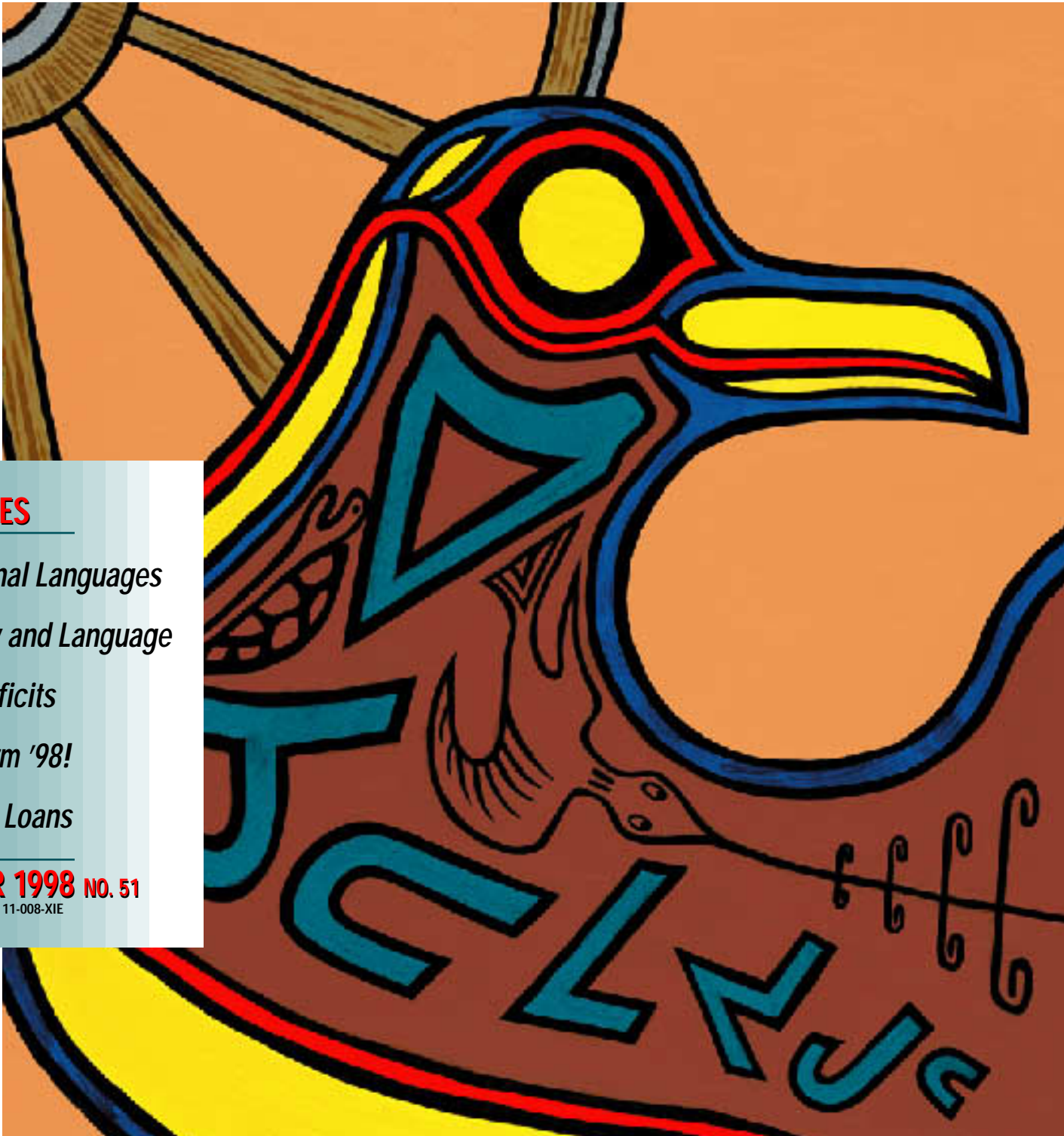




CANADIAN

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SOCIAL TRENDS



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Aboriginal Languages

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Ron Noganosh was born May 3, 1949 on the Magnetawan Reserve in Ontario. He is of Ojibway descent. He studied Graphic Design at George Brown College in Toronto, Ontario and holds a Fine Arts degree from the University of Ottawa, Ontario where he focused his talent on print and sculpture. He continues to support several facets of his Aboriginal heritage.

LITERACY: Does Language Make A Difference?

by Jean-Pierre Corbeil

Literacy involves much more than merely mastering the alphabet: people must be able to process increasingly sophisticated written information in both numerical and alphabetical form. In modern societies, literacy is closely linked to economic opportunity, and high level literacy skills have a strong correlation with high income and stable employment. Many other elements of a rewarding life, including active participation in the community, are also enhanced by good literacy skills.

According to the 1994 International Adult Literacy Survey (IALS), literacy skills differ considerably between Canada's two official language groups. People whose mother tongue is English generally have higher scores on literacy tests than those whose mother tongue is French. In fact, the disparities are large: two to three times as many anglophones as francophones scored at the highest skill levels.¹ This article first examines the literacy profiles of Canada's two main linguistic groups in terms of such variables as education, age and reading habits, and then calculates

1. *Reading the Future: A Portrait of Literacy in Canada*. 1996. Statistics Canada, Human Resources Development Canada and National Literacy Secretariat. Catalogue no. 89-551-XPE; p. 33.

CST What you should know about this study

This article draws on data from the 1994 International Adult Literacy Survey (IALS), a joint effort by seven countries to assess the literacy skills of their citizens. The purpose of the IALS literacy tests was to determine if adults correctly answer test items that duplicate the tasks they encounter in their daily lives. In Canada, the survey was conducted among 5,660 individuals aged 16 and over. Respondents were able to take the test in the official language of their choice; about 4,000 respondents took the test in English and about 1,700 in French. Each respondent's test results were plotted on a 500-point scale, and divided into five levels of literacy, with Level 1 being the lowest (0-225 points) and Level 5 the highest (more than 375 points).

Three types of literacy were tested – prose, document and quantitative. In this study, the patterns identified are similar for all three literacy measures, so results are presented only for prose literacy unless otherwise stated.

Respondents are defined as francophone or anglophone on the basis of their mother tongue, that is, the language first learned in childhood and still understood. Since respondents were allowed to report more than one mother tongue, the French mother tongue category includes respondents whose mother tongue is "French and another language," if they chose to do the IALS test in French. Similarly, English mother tongue includes respondents whose mother tongue is "English and another language" if they did the literacy test in English.

- For more information about the IALS, see *Reading the Future: A Portrait of Literacy in Canada*. 1996. Statistics Canada, Human Resources Development Canada and National Literacy Secretariat. Catalogue no. 89-551-XPE.

the effect of these variables on the “literacy gap” between the two groups.

A general portrait of literacy levels in Canada

Many factors may contribute to the differences in literacy levels between English and French Canadians, but historically lower levels of education among francophones is undoubtedly one of the major causes.² Since formal schooling is one of the principal determinants of literacy skills, a person without much education is considerably disadvantaged. On the other hand, the advantage of higher education, on both linguistic groups, is profound: although overall literacy levels are higher for anglophones, the literacy skills of anglophones and francophones with the same level of schooling are very similar.

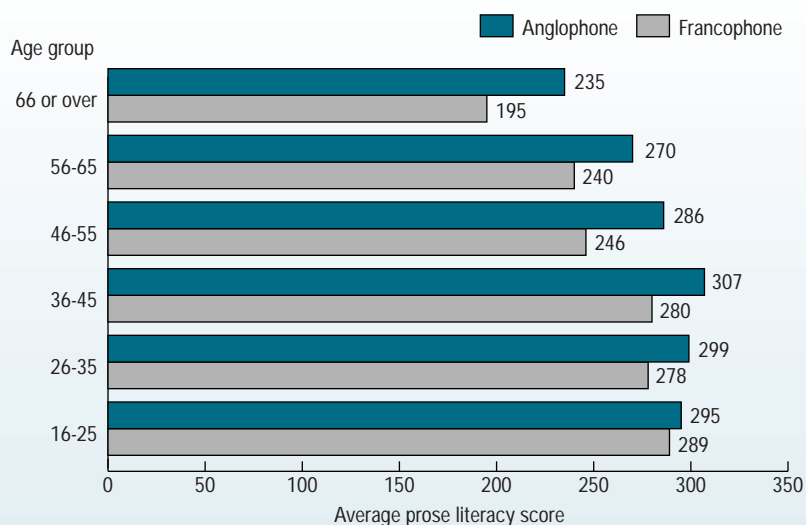
Literacy skills are also influenced by age. Generally speaking, Canadians under 45 in both linguistic groups score higher on the literacy tests because they have more schooling than older adults. There is a 40-point difference (on a 500-point scale) in literacy scores between anglophones and francophones over age 65, but the gap narrows among younger age groups until it almost disappears for those aged 16 to 25. Steady improvement in educational attainment has erased the literacy disparity between young Canadians in the two linguistic groups. The weaker literacy skills of older Canadians, both francophone and anglophone, are of continuing concern to literacy researchers.

While education provides the groundwork for strong literacy skills, some adults may have a relatively high level of literacy but a low level of formal education, while others may

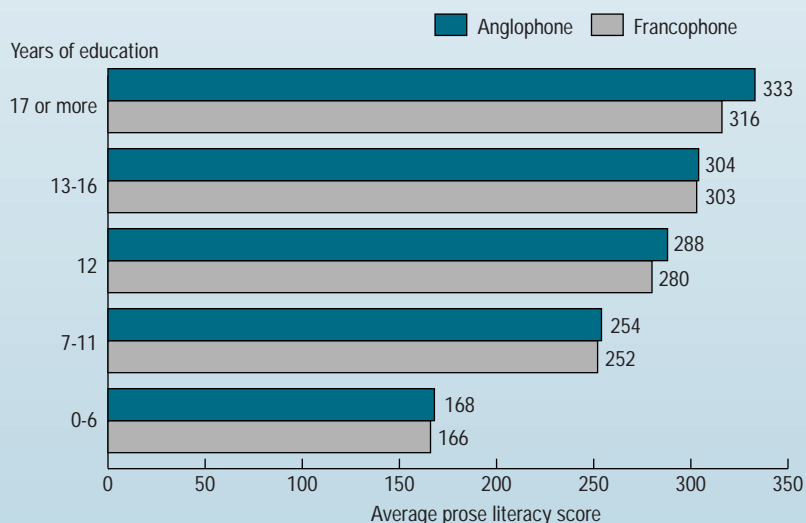
2. In 1961, 54% of francophone men in the workforce had less than nine years of formal education, compared with 31% of their anglophone counterparts.



The anglophone-francophone literacy gap increases with age...



...but decreases with same level of education



Source: Statistics Canada, International Adult Literacy Survey, 1994.

demonstrate poor literacy skills despite having many years of formal schooling. These findings suggest that daily reading and writing activities are also necessary to the maintenance or improvement of literacy skills. Indeed, occupations which demand a lot of reading and writing, along with a well-developed “literacy habit” at

home, are strongly associated with high scores on the IALS tests.³

Job-related literacy tasks – writing letters or memos and reading reports,

3. *Reading the Future: A Portrait of Literacy in Canada*; pp. 35-79.

manuals or schematic drawings – are generally performed more often by anglophones than francophones.⁴ An index of reading intensity, based on the frequency and variety of reading tasks that individuals perform, shows a significant gap between anglophones (3.1) and francophones (2.6). Even when they work in the same type of occupation, anglophones record average literacy scores between 10 and 35 points higher than francophones.

Anglophones generally engage more frequently in literacy activities at home as well – reading books or daily newspapers, visiting the library, or writing letters. According to the IALS, they record an at-home reading intensity of 3.0, compared with 2.6 for francophones. As might be expected, individuals with higher level skills perform at higher levels of intensity. However, it is not certain whether people read more because they have good skills, or whether they have developed good skills by reading more.

What explains the literacy gap?

In Canada as a whole, the average prose literacy score is 261 for francophones and 288 for anglophones. But when so many characteristics appear to have such a powerful influence on literacy skills, averages are not very useful in understanding why these literacy rates should differ by almost 10% (27 points). Using a statistical technique called regression modelling, it is possible to predict the effect of a specific characteristic on a person's literacy skills, while removing the effects of (“controlling for”) other variables. In this way, the model can identify the factors that contribute to

the literacy gap by estimating how many points each factor adds to a person's basic literacy score. The data used in the Canada-level regression are for anglophones across Canada and for francophones living in Quebec.

If language is considered to be the only factor that can explain differences in literacy skills, then a person whose mother tongue is English will,

Schooling (and not language) explains the great majority of the difference in anglophone and francophone literacy scores.

on average, have a literacy score 27 points higher than a person whose mother tongue is French (Model 1).

But if education is also considered to be an explanatory factor, and its effect is controlled for, the gap due to mother tongue almost closes – the difference in average anglophone and francophone scores is only 5 points (Model 2). In other words, schooling (and not language) explains the great majority of the difference in anglophone and francophone literacy scores.

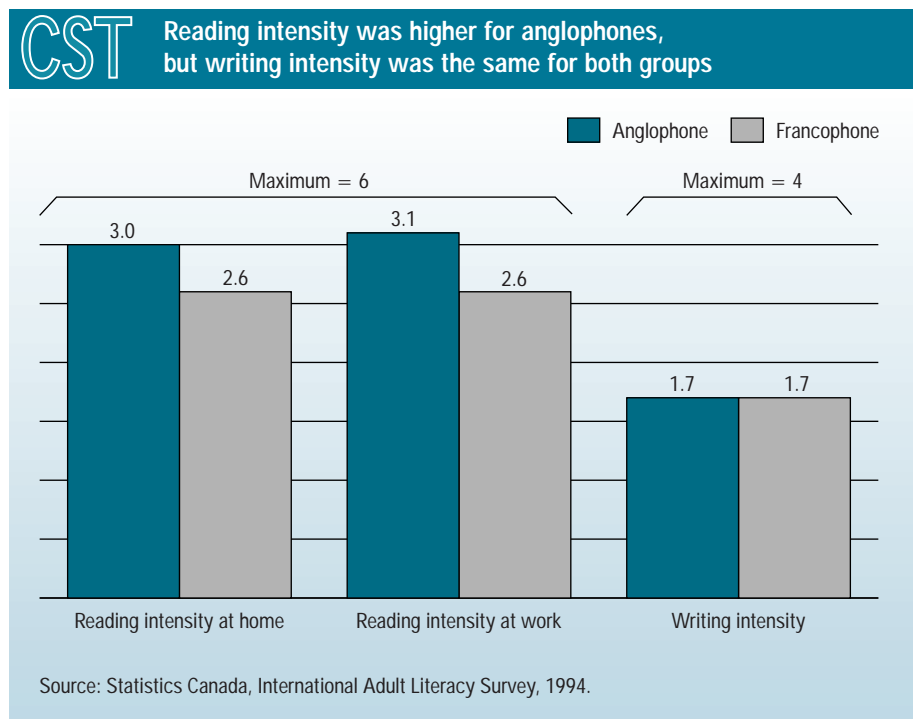
The literacy gap narrows still further, to a scant 1 point, when the other characteristics discussed earlier – age, reading intensity, literacy activities and occupation – are taken into account (Model 3). Indeed, in this more complex model, the importance of language as an explanatory factor ceases to be statistically significant.

Clearly, the key determinant of people's literacy scores is not their mother tongue, it is educational attainment. Every year of schooling increases a person's literacy score by more than 7 points (Model 3). For

example, someone with a university degree (17 years of formal education adding 119 points to the base score) will generally have a much higher literacy score than someone with less than high school (say Grade 9, which adds only 63 points).

Age remains a significant contributor to literacy skills: being under the age of 45 improves a person's literacy score by 16 points, even when the impact of education and other variables are controlled for.⁵ This finding is a bit

4. These results are for prose and quantitative literacy. Francophones more frequently performed tasks related to document literacy in the workplace.



surprising, since age is closely linked with schooling and controlling for it might have been expected to produce less variation between the age groups. The lower scores for older respondents may reflect the cumulative effect of reading less frequently over a lifetime.

The regression model shows that many leisure literacy activities also have a significant effect on literacy scores. When all other factors are controlled for, people who read a newspaper at least once a week added almost 13 points to their literacy score, while reading a book at least once a week added another 11 points.

Literacy skills in minority language communities⁶

These regression models are very successful at explaining the factors underlying the literacy disparity between the two linguistic groups at the Canada level. However, because the model compares francophones in Quebec with anglophones in Canada, its results are applicable only to people in majority-language communities. Is the model equally valuable in explaining the literacy gap for the French-language minority communities in New Brunswick and Ontario?⁷

The size of the linguistic literacy gap between anglophones and francophones is about the same in both provinces — 36 points in New Brunswick and 35 in Ontario — but here most similarities end. In New Brunswick, the effect of education appears to be small, only narrowing the gap to 30 points between anglophone and francophone literacy scores; in Ontario, however, the gap is halved to 17 points.

5. The importance of one variable cannot be compared to another using the “points added” estimate; for example, age is not twice as important as education (16 points versus 7 points). The relative importance of each variable is provided by the standardized estimate (beta coefficient), which is not shown in this article.

CST Compared with education, the effect of mother tongue on literacy is minimal			
	Model 1	Model 2	Model 3
Base literacy score	261	148	146
<i>Points added to base score if mother tongue is English (Literacy gap)</i>			
	27	5	1*
<i>Points added to base score by each year of education</i>			
		10	7
<i>Points added to base score if</i>			
Less than 45 years old			16
Reading intensity greater than 0 (maximum=6)			2
Visit a library at least once a month			9
Write letters or other text at least once a month			5
Read newspapers at least once a week			13
Read books at least once a week			11
Watch TV less than one hour a day			6
<i>Points added to base score if occupation is¹</i>			
Management/administration			-10
Professional			9
Clerical			-1*
Sales and service			8
Machine operation			-1*
* Not statistically significant.			
1. Compared with Agriculture and related occupations.			
Source: Statistics Canada, International Adult Literacy Survey, 1994.			

The full model does not explain much more of the disparity in either province. After controlling for all selected variables except mother tongue, anglophones in New Brunswick still averaged 22 points more than francophones in the literacy test, while those in Ontario generally scored 14 points higher. Since these results are substantially different from those at the Canada level, they suggest that other

6. In Ontario, only 52% of francophones chose to do the tests in French, while in New Brunswick, 89% did so. However, there was little difference in the scores of francophones who did the tests in English rather than in French.

7. Because the sample size for anglophones in Quebec was too small to produce reliable estimates, Quebec is not included in the analysis of minority-language communities.

factors play a significant role in the literacy gap in minority-language communities.

One explanation is limited access to reading material in one's mother

tongue. The regression model shows that literacy activities such as visiting the library, writing letters and reading books can significantly increase literacy scores, particularly in New

Brunswick. Yet IALS data show that francophones in New Brunswick are least likely to practice them. Quite possibly, francophones, particularly those in the rural areas of northern and eastern New Brunswick, may not have had easy access to French-language reading material which could help them maintain or strengthen their literacy skills.

CST

Francophones in New Brunswick were least likely to practice regular literacy activities at home

	Mother tongue	
	English	French
	%	
Read daily newspapers		
Canada	66	54
New Brunswick	64	49
Quebec	--	53
Ontario	69	62
Visit a library at least once a month		
Canada	28	18
New Brunswick	16	13
Quebec	--	18
Ontario	31	22
Write letters or other text of more than one page at least once a month		
Canada	41	26
New Brunswick	31	21
Quebec	--	26
Ontario	41	31
Read books at least once a week		
Canada	56	40
New Brunswick	55	36
Quebec	--	38
Ontario	56	53
Spend more than two hours per day watching television or videos		
Canada	38	51
New Brunswick	42	41
Quebec	--	53
Ontario	38	42
Children should have time set aside each day to read		
Canada	53	39
New Brunswick	48	37
Quebec	--	36
Ontario	50	53

-- Amount too small to be expressed.

Source: Statistics Canada, International Adult Literacy Survey, 1994.

Summary

In general, the differences in literacy levels between anglophones and francophones in Canada are not related to language. Rather, the literacy gap arises largely from the educational advantage that anglophones historically have had, and this source of inequality is disappearing as the educational attainment of the francophone population increases. Although age is closely related to education, it is an important explanatory factor in its own right, and being younger than 45 is strongly associated with higher literacy levels. Making a habit of reading every day also contributes significantly to high-level literacy skills, and people who read during their leisure time score higher on literacy tests, whether their mother tongue is French or English.

CST

Jean-Pierre Corbeil is an analyst with Demography Division, Statistics Canada.



Jobs for computer programmers double in 5 years

Between 1992 and 1997, jobs for computer programmers and systems analysts increased by 92% to 267,000. This compares with a 9% employment growth in the economy as a whole over the same period. Rapid growth of the Internet, the spread of internal computer networks in large organizations, and tackling the Year 2000 problem have all contributed to this expanding job market. Programmers worked an average of 38.8 hours a week in 1997, about an hour less than in 1992. They were no more likely than others to work overtime or to hold a second job. In late 1997, computer programmers and systems analysts earned, on average, about \$300 more per week than workers overall (\$853 versus \$577).

Perspectives on labour and income
Summer 1998, Vol. 10, no. 2
Statistics Canada,
Catalogue no. 75-001-XPE



Majority of violent crimes committed by people known to victim

In the majority of violent crimes reported to police, the victim usually knows the assailant. In 1996, one out of three victims was victimized by a stranger. In addition, violence committed by strangers was less likely to result in a physical injury: 41% of incidents involving total strangers

resulted in either major or minor injuries, compared with 52% where the victim knew the perpetrator. The major exception to this pattern was robbery, where 83% of the victims did not know the perpetrator. Most violent crimes tend to occur in the home, perpetrated by someone known to the victim.

Juristat
Vol. 18, no. 9
Statistics Canada,
Catalogue no. 85-002-XPE



Fees up, registrations down for continuing education courses

Registrations in non-credit, university-level courses have declined 7% from 350,000 in 1995/96 to 327,000 in 1996/97. During the same period, the average tuition fee for a non-credit course increased 13% to \$360. Professional development continues to be the main reason for enrolling in non-credit courses: 71% of applicants registered for professional development courses, while the remaining 29% registered for general interest and academic courses. Social sciences were the most popular field of study, accounting for 24% of continuing education registrations, followed by general interest courses (16%), health professions and occupations (15%), and the humanities (14%). The traditional classroom setting remains the most common medium of instruction.

Continuing Education Survey
Statistics Canada,
Culture, Tourism and the Centre for Education Statistics



Almost one-third of households talking with computers

In October 1997, nearly 3 out of every 10 households had at least one member who typically used a computer every month at home, work or another location to send e-mail, do electronic banking or surf the Internet. Alberta had the highest percentage of households with members who used computers (35%) and Quebec, the lowest (20%). Communicating by computer was more prevalent in households with young people. Some 38% of households with people under 18 used a computer regularly to communicate, compared with 25% of households in which there was no one under 18. Of households that used computers regularly to communicate, 84% reported using it to search for specific information on the Internet, 83% said they used computers for e-mail, and about one-third communicated from home for employer-related business.

Microdata file 56M0002XCB
Statistics Canada,
Special Surveys Division



More than half a million adults receive home care

Some 523,000 adults, or 2.4% of the population aged 18 and over, received publically-funded home care services in 1994/95. The majority (64%) were seniors, who needed help with personal care or with

activities such as preparing meals, shopping and housework. People who suffered from cancer or the effects of stroke had about twice the odds of receiving home care as did people without these conditions. Half of all home care recipients reported poor or fair health. About 28% of people who received home care had been hospitalized for eight nights or longer in 1993/94, compared with just 2% of other adults.

Health Reports
Summer 1998, Vol. 10, no. 1
Statistics Canada,
Catalogue 82-003-XPB



Number of seniors will triple over next 40 years

Births in Canada declined for a sixth consecutive year in 1996. If, as anticipated, this trend will stay on course, by the year 2020 Canada's natural population growth (births minus deaths) will approach zero. Immigration, in the meantime, is accounting for a larger and larger share of population growth (53% in 1996). Meanwhile, Canada's population continues to get older. By 2030, persons aged 65 and over will represent 23% of the Canadian population. In the 1990s, seniors tend to live independently of their children, but the lives of men and women are quite different. Half of women aged 75 and over live alone, compared with only 20% of men. Elderly persons with very low incomes tend to live in large households.

Report on the Demographic Situation in Canada 1997
Statistics Canada,
Catalogue no. 91-209-XPE

Canada's Aboriginal Languages

By Mary Jane Norris

Canada's Aboriginal languages are many and diverse, and their importance to indigenous people immense. Language is one of the most tangible symbols of culture and group identity. It is not only a means of communication, but a link which connects people with their past and grounds their social, emotional and spiritual vitality. Although loss of language doesn't necessarily lead to the death of a culture, it can severely handicap transmission of that culture. For Aboriginal people, great losses have already occurred. During the past 100 years or more, nearly ten once flourishing languages have become extinct; at least a dozen are on the brink of extinction. When these languages vanish, they take with them unique ways of looking at the world, explaining the unknown and making sense of life.

Societal factors often contribute to the decline of languages. Without doubt, the forces of dominant languages and modernization exert a strong influence on any minority language. In the case of Aboriginal languages, historical events such as the prohibition of indigenous language use in residential schools have also contributed to this process. In addition, the fact that most Aboriginal languages were predominantly oral may also have diminished, in an already difficult environment, their chances of survival.

As of 1996, only 3 out of Canada's 50 Aboriginal languages had large enough populations to be considered truly secure from the threat of extinction in the long-run. This is not surprising in light of the fact that only a small proportion of the Aboriginal population speaks an Aboriginal language. Of some 800,000 persons who claimed an Aboriginal identity in 1996, only 26% said an Aboriginal language was their mother tongue and even fewer spoke it at home. This article explores which of Canada's Aboriginal languages are flourishing and which are in danger of disappearing. It also examines the factors that differentiate viable languages from endangered ones. And finally, it compares language use and maintenance patterns between 1981 and 1996 to understand what happened to Aboriginal languages over the years and what the future may hold for them.





Some languages large, others tiny

The current 50 languages of Canada's indigenous peoples belong to 11 major language families — 10 First Nations and Inuktitut. Most families consist of separate but related member languages, and each member language may include several dialects. Exceptions comprise the Haida, Tlingit and Kutenai families — known as the isolates — which cannot be further broken down into individual languages.

Some language families are large and strong, others small and vulnerable. The three largest families, which together represent 93% of persons with an Aboriginal mother tongue, are Algonquian (with 147,000 people

whose mother tongue is Algonquian), Inuktitut (with 28,000) and Athapaskan (with 20,000). The other eight account for the remaining 7%, an indication of their relative size. Tlingit, one of the smallest families, has a mere 145 people in Canada whose mother tongue is that language. Similar variations apply to individual languages — Cree, with a mother tongue population of 88,000, appears immense when compared with Malecite, at 660.

Geography influences size and diversity of languages

Geography is an important contributor to the diversity, size and distribution of Aboriginal languages

CST Language classification: "viable" and "endangered"

This article's classification of language survival is based on M. Dale Kinkade's 1991 study, "The Decline of Native Languages in Canada." Other classification schemes exist, but there is general agreement as to which languages are viable and which endangered. Kinkade divides Aboriginal languages into five groups: already extinct, near extinction, endangered, viable but with a small population base, and viable with a large population.

- Languages near extinction are considered to be beyond the possibility of revival, since generally only a few elderly people know them. (These languages are not discussed in this study because reliable Census data are not available.)
- Languages considered endangered are still spoken by enough people to make survival an outside possibility, given sufficient community interest and educational programs.
- Languages that are viable but small tend to have more than 1,000 speakers and are spoken in isolated or well-organized communities with strong self-awareness. In these communities, language is considered one of the important marks of identity.
- Viable languages have large enough population bases that long-term survival is relatively assured. In this article, the terms "healthy", "strong" and "flourishing" are used alternatively to describe viable languages.

For discussions on viable and endangered Aboriginal languages see UNESCO. 1996. *Atlas of the World's Languages in Danger of Disappearing*. Edited by Stephen A. Wurm. Paris: Unesco Publishing; Report of the Royal Commission on Aboriginal Peoples. 1996. *Gathering Strength*. Vol. 3. Ottawa: Minister of Supply and Services Canada; Indian and Northern Affairs Canada. 1990. *Indians and Inuit of Canada*. Ottawa: Minister of Supply and Services Canada.

across Canada's regions. Open plains and hilly woodlands, for example, are ideal for accommodating large groups of people. Because of the terrain, groups in these locations can travel and communicate with each other relatively easily and often tend to spread over larger areas. On the other hand, soaring mountains and deep gorges tend to restrict settlements to small pockets of isolated groups. British Columbia's mountainous landscape with its numerous physical barriers was likely an important factor in the evolution of the province's many separate, now mostly small, languages. Divided by terrain, languages such as Salish, Tsimshian, Wakashan, Haida, Tlingit and Kutenai could not develop as large a population base as the widely dispersed Algonquian (particularly Cree and Ojibway) and Athapaskan languages, whose homes

are the more open central plains and eastern woodlands.

In some instances, geography can also influence the likelihood of a language's survival. Groups located in relatively isolated regions, away from the dominant culture, face fewer pressures to abandon their language. They tend to use their own language in schooling, broadcasting and other communication services and, as a result, are likely to stay more self-sufficient. Communities living in the northern regions of Quebec, Nunavut, the Northwest Territories and Labrador — the Inuit, Attikamek and Montagnais-Naskapi — are examples of such groups.

Because of their large, widely dispersed populations, the Algonquian languages account for the highest share of Aboriginal languages in all provinces except British Columbia and the territories, ranging from 72%

in Newfoundland to practically 100% in the other Atlantic provinces. In both British Columbia and the Yukon, the Athapaskan languages make up the largest share (26% and 80% respectively), while Inuktitut is the most prominent language in the Northwest Territories (77%) and practically the only one in Nunavut (virtually 100%). British Columbia, home to about half of all individual languages, is the most diverse in Aboriginal language composition. However, because of the small size of these language groups, the province accounts for only 7% of people with an Aboriginal mother tongue.

Large languages more likely to flourish

There are a number of factors which contribute to a language's ability to survive. First and foremost is the size of the population with an Aboriginal mother tongue or home language. Since a large base of speakers is essential to ensure long-term viability, the more speakers a language has, the better its chances of survival.

Indeed, Inuktitut, Cree and Ojibway — the three most flourishing languages — all boast over 20,000 people with an Aboriginal mother tongue. In contrast, endangered languages rarely have more than a few thousand speakers; often they have only a few hundred. For instance, the two smallest and weakest language groups, Kutenai and Tlingit, have mother tongue populations of 120 and 145 respectively.

Passing on language critical for survival

To survive, a language must be passed on from one generation to the next. The most effective way of making this happen is to speak it in the home where children will learn it as their mother tongue. Spoken in the home, language is used as the working tool of everyday life. In contrast, when learned as a second language, it is often used in potentially limited situations only as

CST Language indicators

Mother tongue population (MT): those people whose first language learned at home, and still understood, is an Aboriginal language.

Home language population (HL): those people whose language spoken most often at home is an Aboriginal language.

Knowledge or ability population (Kn): those people who speak an Aboriginal language well enough to conduct a conversation.

Index of continuity (HL/MT): measures language continuity, or vitality, by comparing the number of those who speak a given language at home to the number of those who learned that language as their mother tongue. A ratio less than 100 indicates some decline in the strength of the language (i.e., for every 100 people with an Aboriginal mother tongue, there are fewer than 100 in the overall population who use it at home). The lower the score, the greater the decline or erosion.

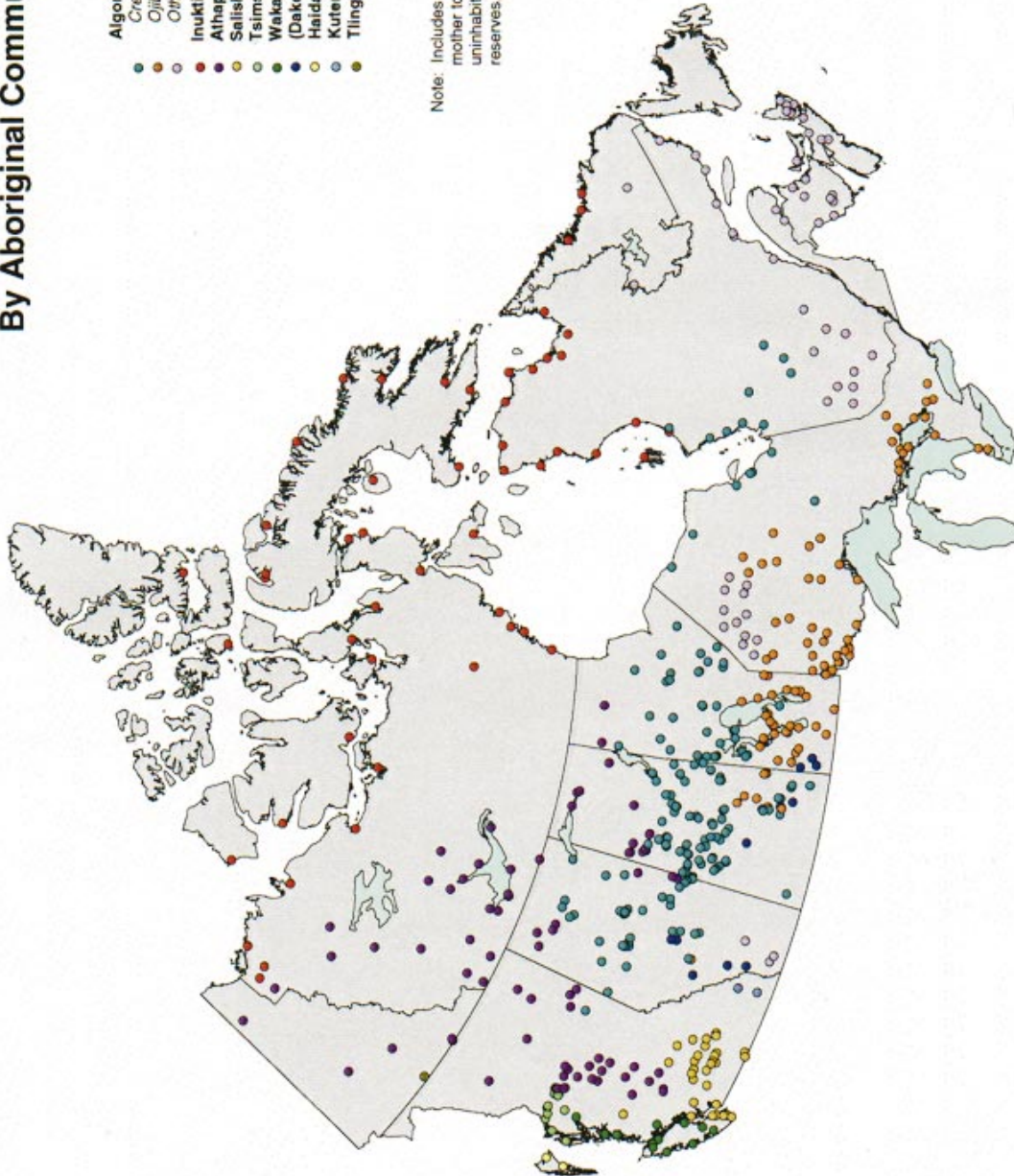
Index of ability (Kn/MT)¹: compares the number of people who report being able to speak the language with the number who have that Aboriginal language as a mother tongue. If for every 100 people with a specific Aboriginal mother tongue, more than 100 persons in the overall population are able to speak that language, some clearly learned it as a second language either in school or later in life. This may suggest some degree of language revival.

1. Harrison, B. 1997. "Language integration: Results of an intergenerational analysis." *Statistical Journal of the United Nations ECE*. 14: 289-303.

DISTRIBUTION OF ABORIGINAL LANGUAGES By Aboriginal Communities, 1996

- Algonquian Family
- Cree
- Ojibway
- Other Algonquian Languages
- Inuktitut Family
- Athapaskan Family
- Salish Family
- Tsimshian Family
- Wakashan Family
- (Dakota) Siouan Family
- Haida Family
- Kutenai Family
- Tlingit Family

Note: Includes communities with minimum single mother tongue population of 20. Excludes uninhabited and incompletely enumerated reserves.



Source: Statistics Canada, Census of Population, 1996. Produced by the Geography Division, Statistics Canada, 1998.

may be the case, for example, in immersion programs. There is, therefore, no equivalent to learning a language as a mother tongue.¹ Because unlike other minority language groups, Aboriginals cannot rely on new immigrants to maintain or increase their population of speakers, passing on the language from parents to children is critical for all indigenous languages' survival.²

Language vitality declines between 1981 and 1996

Between 1981 and 1996, the index of continuity has declined for all Aboriginal languages. Although the number of people reporting an Aboriginal mother tongue increased by nearly 24% between 1981 and 1996,³ the number of those who spoke an Aboriginal language at home grew by only 6%. As a result, for every 100 people with an Aboriginal mother tongue, the number who used an indigenous language most often at home declined from 76 to 65 between 1981 and 1996.

Although most languages experienced a steady erosion in linguistic vitality during these years, endangered ones suffered the most. For example, the index of continuity for Salish languages fell from 35 in 1981 to only 12 by 1996. Tlingit and Kutenai, as

languages most often spoken at home, had practically disappeared by the 1990s. Given that in 1996 there were only 120 people with a Kutenai mother tongue, it is not hard to see why there is serious concern for the survival of this language. In contrast, although the continuity index dipped for the relatively strong Cree as well, it did so by considerably less, from 78 to 65. Although Inuktitut did experience a slight erosion in the early 1980s, the past decade has seen the index stabilize at 84.

By 1996, these rates of language erosion resulted in strikingly different continuity levels for viable and endangered languages as a whole. For every 100 speakers with an Aboriginal mother tongue, an average of about 70 used an indigenous home language among viable groups, compared with 30 or fewer among endangered groups.

The younger the speakers, the healthier the language

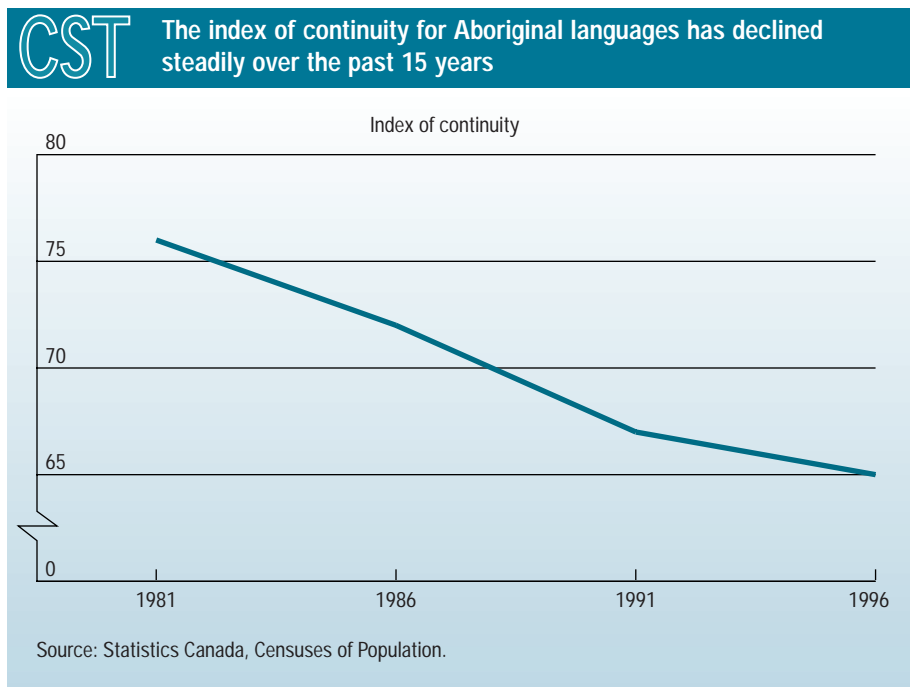
Age also plays an important role in how healthy languages are and what the future may hold for them. The average age of those who speak an Aboriginal language or have it for a mother tongue

reveals the extent to which language transmission has been successful. The higher the average age, the fewer young people have learned or still understand the language and the older the people who still speak it. When these older people die, so may the languages.

For indigenous language groups as a whole, average ages are getting higher. Two main factors are responsible for this trend. First, although fertility rates are still high they are declining, translating into relatively fewer children. And second, the proportion of the Aboriginal population with an indigenous mother tongue is decreasing with younger generations. In fact, in 1996 only 20% of children under 5 had an indigenous mother tongue.⁴ Overall, between 1981 and 1996, the average age of the population with an Aboriginal mother tongue rose by 3 years, to reach 31 years in 1996. Similarly — although to a lesser extent — the average age of Aboriginal home language speakers increased by nearly 2 years, to 27 years in 1996.

4. In comparison, 60% of those 85 years and over, and 30% of 40- to 44-year-olds reported an Aboriginal mother tongue in 1996.

1. Some 75% of those who have learned the language at home are fair to excellent speakers, compared with 23% of those who have learned it at school only. Yukon Executive Council Office. 1991. *A profile of Aboriginal languages in the Yukon*.
2. For example, immigration spurred the growth of the Chinese mother tongue group from 95,000 in 1971 to 517,000 in 1991. B. R. Harrison. 1997. "Language integration: Results of an intergenerational analysis." *Statistical Journal of the United Nations ECE* 14: 292.
3. The growth in Aboriginal mother tongue populations is attributed to the high fertility rates of the Aboriginal population. To a lesser extent, adults relearning their mother tongue and more people reporting their Aboriginal mother tongue may also have contributed to the growth.



Aboriginal Languages	Mother Tongue Populations	Index of Continuity	Index of Ability	Average Age of Population			Status of Language**
				Knowledge	Mother Tongue	Home Language	
Total	208,610	70	117	30.4	31.0	28.3	mix of viable and endangered
Algonquian Family	146,635	70	117	30.5	30.9	28.8	mostly viable
Cree	87,555	72	117	29.9	30.2	27.9	viable large
Ojibway	25,885	55	122	34.9	36.2	34.4	viable large
Montagnais-Naskapi	9,070	94	104	25.1	25.2	24.8	viable small
Micmac	7,310	72	111	29.5	29.9	29.2	viable small
Oji – Cree	5,400	80	114	25.7	26.3	26.8	viable small
Attikamek	3,995	97	103	21.8	21.9	21.5	viable small
Blackfoot	4,145	61	135	36.4	39.7	40.6	viable small
Algonquin	2,275	58	119	29.8	30.7	31.4	viable small
Malecite	655	37	148	40.5	44.0	44.8	viable small
Algonquian*	350	40	159	47.2	52.2	46.7	uncertain
Inuktitut Family	27,780	86	109	23.9	23.9	23.3	viable large
Athapaskan Family	20,090	68	117	31.4	32.5	30.0	mostly viable
Dene	9,000	86	107	24.4	24.8	24.1	viable small
South Slave	2,620	55	124	35.6	37.8	38.4	viable small
Dogrib	2,085	72	118	28.3	29.8	30.6	viable small
Carrier	2,190	51	130	37.5	41.4	40.5	viable small
Chipewyan	1,455	44	128	39.4	40.2	40.7	viable small
Athapaskan	1,310	37	129	41.6	44.7	44.2	uncertain
Chilcotin	705	65	130	32.2	37.0	36.9	viable small
Kutchin-Gwich'in (Loucheux)	430	24	114	53.0	53.1	56.8	endangered
North Slave (Hare)	290	60	116	38.3	39.1	39.8	endangered
(Dakota)Siouan Family	4,295	67	111	31.0	31.9	28.0	viable small
Salish Family	3,200	25	132	42.0	48.7	47.2	endangered
Salish	1,850	24	130	43.0	49.7	48.5	endangered
Shuswap	745	25	134	38.7	46.3	42.9	endangered
Thompson	595	31	135	43.1	48.6	48.3	endangered
Tsimshian Family	2,460	31	132	43.2	48.0	49.6	endangered
Gitksan	1,200	39	123	41.4	45.2	45.7	viable small
Nishga	795	23	146	41.8	47.5	57.6	endangered
Tsimshian	465	24	132	50.5	55.9	52.7	endangered
Wakashan Family	1,650	27	118	47.3	51.3	51.1	endangered
Wakashan	1,070	24	129	47.7	53.0	53.2	endangered
Nootka	590	31	99	46.5	48.1	48.4	endangered
Iroquoian Family***	590	13	160	36.4	46.5	52.0	uncertain
Mohawk	350	10	184	36.6	46.1	60.5	uncertain
Iroquoian	235	13	128	35.8	47.0	41.4	uncertain
Haida Family	240	6	144	46.7	50.4	64.6	endangered
Tlingit Family	145	21	128	45.5	49.3	41.6	endangered
Kutenai Family	120	17	200	37.1	52.3	41.2	endangered
Aboriginal languages*	1,405	28	176	43.0	47.0	45.8	endangered

Note: All indicators based on single and multiple responses combined.

* Not identified elsewhere.

** The viability "status" of the individual languages is based on a classification from M. Dale Kinkade's "The Decline of Native Languages in Canada" in *Endangered Languages*, edited by R.H. Robins and E.M. Uhlenbeck., Berg Publishers Limited, 1991.

***Data for the Iroquoian family is not particularly representative due to incomplete enumeration of reserves. Other languages may also be affected by incomplete enumeration.

Source: Statistics Canada, Census of Population, 1996.

Average ages and rates of population aging do, however, vary by languages. Not only do viable languages have younger populations, but the average age of these groups rises more slowly than that of endangered groups. For example, the average age of the Inuktitut mother tongue population — young by any standard — increased only slightly from 23 to 24 years between 1981 and 1996. The rise was somewhat higher, but still relatively modest for the Cree, from 26 to 30. In comparison, the average age of the much older Kutenai mother tongue group increased from 44 in 1981 to 52 in 1996; for the Tlingit, from 47 to 58. The pattern, then, repeats: as with language erosion, population aging affects endangered languages more, thus accelerating their slide towards extinction.

Language loss most pronounced during family formation years

Examining the rate at which a specific group of people shifts from one language to another provides a way of

understanding language use and decline in relation to lifestyle changes. Language maintenance seems very much to depend on the stage of life people are going through.

Young children, for example, have not yet had time or reason to shift from their mother tongue to another language and for most of them their mother tongue is, therefore, the same as their home language. As a result, for

Loss of an Aboriginal home language is most pronounced in the working-age population, especially among women.

every 100 children who were under 5 in 1981, 91 spoke their mother tongue at home. However, in 1996, when these children were in their mid- to late teens, only 76 still used their mother tongue as their home language. While this indicates a serious loss in home language usage, the decline does not stop here.

As youth move out of the original family home, marriage, entry into the labour force, and a different, often

large, urban environment can further accelerate their language decline. Without the support of a closely knit community, and immersed in the language and culture of the dominant society, language erosion becomes difficult to resist. Indeed, the data show that language loss is most pronounced during the labour force years. While this holds for both men and women, it is particularly notable for women. Why this should be so is not clear, but contributing factors may include the fact that women are more likely than men to leave their reserves and move to other locations where the chances of marrying non-Aboriginals are higher. Indeed, the index of continuity declines from 74 for women between the ages of 20 and 24 to 45 by the time these women reach the ages of 35 to 39. Because these are the very years during which women tend to bring up young children, their shift from an Aboriginal to another home language is all the more serious for the transmission of these indigenous languages.

With the older cohorts nearing the end of their working lives and moving into their retirement years, the loss in home language is less pronounced. Their language use still declines, but more slowly than before. For example, language continuity for the cohort aged 50 to 54 in 1981 declines from a ratio of about 64 in 1981 to 61 by 1996. A similarly slow erosion occurs among the older seniors.

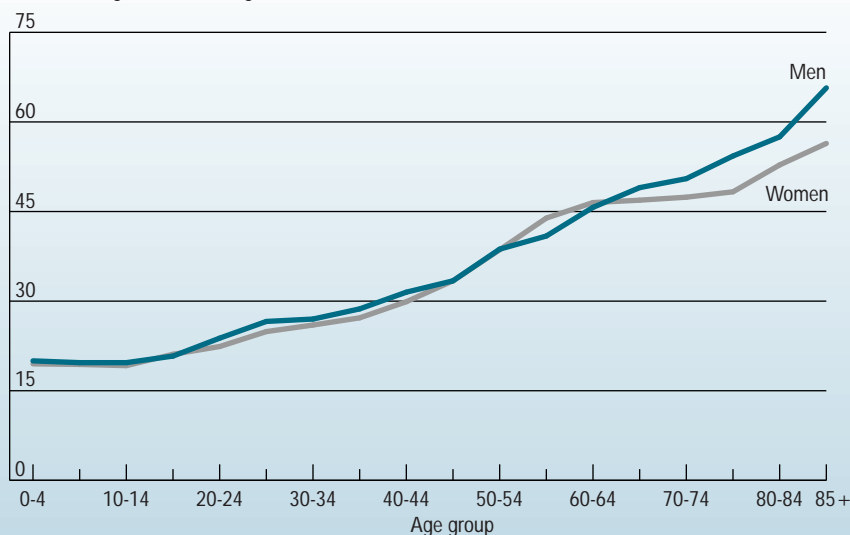
Registered Indians account for majority of Aboriginal speakers

Groups that live in remote communities or in settlements with concentrated populations of indigenous speakers appear to find it easier to retain their language. Indeed, two such groups, on-reserve Registered Indians and the Inuit, show the highest indexes of language continuity among all groups: 80 and 85, respectively.⁵ In contrast, non-status Indians and Métis,

CST

Older men were most likely to report that their mother tongue is an Aboriginal language

% with Aboriginal mother tongue



Source: Statistics Canada, Census of Population, 1996.

who tend to live off-reserve, as well as off-reserve Registered Indians, have home language-mother tongue ratios of 58, 50 and 40 respectively, pointing to a more pronounced state of language decline. Clearly, the off-reserve environment poses major threats to Aboriginal languages.

Signs of hope for endangered languages

Despite the grim prospects facing many small languages, there are some signs which give rise to hope. The Kutenai language family, for example, has the

5. However, significant variations exist between Inuit communities depending on location. While the Eastern group of dialects have high indexes of continuity, the Western groups have much lower ones.

smallest mother tongue population, one of the lowest indexes of continuity and some of the oldest populations. However, for every person with a Kutenai mother tongue, there are two people (generally younger) who are able to speak it, suggesting that younger generations may be more likely to learn Kutenai as a second language than as a mother tongue. Similar second-language patterns are showing up for other endangered languages. A growing awareness of Aboriginal cultural identity may be partly responsible for this resurgence in language.⁶

Other positive signs are also apparent. According to the 1991 Aboriginal Peoples' Survey, about 9 in 10 adults would like to relearn an Aboriginal language they once spoke. In addition, the great majority of adults who never

spoke an Aboriginal language reported that they would like to learn one.⁷

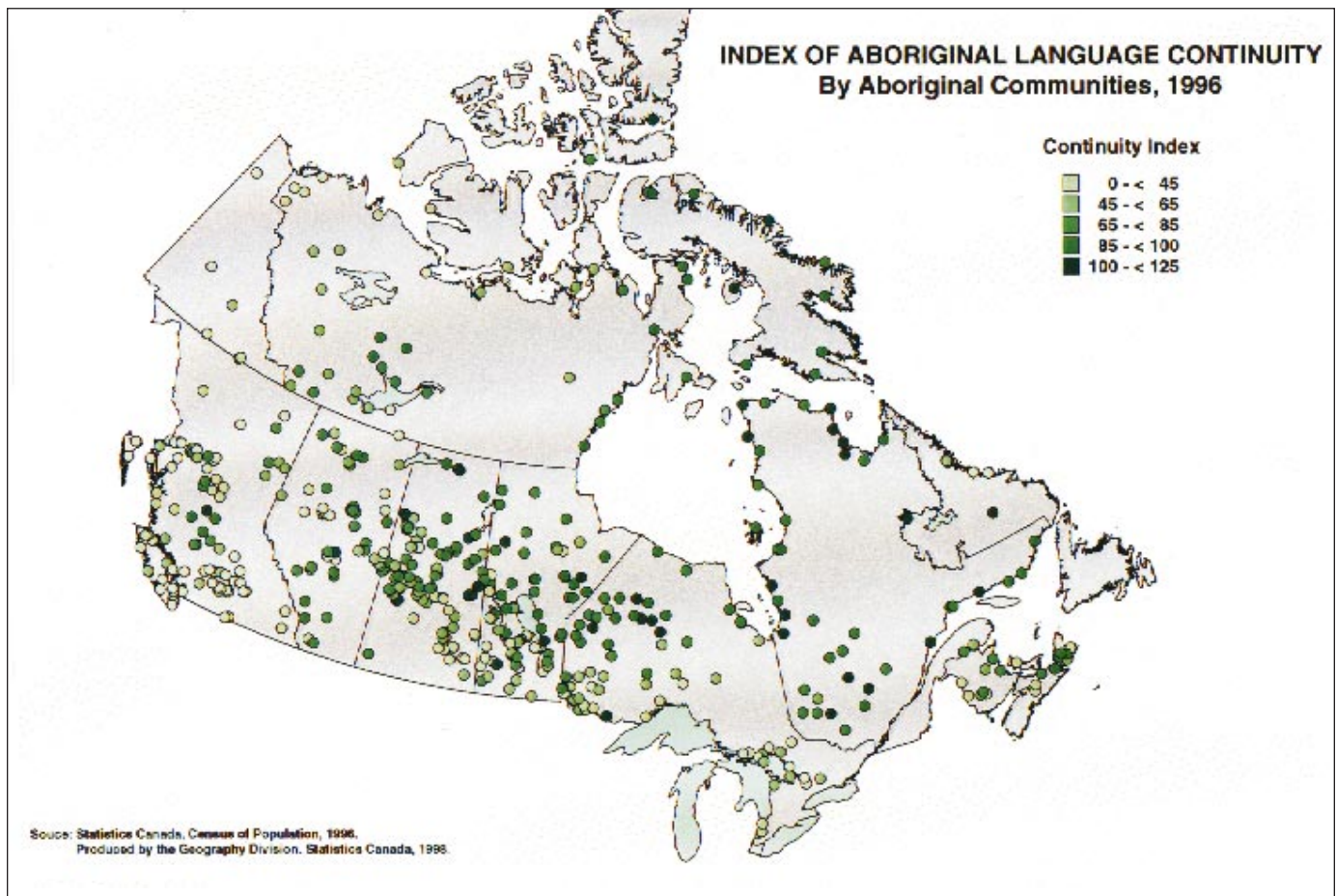
Summary

Canada's Aboriginal languages are among the most endangered in the world.⁸ Significant numbers of languages have either already disappeared or are close to extinction, and among

6. For example, the off-reserve Aboriginal Head Start Program, designed primarily for pre-schoolers, incorporates language as one of its components.

7. Ponting, J. R. 1997. *First Nations in Canada – Perspectives on Opportunity, Empowerment and Self-determination*. Toronto: McGraw-Hill Ryerson.

8. UNESCO. 1996. *Atlas of the World's Languages in Danger of Disappearing*. Edited by Stephen A. Wurm. Paris: Unesco Publishing, p. 23.



This article uses data from the 1981 to 1996 censuses as well as the 1991 Aboriginal Peoples Survey (APS). Because of changes in concepts and measures of the Aboriginal population over time, the time-series analysis from the Census is restricted to language-based data only, such that Aboriginal language data are reported for the total population.

The Aboriginal identity population includes those people who reported identifying with at least one Aboriginal group, i.e., North American Indian, Métis or Inuit in 1996. In 1991 and in previous censuses, a person's Aboriginal ethnicity was determined using the ethnic origin question based primarily on ancestry.

To ensure comparability over time, this study controlled for incomplete enumeration of reserves between 1981 and 1996, and recoding of languages in the 1986, 1991 and 1996 censuses to correspond to the 1981 classifications. Prior to 1981, detailed data on individual Aboriginal languages were not available — the only distinctions made were between Indian and Eskimo (Inuit). While the level of detail in terms of individual languages generally increased with each census, some of the smaller languages, coded separately in earlier censuses, were collapsed into broader groupings because of declining numbers.

- **Single response:** occurs when the respondent reports one language only as his or her mother tongue or home language. In this article, time series data (1981-1996) are based on single responses since multiple responses were not available until 1986.
- **Multiple response:** occurs when the respondent reports more than one language that he or she uses equally often as mother tongue or home language. Data for 1996 are based on single and multiple responses combined. Multiple responses account for 10% of mother tongue and 17% of home language responses.

those spoken today, only 3 of some 50 are viable with a large population base. Large or small, viable languages tend to have relatively young speakers, are successfully passed on between generations, and are spoken in isolated or well-organized communities. In contrast, endangered languages are characterized by small population groups, older speakers, and lower rates of language transmission.

Aboriginal elders, teachers and other leaders are well aware of the gravity of

the linguistic situation and are taking steps to preserve indigenous languages. These include such measures as language instruction programs, Aboriginal media programming, and the recording of elders' stories, songs, and accounts of history in the Aboriginal language.⁹ Perhaps as a result, the number of people who can speak and understand an Aboriginal language has been on the rise.

9. Ponting, *op.cit.*, p. 252.

The Royal Commission on Aboriginal Peoples (RCAP) has studied Aboriginal language use and retention extensively. Its recommendations aimed at saving these languages from extinction echo some of the steps taken by Aboriginal elders. In addition, RCAP also recommends granting special status to Aboriginal languages and guaranteeing their extended use in the public domain, at least within the confines of Aboriginal communities; providing formal education in the Aboriginal language; and conducting research on these languages. The Commission emphasizes that everyday language use in the home and in the community is critical for intergenerational transmission and for acquiring Aboriginal languages as a mother tongue.



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Skill Deficits Among The Young

by Sid Gilbert and Jeff Frank

Advancing technology has made adaptability a key component of success in the workplace. And while young people need the technical knowledge provided by an education to succeed in the job market, generic skills are also highly valued by employers. Some of these skills, such as literacy and numeracy, are formally taught by the education system. Others are acquired through experience and upbringing, including oral and written communication; thinking skills such as creativity, critical thinking and problem-solving; and “soft skills” such as interpersonal abilities, learning and team work.

These generic skills are maintained and improved with practice, and young people who rarely use them may face a more difficult transition from school to work. Indeed, they may also be vulnerable over the long-term, since having weaker generic abilities may make it harder to adapt to the changing requirements of the job market. This article focuses on the key factors associated with infrequent use of basic skills, and then examines the role of educational attainment in the application of these skills.

CST What you should know about this study

Conducted by Statistics Canada on behalf of Human Resources Development Canada, the 1995 School Leavers Follow-up Survey (SLF) continued an ongoing survey of young people's lives as they finish their education and enter the workforce. The first survey, the 1991 School Leavers Survey (SLS), was designed to determine high school leaving rates (“drop-out” rates), and to compare young people who had successfully completed high school (graduates) with those who were still attending (continuers) and those who had left school before graduating (leavers). The SLS collected information from almost 9,500 young people aged 18 to 20 living in private dwellings in the ten provinces.

In 1995, the SLF revisited over 6,000 of the original respondents, now aged 22 to 24, to focus on school-to-work transitions of young adults by gathering information on education and work activities beyond high school. This article examines the generic skills respondents possessed, as measured by the frequency with which they performed these skills activities. Although this measure of skill use should not be interpreted as a direct indicator of proficiency, it is assumed that a skill performed frequently is less likely to be lost. Nevertheless, people may not use some of their skills because of the nature of their work, schooling or personal circumstances.

Skill sets: Skills were grouped into six categories, or sets: reading, writing, numeracy, communication, learning, and group or team work.

Skill use: Respondents were asked about the frequency with which they used the six basic skill sets during the 12 months preceding the survey. There was no restriction on the context in which these skills may have been used, allowing respondents to include activities at work, at school or in their personal life. For each of the six skill sets, respondents were asked four questions about the frequency with which they performed various skill-related activities. Responses ranged from never (least frequent) to more than three times a week (most frequent).

Self-assessment of ability: Respondents were asked to rate their abilities for each of the six skill activities on a scale of one to ten, that is, from very basic to very advanced.

Odds ratios: In this article odds ratios are used to assess whether, all other things being equal, people with a specific characteristic (say, employed) are more or less likely to report infrequent use of skills than a benchmark group of people (say, unemployed). An odds ratio close to 1.0 means there is little or no difference in skill use between the groups, but an odds ratio of 0.5 means the odds of low skill use are only half as high for the comparison group as for the benchmark group.

What factors are associated with having insufficient skills?

Who is most likely to have a low level of skill use? Using a statistical technique called odds ratios, which examines the relationship between frequency of skill use and some key socio-economic characteristics, six skill sets were analyzed: reading, writing, numeracy, verbal communication, learning, and group or team work.

Three factors — education, employment and student status — were consistently related to the low use of all six skill sets. For example, infrequent use of skills was associated with relatively low levels of education. In contrast, having a job or attending college or university decreased the odds of reporting low skill use. These findings suggest that without appropriate environments conducive to using

their skills, some young people risk losing the generic skills they already have, or may fail to develop new ones.

Even though women are widely believed to have better developed “soft skills,” the analysis shows that after controlling for selected factors gender did not play an important role in low skill use. For instance, men are no more likely than women to report that they rarely read or use verbal

CST Odds of rarely using basic skills are much higher for high school leavers						
Never or seldom used skills						
	Reading	Writing	Numeracy	Verbal communication	Learning	Team work
Education						
School leaver	1.9	2.7	1.4	2.3	1.4	1.7
<i>Not school leaver</i>	<i>1.0</i>	<i>1.0</i>	<i>1.0</i>	<i>1.0</i>	<i>1.0</i>	<i>1.0</i>
Employment status						
Employed	1.1*	1.1*	0.7	0.6	0.8	0.6
<i>Not employed</i>	<i>1.0</i>	<i>1.0</i>	<i>1.0</i>	<i>1.0</i>	<i>1.0</i>	<i>1.0</i>
Student status						
Postsecondary student	0.4	0.4	0.8	0.8	0.7	0.8
<i>Not postsecondary student</i>	<i>1.0</i>	<i>1.0</i>	<i>1.0</i>	<i>1.0</i>	<i>1.0</i>	<i>1.0</i>
Gender						
Male	1.0*	1.3	0.4	1.0*	0.8	0.7
<i>Female</i>	<i>1.0</i>	<i>1.0</i>	<i>1.0</i>	<i>1.0</i>	<i>1.0</i>	<i>1.0</i>
Family structure						
Lone parent	1.0*	1.1*	1.0*	1.2	0.9	1.1
<i>Two parents</i>	<i>1.0</i>	<i>1.0</i>	<i>1.0</i>	<i>1.0</i>	<i>1.0</i>	<i>1.0</i>
Socio-economic status¹						
Lower	1.3	1.4	1.0*	1.2	1.1*	1.1*
<i>Higher</i>	<i>1.0</i>	<i>1.0</i>	<i>1.0</i>	<i>1.0</i>	<i>1.0</i>	<i>1.0</i>

Note: Benchmark group shown in italics. An odds ratio of close to 1.0 for the comparison group means there is little or no difference in skill use between the comparison and the benchmark groups, when the effects of other factors shown in the table are controlled for.

* Not statistically significant.

1. Measured using mother's level of education as a proxy.

Source: Statistics Canada, School Leavers Follow-up Survey, 1995.

communication. On the other hand, they are considerably less likely than women to demonstrate low use of numeracy and teamwork skills.

Not unexpectedly, being a school leaver (not completed high school) was associated with low skill use, most notably in the areas of writing, reading and verbal communication. What seems more surprising, given conventional wisdom, is that after controlling for other factors, there were only very modest positive relationships between low skill use and living in a lone-parent family or a family with lower socio-economic status.

But how important was education?

The odds-ratio analysis shows that education is by far the most important predictor of a young person's skill use, but different patterns exist at different levels of education. Infrequent skill use was quite common among high school leavers, ranging from 55% for team work to 88% for verbal communication. As might be expected, high

Low skill use is only modestly associated with living in a lone-parent family, or in a family with lower socio-economic status.

school graduates had higher levels of skill use than school leavers. Even among these young people, though, skills were not used frequently: the proportion of graduates who never or seldom used skills ranged from 37% for reading to 73% for verbal communication skills. Interestingly, the skill-use patterns of graduates with high school only more closely resembled those of leavers than of graduates who went on to further education.

How do youth rate their skills?

When asked to rate their skills, there was some noticeable dissonance between self-assessment and frequency of skill use, especially among

CST Literacy skills "mismatch" in the Canadian workplace

According to the 1994 International Adult Literacy Survey (IALS), about three-quarters of Canadian workers report there is a reasonable fit between their job requirements and their literacy skills (reading, writing and numeracy). Nevertheless, a significant number of people are a literacy "mismatch" with the work they do: one in five had higher level skills than were demanded by their job (literacy surplus), and as many as one in ten had insufficient skills to do their jobs adequately (literacy deficit).

Certain groups of workers are more likely to have a literacy surplus. Since the level of literacy among young Canadians is high, and yet many have difficulty finding satisfactory employment, it was not surprising that 16- to 24-year-olds were most likely (33%) to have a literacy surplus.

Among other factors, the extent of a worker's interaction with co-workers seems to influence literacy fit. Workers with limited or no supervisory responsibilities, the self-employed and those who worked part-time or in temporary jobs were more likely to find that their literacy skills were under-used. Jobs with these characteristics are often held by young people.

Having high literacy skills and not using them could have serious long-term consequences not only for individuals, but also for the overall level of human capital in the Canadian labour force. Analysis of the IALS data provides some support for the "use it or lose it" hypothesis, showing that under-using literacy skills in the workplace has a negative, if small, effect on literacy.

- For more information, see Harvey Krahn, and Graham Lowe, *Literacy Utilization in Canadian Workplaces*. Human Resources Development Canada, National Literacy Secretariat and Statistics Canada. Catalogue no. 89-552-MPE.

	Never or seldom used skills					
	Reading	Writing	Numeracy	Verbal communication	Learning	Team work
	%					
High school leavers	58	82	58	88	64	55
High school graduates	37	58	51	73	55	41
no post-secondary education	56	77	58	80	61	48
with some postsecondary	41	65	51	75	58	43
with university degree	24	37	47	61	53	31
with other postsecondary completion	42	63	49	74	54	39
Postsecondary students	21	41	47	70	50	40

Source: Statistics Canada, School Leavers Follow-up Survey, 1995.

those with less education. The self-assessments were more positive than the frequency of skill use would indicate. Also, high school graduates with no further education were less likely than leavers to rate their skills as low, even though their skill use patterns were quite similar. University graduates and postsecondary students were least likely to view their skills as being only basic.

Summary

Young people were most likely to use basic skills infrequently if they had less than high school completion. They were also more likely to rate their abilities as low-level. These findings suggest that in an increasingly well-educated society, which demands a wide array of formal and informal skills, young people without postsecondary training face, and know they face, a difficult transition from school to work.

In contrast, young people with postsecondary qualifications assessed their abilities highly, even though their use of basic skills was lower than might

be expected. This may indicate that although they possess the necessary skills, they are not yet employed in jobs that require them to exercise their abilities to the fullest extent. In other words, people in their 20s are still very much in the midst of maturing from students into workers.

- This article is adapted from *High School May Not Be Enough: An Analysis of Results from the School Leavers Follow-up Survey*, 1995. Human Resources Development Canada, Catalogue No. SP-105-05-98E and Statistics Canada, Catalogue No. 81-585-XPE.



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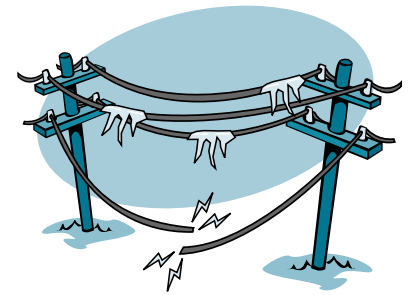
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Ice Storm '98 !

by François Soulard, Doug Trant, Joe Filoso
and Peter Van Wesenbeeck



From January 4 to 10, 1998, three successive storm fronts dropped as much as 100 millimetres of freezing rain on central and eastern Canada. At the height of the storm, the area covered by freezing precipitation stretched from Kitchener and Muskoka in southern Ontario to the Eastern Townships of Quebec and to the Fundy coasts of New Brunswick and Nova Scotia. In the United States, the storm hit parts of New England and northern New York state. This study concentrates on Canada's St. Lawrence River Valley where total precipitation exceeded 73 mm in Kingston, Ontario, 85 mm in Ottawa and 100 mm in areas south of Montreal. By comparison, the largest previously recorded ice storms left some 30 to 40 mm of ice.¹



DEALING WITH THE STORM

- Over 18% of Canada's population, including 56% of Quebec's and 11% of Ontario's, were affected by the storm. More than one in ten Quebecers (11%) were subjected to precipitation exceeding 80 mm.
- Over 1,000 power transmission towers were toppled and more than 30,000 wooden utility poles were brought down.
- At the height of the storm, close to 1.4 million customers in Quebec and over 230,000 in Ontario were left without electricity.²
- More than 2.6 million people (19% of Canada's labour force) either had difficulty getting to work or were not able to get there at all. About 135,000 of these workers lived in municipalities where power was not fully restored for at least a week.
- Approximately 100,000 people had to take refuge in shelters.
- Nearly 16,000 Armed Forces personnel (almost 11,000 in Quebec and 5,000 in Ontario) assisted with emergency measures and the restoration of the power grid, the largest peace-time deployment of Canadian troops ever.

In comparison, 8,700 Canadian soldiers participated in the Red River flood relief effort in Manitoba in 1997, and about 450 in the Saguenay flood relief operation in Quebec in 1996.

- Soldiers teamed up with workers from 14 utility companies from six provinces and eight American states.
- The Canadian Red Cross Ice Storm relief fund had raised over \$10 million by mid-February 1998.³

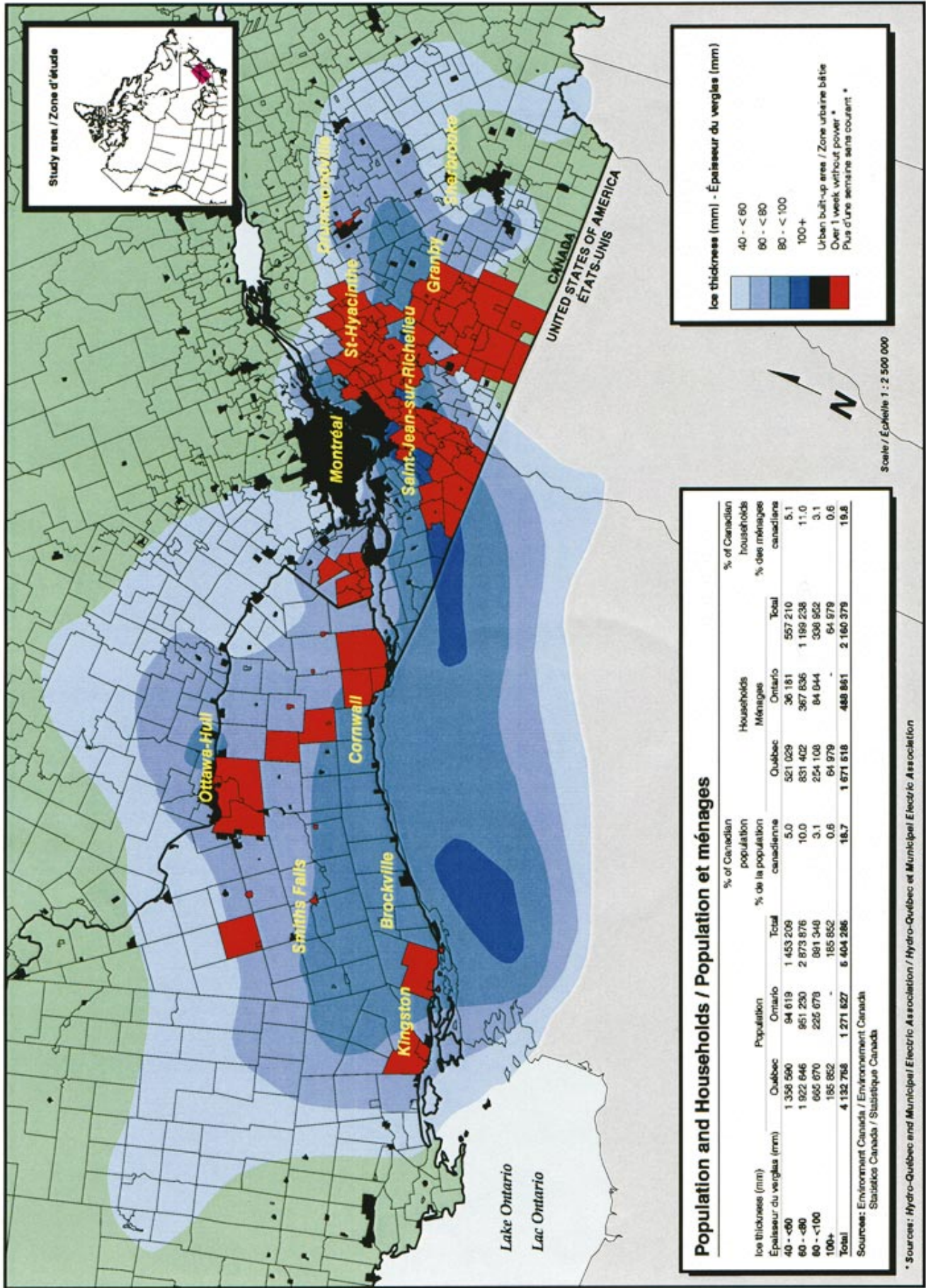
The map, **Population and Power Failure**, uses census sub-division boundaries and population figures from the 1996 Census. The legend displays the hierarchical classification scheme: the colour red (over 1 week without power) overlays the colour black (urban areas), which in turn overlays the ice-thickness (in shades of blue).

Environment Canada's Atmospheric Environment Service provided the preliminary ice accumulation map, last updated March 4, 1998.

1. In December 1986 in Ottawa and February 1961 in Montreal. David Phillips. Atmospheric Environment Service of Environment Canada. The Worst Storm in Canadian History? http://www.tor.ec.gc.ca/events/icestorm98/icestorm98_the_worst_e.html.

2. *Canadian Geographic*, March/April 1998, pp. 36-37; David Phillips, *loc. cit.*

3. Compare with \$30 million collected for victims of the Saguenay floods, and \$22 million collected for people affected in the Red River floods. <http://www.redcross.ca>; *CP/Edmonton Journal*, March 17, 1998.





THE AFTERMATH

- Fifty-seven percent of urban areas in Quebec and 15% in Ontario, accounting for 19% of Canada's total urban space, were subjected to the storm.
- Over one-third (36%) of cropland in Quebec and almost one-quarter (22%) in Ontario were located in the 40 mm accumulation zone. In the worst-hit areas, the ice storm has translated into substantial losses for most farmers.
- Almost 5 million sugar maple taps in Quebec (23% of the total) and 285,000 (25%) in Ontario were located in the affected areas. (Quebec's maple syrup producers account for 70% of the world supply.) The Ontario Maple Syrup Producers Association estimates that it could take 30 to 40 years before production in eastern Ontario is back to normal.
- Nearly one-quarter of all dairy cows (274,000) were located in the affected areas, the majority in Quebec. Dairy farms are thoroughly dependent on mechanized milking, and cows that are not milked regularly become vulnerable to mastitis, an infection of the udder. Dairy cows that survived the power outages may never attain their pre-storm level of productivity.
- Milk processing plants were shut down and over 10 million litres of milk had to be dumped. However, 1.5 million litres were processed in American facilities and returned to Canada for consumption.

- Close to one-third of the 0.7% drop in Gross Domestic Product (from December 1997 to January 1998) was due to downturns in the electric power and construction industries. Some manufacturers benefited directly from the storm, including makers of telephone poles, batteries and specialized electrical equipment.⁴
- As of June 1998, over 600,000 insurance claims totalling over \$1 billion had been filed by Canadian households and businesses.⁵

For more information, see *The St. Lawrence River Valley 1998 Ice Storm: Maps and Facts*, at <http://www.statcan.ca/cgi-bin/downpub/freepub.cgi>.



François Soulard, Doug Trant, Joe Filoso and Peter Van Wesenbeeck are analysts with the Environment Statistics Program, Statistics Canada.

4. According to The Conference Board of Canada, the Ice storm resulted in a short-term loss of \$1.6 billion for Canada's economic output, of which \$1.4 billion originated in Quebec and \$200 million in Ontario. Economic losses for Montreal and Ottawa were estimated at \$585 million and \$114 million respectively. The Conference Board of Canada, *Economic Impact of the 1998 Ice Storm*.
5. Kovacs, P. *Now is the Winter of Our Discontent. Perspective*. Insurance Bureau of Canada: 4.2. June 1998.

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Paying Off Student Loans

by Warren Clark

Many students expect that postsecondary education will result in better employment and higher earnings. However, to acquire this education, students must find the necessary financial resources. In Canada, paying for postsecondary education has always been a responsibility shared by society through tax dollars, and by parents and children through personal savings. Since 1980, tuition fees have grown by 115%, while average family income has risen by only 1% (after adjusting for inflation). The result is increased pressure on families to find ways to pay for postsecondary education. Government student loans provide one way for young people to invest in their future.

Although student loans provide essential financial help for many, they are not without risk. Much concern has been expressed about student debt levels and whether the growing dependence on loans is creating serious problems for borrowers and for society. Are students defaulting on loans, particularly if they are unable to find well-paying jobs after graduation? Do prospects of heavy debt discourage some students from enrolling in postsecondary programs or cause them to drop out before they reach their educational goals? Another concern is how a high debt load may affect students' post-graduation plans. Do they modify future educational plans, or decisions about buying a home or a car, or starting a family.¹ Using data from the National Graduates Survey of 1995 Graduates (NGS), this article examines the extent of indebtedness, the repayment record and the impact of high debt on postsecondary graduates who used government loans to help finance their studies.

Employment earnings and student loans are primary sources of funding

When asked how they had financed their education, both college and bachelor's graduates most frequently identified

1. Choy, Susan P., Sonya Geis and C. Dennis Carroll. 1997. Early Labor Force Experiences and Debt Burden. National Center for Education Statistics, Report 97-286, Washington, D.C.

CST What you should know about this study

During the summer of 1997, Statistics Canada, in partnership with Human Resources Development Canada (HRDC), interviewed nearly 43,000 people in the National Graduates Survey of 1995 Graduates (NGS). This sample represented over 295,000 Canadian residents who had graduated from trade/vocational, college and university programs during 1995. The survey focussed on the education, training and labour market experiences of these graduates during the two years immediately following graduation. Graduates were also asked about how they financed their education, the extent of any student loans, scholarships, bursaries and if they had difficulties repaying their student loans. In addition, the survey asked about how much graduates owed to government student loan programs at graduation in 1995, and at the time of the interview in June 1997. Graduates were also asked about the amount they owed to other sources.

The results presented in this article are for college graduates (community college and similar institutions) and for graduates of bachelor's degree programs. Undergraduate certificates and diplomas, and first professional degrees (e.g., medicine, dentistry, veterinary medicine and law) are excluded from the bachelor's degree group.

employment earnings (59% college, 69% bachelor's) and student loan programs (41% college, 42% bachelor's) as primary sources of funds. Parents ranked a close third for bachelor's graduates. Scholarships, fellowships, prizes, grants and bursaries were rarely identified as a significant source of funding.²

Students from families with lower parental education more likely to borrow

Government student loan programs were designed to allow students of limited financial means to acquire postsecondary education. Student loan eligibility is assessed based on students' living arrangements, education and living costs, and the financial resources available to the student, including parental income and contributions. Using parents' education as a

1995 grads owed between 130% and 140% more to student loan programs than 1982 graduates.

proxy for socioeconomic well-being (since parental income is not available from the NGS), it is clear that graduates whose father had not completed high school were more likely to use government student loans than those whose father had a university degree. However, while the use of student loans decreased with parental education, the use of other types of loans (personal loans, loans from relatives, credit cards) increased.

Compared with the class of 1982, college and bachelor's graduates from the class of 1995 owed between 130% and 140% more to government student loan programs at graduation (after adjusting for inflation). On average, the 1995 graduates owed \$9,600 (college) and \$13,300 (bachelor's) when they graduated.

Averages, however, don't tell the complete story. While some borrowers (7% of college and 22% of bachelor's) owed more than \$20,000 at graduation, others (21% of college and 14% of bachelor's) owed less than \$5,000. With these widely varying amounts, graduates face different pressures to find a good job and begin repayments.

2. Scholarships, fellowships, awards and prizes were a much more common way of financing education among first professional (14%), master's (23%) and doctoral (59%) graduates.

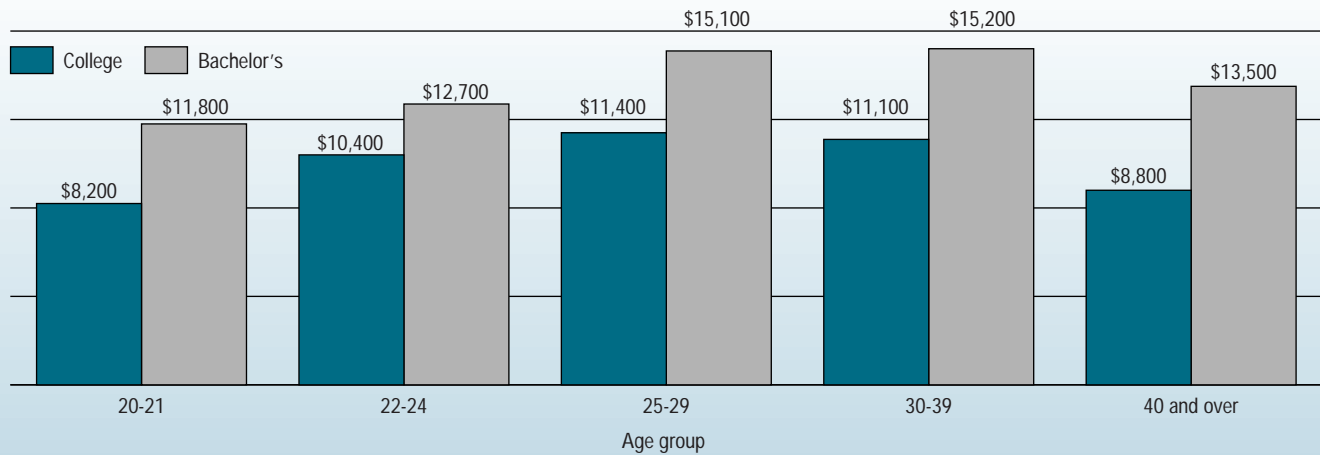
Education of father ¹	College		Bachelor's	
	% who borrowed from student loans programs	Average amount owed to student loan programs at graduation (\$)	% who borrowed from student loans programs	Average amount owed to student loan programs at graduation (\$)
Total	46	9,600	50	13,300
Less than high school	48	9,600	56	14,600
Completed high school	44	10,000	54	13,500
Some postsecondary	49	9,600	52	13,000
Trade/vocational certificate or diploma	48	9,000	55	12,900
College certificate or diploma	49	8,700	54	12,400
Bachelor's degree	40	9,300	44	12,100
First professional	44 ²	10,300 ²	34	13,300
Master's or doctoral degree	38	--	43	11,500
Not reported	53	9,200	48	16,700

-- Amount too small to be expressed.

1. A similar relationship exists between loan use and mother's education.

2. High sampling variability.

Source: Statistics Canada, National Graduates Survey, 1997.



Source: Statistics Canada, National Graduates Survey, 1997.

The class of 1995 is taking longer to repay student loans

	Year of graduation			
	1982	1986	1990	1995
Average amount owed at graduation (1995 \$)				
College	4,000	6,200	6,700	9,600
Bachelor's	5,800	9,000	9,700	13,300
First professional	9,500	13,700	14,600	21,100
Master's	6,700	8,500	10,000	13,700
Doctorate	5,400	6,900	9,500	12,900
Average amount owed two years after graduation (1997 \$)				
College	--	3,400	4,400	7,700
Bachelor's	--	5,400	7,100	11,000
First professional	--	8,000	10,800	16,600
Master's	--	4,600	6,700	10,000
Doctorate	--	2,700	4,700	7,800
Average reduction in loans between graduation and two years later (%)				
College	--	45	35	19
Bachelor's	--	40	27	17
First professional	--	42	26	21
Master's	--	45	33	27
Doctorate	--	60	50	39

-- Amount too small to be expressed.

Source: Statistics Canada, National Graduates Survey.

Age of graduates also appears to influence borrowing patterns. For example, graduates aged 25 to 29 were more likely to borrow and owed larger amounts than others. While younger graduates may rely on their parents for financial help, many of those over age 30 had a career prior to entry into the program and studied part-time. With help from parents and income from a steady job, both younger and older graduates relied less on government student loans to finance their education.

Class of 1995 slower at repaying student loans

Borrowers are not required to begin repaying their student loans if they continue studying full-time after they graduate. Although not necessarily full-time, 31% of college and 45% of bachelor's graduates were back in school after their "first" graduation in 1995. It is therefore not surprising that as of June 1997, 17% of college and 23% of bachelor's borrowers were not making payments on their loans. In fact, 11% of college and 16% of bachelor's borrowers owed more two years later than they had at graduation.

Other borrowers don't make payments because they are having financial

difficulty. On average, 1995 college and bachelor's graduates had repaid less in the two years after graduation than had the class of 1990. While 1995 college graduates had repaid only 19% of their loans by 1997, 1990 college graduates had paid off 35% by 1992. Similarly, 1995 bachelor's grads repaid 17% compared with 27% paid off by their 1990 counterparts. This means that 1995 graduates will probably repay their loans over a longer period than previous borrowers. Several reasons may underlie the slower rate of repayment: pursuing further studies after graduation; inability to find a well-paying job; or lower interest rates which may encourage people to pay off their loans more slowly.

Will 1995 graduates pay off their student loans?

Although the debt burden of graduates has increased substantially, about 41% of college and 32% of bachelor's graduates had either already paid off their loans or expected

to pay them off before 2001. However, about another 40% did not know when their loans would be repaid in full.

In fact during the two years following graduation, one-sixth of 1995 college and bachelor's borrowers indicated they were already having difficulty making payments on their government student loans. Only about one-third of these borrowers received assistance from government or other lenders, such as the federal government's Interest Relief Program. This program suspends principal payments and assumes graduates' interest payments when their income falls below a specified threshold. As a last resort, graduates may default on their loans. Indeed, some 4% of 1995 borrowers had defaulted by 1997.

The two most significant factors contributing to loan repayment difficulties were the size of the loan and income after graduation. For example, only 8% of bachelor's graduates with a loan of less than \$2,000 had difficulty

CST Canada Student Loans Program

Human Resources Development Canada estimated that in 1996, the typical living costs for an eight-month college or university program were between \$10,000 and \$13,000 for students living away from home, and between \$3,400 and \$6,400 for students living at home with their parents. Based on these estimates, the cost of a four-year program can exceed \$50,000 for someone living away from home and \$25,000 for a student living at home.¹

The Canada Student Loans Program (CSLP) allows eligible Canadian citizens and permanent residents to finance their postsecondary education with government-sponsored loans.² Full-time students in a program lasting at least 12 weeks may qualify for a loan based on the costs of their program and on the financial resources available to them. For 1997-98, the CSLP provided funding to meet 60% of a student's assessed need for the period of enrolment (up to a maximum of \$165 per week). Part-time students may also qualify for a loan if their family income is below a specified threshold (based on the number of people in the family). The CSLP can be supplemented with provincial student loan programs.

The 1998 federal budget introduced several improvements to the Canada Student Loans Program. Under the CSLP, the government pays interest on the loan while the borrower is in school. Interest accrues after graduation, but payments are not required for six months; after this grace period,

the borrower is responsible for paying off the loan, usually over the next 9 1/2 years. For those facing financial difficulties, the federal government may pay the interest for a maximum of 30 months after the borrower has left school (extended from 18 months); also during this time, the borrower need not make payments on the principal.

The 1998 budget also introduced a 17% federal tax credit on the interest portion of payments for both federal and provincial student loans. Income thresholds for interest relief were raised, and in 1999, partial interest relief will be available for those with higher incomes. For borrowers who have used all of their interest relief, the loan repayment schedule may be extended to 15 years and interest relief to 54 months. For those who still have financial difficulty at least five years after their studies, the government may reduce the loan principal if payments exceed a certain percentage of income.³

1. Human Resources Development Canada. "The costs of post-secondary education." http://www.hrdc-drhc.gc.ca/student_loans/engraph/content/cost.html.

2. Quebec and the Northwest Territories operate their own student assistance plans and receive other payments from the federal government.

3. Finance Canada. "Budget 1998 – Building Canada for the 21st Century – The Canadian Opportunities Strategy: Helping Manage Student Debt." Ottawa. <http://www.fin.gc.ca/budget98/pamphe/studpae.html>.

repaying, compared with 34% of those with loans of \$30,000 or more. Similarly, those with incomes below \$30,000 had nearly three times as much difficulty repaying their loan as graduates with incomes over \$50,000 (21% versus 8%).

Stable employment also played a significant role in repaying loans. Not surprisingly, those with longer term jobs were less likely to find making repayments difficult. While 19% of those who had been in their job for less than six months as of June 1997 had difficulty repaying, this was true for only 12% of those who had held their job for two or three years. However, bachelor's borrowers who had job tenure beyond three years were equally likely to have loan repayment difficulties as borrowers with less than 6 months in the same job (19%). Not surprisingly, unemployed borrowers had

more difficulty repaying their student loans than those working full-time; one-quarter of unemployed borrowers versus one-sixth of borrowers working full-time had difficulty repaying.

Women university graduates had more trouble repaying student loans

Women were more likely than men to experience difficulties repaying their loans. At the bachelor's level, 20% of women experienced difficulties compared with 15% of men. This discrepancy may be due to the fact that women borrowed, on average, about \$1,000 more than men and that their incomes were approximately \$3,700 less than men's in 1996. In contrast, women and men who graduated from college experienced only marginal differences in repayment difficulties.

Difficulty in repaying loans varied from province to province. In New Brunswick and Newfoundland, 23% of bachelor's graduates reported having trouble paying down their loans. In contrast, bachelor's graduates from Quebec, where undergraduate tuition fees were the lowest in the country, were least likely to report difficulties (14%). Quebec graduates also had one of the lowest debt levels at graduation (\$11,600 in student loans) while those in Saskatchewan had the highest (\$16,200).

Summary

The class of 1995 borrowed more from student loan programs than any group of graduates in the previous 15 years. Because their earnings did not keep pace with these increasingly large loans, many graduates experienced repayment difficulties. Within two years of graduation, one in 20 borrowers ended up defaulting on their loan. Yet for every member of the class of 1995 who had defaulted, there were five or six who had repaid their loan within two years of graduation.

CST Student loans in the United States

As in Canada, tuition in the United States has increased much more quickly than family incomes. Between 1980-81 and 1995-96, tuition fees climbed by more than 90%, while family incomes grew only 9% after accounting for inflation.¹ In 1995-96, 60% of graduates in American bachelor's programs had borrowed an average \$18,200 (Canadian dollars)² to finance their education. Among associate degree recipients (similar to Canadian community college graduates), 42% had borrowed an average of \$6,900 (Canadian dollars).³

In addition to student loans, about 10% of parents of graduates in 1995-96 borrowed from the U.S. Department of Education's PLUS program to help finance their children's education. Another study conducted by the University of Michigan indicated that 21% of borrowers using home equity lines of credit used some or all of those loans to finance education compared with 7% of borrowers using traditional equity loans.

1. The College Board. 1997. *Trends in Student Aid: 1987 to 1997*, Washington, D.C.
2. Canadian dollars were calculated based on the May 1996 exchange rate of \$1.369 CDN = \$1 U.S.
3. United States General Accounting Office. "Students have increased borrowing and working to help pay higher tuition fees." Washington, D.C., GAO/HEHS-98-63, p.6.

CST

Warren Clark is an analyst with *Canadian Social Trends*.

S O C I A L I N D I C A T O R S

	1990	1991	1992	1993	1994	1995	1996	1997	1998
POPULATION									
<i>Total population (July 1)</i>	27,790,590	28,120,065	28,542,210	28,946,770	29,255,600	29,617,450	29,969,210	30,286,600	-
Age 0-17	6,895,450	6,968,880	7,039,275	7,095,740	7,132,750	7,169,335	7,198,080	7,216,280	-
Age 18-64	17,778,180	17,940,170	18,201,870	18,461,905	18,650,630	18,889,955	19,127,410	19,344,485	-
Age 65 and over	3,116,965	3,211,015	3,301,070	3,389,120	3,472,220	3,558,160	3,643,715	3,725,835	-
Child dependency ratio (0-17)	0.388	0.388	0.387	0.384	0.382	0.380	0.376	0.373	-
Aged dependency ratio (65+)	0.175	0.179	0.181	0.184	0.186	0.188	0.190	0.193	-
<i>Population rates (per 1,000)</i>									
Total growth	13.9	13.2	14.1	12.3	12.3	11.9	10.7	-	-
Birth	14.6	14.3	14.0	13.4	13.2	12.8	12.2	-	-
Death	6.9	7.0	6.9	7.1	7.1	7.1	7.1	-	-
Natural increase	7.7	7.4	7.1	6.3	6.1	5.6	5.0	-	-
Immigration	7.7	8.2	8.9	8.8	7.7	7.2	7.5	7.1	-
Emigration	1.4	1.7	1.6	1.5	1.6	1.6	1.6	-	-
Interprovincial migration	12.0	11.2	10.8	9.8	9.8	9.7	10.5	-	-
Marriage	6.8	6.1	5.8	5.5	5.5	5.4	5.2	-	-
<i>Percent growth in largest Census Metropolitan Areas (to July 1)</i>									
Toronto	1.6	0.9	2.0	2.0	1.4	2.1	2.3	1.5	-
Montreal	0.9	0.6	1.2	1.2	0.6	0.8	0.7	0.8	-
Vancouver	2.5	2.2	2.6	2.6	2.6	3.0	3.2	1.9	-
HEALTH									
Total fertility per women	1.66	1.70	1.69	1.69	1.65	1.64	1.59	-	-
Teenage pregnancy	45,639	45,553	46,221	46,376	47,376	45,044	-	-	-
Rate per 1,000 women 10-19	24.4	24.3	24.5	24.3	24.6	23.1	-	-	-
% of low birth-weight babies	5.4	5.5	5.5	5.7	5.8	5.9	5.9	-	-
Infant mortality (per 1,000 live births)	6.8	6.4	6.1	6.3	6.3	6.1	5.6	-	-
<i>Life expectancy (years)</i>									
Men	-	74.6	74.8	74.9	75.1	75.4	75.7	-	-
Women	-	81.0	81.0	81.0	81.1	81.3	81.4	-	-
<i>Leading causes of death for men (per 100,000 persons)*</i>									
Cancer	246.6	247.5	244.0	241.0	239.0	234.9	231.3	-	-
Lung	79.6	78.8	77.3	77.3	74.7	72.1	71.5	-	-
Colorectal	25.7	25.1	25.9	24.5	24.7	24.7	24.0	-	-
Prostate	30.1	31.2	30.9	30.8	30.3	30.3	30.9	-	-
Heart diseases	269.1	263.7	256.8	255.9	244.8	239.2	232.5	-	-
Cerebrovascular diseases	58.2	55.8	54.3	56.2	54.3	53.6	51.1	-	-
External causes**	69.1	68.7	66.9	67.4	64.9	65.0	63.0	-	-
<i>Leading causes of death for women (per 100,000 persons)*</i>									
Cancer	153.1	153.7	152.7	154.0	153.9	150.4	153.0	-	-
Lung	27.6	29.6	29.6	31.6	31.7	31.1	33.3	-	-
Colorectal	17.7	16.8	16.6	16.5	15.9	16.0	15.5	-	-
Breast	31.3	30.1	30.4	29.2	29.8	28.4	28.6	-	-
Heart diseases	150.1	147.6	140.8	140.4	137.9	134.9	131.7	-	-
Cerebrovascular diseases	46.8	46.3	46.1	47.3	45.2	44.0	43.1	-	-
External causes**	26.5	26.5	25.7	26.6	25.0	25.4	25.1	-	-

- Data not available.

* Age-standardized to 1991 population.

** Includes events such as suicide, poisoning, and motor vehicle and other types of accidents.

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Lesson plan for “Paying Off Student Loans”

Objectives

- To help students plan financing postsecondary education.
- To understand how loan repayments work.

Method

1. Acquiring postsecondary education involves many costs, not just tuition expenses. Have the students discuss what expenses they may incur while attending a university or college during an 8-month study period.
2. Have the students build a spreadsheet, listing the categories of expenses in the left hand column. In the second column estimate the costs they might incur in each expense category if they were to live at home while attending university or college. In the third column estimate what these costs would be if they lived away from home. Add up these columns to estimate the total costs of an 8-month study period.
Various sources can be used to estimate expenses. Your local newspaper may have ads for student rooms or apartments for rent, many universities have web sites indicating tuition fees, residence fees and meal plan costs, or the school library or guidance office may have university or college calendars indicating the costs of attending their institution. Parents may help students estimate the cost of food.
3. Now, have the students estimate the resources they have available to pay for their education, e.g., savings from summer jobs, earnings from part-time jobs while studying or parental support. Itemize the sources of income and their amounts in another part of the spreadsheet.
4. Calculate the difference between total expenses and total resources available for education. If costs exceed resources, the student may need to reassess the costs, or find additional sources of financial aid. Estimate how much the student may need to borrow over the duration of the educational program. The Canada Student Loans Program and provincial student loans programs may provide funding. Check out Human Resources Development Canada's web site to find the terms and conditions of eligibility for Canada Student Loans.
5. After completing studies, students must begin repaying government student loans before the end of the 7th month after graduation. Canada Student Loans carries a maximum fixed interest rate of the prime rate + 5% or a maximum floating rate of the prime rate + 2½%. Provincial student loans have different interest rates varying from province to province. Calculate monthly payments if the interest rate was the prime rate + 2½% and loans were repaid over a 5-year period. Recalculate monthly payments with a 10-year repayment period. (The prime interest rate can be found in your daily newspaper). The following formula can be used or students may wish to refer to loan calculators available at many financial institutions' web sites.

$$\text{Monthly Payment } M = \frac{P \cdot J}{1 - (1 + J)^{-N}}$$

where P = principal

N = number of months over which the loan is amortized

J = monthly interest rate in decimal form (i.e., $I/(12 \cdot 100)$). For example, an annual interest rate of $I = 10\%$ means that $J = 10/1200 = 0.0083333$.

EXAMPLE OF CALCULATING MONTHLY LOAN REPAYMENTS

What would the monthly payments be to repay a loan of \$30,000 at 10% interest over 15 years.

Student loan principal P = \$30,000

Annual interest rate I = 10%

Repayment period = 15 years. Number of repayment periods N = 15 years * 12 months = 180.

Monthly payments M = $\frac{30000 \cdot 0.0083333}{1 - (1 + 0.0083333)^{-180}} = \322.38

Over 15 years, 180 monthly payments would be made amounting to just over \$58,000 in payments.

This means that \$28,000 in interest was paid to repay the \$30,000 loan.

6. Have the students discuss how they would handle making repayments and what hardships they may experience.

Using other resources

- Visit Human Resources Development Canada's website to get an estimate of the amount of Canada student loans you may be eligible to receive using the Student Need Assessment Software (SNAS). http://www.hrdc-drhc.gc.ca/student_loans/engraph/content/fmuch.html.
- Details about provincial student loans programs can be obtained from links at the SchoolNet web site: <http://ngr.schoolnet.ca>.

Share your ideas!

Do you have lessons using CST that you would like to share with other educators? Send us your ideas and we will ship you lessons using CST received from other educators. For further information, contact Joel Yan, Dissemination Division, Statistics Canada, Ottawa K1A 0T6, 1-800-465-1222; fax: (613)-951-4513 or Internet e-mail: yanjoel@statcan.ca.

EDUCATORS

You may photocopy *Educators' Notebook* and any item or article in *Canadian Social Trends* for use in your classroom.

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