Canada[21] in general, and the IHAC report[22] and Technology-based Training in the Workforce[23] in particular.

1.6.2. New approaches to the assessment and recognition of learning

Traditional approaches to assessment of learning have been post-teaching and norm-based; traditional recognition of learning has been credits and credentials from formal education providers and certifying bodies. New approaches to the assessment and recognition of learning are reflected in the development of Prior Learning Assessment and Recognition (PLAR) and the Skills and Knowledge Profile (SKP), work led at the national level by the Canadian Labour Force Development Board (CLFDB).[24]

In Canada PLA/PLAR is being promoted, by the CLFDB and others, as a means by which to improve education/training, support lifelong learning, and increase access to employment. The CLFDB has undertaken substantial work leading to a stated PLAR policy and national implementation strategy, recommended national quality standards, and a method of quality assurance.[25] The intention is to ensure that Canada's workforce development system in general, and PLAR processes and practices in particular, are effective, efficient and equitable.
The CLFDB has identified six public policy objectives that quality PLAR practices and services can positively address: the efficient use of resources, the development of a lifelong learning culture, the advancement of social justice, co-ordinated and coherent labour force development, education and training reform, and the management of change. The CLFDB has said:

> *PLAR promotes lifelong learning through the formal recognition that valuable learning can take place in a variety of settings. As well, it serves as a planning tool for further learning*

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[19] Home page is at http://olt-bta.hrdc-drhc.gc.ca/

[20] Information on *The Lifelong Learning on the Information Highway Series* is available at http://www.kcc.ca/project/library/p1004.html

[21] Home page is at strategis.ic.gc.ca

[22] Located at http://strategis.ic.gc.ca/SSG/

[23] Available at http://www.strategis.ic.gc.ca/cgi-bin/

[24] General information is available at http://www.clfdb.ca/

[25] Information is available at http://www.plar.com/

as, in the PLAR process, individuals compare their current skills and knowledge with that which they might want or need in the future. Through PLAR, individuals can become more interested in and more self-directed in learning and career choices. Also, individuals learn to recognize their own skill and knowledge development in different life and work settings. Individuals are increasingly aware of the need to continue learning, formally and non-formally, throughout a lifetime. Knowledge and skill requirements, for active participation in the labour force and in the community, are continually increasing and changing. However, there is no comprehensive, integrated process to help adults to return to the learning system, a system that affords many options, little or no decision-making help, and not enough recognition of prior learning. Therefore, for individuals, there is a need for increased access to learning opportunities; for a more equitable, effective and efficient access procedure; and for support and encouragement to see their plans through to completion. At the same time, PLAR contributes to the recognition that formal credentials are not the only means of accounting for learning.[26]

Work on PLAR has led to preliminary work on a learning record called a Skills and Knowledge Profile (SKP). The CLFDB Working Group has defined the Skills and Knowledge Profile (SKP) as a tool by which an individual can express his/her formal and non-formal learning in a standardized and credible manner to a wide variety of stakeholders for personal, economic and education/training development. Hypothetically, the systematic application of a such an SKP can increase educational productivity, enhance economic productivity and resource utilization, and enable individuals to maintain balance and a sense of self in turbulent times. In speculating about this hypothesis, and creating recommended SKP quality standards, the Working Group and FuturEd concluded that a learning record such as the Skills and Knowledge Profile can be a mechanism by which individuals inventory or catalogue their acquired learning for purposes of skill upgrading, credential acquisition, and lifelong learning. The development of a learning record is related to innovations in human resources accounting and human capital management,[27] part of the new approaches to management of learning discussed below.

1.6.3. New approaches to the management of learning

Traditional approaches to the management of learning have focused on the provision of education and training as preparation for life and work. New approaches to the management of ongoing learning include, but are not limited to such diverse initiatives as (1) macro-management of labour exchange and labour market planning, particularly in electronic form, (2) gender-based analysis, (3) a lifecycle or key life transitions approach to learning, and (4) human resources accounting.

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[26] Considerably more information is available on PLAR from FuturEd.
[27] For more information see Miller (1996).

First, considerable research and innovation has been directed at efforts to manage labour exchange, improve labour market planning and enhance labour force efficiency through the management of human resources. Specifically, this mean better understanding the requirement of jobs, the skill banks and proficiencies of potential workers, and matching processes such as the Electronic Labour Exchange[28] where employers and employees can be matched up via the Internet. There are increasingly vast amounts of critical and timely information by which individuals can identify their own skills gaps, work and training opportunities to fill those gaps, and efficient uses of their lifelong learning resources.

A second important, but totally different, initiative in support of lifelong learning is a move towards gender-based policy analysis. All aspects of lifelong learning – identified needs and barriers, opportunities and incentives – need to be assessed with gender in mind. Canada's federal office of the Status of Women Canada has provided an exemplary model by which to ensure, through its Gender-Based Analysis model,[29] that women and men are treated equitably but differently in the design and delivery of lifelong learning opportunities and supports.

A third innovation in the management of learning is growing interest in implementing lifelong learning according to a life cycle or key life transitions model. Among other things, this puts the focus on the learner rather than on the provider of learning opportunity, and allows for coherent intervention strategies. Considerable study of done in this area by the Strategic Policy branch of HRDC.[30] Two of the visions of lifelong learning incorporate this thinking about the timing and the nature of lifelong learning requirements.

The fourth, but no means last, new approach is innovation in human capital accounting. It has been recognized that investment in human resources, or non-tangible assets, is crucial to productivity, growth, and individual participation in the knowledge-based economy. Within the context of lifelong learning, HRD experts have recommended the following public policy priorities:[31] providing basic skills education; supporting efficient human capital markets through information, counseling, and standard-setting; promoting linkages within the education sector, between that sector, labour markets, and industry technology diffusion policies; and addressing

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[28] Canada's Electronic Labour Exchange is found at http://www.ele-spe.org/
[29] Available at http://www.swc-cfc.gc.ca/publish/gbabro-e.html
[30] Studies are available at http://www.hrdc-drhc.gc.ca/arb/publish/bulletin/contents.html
[31] Taken from *Priorities for Government* at http://www.hrdc-drhc.gc.ca/stratpol/arb/research/change/prior_e.html

inequitable access. They conclude that the focus for human resource development policies should be to ensure basic skill foundation is strong, to provide infrastructure, and to ensure that workers and employers *get the financial incentives right.* In this effort, they are encouraged by the OECD which has urged its members to *identify the benefits of increased investment in lifelong learning,… and how sharing the costs of such investments can be related more equitably to the benefits.*[32] It is this last point that generates controversy and innovation, i.e., an effort to understand and use financial incentives for lifelong learning.

1.6.4. Learning requirements of the knowledge-based economy

Learning requirements for Canada's industrial- and resource-based economy are different from those required for the post-industrial knowledge-based economy. Increasingly, Canadians are aware that our formal education and training systems do a good job of preparing individuals for an industrial-based economy/society that no longer exists, and do an inadequate job of preparing individuals for the knowledge-based economy; and the current forms of recognition of learning – credits and credentials – may be meaningless in both a lifelong learning culture and a knowledge-based economy.

To resolve this, considerable effort is being put into understanding the new learning requirements:
> essential or foundational skills, e.g., literacy and communications skills;[33]
> critical and generic employability skills such as academic, personal management and teamwork skills[34] identified by the Conference Board of Canada;
> science literacy for the world of work, e.g., basic uses of science, technology and mathematics[35] identified by the Conference Board of Canada;
> occupational skill requirements for various jobs, i.e., Canada's National Occupational Classification system continuously updated by HRDC;
> labour market information (LMI) such as career possibilities and career development tools, through, e.g., WorkInfoNet[36] and Job Futures;[37]

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[32] *Making Lifelong Learning a Reality for All* at http://www.oecd.org//news_and_events/reference/nw96-7a.htm
[33] HRDC Essential Skills Research Project at http://www.hrdc-drhc.gc.ca/
[34] From the Conference Board of Canada: http://www2.conferenceboard.ca/nbec/pdf/emskill.pdf
[35] From the Conference Board of Canada: http://www2.conferenceboard.ca/nbec/pdf/literacy.pdf
[36] LMI information is available from WorkInfoNet at http://www.workinfonet.ca/cwn/english/main.html
[37] Job Futures is located at http://www.hrdc-drhc.gc.ca/JobFutures/english/index.html

a conceptualization of the skills and knowledge required of Knowledge Workers;[38] the impact of information technology on employment, and jobs in the knowledge-based economy.[39]

All of these efforts serve to target training and skills upgrading for individuals and industries, specify education and training outcomes for providers, and make lifelong learning resource expenditures more effective and efficient.

1.6.5. Quality assurance in lifelong learning

Not surprisingly, with all the lifelong learning initiatives and opportunities, the issue of quality assurance has surfaced. As the cost of lifelong learning opportunities rise, there is a greater demand for accountability and return-on-investment. The following learning-related quality assurance measures are in place, and FuturEd is working on others.

Recommended national training standards, developed by the CLFDB (1995), describe all the elements of quality career and professional training programs and services from a consumer's point of view.[40] Recommended national quality standards for PLAR[41] and for LMI[42] have also been developed by the CLFDB and its labour market partners.

CanLearn Interactive, an omnibus education and training web site, will house a number of consumer's guides to learning products and services that are being developed by FuturEd.[43]

Industry Canada and its partners have developed guidelines for learning software, or "learnware."

1.7. Organizations that Promote and Support Lifelong Learning in Canada

Lifelong learning opportunities and information have always been available to and valued by Canadians. This has been, in part, due to the advocacy work of adult educators and concerned citizens since Canada's beginnings. Considerable information is directed at lifelong learners;[44]

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[38] Skill Profiles for Higher Skill Level Occupations. (Barker, 1997)
[39] *Jobs in the Knowledge-Based Economy: Information Technology and the Impact on Employment* at www2.conferenceboard.ca/press/prev/1997/itacnews.htm
[40] The national Training Standards are at http://www.clfdb.ca/english/library/train_e.pdf
[41] PLAR quality standards are found at http://www.plar.com/about_plar/what_should_it_look_like.html
[42] Information available at http://www.clfdb.ca/english/library/lmi-eng.pdf
[43] The Consumer's Guide to Training is currently at http://www.futured.com/
[44] Examples are (1) http://www.edu.psc-cfp.gc.ca/tdc/continu/english/contlm.htm and (2) http://www.adm.uwaterloo.ca/infocecs/CRC/manual/lifelonglearning.html

however, broader information and resources specific to lifelong learning in Canada, and related concepts, is available from a number of key sources, among them the following.

The Canadian Link to Lifelong Learning (CLLL)[45] and to the annual Canadian Lifelong Learning Lyceum (the Lyceum).   The CLLL believes that learning enhances the quality of life; learning is lifelong; learning occurs in many forms and for different reasons; learning better prepares individuals and organizations for a changing society; and CLLL members have a responsibility to demonstrate the importance of learning and so value learning. It's mission is increased participation in lifelong learning, coordination of learning in Canada, and protection and information for learners as consumers. The CLLL serves as a meeting place for like-minded persons interested in providing quality lifelong learning opportunities. The CLLL is advocating for the year 2001 to be designated the Year of Lifelong Learning in Canada.

APEC studies and reports on lifelong learning[46] in Canada, i.e.,
> the activities and reports of the APEC HURDIT (Human Resources Development in Industrial Training) project on the HURDIT website[47]
> the preparation of teachers and students for practical success and survival in a learning society, and the critical role of "elders" (Beaupre, 1997)
> the importance of training and lifelong learning as a strategic tool to achieve business results (Benimadhu, 1997);
> lifelong learning for indigenous peoples and the need to imbed it within the traditional culture, with key elements and obstacles identified (Steckley, 1997); [48]

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[45] Information about CLLL is available at http://www.connect.ab.ca/~tllink
[46] Summaries for the first four are available at http://142.214.107.4/lifelong-learning-conference.html - 17
[47] Located at http://www.apec-hurdit.org/
[48] Full paper, co-authored with Rice is available at http://www.apec-hurdit.org/lifelong-learning-book/main.htm

change requirements in how education and training are delivered to workers in the new economy (Hanna, Hatton and Lee; 1997);

the lifelong learning needs of women and SMEs (Barker, 1998).[49]

An inventory of many practitioners and researchers in lifelong learning on the HURDIT web site maintained by Canada.[50]

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[49] Executive summary and related documents available at http://www.nsi-ins.ca/research/research11.html - APEC HRD

[50] Located at http://www.apec-hurdit.org/

2. VISIONS OF LIFELONG LEARNING FOR CANADA

The second part of the paper sets out visions for the future of lifelong learning in Canada.   While there may be numerous possible and/or probable futures, this paper only sets forth some preferred futures. Among the various visions, for example, are the view of educational and telecommunications technocrats, the policy goals of the federal government in the context of human resources development and economic development, the perspective of individual Canadians, and the preferred future set out by futurists.

2.1.   A Vision Centred On Human Resources Development

One vision of a preferred future for lifelong learning is based on the concept of developing and maximizing human potential and human resources within the context of economic and social development. Human Resources Development Canada (HRDC), Canada's largest federal department, has this responsibility; and it has begun to articulate it's view of lifelong learning within its Vision Statement.[51]   In the context of enabling Canadians to participate fully in the workplace and the community and to manage transitions in their lives, HRDC views lifelong learning as a measure that helps Canadians *to identify risks and opportunities earlier, make better choices, contribute to economic growth and gain access to the right government and community resources*. To promote lifelong learning and other preventative measures, HRDC plans to take a leadership role, forge partnerships and build community capacity.

HRDC and others in Canada would like to achieve a "lifelong learning society" in which all citizens have (1) equitable access to lifelong learning opportunities that are effective and efficient, and (2) the preparation and propensity to be self-motivated or self-directed learners. Key to the development of such a lifelong learning society is an understanding of the learning requirements, a means of assessing and recognizing all forms of learning, and incentives to engage in learning. To these ends, HRDC and its partners, fund such developmental activities as :

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[51] Available at http://www.hrdc-drhc.gc.ca/dept/mission/mission.shtml

the creation of occupational skill standards, within various industries by those who work in those industries,[52] to serve as learning goals in the occupational preparation and skills upgrading environment;

means and methods of Prior Learning Assessment and Recognition (PLAR) as a process to assist individuals to gain access to appropriate training and/or employment, and to make efficient career development plans;

an inventory of essential skills required in many occupations that serves as a basis, as well, for knowledge work.

The achievement of this vision would see that all Canadians – from those in need of basic skills to those making advances in knowledge work – would have the preparation for and access to appropriate lifelong learning to maximize their human resources potential.

2.2.   A Vision Based on Learning Technologies

A second vision of a preferred future for lifelong learning is based on the concept of developing and maximizing applications of technology to improve access to information and to lifelong learning. This is the purview largely of Industry Canada (IC), the federal ministry responsible for business development in general and the high tech sector in particular. It convened an Information Highway Advisory Council, of which the Learning and Training Working Group's vision[53] suggested that Canada needs to provide all Canadians with access to the widest possible variety of learning opportunities so that they succeed in the rapidly changing knowledge economy. The concluded that, to reach this goal, Canada must realize the full learning and training potential of the Information Highway. In their vision of a preferred future, the emphasis would be on a Canada that embraces learning as a central feature of its national identity, on the provision of learning opportunities for every Canadian, and on making available a wide variety of different learning techniques, as well as subject matter, geared to the individual learner. The Working Group was convinced that providing the widest possible variety of learning opportunities to Canadians of all ages would revolutionize lifelong learning in Canada. They asserted that learning and training should be a major focus for applications developed on the Information Highway, and that public and corporate policy was needed to create, reinforce and implement these

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[52] The medium is typically an industry sectoral council; more information on sectoral councils and occupational standards is available at http://www.hrdc-drhc.gc.ca/hrdc/spi/index_e.html

[53] Available in full at http://csg.uwaterloo.ca/~industry/part-2e.htm

applications. Such a comprehensive set of objectives was seen as important for the following three reasons.

1. Lifelong learning is the essential route to personal development and satisfaction for Canadians.
2. The social cohesiveness and harmony essential to cultural diversity requires that every Canadian must have the opportunity to choose from a broad menu of learning opportunities.
3. Canada's competitiveness and strength in the global economy depends on every Canadian's ability to be able to attain the highest possible level of formal education, and to participate in successive training programs during his or her lifetime.

The development of a national strategy for making this vision a reality was deemed essential. Its successful development depends upon a number of policy factors that would have to be taken into account by federal, provincial and territorial authorities. National and provincial educational and training organizations and institutions would also play key roles. To succeed, the national strategy would need to:

stimulate learning for all Canadians throughout their lives and facilitate the transition between each stage of development;

ensure affordable access to learning and training using the Information Highway -- this includes more public and private learning centres and various forms of shared facilities;

recognize the role of technologies in enhancing learning and training;

emphasize the importance of a strong Canadian technology-based learning and training industry;

foster new media-based learning and training that is learner-driven to assist Canadians in acquiring Information Highway skills;

recognize the role that every Canadian can play in introducing lifelong learning into every economic and social activity;

integrate learning and training into all activities of public and private sector organizations, and manage the impacts of introducing new media-based solutions;

contribute to the availability of high-quality content on the Information Highway, especially Canadian content and culture, in both official languages;

encourage all stakeholders to experiment with new media-based solutions;

address the needs of under-served constituencies;

support more research and development to foster the use and development of new
media-based learning and training products and services, and evaluate their
effectiveness; and

recognize the leadership role of emerging vehicles and providers.

Many initiatives have resulted from these observations and recommendations.

2.3.   The Vision of Lifelong Learning Advocates

A third vision of lifelong learning is based on the perceived benefits of lifelong learning to all
individuals and the need for grass-roots implementation.   As Statistics Canada (1996) has said,
t*he development of basic skills and lifelong learning are being promoted by many countries, in
hopes of improving their economic health and the human condition of their citizens.*

Advocates for lifelong learning as members of the Canadian Link to Lifelong Learning (CLLL)
have as a vision statement: *lifelong learning is an integral part of every Canadian's life*. At the
1996 Lyceum of the CLLL,[54] proponents of lifelong learning concluded that a national advocate for
lifelong was required, and they called for the development of a national strategy for lifelong
learning. They recommended that the national strategy always be a work in progress, adapting
to changing demographic and economic circumstances, guiding rather than prescribing,
sustainable over time, responsive to changes in the workplace and the home, and resilient to the
dynamics of the global marketplace and shifting patterns of association. They noted that
increasing numbers of individuals, professionals, business leaders, union officials, interest
groups, communities, agencies, governments and non-for profit organizations have come to
understand that their survival is dependent upon continuous learning; that an investment of
energy, time and financial resources in lifelong learning is essential; and that the return on the
investment is protection, preservation and prosperity within and for themselves, their interest
group and the broader society.

The CLLL vision for lifelong learning is based on the belief that:

lifelong learning makes a positive difference by contributing to the ability of any nation to
preserve its traditions, protect its interests and prosper in a global, knowledge based
economy;

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[54] More information is found at http://www.connect.ab.ca/~tllink/strategy.htm

lifelong learning will optimize human potential, improve the human condition and promote societal well being;

learning occurs in many forms, for different reasons;

individuals have a responsibility for learning throughout their lives and that governments, corporations, union, institutions and other groups along with individuals share the responsibility to facilitate, support and provide lifelong learning opportunities;

participation and partnership in lifelong learning leads to prosperity in all its dimensions.

In their vision, *learning in the 21st century will be a continuous affair, valued and recognized as such. The shift in focus from teaching to learning will be completed and the emphasis on learners and learning organizations sharpened. Shepherded and supported by lifelong learning champions and working collaboratively, the learning system required for societal preservation, protection and prosperity will be in place.*[55]

2.4.   A LIfecycle Vision of Lifelong Learning

This vision of lifelong learning is based on the timing of lifelong learning interventions. With lifelong learning as an organizing principle and social goal, Faris and others have proposed a vision of lifelong learning as a conceptual framework in which opportunities and necessary supports are provided throughout one's lifespan. Elements of this vision include the development and promotion of learning organizations, i.e., human collectivities in which the lifelong learning of its members is systematically appreciated, encouraged, invested in, and used as a central corporate strategy. The overall goal, or vision, is to prepare Canadians for the information-based global economy of the 21st century by ensuring that they possess the skills, knowledge, attitudes and values needed to participate fully and productively in the nation's social, cultural and economic development. It is recommended, by Faris (1997), that this be achieved through the following four strategies at key intervention points.

1. A Fair Start
GOAL A: All expectant parents will receive high quality pre- and post-natal education.
GOAL B: All children will begin school ready to learn.

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[55]   Excerpted from Building a National Strategy for Lifelong Learning at
http://www.connect.ab.ca/~tllink/strategy.htm

2. Youth Learning

GOAL A: All students will have the foundation skill (learning how to learn) which will enable them to acquire the basic skills, knowledge, attitudes and values for productive work, responsible citizenship, creative lives, and lifelong learning.

GOAL B: All students will have opportunities to learn.

3. Recurrent Learning

GOAL: All adults will be enabled to learn throughout their lives in ways and places, and at times appropriate to their needs in order to develop and maintain the skills, knowledge, attitudes and values necessary for the workplace, to acquire or upgrade general education, and to more effectively play roles as world citizens, parents, community members, consumers and learners.

4. The Third Age

GOAL: All senior citizens will be enabled to learn in ways, places and means appropriate to their avocational pursuits and to more effectively play roles as world citizens, family and community members, consumers, learners and mentors.

The kinds of supports that would be required for this provision of lifelong learning would include social supports to enhance readiness to learn for children and to enable adults to access learning as they needed to.

2.5.   The View of Canada's Business Community

In 1994, the Canadian Chamber of Commerce issued the following vision of a lifelong learning culture. *A culture of lifelong learning is one in which all citizens value continuous learning and skill development as an enriching and enjoyable activity in itself, as well as being a critical component to maintaining a high standard of living. In such a society:*

>*all children enter school ready and eager to learn;*
>
>*formal, K-12 learning systems and methods maintain and enhance a child's natural desire to learn and grow throughout their life, and provide the essential foundation skills, knowledge and values (including literacy, numeracy, life management, and citizenship) which allow for continued, lifelong skill development;*
>
>*a flexible, open system exists to enable each citizen to continue their learning in a way that accommodates personal and family circumstances, taking into consideration both time and distance constraints;*

citizens are encouraged to take a proactive role in managing their own learning, and are provided with basic "learning to learn" skills that can be used throughout life;

education systems support ongoing skill development, with transferable accreditation of learning experiences across institutions and provinces;

learning of all types and methods is valued – vocations and trades-related learning is recognized as being as important as "academic" learning;

learning opportunities are available to all members of society, including support systems for those with special needs; learning systems are purged of elements which discriminate against any group; and

engaging in learning projects, at any age, is as commonplace as driving or watching television is today; family and community expectations and role models reinforce this focus across the fabric of Canadian society.

Most people agree with this vision somewhat, and point out that business and industry in Canada should invest more in workplace training and lifelong learning themselves.

2.6.   The Futurist Vision Of Lifelong Learning

A final vision of a preferred future for lifelong learning is of a radically transformed learning environment – one in which all elements of the traditional education and training system have been changed and integrated into a much larger learning environment. In a preferred lifelong learning system, the emphasis is on learning rather than teaching; skills and knowledge are acquired for use rather than for testing, i.e., knowledge acquisition is a process rather than an outcome; and a wide variety of lifelong learning opportunities and supports are available to all. Some specific characteristics of this radically transformed learning system, identified by Barker (1996) are that it would be:

1. a holistic and integrated system of inputs and resources, processes and practices, outputs and outcomes, with feedback loops and accountability mechanisms – rather than the fragmented elements that currently exist
2. an open system, responding to the feedback loop and integrated with the external environment – rather than the existing closed "system"
3. individualized, using current knowledge of how people learn and enabling technologies – rather than bureaucratic
4. responsive to emerging and changing learning demands – rather prescriptive about what needs to be learned

5. cyclical, with continuous and open entrance and exit – rather than linear, age-based and time-based

6. learner-enabling, i.e., ensuring that all learners are successful to the degree that they can be – rather than learner-screening

7. a global concern, taking into account the elements of global citizenship and international work opportunities – in addition to being a local concern

8. promoting change – rather than maintaining the status quo

9. teaching by modeling and facilitating – rather than by direct instruction

10. an industry that demonstrates effectiveness, efficiency, innovation and accountability – rather than a costly, labour-intensive social agency

11. consumer-oriented – rather than provider-based, self-serving decision-making

12. learning-focused – rather than credential or completion focused

To achieve this vision, it is necessary to answer the following questions.[56]

1. What is the public policy problem that lifelong learning can solve? Is it the best policy option? How do we know?

2. Who are the customers or target policy beneficiaries, and what are their real needs? How do we know?

3. How can lifelong learning prepare individuals for the future? What skills and knowledge are needed – not just for the knowledge-based economy but for global sustainability? How do we know?

4. Who are the key stakeholders, and what is their appropriate role? How can change be managed effectively and efficiently?

5. What would a lifelong learning culture look like? How would we know when we'd achieved it? How do we know we don't have one now?

Hence, a lifelong learning culture, as set out by Gallagher (1995), exists in a society that:

supports people, young and older, to be continuously engaged in learning, both structured and unstructured;

encourages and enables citizens to assume responsibility for their own learning;

values educational and training institutions acting as co-operating components of a nation-wide learning network; and

targets its limited resources for learning to those in greatest need of those resources.

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[56] Based on the FuturEd Transformational Model: http://www.futured.com/

The kinds of supports that would be required for this provision of lifelong learning, identified by FuturEd, would include but not be restricted to equitable access to learning opportunities; assurance of quality learning opportunities; preparation for learning (acquisition of learning skills); accurate, current and accessible information about learning opportunities; accurate, current and accessible information about learning requirements; tools for assessing learning and making learning plans; means of assessing and recognizing all forms of learning; motivation for the acquisition of new skills and knowledge; and incentives for continuous learning.

For futurists, lifelong learning is critical to sustaining human existence and to preventing further environmental and social disintegration. Indeed, leaders in HRD and lifelong learning have a special responsibility for the future – providing environments in which others can learn the changing skills and knowledge required for the future while managing to change and model lifelong learning themselves.

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Appendix A
Lifelong Learning Policies Across Canada

http://www.cmec.ca/

COUNCIL OF MINISTERS OF EDUCATION, CANADA (CMEC)

Public Expectations of Post-secondary Education in Canada March 1998	http://www.cmec.ca/postsec/pseexpect.en.stm	A generic set of draft expectations offered for discussion with post-secondary education stakeholders across Canada. The consultation will clarify pan-Canadian expectations for post-secondary education/adult learning and inform the activities of the respective jurisdictions final report will be tabled with the Ministers in February 1999.
Report On Education In Canada	http://www.cmec.ca/reports/rec98/	List of goals and objectives for each province and territory in Canada
Pan-Canadian Protocol on the Transferability of University Credentials February 1995	http://www.cmec.ca/postsec/transferability.stm	Discusses how lifelong learning has become a reality, with more and more individuals moving from school to work and back again. There is a greater need for individuals to transfer credentials as they upgrade skills.

http://www.educ.gov.bc.ca/

BRITISH COLUMBIA

Charting a New Course (1995)	http://www.aett.gov.bc.ca/strategic/newcourse/toc.htm	A strategic plan for the college, institute and agency system. The plan recommends implementing system wide approaches to complement the strengths and diversity of individual institutions and to promote responsive, flexible and high quality program delivery. The fundamental values and strengths of the existing college, institute and agency system are central to the strategic plan.
Aboriginal Post-Secondary Education and Training Policy Framework	http://www.aett.gov.bc.ca/aboriginal/framewrk.htm	Policy Framework designed to: • increase the participation and success rates of Aboriginal people in post-secondary education and training; • establish a long-term plan to ensure that Aboriginal people can acquire the knowledge and skills required for effective self-government in the post-treaty environment; and • secure Federal commitment to maintain financial contributions for post-secondary education and training for Aboriginal people.

A Report on Continuing Education in B.C. Colleges and Institutes 1995/96	http://www.aett.gov.bc.ca/continuing_ed/ce9596/cerprt.htm	Provides an overview of system wide continuing education statistics for the reporting year 1995/96.
Adult Basic Education in British Columbia Colleges 1998-1999 An Articulation Handbook	http://www.aett.gov.bc.ca/abe/handbook/welcome.htm	Permits the orderly transfer of course work and credits between participating institutions.
Transitions and Career Programs Initiatives Branch Mission Statement	http://www.bced.gov.bc.ca/branches/tcpi/	Promote a seamless education system and partnerships to support career programs that: • are relevant and accountable, • prepare students for effective transition from school to work, or to further education and training, • consider economic needs and labour market needs; • promote life-long learning.
Career Programs Report (Dec 1996)	http://www.bced.gov.bc.ca/branches/tcpi/cp_report/info.htm	This report lays out the current level of action and the future directions in support of a seamless structure of education. It is also the next level of reporting since the culmination of the Skills Initiative 1994-96.
ALBERTA	http://www.aecd.gov.ab.ca	
1998-2001 Business plan	http://www.aecd.gov.ab.ca/ministry_info/business_plan/business_plan.htm	Government strategic plans has multiple references to lifelong learning.
Ministers Forum on Adult Learning Alberta Learning Information Service	http://www.aecd.gov.ab.ca/dept/learner_assistance/whatweheard/1997forum.html	Links to ALIS (http://www.alberta-learning.ab.ca/), a database of programs offered in Alberta.
Enhancing Alberta's adult learning system through technology (1996)	http://www.aecd.gov.ab.ca/dept/system_funding/enhancing_thru_tech/enhancing.htm	Learning Enhancement Policy Technology integration within the adult learning system will be supported through the establishment of the Learning Enhancement Envelope. The $30M over three years will stimulate use of the most current concepts in learning and technology to develop alternatives that provide new and better opportunities for adult learners at costs that can be justified to Alberta taxpayers
Alberta Careers Beyond 2000 (October 1996)	http://www.aecd.gov.ab.ca/dept/learner_assistance/car2000/httoc.htm	A study of the primary forces of change and their effects on the Alberta workplace through 2005. Review national and provincial economic trends, socio-demographic trends, technological change, and Alberta's economic outlook by industry.

Profile of Apprenticeship and Industry Training in Alberta Current Context and Selected Trends 1996	http://www.tradesecrets.org/apprtshp/papers/profile/profile.htm	
Curriculum Redevelopment Fund Guidelines - 1996/97	http://www.aecd.gov.ab.ca/dept/system_funding/redevelopment/crfguide.html	Provides links to special databases that helps the user to: • Plan your career path • Explore work options • Learn more about adult learning in Alberta • Get specific program information • Apply on line for admission • Find out about student financial assistance • Get useful transfer information • Search for work
People and Prosperity: A human resource strategy for Alberta--1997	http://www.aecd.gov.ab.ca/ministry_info/people/index.html	
Vision for Change: a concept paper for the development of a virtual learning system September 1995	http://www.aecd.gov.ab.ca/dept/system_funding/vision_for_change/vision_for_change.htm	Provide a conceptual framework for facilitating and supporting system-wide change in Alberta's Adult Learning System. Its premise is that a province-wide virtual learning system, developed through effectively integrating technologies into programs and student support services at both traditional and non-traditional places of learning, can meet our goals of increased accessibility, cost-effectiveness, responsiveness and accountability.
New Directions for Adult Learning in Alberta (1994)	http://www.aecd.gov.ab.ca/ministry_info/new_directions/new_directions.htm	Sets out 22 strategies to help achieve the four goals of increased accessibility, improved responsiveness, greater affordability and more accountability
SASKATCHEWAN	http://www.gov.sk.ca/govt/educ/	
Saskatchewan training strategy (April 1997)	http://www.sasked.gov.sk.ca/training/	Includes links to three newsletters that update the status of the strategy, overview of consultation process and goals and objectives.
Canada-Saskatchewan Strategic Initiatives	http://www.sasked.gov.sk.ca/careers/success/info/cssi.html	Strategic Initiatives (S.I.) was introduced in the Canada-Saskatchewan Agreement on Labour Force Development in November 1994, then formalized in the Canada-Saskatchewan Contribution Agreement concerning Labour Market Initiatives under the Strategic Initiatives Program signed January 18, 1996. The S.I. Agreement commits each government to contribute $13 million over three years, until March 31, 1999, to develop innovative labour market projects.

Online Career Services	http://www.sasked.gov.sk.ca/careers/success/career/planning/plan.html	Online Career Services provides people in the job market with an extensive plan for finding a career suited to their interests, values, personal style, skills and abilities. These services allow users to explore their options, make informed career decisions, take effective action, and find jobs!
Career Services Projects An Overview	http://www.sasked.gov.sk.ca/P/cssi/csoverview.html	Career Services projects are underway in three diverse geographical areas: Northern Saskatchewan, Rural Saskatchewan and the Regina area. Lists costs and workplans for each project.
Focus On Post-Secondary Education and Skills Training in Saskatchewan	http://www.sasked.gov.sk.ca/info_docs/focus/focus.html	Provides an overview of the network of institutions, programs and delivery systems that take over where grade school leaves off. The system is designed to satisfy the advanced education, skill development and other learning needs of all Saskatchewan adults in the context of the province's economic and social needs.
MANITOBA	http://www.gov.mb.ca/educate/	
Roblin Report: Post Secondary Education In Manitoba: Doing Things Differently December 1993	http://www.gov.mb.ca/educate/postsec/roblin/roblin.html	A study on how to manage better the assets of Manitoba's post-secondary institutions.
Government Response To Roblin Report June 1994	http://www.gov.mb.ca/educate/postsec/response/response.html	Response of the Government of Manitoba to the Report of the University Education Review Commission
ONTARIO	http://www.edu.gov.on.ca/	
Adult and Continuing Education Grant March 25, 1998	http://www.edu.gov.on.ca/eng/document/nr/98.03/adultfs.html	The Adult and Continuing Education Grant funds education for adults age 21 and over, including credit courses leading to an Ontario Secondary School Diploma and non-credit second-language training in English or French. With this grant, adults will continue to have a variety of options for study, including daytime instruction at regular high schools and adult day schools, night courses, and, at some boards, correspondence courses.
The Ontario Model of Adult Literacy March 1996	http://www.edu.gov.on.ca/eng/training/literacy/model/model.html	A series of 5 papers presented at the World Conference on Literacy held in Philadelphia from 12 to 15 March 1996, that provides overview of Ontario's literacy system

Local Training Boards	http://www.edu.gov.on.ca/eng/training/localbd/localbd.html	Under the Local Training Boards Initiative, up to 25 new boards are being set up across Ontario to play a leadership role in local labour force development. These boards bring together representatives from local labour market partner groups to work with government (federal, provincial, and municipal) for the improvement of the community training and adjustment system.
Report of the Advisory Panel on Future Directions for Post-secondary Education December 1996	http://www.edu.gov.on.ca/eng/document/reports/futuree.html	Terms Of Reference: • to recommend the most appropriate sharing of costs among students, the private sector, and the government, and ways in which this might best be achieved; • to identify ways to promote and support co-operation between colleges and universities, and between them and the secondary school system in order to meet the changing needs of students; • to provide advice on what needs to be done to meet the expected levels of demand for post-secondary education.
Independent Learning Centre	http://ilc.edu.gov.on.ca/01/home.htm	Provides a distance education program, in English and French, for Ontario residents who want to earn secondary school diploma credits, upgrade basic skills, or study for personal development
Framework for a Research Policy for Ontario A Discussion Paper (1997)	http://www.edu.gov.on.ca/eng/document/discussi/research.html	A discussion paper to examine the recommendation for a research policy that is relevant to universities and colleges.
For the Love of Learning Report of the Royal Commission on Learning (Short Version)	http://www.edu.gov.on.ca/eng/general/abcs/rcom/short/short.html	Develop program plans for more comprehensive high school programs and services and promote community-based learning. Community-based learning takes such forms as co-operative education, school-to-work transition, work experience, and job shadowing.
Continuing Education A Resource Document, 1987	http://www.edu.gov.on.ca/eng/document/resource/continu.html	The information provided in this document is intended to address the needs of adult learners of every age and every social and economic background. These learners range from adults with less than Grade 9 education who wish to add to their formal. schooling to highly educated individuals who seek advanced studies or leisure-time pursuits. This resource document provides principles for establishing effective continuing education programs in the province..

	http://www.meq.gouv.qc.ca/	
QUEBEC		
Direction de la formation générale des adultes DFGA	http://www.meq.gouv.qc.ca/dfga/informat/mandatde.htm	Describes the mandate of this division of the dept. of education. Covers adults with learning and physical disabilities, those needing upgrading or skill development, distance education, literacy, etc.
Basic school regulation	http://www.meq.gouv.qc.ca/dfga/autres/poura.htm	This document provides information on the application of the 50 sections of the Basic school regulation respecting educational services for adults in general education so as to demonstrate the various options available. From literacy to Secondary Cycle Two, not to mention the various other educational services offered under the Basic school regulation, numerous options are available to adults to help them fulfil their various roles in society. Provides link to download the document.
Overview of the Adult Education system in Quebec	http://www.meq.gouv.qc.ca/dfga/informat/panorama.htm	Link to overview document for downloading
	http://www.gov.nb.ca/education/	
NEW BRUNSWICK		
Prior learning assessment and recognition	http://www.gov.nb.ca/ael/transfer	New Brunswick Community College (NBCC), a nine-campus network, is a key component in New Brunswick's drive to develop a culture of lifelong learning. This culture will serve as the foundation for individual self-sufficiency and for social and economic development at a time when all of us face major changes in education, the economy, technology and society.
A vision for adult learners	http://www.gov.nb.ca/ael/visione.htm	Vision statement for the Dept. of Advance Education and Labour.
NOVA SCOTIA	http://www.ednet.ns.ca/	
Dept. of Education and culture 1998-99 Business Plan (June 4, 1998)	http://www.ednet.ns.ca/educ/business/index.html	Strategic plan with multiple references to lifelong learning. Outlines outcomes.
Budget 1998: Education and Culture	http://www.gov.ns.ca/prio/gbd98/educult.htm	List the mission, seven goals and talks about developing a learning culture.

Toward a Learning Culture A Vision for Education & Training in Nova Scotia: A Strategic Plan (1994)	http://www.ednet.ns.ca/educ/d_depot/reports/plan.htm	This strategic plan outlines the goals, guiding principles and strategies of the Department of Education that will contribute to the development of a learning culture and the promotion of excellence.
Centre For Entrepreneurship Education And Development-- Programs At A Glance	http://www.ednet.ns.ca/educ/CEED/What/Programs.html	
Registry of Regulations	http://www.gov.ns.ca/just/publish/registry/regs/rxaa-l.htm	Reference to Mandatory Continuing Education Regulations (N.S. Reg. 97/94)
Participation in Company–Sponsored Training	http://www.gov.ns.ca/prio/nsc98/econ.htm	Performance report on government outcomes re: goal of economic growth. Participation in adult education and training reflects a commitment to lifelong learning by employees and employers. Measuring the level of company–sponsored training shows the commitment by employers to develop their human resources.
Career Planning Resources	http://www.ednet.ns.ca/educ/career/	Site designed to help citizens with career planning.
An Occupational Handbook for Nova Scotians	http://www.ednet.ns.ca/educ/career/careerop/career_options/intro.htm	Users can search the handbook to answer questions about each occupation, including the Nova Scotia labour market. Includes nature of work, educational requirements and training paths (i.e., where you can learn the required skills)
Training & Financial Assistance Branch	http://www.ednet.ns.ca/educ/dept/train_fin.htm	Coordinates all aspects of non-university post-secondary training including adult learning, apprenticeship, career counselling, literacy and workplace initiatives, and student assistance
Study in Canada	http://www.studyincanada.com/index.htm	Site dedicated to international students seeking information about post-secondary institutions in Canada.
Adult Learning & Innovation	http://www.ednet.ns.ca/educ/program/ali/index.htm	To provide individuals with lifelong learning opportunities designed to promote active participation in the family, the community and the workplace.
PRINCE EDWARD ISLAND	http://www.gov.pe.ca/educ/index.asp	
Continuing Education and Training Branch	http://www.gov.pe.ca/educ/dept_info/continuing.asp	Basic contact information and responsibilities.
Tough Challenges: Great Rewards - A Strategy for Adult Literacy/Education in Prince Edward Island	http://www.gov.pe.ca/educ/publications/literacy.asp	Sets out an aggressive approach to improve literacy (summary).

	http://www.gov.nf.ca/edu	
NEWFOUNDLAND AND LABRADOR		
Announcements	http://www.edu.gov.nf.ca/council/ANNOUN~1.HTM	This homepage provides you with information on recent activities of the Council on Higher Education. As new developments occur within the Council, they will placed in this Announcements section, please be sure to check regularly for updated information.
Press release July 30, 1996	http://www.gov.nf.ca/releases/1996/edu/0730n02.htm	Stephenville was selected as the headquarters site for the provincial college system. The new college system will be technology driven with the main computer and technical support personnel located at Cabot College in St. John's.
NORTHWEST TERRITORIES	http://www.gov.nt.ca/ECE/	
THE BRIDGE TO MY FUTURE: Summary	http://siksik.learnnet.nt.ca/career/bridge/ABEINDE.htm	Reported here are some of the findings of the Department of Education, Culture and Employment's Adult Basic Education Consultation and Review. The purpose of the review was to find out who was participating in ABE programs, whether these programs are effective, what changes are having an impact on adult basic education, and how programs and services should be refocused or new ones developed to support adult basic education and adult learning.
Adult Learning Centre	http://siksik.learnnet.nt.ca/display.taf?area=4	Not a lot on the basic site. Looks like it's under development.
Careers, Apprenticeship and occupational certification	http://siksik.learnnet.nt.ca/career/	Links to On Track, a site for students, employment seekers and career changers, and CAREER WORKSTATION, a site for staff, career centres, educators and partners.
NWT Labour Force Development Plan... A Workable Approach	http://siksik.learnnet.nt.ca/college/planning/%20labforce/INDEX.HTM	Provides a picture of the current issues and, building upon existing programs and services, charts a new course towards a highly skilled workforce.
PEOPLE: OUR FOCUS FOR THE FUTURE - a Strategy to 2010 (Sept. 1994)	http://siksik.learnnet.nt.ca/office/B/INDEX.HTM	Department's strategic plan describes a vision of a new way to provide services: * that is founded on culture, heritage and language; * that promotes life-long learning; * that puts the tools of learning in the hands of people at the community level; * and that lets community residents make critical decisions. This plan is intended for use by communities, stakeholders and leaders in the areas of education, culture and employment to reshape and improve the way we provide programs and services.

YUKON	http://www.gov.yk.ca/depts/education	
None		

learning in a variety of spaces that is not necessarily organized or formal in nature like a school or organization. Self-directed learning. a process in which individuals take the initiative without the help of others in diagnosing their learning needs, formulating goals, identifying human and material resources, and evaluating learning outcomes. Learning analytics. Â

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