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Employment Training — A Government Perspective

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ABSTRACT

Federal involvement in employment training, from the establishment of the Royal Military College in 1884 to the legislation of the National Training Program in 1982, has been to ensure a qualified Canadian labour force. The evolving Canadian economy and the changing world of work have required a federal role varying from passive financing to direct training involvement. An examination of current and future demographic and employment trends, altered demand patterns, changing technology, new challenges of employment and unemployment, and a narrowing global community; in Federal reports and papers indicates that a comprehensive, cooperative human resource strategy is essential to Canadian economic health and international competitiveness.

RÉSUMÉ

Aussi loin que l'on remonte, c'est-à-dire en 1884 lors de la fondation du Collège militaire royal, jusqu'à nos jours et à l'adoption de la Loi créant le Programme national de formation en 1982, le gouvernement fédéral a eu pour objectif d'assurer, de par sa participation à la formation professionnelle, la création d'une population active qualifiée. L'évolution de la conjoncture économique au pays et la transformation du monde du travail lui ont tour à tour demandé de s'en tenir à un rôle de financier passif ou, à l'autre extrême, d'intervenir directement dans le domaine. Les rapports et documents produits par l'administration fédérale ont examiné les tendances de l'emploi de la population, tant actuelles que futures, de la nouvelle physionomie de la demande, de l'évolution technologique, des défis que suscitent les problèmes liés au chômage et à l'emploi, et de l'universalisation de la société. Ils mettent en évidence la nécessité d'une stratégie globale et coopérative en matière de ressources humaines pour assurer la santé de l'économie canadienne et défendre la position concurrentielle du Canada sur les marchés internationaux.

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INTRODUCTION

Federal involvement in manpower training dates from the early years of this century. During that period, various labour organizations and boards of trade, with the full support of the provinces, urged the federal government to provide financial assistance to the provinces with respect to vocational education. Financial grants on a per capita basis were provided under the Agricultural Instruction Act of 1913 and replaced by a cost-sharing formula under the Technical Education Act of 1919. As a result, a somewhat passive federal role emerged which involved direct funding assistance to provinces, mainly on the basis of the federal government matching provincial outlays for technical/vocational education. The 1937 Unemployment and Agricultural Assistance Act emphasized "make work" through community service. This involvement in vocational training increased under the Vocational Training Co-ordination Act of 1942, which contained provisions for training the unemployed via the intermediary of the provinces.

Technical/vocational education, however, was not accorded a very high priority by the provinces and up to 1960 remained limited in both scope and magnitude. Indeed, the relatively modest federal fund allotments remained generally underutilized in all except the most industrialized provinces. The Technical and Vocational Training Assistance Act (TVTA) of 1960 represented a quantum leap in the scale of federal financial aid but no significant change in the nature of federal involvement. This expansion in the magnitude of the federal role came largely as a response to the rapid increase in unemployment during the late 1950s and the widely held view that this increase was in large measure a result of the inability of the labour force to adapt to accelerating technological change. At the same time, belief in education as a panacea for dealing with social and economic problems was probably at its peak. In 1967, the Adult Occupational Training (AOT) Act, was passed. It was based on the assertion that the training of adults in accordance with national economic priorities was well within the scope of federal jurisdiction. The AOT Act abandoned the TVTA cost-sharing formula and gave the Federal Government greatly increased control over various aspects of training, including who has to be trained, in what manner and where. Provision was also made for industry-based training under the Canada Manpower Industrial Program (CMITP). Several provisions of the AOT Act were amended in 1972 in the face of increasing youth unemployment and the tendency for women to return to the labour force.

In 1982, the National Training Act (N.T.A.) was passed. This federal initiative was in response to needs defined in the two federal reports, Work for Tomorrow[1] and Labour Market Development in the 80s,[2] and in consultations with the provinces, business, labour, education and other interested groups. The main thrusts of the new legislation were:

- to meet the occupational skill requirements of the Canadian economy in the 1980s,
- to support industrial adjustment and adaption to technological change in the 1980s, and

– to increase the employment opportunities of adult Canadians.

From the founding of the Royal Military College in 1884, to the legislation of the National Training Program in 1982, the Federal interest in employment training has been to ensure a strong Canadian labour force of skilled, highly skilled and highly qualified people.

In order to examine current and future directions for employment training from a federal government perspective; the short-term economic outlook within an historical context, the medium outlook presented by the Labour Market Development in the 80s Task Force, and the new National Training Program will be reviewed.

SHORT-TERM ECONOMIC OUTLOOK

Recession often causes a downturn in training emphasis. During the recession from 1957 to 1961 and again from 1976 to 1978, this situation occurred. Subsequently, with the bullish turn around in the 1960s and again in 1979-1981, skill shortages emerged.

The short-term Canadian outlook is not encouraging. Unemployment in Canada is at post-1939 high, and all provinces have experienced a downturn in professional vacancies.

Highly qualified, highly skilled and skilled[3] workers capable of responding to the challenges of a post-industrial, highly technical world market are increasingly required. Flexible training programs and the transferability of redundant skills to developing sectors take on new importance if Canadian growth prospects are not to be reduced by shortages in a wide range of occupations. The far reaching significance of these shortages include: insufficient skilled people in critical occupations to sustain Canadian growth and international competitiveness, the lack of skilled workers for major development projects, and bottlenecks caused by the lack of key employees with critical skills.

Federal officials are the opinion that the extension of federal government training funds to the development of skills essential to increasing economic activity, to meeting international competitiveness, and to reducing inflationary pressures should ensure that Canadians are trained and retrained to benefit from the well-paid and rewarding job opportunities which will be opened up by our national development. The extended recession and uncertain outlook for energy and commodity prices have waylaid some of the "Labour Market Development in the 80s" projections. These projections are generally expected to come back into focus as the economy begins to gain ground.

MEDIUM TERM OUTLOOK AS IDENTIFIED IN THE EMPLOYMENT AND IMMIGRATION CANADA REPORT, "LABOUR MARKET DEVELOPMENT IN THE 80s"

Three components of the intrinsically linked work/education system: training at the post-secondary level, training for the higher skill trades, and low and middle level training, were analysed. Throughout, the focus was on training – that com-

ponent of the education system which is directed at producing skills for the labour market. The achievement of other social goals within the education system was outside the realm of this particular study. The value of these goals was not negated rather it was not considered within this context.

The Labour Market Development in the 80s Task Force answered two basic questions for Labour Force readiness:

> "How efficient has the training system been in meeting skill needs and satisfying equity objectives?"

and

> "What modification in the federal government role is required to ensure that the system can meet the changing skill needs of the 1980s?"

In response to the first question, the Canadian Adult Occupational Training system, despite its accomplishments, was unable to effectively provide adequate numbers of Canadians with training in the middle and high level skills areas. Too much of the past training focused on reactive situations rather than proactive projections. Much of the recent industrial and institutional training did not lead to better jobs, higher skills or related employment but to ongoing frustration and unemployment for many Canadians. In short, the Training system was not fully meeting skill needs or satisfying equity and objectives.

An examination of the changing skill needs for 1980s, including demographic factors and demand and employment trends, was needed to answer the second question. While demographic projections in the medium term are fairly exact, demand projections vary considerably depending on a number of exogeneous factors and the optimistic or pessimistic orientation of the forecaster.

DEMOGRAPHIC FACTORS

An analysis of demographic factors indicates that growth in the labour force will slow significantly in the next decade. By 1990 the labour force will grow at only half the rate at which it grew in the 1970s. There will be an actual decline in the number of workers in the 18-24 age group. Of the 2.6 million people added to the work force in the next ten years, over two-thirds are expected to be women. The Native working age population will gorw quickly and in some prairie cities Natives are expected to constitute thirty percent of total labour force growth.

In addition, the Post Second War 'Baby Boom' was more pronounced in Canada than in any other industrial nation. The rise and now the dramatic fall, in the proportion of the population under 22 years, has taken place with great rapidity and impact. While this group presents a tremendous developmental pool potential, this demographic bulge will cause stress and overload on the system throughout, culminating in tremendous strains on the country's resources when this group reaches traditional retirement age. Additionally as the "Boom"

cohort ages, increased funding will be required to provide services to this population, such as: health care, manpower retraining and unemployment benefits.

While the 1980s can be referred to as the era of the young adult, the 1990s will experience a middle age bulge, and around 2015 the post-war baby boom generation will reach the present retirement age of 65. Recent trends toward early retirement may change, increasing the workforce participation of seniors. Extended longevity, slowing in functional aging, along with the need to maintain real income may increase the desire of older people to remain in the workforce. In conjunction with new human rights legislation and the removal of mandatory retirement, these factors may slow the withdrawal of older workers from the labour force and create an environment for flexible work arrangements. Additionally, the "greying of the workforce" will deplete the stock of current highly qualified and skilled manpower and inhibit the mobility of the workforce. Concurrently, aging faculty, guidance counsellors, researchers and teachers will impact on the educational delivery systems. Many of the economic, social, and psychological problems caused by retirement and the aging of such a large group can be alleviated by a major reallocation of free time throughout the lifespan.

To avoid increasing tightness in labour markets for men and increasing slackness in labour markets for women, integration of women into industries in which they have not traditionally been employed in large numbers, will be necessary. Relatively static demands for clerical and office workers and for workers in health, education and public administration will mean decreased opportunities for women in those "traditional" female occupations. To facilitate the integration of women, a process partly related to training and education systems, partly to dissemination of information, partly to societal expectations and the elimination of systemic barriers, partly to revisions of obsolete hiring practices and also to the internal promotion procedures of employers, will be required.

Societal, cultural, educational, geographical and systemic barriers to the full participation of Native peoples and special needs groups, must also be addressed.

Decreased numbers and the immediacy of job offers after secondary school should bring down the youth unemployment rate. As the pool of highly qualified and highly skilled youth declines, a need for further education of the existing labour force becomes obvious. Fundamental improvements are required in training processes so that labour market shortages can be alleviated by domestic means in the medium and longer term. Foreign labour sources no longer hold the same potential for filling critical gaps as they did earlier. Special initiatives and short-term projects to meet the immediate and pressing employment and training needs of youth, should be considered as modules within a continuum of lifelong learning and employment. National policies in support of currency throughout life, such as, educational leave for workers and flexible work and learning arrangements, become increasingly important.

Training must be more flexible and the delivery systems modified to meet the needs of all workers, especially the elderly and disabled. Computer advances are expected to lead to more employment opportunities for the disabled and other

people who have restricted mobility. Home computer cottage industry will increasingly allow for the productive work involvement of physically disabled and 'labour restricted' Canadians.[4]

Fundamental changes in the demographic structure of the Canadian labour force are occurring. In order to fully incorporate and develop the new human resource potentials, an effective educational delivery system will be required.

DEMAND TRENDS

Presently, although Canada's post-secondary education system will produce a net surplus of graduates in the 1980s there will be a shortage in critical areas. Federal officials feel that, government funding must shift to stimulate expansion of engineering, science, technological and business training, and to increase the number of highly skilled tradespeople.

The composition of the demand for labour will change in the 80s. Strong employment growth is expected to occur in the primary industries, high technology manufacturing, and the business service sectors. A sharp slowdown in the rate of employment growth in government, personal services and in clerical occupations is expected to occur. Increased international competition in standard technology goods industries employing a high proportion of unskilled workers will probably mean declining employment opportunities for these workers in Canadian industries.

The three western-most provinces, are expected to have the greatest growth in skilled labour demand. Although moderate increases in growth are predicted for most metropolitan labour markets throughout Canada, very slow growth is expected in the non-metropolitan areas of Eastern Canada. This demand projection could change, with changes in major mega project activity, such as the development of the Hybernia Oil reserves in the Atlantic region.

The developed world is not far from the time when people will conduct many of their transactions – banking, shopping, and even jobs – electronically. Some people will communicate rather than commute to work. The rapid introduction of elaborate electronic home two-way video systems is likely to occur.

The advent of the new technology society requires a highly qualified and skilled, mobile labour force to both research and develop the technology and its applications. There is concern in various sectors that the present Canadian education system is not able to meet the evolving labour market needs. The immediacy of the labour market pull for highly qualified, high demand professionals at the bachelor level, will mean a long-term shortage of Masters and PhD qualified researchers and teachers. Research and Development, as well as Post-Secondary teaching, will eventually experience extreme shortages because of this situation.[5]

The Ministry of State for Science and Technology (MOSST) projects a need for 8,000 PhD's in Engineering and Physical Science by 1985. The supply is expected to be less than 4,000. There is also expected to be a requirement for 3,100 graduate students in science and engineering. The projected supply is 2,100.

There will be a shortfall of approximately 50 per cent in the number of graduate students in science and engineering.

The dearth of graduates available in those areas critical to the country's economic growth is exacerbated by the fact that fully one third of the graduates are visa students who are required to leave Canada after graduation – double the proportion in 1971.

In addition to the exit of visa students in global high demand areas, a "brain-drain" is evident. The Minister of Employment and Immigration, the Honourable Lloyd Axworthy, recently expressed concern to the United States officials, that that country's large funding cutbacks in training and education would put strains and an international pull on the Canadian highly qualified and skilled labour pool. Shortfalls in areas of Engineering, Computer Science, Biotechnology, and Agriculture are projected.

In the long term, unless major adjustments are made, the need for highly qualified manpower in demand areas will outpace the supply. Major university teacher shortfalls are already occurring in key areas. There are two hundred vacancies for professors of management, (there are only twenty PhD's graduating annually), six hundred openings in computer science, and two hundred engineering professors required in Canada.[6] At the same time there are 2,000 unfilled Engineering teaching positions in the United States.

The Labour Market Development in the 80s publication reported a surplus of 15,000 graduates a year, over ten per cent of the graduating class. Surplus graduates in Education and General Arts and Sciences are often either unemployed or underemployed. A wage push/pull comes into play for graduates in Engineering, Business, Technologies and Computer Science. When there are not enough graduates in bottleneck areas, employment blockages are filtered down to other employment areas.

Japan has carefully managed the shifting emphasis from traditional technologies to the post-industrial wave giving that country a major competitive edge in world markets. In Japan, the centralized Ministry of Education looks at national goals and social demands. Ten-year plans are developed, focusing on long-term labour market needs and the concrete steps to reach the national goals. The plans have been successful, even to the point where in the last ten-year plan, the supply of engineers and scientists surpassed the demand. However, this was not a large problem, because of the orientation of Japanese society and the high transferability of skills acquired by this surplus group, other suitable jobs were found. The current Japanese ten-year plan focuses on High Technology and the need for innovation and creative scientists and engineers. The emphasis has changed from quantity to quality and the need for flexibility.

The overall demand trends necessitate a more effective utilization of both the technical and professional components of the work force. Scarce resources must be used more effectively. A responsive labour force will require the full integration of previously disadvantaged people. Flexibility and cooperation among industry, government, and education in the form of medium to long-term plans are imperative.

EMPLOYMENT TRENDS

Whethere we are comfortable with change, or not, the revolution in the workplace is also affecting the pith of our social values. Burgeoning technology will see many Canadians in stages of career transition. Societal demands for professional competency will put pressures on the individual for currency. Social equity, a quest for self-fulfillment, and their subsequent indirect benefits to society, will affect the core of labour market composition. The smooth, effective assimilation of new groups into a productive labour force will and are currently starting to require innovative approaches to the world of work, and work/education.

Encouragement of flexible working schedules and conditions address both employment system and target group needs. Traditionally, part-time and part-year workers were considered a marginal component of the labour force. The implementation of a number of flexible work arrangements such as: job rotation, job sharing, compressed work week, remote site employment commuting, and Paid Educational Leave should tap the qualified pool of labour not available for traditional work arrangements. One in eight Canadian labour force participants, works part-time or part-year. Seventy per cent of this group is female. The growth of this component has been greater than the rate of growth of full-time employment.[7]

To address the needs of a rapidly changing work environment, new employee groups, and alternate periods and schedules of work and training involvement, a major shift towards a comprehensive lifelong education strategy seems necessary. The sobriquet, "lemon socialism"[8] reactively focuses current industrial policy on depressed industries like textiles and automobiles, rather than proactively responding to economic opportunities. This reference is also appropriate in the field of work/education – the coined term would be "lemon educationalism". "Lemon educationalism" focuses on education totally for the traditional 18-24 year old, full-time student, rather than responding to the ongoing professional education needs of working adults as well as the new adult clientele groups.

MODIFICATION OF THE FEDERAL GOVERNMENT ROLE TO MEET THE CHANGING SKILL NEEDS OF THE 80s

Effective response to the changing work environment in Canada requires modification of the Federal Government role and the development of policies: to overcome skill shortages, to accelerate economic growth and development, to facilitate industrial adjustment, to promote access, equity and mobility and to encourage a work/education system capable of quick response to a rapidly changing Canadian environment. A number of these areas have been addressed in the National Training Program. Several others, including the upgrading requirements for a current Canadian labour force, are presently being examined within the context of the National Educational Leave Study.

The focus of the National Training Program on developing the most natural Canadian resource – the human resource, centres on four main components: the Industrial Training Program, the Institutional Training Program, the Skills Growth Fund and the Canadian Occupational Projection System.

Industrial training under the new legislation will be expanded and refocused. Training for critical trade skills in national occupations will be quickly increased to include the training of an additional number of highly-skilled workers.

Federally funded institutional skill training will be more closely tied to regional and national demand areas and the middle and higher skill levels will be emphasized.

The Skills Growth Fund is expected to accelerate skill development in national occupations.[9] Administered with close provincial cooperation, it will assist with the capital costs and initial operating costs of the necessary facilities. The fund will establish, expand or convert and re-equip existing training facilities for national occupations.

The first step in overcoming skill shortages is the development of an improved system of projections for future occupational imbalances. Since it takes time to arrange for increased training and two or three years lead time for training is required in many occupations, a medium to long-term projection system is necessary. In order to make these general projections, not only recent quantitative data and projections, but also judgement, consultation and other qualitative information will be required. Outputs of this system will take the form of projections of skill imbalance over a three to ten-year horizon for those occupations requiring significant amounts of training.

MEETING THE CHALLENGE

Against a backdrop of current demographic and employment trends: altered demand patterns, changing technology, the new challenges of employment and unemployment and the narrowing global community, new work/education policies and programs, as part of a comprehensive human resource strategy are necessary. The National Training Program is seen by many as a pivotal point in the evolving role of the Federal government in employment training and Canadian work/education.

NOTES

1. Work for Tomorrow, Employment opportunities in the 80s, All Party Parliamentary Task Force Report Government of Canada, Ottawa, 1981.
2. Labour Market Development in the 1980s, A Task Force Report, Employment and Immigration Canada, Ottawa , July 1981.
3. Labour Market Development in the 80s, Chapter 9, Training to Meet Skill Needs, Employment and Immigration Canada, July 1981, page 152.

   Highly Qualified: occupations and professions requiring post-secondary education in universities and colleges.

Highly Skilled: blue collar occupations normally requiring apprenticeship and/or some post-secondary training.

Lower Skilled Occupations: those requiring some vocational or other skill training.

4. Groups such as Women Returning to the Workforce, Parents of Young Children, Unemployed Youth, The Handicapped, Natives, Language Minority Groups, Immigrants, Senior Citizens, Pre-Retirement Groups, and Redundant Workforce Participants.
5. The Natural Sciences and Engineering Research Council of Canada's (NSERC) Five-Year Plan, targets the spending of 1.5 per cent of the Gross National Product on Research and Development. While enrolments were up slightly this past year (4 per cent overall) there are major shortfalls in key industrial professions. A recent survey by the Canadian Council of Professional Engineers reports a 7.9 per cent increase in enrolment for Masters and PhD programs in 1981-1982. By comparison, the number of graduate students in engineering declined annually from 1976 to 1980.
6. Ministry of State for Science and Technology, February 1982.
7. The group includes such people as parents with young people, young people, older workers, pensioners, disabled people and an increased number of older workers wishing to extend their working lives.
8. The Harvard Business Review, November-December, 1981.
9. *National Occupation:* an occupation in short supply, deemed to be of sufficient economic importance to the well-being of the country to be designated as a National occupation.