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# CANADIAN DEMOGRAPHIC TRENDS / 2 Changing Society and Education Trends

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## Structural Changes and Education Trends

Structural changes in society or in industry have a direct bearing on educational trends. The content of the curriculum, its accessibility and duration are influenced by the structure of society and industry. As technology or the political system changes, so does the educational system. Since the second world war, there have been several structural changes in the Canadian economy. These changes have-as one would expect-influenced and will continue to influence educational trends.



## Structural Changes in Industries

Currently, industries in Canada and the United States are undergoing fundamental structural changes. We are witnessing major structural changes in companies (such as IBM and General Motors) for the first time. Many jobs have disappeared, never to come back again. Structural changes occur when the nature of production changes. Thus there was a major structural change after the industrial revolution. Since then, industries have changed radically, but the changes have been evolutionary. There have been tremendous changes and technological breakthroughs, but they happened over a period of time and industries and workers have had time to adjust to them.

However, what has been happening over the past decade or so is rapid technological change. The examples that follow show the type of changes that have happened in recent years and their impact on the workforce.

- Our production methods have become more efficient. We do not need as many people or as much time to produce the quantity of goods we did a few years ago. This means that many industries are overstaffed.
- We have been moving into a service-oriented economy. While this is no secret and this trend has been evident for several years now, industries are still mostly production oriented.
- We can have computers (right on our desks) that are much more powerful than the mainframe computers we used to work with just about 10 years ago. We can have access to practically all unclassified information that the Prime Minister has access to, through information networks. Again this scenario didn't exist just a few years ago.

This means computer literacy can replace the need for specialist programmers in many instances; spreadsheet programs can replace clerical workers; word processing programs can replace typists; facsimiles can replace courier services; electronic mail boxes can replace the need for paper duplication and people who disseminate information. Information data bases reduce the need for researchers. All such changes affect the structure of business operations.

• Another major trend is that the world is becoming one single market. While there are trading blocks and restrictions on the free importation of goods, goods move relatively freely among different countries. Thus goods made in Japan or Taiwan compete with goods made in Canada and other Western countries. Unless we are competitive, other countries will dominate the market, take away our jobs and-as a consequence- will threaten our standard of living.

Increasing global competition is another major reason for restructuring industries. The challenge is to produce more with a reduced workforce in order to remain competitive with countries where the cost of labour is low. This is one of the major reasons for restructuring, especially in large production-oriented companies.



# Impact on Education

The educational system needs to respond to these changes and challenges. The trends which have accelerated in the past decade have developed over the past 30 years or so. Our educational system has been responding to the changing needs slowly. The education trends, described below, are a result of the changes in structure, but also will shape the social fabric in the years ahead.

# 1. Canadians are going to school longer.

Over the past few years, the number of years Canadians receive formal education has been steadily increasing. The increase is approximately 1% per year. According to the 1986 census, the median number of years of schooling for people between the ages of 25 and 34 was 12.9 years, between the ages of 45 and 54 was 11.4

years and over the age of 75 was 8.8 years. This is a very distinct trend and is likely to continue in the future.

## 2. Canadians are reaching higher levels of formal schooling.

If we use another yardstick-the level of education completed rather than the number of years of education-we find that the highest level of schooling reached by Canadians over the age of 25 is on the rise. Since 1971, the proportion of people who have had some post secondary or university education has steadily risen.

These above two trends will have far reaching implications for the Canadian economy, as the workforce will have better qualified people. The educational system will be able to accommodate the need for a better educated workforce because the demand on the system will sharply decline as the proportion of younger people declines.

#### 3. There will be a greater demand for adult education.

About one in four Canadians (21% of women and 17% of men) is estimated to participate in adult education programmes. This estimate does not include adults who attend school full time.

The type of courses taken appear to be gender-related. Women tend to take personal development and hobby related courses (56%) while men tend to take job related courses (57%). Among both men and women, participation in educational programmes drops sharply after age 45.



There are reasons to believe that the demand for adult education will increase in the future:

- As the number of younger people decreases, educational institutions will need additional funding to continue functioning. The most readily available source are people who are older and need additional skills.
- As the nature of work changes along with technology, people are likely to return to school (part time) to update their current skills and learn more relevant skills.
- Better-educated people tend to return to school (usually part time) to update their skills. Given that Canadians are becoming better educated, it is also more likely that they will return to school in their adult life.

## 4. Canada will have a better educated work force.

Compared to the general population, the Canadian workforce is better educated. This has been an increasing trend. There is no reason to believe that this trend will be reversed in the next few years. In fact, given the increasing demand that will be made on workers in the future, the workforce is likely to be even better educated than it is now.

There is another reason to expect the workforce to be better educated. There has been an increasing number of women entering the workforce. The number of women with a university degree is growing much faster than the number of men with a degree. In the past 15 years, the percentage of women with a university degree in the workforce has nearly doubled.

As more and more educated people enter the workforce, the entry level education for jobs is likely to rise. This in turn will motivate people to get a higher education. Even if people could enter the workforce with less education, the competitive context will be such that it may be in the worker's own interest to get a better education.

The above trends are already in evidence. We can already see the aggressive marketing to executives done by business schools. Such marketing is not even confined to specific geographical areas. For instance, the University of Western Ontario, based in London, offers an MBA programme in Mississauga, competing effectively with the nearby local universities such as University of Toronto, York University and McMaster University.

As the number of young people continues to decline, educational institutions will compete for the available resources even more aggressively-perhaps concentrating on long distance multimedia programmes.

#### 5. Educational programmes will become more communication-oriented and more relevant.

Current trends indicate that educational institutions can no longer count on a captive audience. If they are to survive, they need to attract adults who are already in the workforce. Success in attracting this group will depend on two factors: Are the courses interesting and do they communicate effectively? Are the courses relevant to a person's career? Increasing competition for the available resources will probably ensure that these conditions are fulfilled.

An informal survey of the learning and teaching materials currently available shows the beginning of this trend. Increasing use of interesting graphics, four-colour text books, and audio and video based supplementary learning materials support the view that the passive offering of courses and course materials is not adequate to attract and sustain student interest.

#### 6. Higher education will mean higher earnings.

Census figures show that as the educational level improves, the unemployment rate drops-rapidly so. For instance, in 1986, unemployment was about 2.5 times higher (14.6%) among those who had completed grade 8 or less compared to those who had a university education.

Not just that. Those with university education earn considerably more than those who do not have a university education-about \$10,000 more on average. The level of participation in the labour force has increased for both men and women. However, the level of participation as educational level increases is much more pronounced.

All these patterns are likely to have an impact on public policy. To be competitive we need a better educated workforce and Canadians are getting better educated. At the same time, education is also becoming more expensive. There is a disparity between the nation's need for a more educated workforce and the individual's ability to acquire the education.

While currently there is no evidence that points to this conclusion, it is quite likely that as this disparity grows, greater accessibility to higher education may become an important issue. One may even surmise that this and other educational issues may take centre stage, relegating current issues such as Old Age Security, pensions and the like to lesser prominence.

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