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Youth in Transition Survey

## In and out of high school: First results from the second cycle of the Youth in Transition Survey, 2002

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## Education, skills and learning Research papers

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Tracey Bushnik and Lynn Barr-Telford

Statistics Canada
Patrick Bussière
Human Resources and Skills Development Canada

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#### Abstract

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## Note of appreciation

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## Table of Contents

1. Introduction ..... 5
2. Still in school? ..... 6
3. Characteristics at age 15 related to dropping out by age 17 ..... 9
4. Gender differences among dropouts ..... 15
5. A final note on the dropping out process ..... 16
6. Going back to school: experience with the "second chance system" ..... 17
7. Conclusion ..... 19
Endnotes ..... 20
References ..... 21
Appendix
Appendix A: What is the Youth in Transition Survey (YITS)? ..... 23
Appendix B: Structure of elementary and secondary education in Canada ..... 26
Appendix C: Tables ..... 27
Appendix D: Programme for International Student Assessment (PISA) and reading literacy ..... 36
Appendix E: Explaining the scales and definitions ..... 37

## 1. Introduction

> "Rising skill demands in OECD countries have made qualifications at the upper secondary level of education the minimum credentials for successful labour market entry. Upper secondary education serves as the foundation for advanced learning and training opportunities, as well as preparation for direct entry to the labour market."

Education at a Glance - OECD Indicators 2003

Completing high school is now widely considered as a minimal educational requirement for access to the labour market and lifelong learning. The skills and knowledge acquired through high school are valuable foundations for the future of youth. Both educational and labour market transitions are influenced by an individual's possession or lack of a high school diploma. There is a greater likelihood that youth without such a diploma will experience difficulties participating in lifelong learning (HRDC and STC, 2001) and finding stable and well-paying employment (Rumberger, 1987).

This report focuses on the process of dropping out of high school in the young adult years in an effort to answer two questions: what are the factors related to dropping out of school at an early age, and what differentiates dropouts who eventually return to high school from those who do not return? To answer these questions, data from the second cycle of the Youth in Transition Survey (YITS) are used. YITS is a longitudinal survey developed by Human Resources Development Canada and Statistics Canada in the late 1990s to collect information on major transitions in the lives of youth, particularly between education, training and work.

The Youth in Transition Survey contacts the same respondents at two-year intervals and can therefore link events and traits in one period - such as attitudes, behaviours and achievement - with outcomes in subsequent periods, such as educational and occupational attainment (see Appendix A for detailed information about YITS).

This report is the first to take advantage of the longitudinal nature of YITS. The survey collected information from 15-year-olds in 2000 and returned in 2002 to interview the same young adults at age $17^{1}$. By then, some had dropped out of school (see textbox for definitions). This report discusses characteristics measured at age 15 associated with dropping out of high school by age 17 . These characteristics include family background, abilities, self-perception, aspirations, behaviour, school engagement, and school climate.

> H ow are high school dropouts defined?
> A high school dropout is a 17-year-old who was not in high school in December 2001 and had not already met the minimum requirements for high school graduation.
> The 17 -year-olds discussed in this report also include high school continuers and graduates. A high school continuer is a 17 -year-old who was in high school in December 2001 and had not already met the minimum requirements for high school graduation. A high school graduate is a 17 -year-old who had met the minimum requirements for high school graduation by December 2001 .
> For the purposes of comparison with the dropouts, high school continuers and graduates have been grouped together.

YITS also interviewed a separate group of 18- to 20-year-olds in 2000, and re-interviewed them in $2002^{2}$. This report looks specifically at individuals who were dropouts at ages 18 to 20 to see whether or not they had returned to high school two years later. The characteristics of the dropouts who returned to high school are compared with those who did not return.

## 2. Still in school?

At age 17, most youth were still in high school and only 3\% had left without a diploma

In May 2000, over 345,000 fifteen year-olds were in Canadian schools, most of them in Grade 10. In December 2001, at the age of seventeen, most (83\%) were still in high school and, given their young age, few had graduated (14\%). Just 3\% of these young adults had left high school without a diploma. While the percentage of dropouts was low, it is estimated that over 9,000 youth had left high school by age 17 without receiving a high school diploma.

Among the provinces, Quebec, at $5 \%^{3}$, had the highest estimated dropout rate by age 17 (see Table 1). Furthermore, of all the dropouts, two in five were from Quebec. This may reflect the fact that by age 17, most students in Quebec have reached their final year of high school (see textbox High school status in Quebec and Appendix B Structure of elementary and secondary education in Canada). However, the tendency for dropout rates to be higher in Quebec has been noted before; the rate in Quebec ( $16 \%$ ) was among the highest for 20-year-old youth in 1999 (Bowlby and McMullen, 2002).

Table 1
High school status by age 17, December 2001

|  | Graduates |  | Continuers |  | Dropouts |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | Total | \% | Total | \% | Total |
| Canada | 14 | 49,000 | 83 | 288,000 | 3 | 9,000 |
| Newfoundland and Labrador | 1 * | 100 | 97 | 6,700 | 2 * | 150 |
| Prince Edward Island | 5 | 100 | 94 | 1,750 | 2 * | 50 |
| Nova Scotia | 1 * | 200 | 97 | 10,550 | 2 * | 250 |
| New Brunswick | 2 | 250 | 96 | 8,600 | 2 | 200 |
| Quebec | 52 | 41,600 | 43 | 34,200 | 5 | 3,950 |
| Ontario | 3 | 3,600 | 95 | 122,950 | 2 | 2,650 |
| Manitoba | 3 | 350 | 95 | 12,100 | 2 | 300 |
| Saskatchewan | 2 | 300 | 96 | 13,000 | 2 | 250 |
| Alberta | 4 | 1,550 | 93 | 33,900 | 3 | 1,050 |
| British Columbia | 2 * | 900 | 97 | 43,950 | 1 * | 500 |

Notes: As a measure of sampling error,

* indicates a coefficient of variation (CV) between $16.6 \%$ and $25 \%$
** indicates a CV greater than $25 \%$ and less or equal to $33.3 \%$
*** indicates a CV greater than $33.3 \%$. Caution should be used when interpreting these results.
National numbers have been rounded to the nearest 1000 and provincial numbers have been rounded to the nearest fifty.
Percentages in each row may not add to one hundred due to rounding.


## High school status in Q uebec

The secondary school system in Quebec differs from that in the other provinces with respect to the grade level of the last year of high school. In Quebec, the last level of high school is Secondary V (Grade 11), while in other provinces it is Grade 12.
The Youth in Transition Survey derived high school status as of December 31, 2001. At that time, in all provinces except Quebec, the majority of young people included in this study were still at the grade 12 level. In Quebec, although some students were still at the Secondary V level, more than half of them had been at this level the previous year. It follows then, that for these students, their status had already been determined as either 'graduate' or 'dropout'.
This provincial difference in the timing of the last year of high school may help explain why both the dropout and the graduation rates were higher in Quebec than elsewhere. For more information about the structure of the provincial school grade systems, see Appendix B Structure of elementary and secondary education in Canada.

By comparison, the dropout rate was lowest in British Columbia where an estimated $1 \%^{* 4}$ of 17 -year-olds were not in high school and did not have a high school diploma (Table 1).

Among 17-year-olds, there was little difference nationally in dropout rates ${ }^{5}$ for males (3\%) and females ( $2 \%)^{6}$ (see Table C1 in Appendix C). This runs somewhat counter to studies of older youth that have shown much higher dropout rates for males than for females. In 1999, for example, the dropout rate for 20 year-old males was $15 \%$ versus $9 \%$ for females (Bowlby and McMullen, 2002).

Dropout rates declined through the 1990s (Bowlby and McMullen, 2002). It may be that the low rates for males and females in 2001 are a sign of a continuing decline. Or, these low rates may be due to the fact that few youth - whether male or female - are leaving school at an early age. Data from the next cycle of YITS will shed further light on this issue.

Nationally, dropout rates for males and females were similar by the age of 17 ; however, the reasons for leaving were quite different

When asked their main reason for leaving school, the $3 \%$ who dropped out most frequently cited school-related reasons for their early departure (see Figure 1). School-related reasons include being bored or not interested in school, problems with school work, problems with teachers, being "kicked out of" school", and missing a few credits/not worth continuing. This is consistent with results from the 1991 School Leavers Survey and the 2000 cycle of YITS where school-related reasons were also most often reported by 18 - to 20 -year-olds as the main reason for dropping out.

Figure 1
Main reason for dropping out of high school by age 17


Notes: As a measure of sampling error,

* indicates a coefficient of variation (CV) between $16.6 \%$ and $25 \%$
** indicates a CV greater than $25 \%$ and less or equal to $33.3 \%$
*** indicates a CV greater than $33.3 \%$. Caution should be used when interpreting these results.
School-related reasons include being bored or not interested in school, problems with school work, problems with teachers, being kicked out of school, and missing a few credits/not worth continuing.
Personal or family reasons include health reasons, pregnancy/caring for own child, and problems at home.
Work-related reasons refer to wanting or having to work.
Other reasons were not specified.

While there appeared to be little difference in male and female dropout rates for youth aged 17, their reasons for leaving high school differed (Figure 1). Both males and females cited school-related reasons most frequently but females were much more likely to cite personal or family reasons (including health reasons, pregnancy/caring for own child, and problems at home) for leaving school. Conversely, males more often reported work-related factors (wanting or having to work) as their main reason for dropping out.

## 3. Characteristics at age 15 related to dropping out by age 17

It is widely accepted that dropping out of school is best thought of as a process - not a decision made at a single point in time (Gilbert, Barr, Clark, Blue and Sunter, 1993; HRDC and STC, 1995; Bowlby and McMullen, 2002). Longitudinal data from YITS make it possible to gain a better understanding of the complex process of dropping out. These data, for example, permit an analysis of early signs of disengagement from school. The earlier the risk of dropping out can be detected, the greater may be the likelihood of prevention.

YITS collected information on family background (including parental education), individual characteristics (such as reading performance and school grades), and school characteristics (including disciplinary climate). Each of these factors contributes to an analysis of the process of dropping out.

In the following sections, dropouts are compared to continuers and graduates - the latter two are considered as one group. A broad range of characteristics at age 15 are described - each in isolation. However, the nature of the school experience is complex as individual, family and school factors interact over time. Further analysis using more complex methods will allow for the assessment of the relative impact of these many factors on dropping out.

## 3a. Family background

Students who dropped out by age 17 had a somewhat different background from those who continued to attend or graduated from high school (see Table C2 in Appendix C).

The majority of 17-year-olds lived in two-parent households. However, a higher proportion of dropouts ( $28 \%$ ) than continuers and graduates ( $16 \%$ ) lived with a single parent. Dropouts and their peers also differed with respect to parental income - dropouts lived in households with an average total income ${ }^{8}$ of $\$ 51,000$ while continuers and graduates lived in households with an average total income of $\$ 69,000$. And, when compared to continuers and graduates, a smaller proportion of dropouts had parents who had completed some form of post-secondary education ( $43 \%$ versus $64 \%$ ).

## 3b. Abilities

The Youth in Transition Survey allows one to relate two measures of ability to dropping out: reading literacy and self-reported marks at school.

In 2000, in conjunction with YITS, the Programme for International Student Assessment (PISA) assessed 15-year-old Canadian youth's achievement in reading, mathematics and science. Reading literacy is of particular interest in this report because of its link with educational attainment ${ }^{9}$. In PISA, reading literacy was defined as "understanding, using and reflecting on written texts, in order to achieve one's goals, to develop one's knowledge and potential, and to participate in society" (OECD, 2000). PISA results reveal the relationship between reading literacy assessed at age 15 , and dropping out by age 17 .

> Dropouts had significantly lower scores in reading literacy at age 15 than did continuers and graduates

Dropouts reported significantly lower marks in school than did other students

The average reading score at age 15 among all students included in this report was 535. Dropouts scored significantly lower than their peers - an average score of 467 compared to 537 . This means that, on average, dropouts were performing a full reading proficiency level below continuers and graduates. A difference of one proficiency level can be considered as comparatively large, and indicates a substantive difference in the nature of reading literacy tasks that students can perform (see Appendix D for more a detailed explanation of reading literacy proficiency in PISA).

Reading literacy is one measure of achievement; marks obtained in school are another. Figure 2 shows the distribution of self-reported overall marks at age 15 by high school status at age 17. On average, dropouts reported much lower marks than other students at age 15. Thirty-two percent of dropouts reported an overall mark of less than 59, compared to $8 \%$ of other students. Still, many dropouts said they were doing well enough to graduate as more than a third reported marks of 70 or higher.

Figure 2
Distribution of overall self-reported marks at age 15 by high school status at age 17


Notes: As a measure of sampling error,

* indicates a coefficient of variation (CV) between $16.6 \%$ and $25 \%$
** indicates a CV greater than $25 \%$ and less or equal to $33.3 \%$
*** indicates a CV greater than $33.3 \%$. Caution should be used when interpreting these results.


#### Abstract

Reading scores and self-reported marks Were reading literacy average scores and self-reported marks correlated? Table C3 in Appendix C shows average reading scores by self-reported overall marks obtained at age 15. For continuers and graduates, higher marks meant a higher score in reading performance. Specifically, each increase in one decile of overall marks was matched with a significant increase in average reading score. This pattern, however, was not as clear for the dropouts. A closer look at each group revealed that as marks rose beyond 60, the gap between the dropouts' and the continuers and graduates' average reading scores gradually widened. While continuers and graduates reported marks of 80 to 100 with an average reading score of 592, dropouts reported the same marks with an average reading score of only 490; a difference of more than 100 points. According to this group of dropouts, however, their grades were more than high enough for them to continue in school. What might explain this apparent contradiction? It could be that the courses taken by dropouts differed from those taken by continuers and graduates, or perhaps dropouts overstated their self-reported grades. Or, it could be that while grades provide a measure of success with respect to school curriculum, PISA provides a measure of general skills and knowledge.


## 3c. Self-perception

How one feels about oneself across a multitude of dimensions may also provide insights into the factors associated with leaving school (Rumberger, 1987). Do those who leave school have lower levels of self-confidence, do they have less confidence in their ability to achieve, and are they less likely to feel a sense of control over situations? In YITS terms, these concepts translate into measures of self-esteem, self-efficacy and self-mastery.

While most youth had a positive self-perception, dropouts demonstrated lower levels across all three dimensions at the age of 15 than did those who continued on with their schooling (see Table C4 in Appendix C). Twenty-five percent of dropouts had low levels of self-efficacy compared to $15 \%$ of other youth. Similarly, higher proportions of dropouts had low self-esteem and self-mastery, $22 \%$ and $20 \%$ respectively, compared with $16 \%$ and $14 \%$ of continuers and graduates (see Appendix E on Explaining the scales and definitions for an explanation of low levels).

## 3d. Aspirations

More than half of the dropouts had high educational aspirations. Fifty-nine percent of dropouts aspired to college or university while $87 \%$ of continuers and graduates did so (see Table C5 in Appendix C). However, $23 \%$ of those who dropped out by age 17 reported at age 15 that a high school diploma or less was their highest educational aspiration. This contrasts strongly with youth who were still in school or had graduated by age 17 ; at age 15 , only $7 \%$ of these youth said high school or less was what they wanted.

At age 15, a lower proportion of dropouts than continuers and graduates reported that they planned to stay in high school until graduation (74\% versus 95\%). Interestingly, the remaining dropouts did not have specific plans to leave high school before graduating. Instead, twenty percent of dropouts reported "I don't know" when asked if they were planning to stay in school.

Dropouts differed significantly from other youth with respect to how much importance they felt their parents placed on graduating from high school and obtaining more education after high school. Compared to continuers and graduates, a lower proportion of dropouts reported that their parents felt each of these attainments was very important.

A related finding is the degree to which youth misjudged the importance their parents placed on education. Figure 3 presents this underestimation with respect to getting more education after high school. It is clear that the dropouts underestimated their parents' view of postsecondary education. This division in perception warrants further exploration.

Figure 3
Youth perception of the importance their parent placed on education after high school compared to parent's own perception


## D ropouts were less

likely than continuers or graduates to have friends who valued education

D ropouts were less
likely than continuers or graduates to express confidence in their ability to pursue a postsecondary education

Youth were asked about the educational aspirations of their friends. Compared to continuers and graduates, a lower proportion of dropouts reported that most or all of their friends felt that completing high school was important ( $65 \%$ versus $86 \%$ ), that furthering education after high school was important (54\% versus 79\%), and that it was "okay" to work hard at school ( $50 \%$ versus $71 \%$ ). These findings underscore the importance of the role that peers play in the long-term educational choices of young people.

When 15 -year-olds were asked to think about education in conjunction with their future career plans, dropouts once again differed significantly from continuers and graduates (see Table C6 in Appendix C). While more than half of the dropouts agreed that education plays a role in future success, a lower proportion of dropouts than other youth acknowledged the importance of education in meeting their career goals. Dropouts were also more skeptical about their chances of success in postsecondary education. For example, while $81 \%$ of continuers and graduates thought they were "smart enough" to do well in university, a significantly lower proportion of dropouts felt the same way ( $64 \%$ ).

3e. Behaviour
While not all dropouts engaged in problem behaviour, the dropout literature suggests that such behaviour can precede leaving school (Kronick and Hargis, 1990; Rumberger, 1987). Confirming this view, the YITS data (see Table C7 in Appendix C) indicated that a higher proportion of dropouts than continuers or graduates had been kicked out of ${ }^{10}$ school - $28 \%$ versus $7 \%$. Furthermore, a higher proportion of dropouts had skipped class once a week or more ( $23 \%$ versus $6 \%$ ), or had seen their principal 3 times or more during the year because of causing trouble at school ( $29 \%$ versus $8 \%$ ).

Dropouts were also more likely to have broken rules at home. More than half of dropouts ( $57 \%$ ) had stayed out later than their parents had permitted 3 times or more during the year compared to $42 \%$ of other youth. Moreover, $24 \%$ of dropouts had stayed out all night without permission 3 times or more while $9 \%$ of continuers or graduates had done so.

As with negative peer attitudes toward education, dropouts were much more likely than continuers and graduates to report that their friends engaged in negative behaviours. When compared to the proportion of continuers or graduates (12\%), more than double the proportion of dropouts ( $29 \%$ ) reported that most or all of their friends skipped class once a week or more. Additionally, more than half of the dropouts reported having a friend who was also a dropout, compared to $20 \%$ of continuers and graduates. And finally, $25 \%$ of dropouts compared to $9 \%$ of continuers or graduates said that most or all of their friends had a reputation for causing trouble (see Table C7 in Appendix C).

## 3f. Engagement and school climate

Are youth who participate in, and identify with, their school environment less likely to drop out? Previous research from the Youth in Transition Survey, based on 18- to 20-year-olds, showed that dropouts tended to be less engaged in school than graduates (Bowlby and McMullen, 2002). Dropouts, for example, were more likely to view school less favourably, to have less favourable perceptions of their teacher and peer relationships, to have poorer study habits and to have less involvement in extra-curricular school activities (Bowlby and McMullen, 2002).

To measure school engagement, students at age 15 were asked a series of questions aimed at gauging participation in, and identification with school (see Explaining the scales and definitions in Appendix E). School engagement included engagement in both the academic life of the school (for example, the number of hours spent on homework, completion of school assignments, and feelings about the value of education) and the social life of the school (for example, feelings of belonging, having friends for support, and making friends easily). Youth who had dropped out by the age of 17 were much less engaged in school when they were 15 - both socially and academically - than were those who had either continued in school or had already graduated (see Table C8 in Appendix C).

At the age of 15 , a third of dropouts were not very engaged in school overall. Twenty-six percent of dropouts were not very socially engaged and $39 \%$ were not very academically engaged in school. Lower proportions of other youth at the age of 15 had social or academic engagement difficulties (see Figure 4). While $49 \%$ of

A higher proportion of dropouts were breaking rules and getting into trouble at age 15 than were continuers or graduates

Dropouts were more likely than continuers or graduates to have friends in trouble at school

> 0 verall, 35\% of dropouts were not very engaged in school at age 15
dropouts participated in school-related extra-curricular activities when they were fifteen, $66 \%$ of other students were involved in such activities (for example participating in sports; student government; art, drama or other school clubs). If dropping out is indeed a process, these findings indicate that disengagement from school was underway for many dropouts by the age of 15 .

Figure 4
Proportion of dropouts and continuers/graduates with low engagement at age 15


This difference in engagement extended beyond school life. Dropouts were less likely than others to participate in non-school sports, arts, drama or music lessons or non-school clubs and they were less likely to be involved in volunteer activities, such as canvassing, coaching or fundraising, at the age of 15 (see Explaining the scales and definitions for a full definition of volunteer activities).

The literature on school dropouts describes "push factors" (Kronick and Hargis, 1990) and "pull factors" (McNeal, 1997). Push factors include negative interactions with schooling that might be associated with leaving school voluntarily or through suspension or expulsion, whereas pull factors include those interactions outside the school environment that might attract youth away from schooling. When it comes to the relationship between working while in high school and dropping out, there is no clear direction - is it a push or a pull? Some youth may choose to work as a result of negative school interactions (a push) whereas others may be drawn to work for other reasons such as the need for money or the desire to work (a pull).

At the age of 15, similar percentages of dropouts and other students worked while in school ( $73 \%$ and $68 \%$ - see Table C9 in Appendix C). Dropouts were much more likely to work over 20 hours per week than were other students ( $30 \%$ compared to $15 \%$ ) while other students were more likely to work between one and 10 hours than were dropouts ( $31 \%$ compared to $19 \%$ ). The apparent association
between working long hours and dropping out of school is well-documented (see Bushnik, 2003) yet the push and/or pull of work remains unclear. The 15 year-old students were asked if working affected their interest in schooling and if so, how. Dropouts were almost twice as likely to say working decreased their interest in school at age 15 than were other students ( $19 \%$ versus $10 \%$ ) but, most said their interest in school stayed the same.

School climate is related to school engagement, and refers to the school environment. This includes how students are disciplined at school, whether the school is, in relative terms, a friendly place and if people respect one another and are accepted.

On all three indicators of school climate, dropouts saw their environments in a less positive light (see Table C10 in Appendix C). Forty-nine percent of dropouts felt that discipline was not handled fairly in their school when they were 15 . Only $34 \%$ of continuers and graduates felt the same way. Dropouts were also more likely to feel that students were not respected, and that their school was not a friendly place.

## N ot all dropouts were performing poorly...

When the characteristics of dropouts were compared to those of continuers and graduates, it was evident that dropouts fared less favourably. A large proportion of dropouts, however, had reasonable grades ( $37 \%$ reported an overall mark higher than 70), had confidence in their ability to achieve, were engaged in school, and aspired to education beyond high school. Although they were without a diploma and no longer in high school, their view of education was not so negative as to prevent a possible return.

## 4. Gender differences among dropouts

Although the dropout rate was similar for the 17 year-old males and females, female dropouts differed significantly from male dropouts with respect to a number of characteristics. Several areas of difference, namely educational aspirations, problem behaviour and engagement are presented in Table C11 in Appendix C.

Unlike male dropouts, at age 15 , female dropouts perceived postsecondary education quite positively. Compared to male dropouts, a higher proportion of female dropouts aspired to college or university (see Figure 5) and thought that they would enjoy it. In addition, more female dropouts ( $56 \%$ ) than male dropouts ( $44 \%$ ) reported that their parents thought a postsecondary education was very important.

Female dropouts were also less likely to report having been in trouble at school, and compared to male dropouts, lower proportions of female dropouts had close friends with reputations for causing trouble or who encouraged negative behaviour. Additionally, female dropouts had better grades, were more academically engaged in school, and had higher average reading scores than male dropouts.

Generally, the school experience of female dropouts tended to be more positive than that of male dropouts. How and why young men and women differ with respect to dropout behaviour is a complicated issue and deserving of more attention in future research.

D ropouts perceived their school environments less favourably than did their peers at age 15

Female dropouts had higher educational aspirations, less problem behaviour and were more engaged in school than were male dropouts

Figure 5
Highest level of education you would like to get, as reported at age 15


Notes: As a measure of sampling error,

* indicates a coefficient of variation (CV) between $16.6 \%$ and $25 \%$
** indicates a CV greater than $25 \%$ and less or equal to $33.3 \%$
*** indicates a CV greater than $33.3 \%$. Caution should be used when interpreting these results.


## 5. A final note on the dropping out process

Researchers have found that the process of dropping out of high school can begin much earlier than the few years of schooling leading up to dropping out. Leaving high school without a diploma has been shown to be related to many events, experiences, and choices that take place throughout a young person's life, in addition to those that take place during high school (Rumberger, 1987; Finn, 1989; Jimerson, Egeland, Sroufe, \& Carlson, 2000; Garnier, Stein, \& Jacobs, 1997; Ensminger \& Slusarcick, 1992; Alexander, Entwisle \& Horsey, 1997).

YITS collected an extensive amount of information about youth at age 15 and again at age 17 but has only limited information about these youth before these ages. To explore early markers related to dropping out, another data source, the National Longitudinal Survey of Children and Youth (NLSCY), was consulted. The results support previous research findings and show that experiences at ages 10 and 11 are related to dropping out of school by ages 16 and 17. The NLSCY data showed that low socio-economic status at age 10 and 11, family disruptions such as frequent changes in residence, low parental educational aspirations for the child, a child's emotional or behavioural difficulties, repeating a grade, and poor performance in school, were each associated ${ }^{11}$ with dropping out by age 16 or 17 .

These early markers are similar to the factors identified at age 15 in YITS. It appears that throughout the school years, similar characteristics are related to the eventual decision to drop out. As in the literature, this evidence supports the notion that potential dropouts may be identified early.

## What is the NLSCY?

The National Longitudinal Survey of Children and Youth (NLSCY), developed jointly by Human Resources Development Canada and Statistics Canada, is a comprehensive survey that follows the development of children in Canada and paints a picture of their lives. The survey monitors children's development and measures the incidence of various factors that influence this development, both positively and negatively. To date, four cycles of data from the NLSCY representing the years 1994/95, 1996/97, 1998/99 and 2000/01 have been released. Cycle 5 for 2002/03 will be made available in late 2004.
The first cycle of the NLSCY, conducted in late 1994 and early 1995, interviewed parents of about 23,000 children up to the age of 11. The parents gave information, not only about their children, schools and neighbourhoods, but also about themselves and their families. About 3,400 children aged 10 and 11 at that time were also asked questions directly about themselves. This report discusses data pertaining to the characteristics of those 10-and 11-year-olds collected in the first cycle of the NLSCY and how these characteristics relate to these same youth's high school status 6 years later.

## 6. G oing back to school: experience with the "second chance system"

The preceding sections looked at the factors associated with leaving school. The decision to leave school, however, is not necessarily final. Youth may choose to return to complete high school at a later time.

This section of the report uses data from the 18 to 20 year-old YITS cohort to look at those who returned to high school after dropping out. It compares the characteristics of those who had returned to high school by age 20 to 22 , to those who did not return.

The "second chance system" provides an opportunity for dropouts to complete their high school education and to improve their knowledge and skills. It can be an important element of a lifelong learning strategy. A high school diploma provides wider access to postsecondary education, reduces the risk of exclusion from the labour market, and provides better opportunities for future lifelong learning.

Figure 6
High school status in December 2001 of December 1999 dropouts


In December 1999, $11 \%$ of 18 to 20 year-old youth had left high school without a diploma. Among these dropouts, $8 \%$ had returned to high school to complete their diploma and 6\% were high school students as of December 2001 (see Figure 6). This means that 14\% of dropouts in December 1999 took advantage of the "second chance system" to further their education ${ }^{12}$.

About the same proportion of males and females returned to high school

About the same proportion of males and females ( $13 \%$ and $15 \%$ ) who were dropouts in December 1999 had returned to the classroom by December 2001 (see Table C12 in Appendix C). However, given that the male dropout rate in 1999 was much higher, there was still a higher proportion of young men than young women without a high school diploma in 2001.

While Quebec had one of the highest high school dropout rates in December $1999,23 \%$ of these dropouts had returned to high school by December 2001. In fact, over half of all young adults who had returned to high school were from Quebec (see Table C13 in Appendix C). Alberta had a low proportion of young dropouts returning to high school education (5\%). This may be somewhat related to the relatively positive labour market conditions in that province ${ }^{13}$.

Labour market signals may play an important role in the decision to return to high school education. Compared to those who worked part-time, young dropouts working full-time in December 1999 were less likely to have returned to high school education in December 2001. In fact, only $11 \%$ of the youth who worked full-time returned to high school education compared to $21 \%$ of those who worked parttime. Among those without a job in December 1999, 14\% returned to secondary education.

Individuals aged 18 in December 1999 were more likely to go back to high school than their peers aged 19 or 20. In fact, youth aged 18 represented more than $40 \%$ of all the youth who had returned to secondary school and about a quarter of those who did not return.

Dropouts who had parents with a postsecondary diploma or certificate (below a bachelor's degree) were the most likely to return to high school education. While representing $19 \%$ of the dropouts, these individuals accounted for more than a quarter of those who returned to high school (see Table C13 in Appendix C).

Youth educational aspirations were also significantly related to the decision to return to high school. A higher proportion of youth who were dropouts in December 1999, but at the same time expected to go to college, were continuing their high school education or had completed it in December 2001 (20\%). Only $10 \%$ of those who expected to complete high school or less had returned to high school.

## 7. Conclusion

This report presents new longitudinal data from the Youth in Transition Survey (YITS) on the factors at age 15 that may be related to dropping out by age 17. The process of dropping out of high school is complex, and those who leave high school without a diploma may at some point return. The YITS data for 18- to 20-year-olds made it possible to examine the participation of youth in this "second chance system" by the ages of 20 to 22 .

By the age of seventeen, $3 \%$ of youth had left high school without a diploma. Male and female dropout rates were similarly low at $3 \%$ and $2 \%$, respectively. It is too early to say if these low rates are a sign of a significant decline in dropout rates or simply due to a low likelihood of dropping out at such a young age.

Among the provinces, Quebec had the highest estimated dropout rate by age $17(5 \%)$. This higher rate may reflect the fact that, unlike the other provinces, most students in Quebec have reached their final year of high school by this age.

There were some positive signs that, at an early age, youth who left high school without graduating understood the importance of education. At 15 , most dropouts ( $81 \%$ ) believed that getting a good job later in life depended on their success in school, and $77 \%$ wanted to obtain some form of postsecondary education. However, lower scores in reading literacy, lower reported marks in school, and lower expectations for high school completion, were among the characteristics at age 15 associated with leaving school by age 17 . And, according to the National Longitudinal Survey of Children and Youth, factors related to dropping out can be identified as early as age 10 and 11.

Fourteen percent of 18 to 20 year-old dropouts took advantage of the "second chance system" and returned to high school by ages 20 to 22. In Quebec, $23 \%$ of dropouts returned to school - a significantly higher proportion than in any other province. The "second chance system" offers youth an opportunity to return and complete their high school diploma thereby improving access to postsecondary education and labour market prospects.

Future research using the YITS data can provide insight into the relative role of individual, family and school factors in explaining dropping out of, and returning to, high school. The longitudinal aspect of YITS offers an opportunity to further understand the educational and labour market pathways taken by youth.

## Endnotes

1 Note that only those 17 year-olds with a known high school status were included in the analysis. Less than $0.5 \%$ of 17 year-olds did not have a known high school status.
2 For more information about YITS methodology, see Appendix A.
3 The dropout rate in Quebec was significantly higher ( $\mathrm{p}<=.05$ ) than the dropout rates in all other provinces.
4 The dropout rate in British Columbia was significantly lower (p $<=.05$ ) than the dropout rates in all other provinces except Newfoundland and Labrador.
5 In two provinces - Quebec and New Brunswick - the estimated dropout rates for males were higher than for females ( $6 \%$ compared with $4 \%$, and $3 \% *$ compared with $1 \%{ }^{* *}$ ). In the other provinces, the gender differences were too small to be statistically significant.
6 An additional analysis was conducted to determine if bias existed in the male and female dropout rates due to Cycle 2 non-response. The results indicate that based on their Cycle 1 characteristics, youth who did not respond in Cycle 2 appeared to resemble continuers and graduates more than dropouts. Therefore, there is little evidence of bias in the dropout rates presented in this report.
7 "Kicked out" was one of the possible response categories.
8 Total income is derived from a sum of the following nine income sources: (1) Wages and Salaries before deductions, including bonuses, tips and commissions; (2) Net Income from Farm and Nonfarm Selfemployment (after expenses and before taxes); (3) Employment Insurance benefits (before deductions); (4) Canada Child Tax Benefits and provincial child tax benefits or credits (including Quebec Family Allowance); (5) Social Assistance (welfare) and Provincial Income Supplements; (6) Support payments received, such as spousal and child support; (7) Other Government Sources, such as Canada or Quebec Pension Plan Benefits, Old Age Security Pension, or Workers' Compensation Benefits; (8) Goods and Services Tax Credit / Harmonized Tax Credit received in 1999; and (9) Other NonGovernment sources including dividends, interest and other investment income, employer pensions, RRIFs and annuities, scholarships, and rental income.
9 Analysis of prose literacy data from the International Adult Literacy Survey revealed that high school and post-secondary graduates possess higher literacy skill levels than high school dropouts (OECD and Statistics Canada, 2000).
10 The question asked "Have you ever been kicked out of school?".
11 Due to small sample sizes, a multivariate analysis was not possible.
12 It should be noted that this report only looks at the "second chance system" for high school education. Bowlby and McMullen (2002) noted that "Others may enrol in programs or courses outside secondary school, including programs at the post secondary level". In fact, according to their report, $9 \%$ of 20 -year-old high school dropouts were enrolled in or had completed some type of postsecondary education as of December 1999. This proportion is probably higher two years after, increasing the number of participants in second chance education. A report to be released later in 2004 will look at the "second chance system" at the postsecondary level.
13 In 2001, according to the annual figures produced by the Labour Force Survey, the Canadian unemployment rate for 20 to 24 year-olds without a high school diploma was 19.1\%. In Alberta, however, the unemployment rate for 20 to 24 year-olds without a diploma was significantly lower at $13.3 \%$.

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# Appendix A: What is the Youth in Transition Survey (YITS)? 

The Youth in Transition Survey is a Canadian longitudinal survey designed to examine the patterns of, and influences on, major transitions in young people's lives, particularly with respect to education, training and work.

Following a major consultation process with key stakeholders across Canada, ten broad objectives were developed for YITS. They are as follows:

1. to examine key transitions in the lives of youth, such as the transition from high school to post-secondary schooling and the initial transition from schooling to the labour market;
2. to better understand educational and labour market pathways and the factors influencing these pathways;
3. to identify educational and occupational pathways that provide a smoother transition to the labour market;
4. to examine the incidence, characteristics, factors and effects of leaving school;
5. to understand the impact of school effects on educational and occupational outcomes;
6. to examine the contribution of work experience programs, part-time jobs, and volunteer activities to skill development and transition to the labour market;
7. to study the attitudes, behaviours, and skills of young people entering the labour market;
8. to gain a better understanding of the determinants of post-secondary entry and post-secondary retention, including education financing;
9. to better understand the role of educational and labour market aspirations and expectations in investment in further education and career choice; and,
10. to explore the educational and occupational pathways of various subgroups, particularly youth "at risk".

In order to address these objectives in a timely fashion, it was decided to collect data from two age groups of youth in the first cycle of the survey in 2000. One began its participation at age 15 and the other at ages 18 to 20. Both cohorts were asked to provide a range of information on their education and employment experiences as well as information on their personal characteristics including, for example, their educational aspirations. The younger group also participated in the Programme for International Student Assessment (PISA), an internationally recognized test to evaluate the knowledge and skills of 15-year-olds in reading,
mathematics, and science. Furthermore, an interview was conducted with their parents and a questionnaire was administered to their school principals.

In total, almost 30,000 youth aged 15, and more than 22,000 youth aged 18 to 20 from the ten provinces participated in the first cycle of YITS in 2000. The first results from the younger cohort were presented in_Measuring up: The performance of Canada's youth in reading, mathematics and science, while results for the older cohort were presented in At a Crossroads : First results for the 18 to 20-year-old cohort of the Youth in Transition Survey. Both of these publications are available to download for free through the Internet at www.statcan.ca.

The first follow-up interview with the YITS participants took place in early 2002 with over 40,000 youth interviewed for a second time. At that time, the two cohorts were aged 17 and 20 to 22 , respectively.

## YITS methodology

## Target population

YITS has two target populations: a cohort of individuals who were 18 to 20 years old on December 31st, 1999 and a cohort of students who were 15 years-old on December 31 ${ }^{\text {st }}$, 1999.

## Sample D esign

## 18 to 20 year-old cohort

The target population for the 18 to 20 year-old cohort comprises residents of the ten provinces of Canada who were born between 1979 and 1981. These individuals turned 18 to 20 during 1999, the reference year for cycle 1.

The design implemented for the 18 to 20 year-old cohort is based on certain groups of households that were in the Labour Force Survey (LFS) between January 1997 and December 1999. Individuals who were full-time members of the armed forces and persons living on Indian reserves or in northern and remote areas are excluded from LFS and were therefore also excluded from this cohort. From these households, a sample of individuals born between 1979 and 1981 or those estimated to be between 18 to 20 years of age during 1999 was selected.

The sample consisted of 29,164 18- to 20-year-olds in cycle 1. In total, 23,594 ( $80.9 \%$ ) individuals responded in cycle 1 and these respondents formed the cycle 2 sample.

## 15 year-old cohort

The 15 year-old cohort also participated in PISA 2000 (OECD's ${ }^{1}$ Programme for International Student Assessment). Consequently, the sample design prescribed for PISA was used to select the 15 year-old cohort. The sample design entailed twostage probability sampling, with a stratified probability proportional to size (PPS) sample of 1,242 schools selected in the first stage and a systematic equal-probability sample of students selected at the second stage. Up-to-date student lists were obtained from all participating schools selected in stage one. From this list, students were
randomly selected to participate. Students with a cognitive or functional disability who could not participate under the PISA assessment environment were excluded as were those who had a non-official language barrier. In total, 29,330 15-year-olds participated in cycle 1 of PISA and formed the cycle 2 sample for YITS.

## D ata Collection

While separate data collection strategies were employed for each of the cohorts in cycle $1^{2}$, the same data collection strategy was used for both cohorts in cycle 2. Data collection occurred between mid February and mid-June 2002 using computer assisted telephone interviewing. The following table shows the response rates by province.

## Table 1

Response rates in Cycle 2

| Province | 15 year-old <br> reading cohort | 18 to 20 year- <br> old cohort | Both cohorts |
| :--- | ---: | ---: | ---: |
| Newfoundland and Labrador | 94.6 | 83.2 | 90.7 |
| Prince Edward Island | 90.1 | 82.2 | 87.9 |
| Nova Scotia | 88.7 | 82.1 | 86.5 |
| New Brunswick | 84.3 | 75.6 | 81.6 |
| Quebec | 90.9 | 85.9 | 88.4 |
| Ontario | 90.5 | 87.5 | 88.7 |
| Manitoba | 93.3 | 86.7 | 90.8 |
| Saskatchewan | 95.2 | 89.0 | 92.8 |
| Alberta | 92.7 | 85.7 | 89.9 |
| British Colombia | 86.1 | 79.5 | 83.6 |
| Canada | $\mathbf{9 0 . 5}$ | $\mathbf{8 5 . 0}$ | $\mathbf{8 8 . 1}$ |

## N otes

1 Organisation for Economic Co-operation and Development
2 For more information about the Cycle 1 data collection strategy for the 18-20 year-old cohort, see the user documentation accompanying the microdata file. For more information about the Cycle 1 data collection strategy for the 15 year-old cohort, see the document Measuring up: The performance of Canada's youth in reading, mathematics and science.

## Appendix B: Structure of elementary and secondary education in Canada

The elementary-secondary continuum is broken up into different grade combinations in different jurisdictions so that the point of transition between elementary and secondary school varies from jurisdiction to jurisdiction (see Figure 1, from Education Indicators in Canada: Report of the Pan-Canadian Education Indicators Program 2003, Statistics Canada and the Council of Ministers of Education).

Figure 1
Levels within elementary-secondary schools, by jurisdiction


[^0]
## Appendix C: Tables

Table C1
High school status by age 17, December 2001

|  | Graduate | Continuer | Dropout |
| :--- | ---: | ---: | ---: |
| Total | 49,000 | 288,000 | 9,000 |
| Canada | $\%$ | $\%$ | $\%$ |
| Males | 14 | 83 | 3 |
| Females | 13 | 84 | 3 |

Totals are rounded to the nearest thousand.
Percentages in each row may not add to one hundred due to rounding.

Table C2
Family background characteristics for dropouts and continuers/graduates at age 15

|  | Dropouts | Continuers/graduates |
| :--- | ---: | ---: |
| Total | 9,000 | 337,000 |
|  | $\%$ | $\%$ |
| Language first learned |  |  |
| English | 54 | 66 |
| French | $\mathbf{4 0}$ | $\mathbf{2 2}$ |
| Visible minority | $\mathbf{4}^{* *}$ | $\mathbf{1 3}$ |
| Parents' highest level of education |  |  |
| Less than high school | 21 | $\mathbf{7}$ |
| High school graduate | $\mathbf{3 0}$ | 22 |
| Some postsecondary | $5^{* *}$ | 7 |
| Postsecondary diploma | $\mathbf{3 0}$ | $\mathbf{3 6}$ |
| Bachelor degree or higher | $\mathbf{1 3}$ | $\mathbf{2 8}$ |
| Family structure |  |  |
| Two parent | $\mathbf{7 1}$ | $\mathbf{8 3}$ |
| Single parent | $\mathbf{2 8}$ | $\mathbf{1 6}$ |
| Average total parental income | $\mathbf{5 1 , 0 0 0}$ | $\mathbf{6 9 , 0 0 0}$ |

Notes: As a measure of sampling error:

* indicates a coefficient of variation (CV) between $16.6 \%$ and $25 \%$
** indicates a CV greater than $25 \%$ and less or equal to $33.3 \%$
*** indicates a CV greater than $33.3 \%$. Caution should be used when interpreting these results.
Estimates in bold indicate a significant difference ( $\mathrm{p}<=.05$ ) between dropouts and continuers/graduates.
Totals are rounded to the nearest thousand.

Table C3
Marks and reading performance of students at age 15 by high school status at age 17

|  | Dropouts and continuers/graduates |  |  |  | Dropouts |  |  |  | Continuers/graduates |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Proportion \% | Lower confidence limit for reading score | Average reading score | Upper confidence limit for reading score | Proportion \% | Lower confidence limit for reading score | Average reading score | Upper confidence limit for reading score | Proportion \% | Lower <br> con- <br> fidence <br> limit for <br> reading <br> score | Average reading score | Upper confidence limit for reading score |
|  | 100 | 532 | 535 | 538 | 100 | 456 | 467 | 477 |  | 534 | 537 | 540 |
| Self-reported |  |  |  |  |  |  |  |  |  |  |  |  |
| overall mark |  |  |  |  |  |  |  |  |  |  |  |  |
| Less than 50\% | 1 | 427 | 443 | 459 | 9* | 403 | 434 | 465 | 1 | 427 | 446 | 464 |
| 50\% to 59\% | 7 | 459 | 466 | 473 | 23 | 453 | 472 | 491 | 7 | 459 | 466 | 473 |
| 60\% to 69\% | 19 | 487 | 491 | 496 | 32 | 457 | 474 | 491 | 19 | 488 | 492 | 497 |
| 70\% to 79\% | 34 | 527 | 531 | 534 | 26 | 477 | 498 | 519 | 34 | 528 | 531 | 535 |
| 80\% to 100\% | 38 | 588 | 592 | 595 | 11* | 453 | 490 | 527 | 39 | 589 | 592 | 596 |

Notes: As a measure of sampling error:

* indicates a coefficient of variation (CV) between $16.6 \%$ and $25 \%$
** indicates a CV greater than $25 \%$ and less or equal to $33.3 \%$
*** indicates a CV greater than $33.3 \%$. Caution should be used when interpreting these results.
Estimates in bold indicate a significant difference ( $\mathrm{p}<=.05$ ) between dropouts and continuers/graduates.
Note that the significant difference in average reading scores between dropouts and continuers/graduates begins at overall mark of $60 \%$ to $69 \%$.


## Table C4

Self-perception of dropouts and continuers/graduates at age 15

|  | Dropouts | Continuers/graduates |
| :--- | ---: | ---: |
| Total | 9,000 | 337,000 |
|  | $\%$ | $\%$ |
| Self-esteem |  |  |
| High | 14 | 17 |
| Middle | 64 | 67 |
| Low | 22 | 16 |
| Self-efficacy |  |  |
| High | 10 | 17 |
| Middle | 64 | 68 |
| Low | 25 | 15 |
| Self-mastery |  |  |
| High | 16 | 17 |
| Middle | 64 | 69 |
| Low | 20 | 14 |

Notes: As a measure of sampling error:

* indicates a coefficient of variation (CV) between $16.6 \%$ and $25 \%$
** indicates a CV greater than $25 \%$ and less or equal to $33.3 \%$
*** indicates a CV greater than $33.3 \%$. Caution should be used when interpreting these results.
Estimates in bold indicate a significant difference ( $\mathrm{p}<=.05$ ) between dropouts and continuers/graduates.
Totals are rounded to the nearest thousand.
High refers to scale scores greater than 1 standard deviation above the mean score, middle refers to scale scores between (and including) -1 and 1 standard deviation beyond the mean score, and low scores refer to scores less than 1 standard deviation below the mean score.

Table C5
Educational aspirations of dropouts and continuers/graduates at age 15


Notes: As a measure of sampling error:

* indicates a coefficient of variation (CV) between $16.6 \%$ and $25 \%$
** indicates a CV greater than $25 \%$ and less or equal to $33.3 \%$
*** indicates a CV greater than $33.3 \%$. Caution should be used when interpreting these results.
Estimates in bold indicate a significant difference ( $\mathrm{p}<=.05$ ) between dropouts and continuers/graduates.
Totals are rounded to the nearest thousand.

Table C6
Importance of education for future career - perceptions of dropouts and continuers/graduates at age 15

|  | Dropouts | Continuers/graduates |
| :--- | ---: | ---: |
| Total | 9,000 | 337,000 |
|  | $\%$ <br> agree/ <br> strongly agree | agree/ <br> strongly agree |
| When you think about your future career, what do you think about the following? |  |  |
| Getting a good job later in life depends on my success in school now | $\mathbf{8 1}$ |  |
| I will need to go to college or university to achieve what I want in life | $\mathbf{6 3}$ | $\mathbf{9 1}$ |
| I think I would enjoy going to college or university | $\mathbf{6 3}$ | $\mathbf{8 6}$ |
| I'm smart enough to do well in university | $\mathbf{6 4}$ | $\mathbf{8 5}$ |
| I'm smart enough to do well in college | $\mathbf{7 2}$ | $\mathbf{8 1}$ |
| No matter how much education I get, I will most likely end up with a low-paying job | $\mathbf{2 5}$ | $\mathbf{9 0}$ |

Estimates in bold indicate a significant difference ( $\mathrm{p}<=.05$ ) between dropouts and continuers/graduates.
Totals are rounded to the nearest thousand.

Table C7
Behaviour of dropouts and continuers/graduates at age 15


Estimates in bold indicate a significant difference ( $\mathrm{p}<=.05$ ) between dropouts and continuers/graduates.
Totals are rounded to the nearest thousand.

Table C8
Engagement of dropouts and continuers/graduates at age 15

|  | Dropouts | Continuers/graduates |
| :--- | ---: | ---: |
| Total | 9,000 | 337,000 |
|  | $\%$ | $\%$ |
| Social engagement |  |  |
| Very engaged | 14 | 17 |
| Engaged | 60 | 66 |
| Not very engaged | 26 | 17 |
| Academic engagement |  |  |
| Very engaged | $4^{*}$ | 15 |
| Engaged | 57 | 71 |
| Not very engaged | 39 | 14 |
| Overall engagement |  |  |
| Very engaged | 59 | 16 |
| Engaged | 35 | 70 |
| Not very engaged |  | 15 |
| Participated in extracurricular activities | 49 | 66 |
| At school | 54 | 68 |
| Outside school | $\mathbf{4 9}$ | $\mathbf{6 4}$ |
| Participated in volunteer activities |  |  |

Notes: As a measure of sampling error:

* indicates a coefficient of variation (CV) between $16.6 \%$ and $25 \%$
** indicates a CV greater than $25 \%$ and less or equal to $33.3 \%$
*** indicates a CV greater than $33.3 \%$. Caution should be used when interpreting these results.
Estimates in bold indicate a significant difference ( $\mathrm{p}<=.05$ ) between dropouts and continuers/graduates.
Totals are rounded to the nearest thousand.
Very engaged refers to scale scores greater than 1 standard deviation above the mean score, engaged refers to scale scores between (and including) -1 and 1 standard deviation beyond the mean score, and not very engaged scores refer to scores less than 1 standard deviation below the mean score.

Table C9
Working at age 15, dropouts and continuers/graduates

|  | Dropouts | Continuers/graduates |
| :--- | ---: | ---: |
| Total | 9,000 | 337,000 |
|  | $\%$ | $\%$ |
| Worked at a job | 73 | 68 |
| Hours worked at a paid job per week (7 days) |  |  |
| No hours | 27 | 32 |
| 1 to 10 hours | $\mathbf{1 9}$ | $\mathbf{3 1}$ |
| 11 to 20 hours | 24 | 23 |
| More than 20 hours | $\mathbf{3 0}$ | $\mathbf{1 5}$ |
| Did working affect interest in school? |  |  |
| Interest down | $\mathbf{1 9}$ | $\mathbf{1 0}$ |
| Interest stayed same | $\mathbf{7 8}$ | $\mathbf{8 5}$ |
| Interest increased | $4 * *$ | 6 |

Notes: As a measure of sampling error:

* indicates a coefficient of variation (CV) between $16.6 \%$ and $25 \%$
** indicates a CV greater than $25 \%$ and less or equal to $33.3 \%$
*** indicates a CV greater than $33.3 \%$. Caution should be used when interpreting these results.
Estimates in bold indicate a significant difference ( $\mathrm{p}<=.05$ ) between dropouts and continuers/graduates.
Totals are rounded to the nearest thousand.

Table C10
Perceptions of school climate of dropouts and continuers/graduates at age 15

|  | Dropouts | Continuers/graduates |
| :--- | ---: | ---: |
| Total | 9,000 | 337,000 |
|  | $\%$ | $\%$ |
| Students are disciplined fairly |  |  |
| Strongly disagree/disagree | 49 | $\mathbf{3 4}$ |
| Strongly agree/agree | 51 | $\mathbf{6 6}$ |
| People respect others as they are at school |  |  |
| Strongly disagree/disagree | $\mathbf{6 0}$ | $\mathbf{4 9}$ |
| Strongly agree/agree | $\mathbf{4 0}$ | $\mathbf{5 1}$ |
| My school is a friendly place |  |  |
| Strongly disagree/disagree | $\mathbf{3 2}$ | $\mathbf{1 9}$ |
| Strongly agree/agree | $\mathbf{6 8}$ | $\mathbf{8 1}$ |

Estimates in bold indicate a significant difference ( $\mathrm{p}<=.05$ ) between dropouts and continuers/graduates. Totals are rounded to the nearest thousand.

Table C11
Aspirations, behaviour and engagement for male and female dropouts at age 15

|  | Male dropouts | Female dropouts |
| :--- | ---: | ---: |
| Total | 5,000 | 4,000 |
|  | $\%$ | $\%$ |
| What is the highest level of education you would |  |  |
| like to get? |  |  |
| High school or less | $\mathbf{2 7}$ | $\mathbf{1 8}^{\star}$ |
| Trade/vocational/apprenticeship | $\mathbf{2 3}$ | $\mathbf{1 1}$ |
| College/university or more | $\mathbf{5 0}$ | $\mathbf{7 1}$ |
| When you think about your future career, do you |  |  |
| think you would enjoy going to college or university? |  | $\mathbf{7 0}$ |
| Agree/strongly agree | $\mathbf{5 7}$ | $\mathbf{3 0}$ |
| Disagree/strongly disagree | $\mathbf{4 3}$ |  |

How important to at least one parent that you get more education after high school?

| Very important | 44 | 56 |
| :--- | :--- | :--- |
| Not very important | 56 | 44 |

In the past 12 months, have you caused trouble at school and had to talk with the school principal or other administrator?

| Never | $\mathbf{3 4}$ | $\mathbf{4 6}$ |
| :--- | :--- | :--- |
| 3 times or more | $\mathbf{3 8}$ | $\mathbf{1 8}^{\star}$ |

How many of your closest friends have a reputation for causing trouble?

| None | 21 | 31 |
| :--- | :--- | :--- |
| Most or all | 33 | $\mathbf{1 6}^{\star}$ |


| How many of your closest friends push you to |  |  |
| :--- | :--- | ---: |
| do things that you feel are wrong or that make |  |  |
| you uncomfortable? |  |  |
| None | $\mathbf{7 0}$ | $\mathbf{8 7}$ |
| Most or all | $11^{*}$ | F |
| Self-reported overall mark | $8^{* *}$ | $10^{\star *}$ |
| Less than $50 \%$ | 27 | $\mathbf{1 7}$ |
| $50 \%$ to $59 \%$ | 33 | 30 |
| $60 \%$ to $69 \%$ | 25 | 26 |
| $70 \%$ to $79 \%$ | $\mathbf{6}^{* *}$ | $\mathbf{1 7}$ |
| $80 \%$ to $100 \%$ |  |  |
| Overall engagement in school | $\mathbf{4 1}$ | $\mathbf{2 8}$ |
| Not very engaged | $\mathbf{4 5 6}$ | $\mathbf{4 8 0}$ |
| Average reading score |  |  |

Notes: As a measure of sampling error:

* indicates a coefficient of variation (CV) between $16.6 \%$ and $25 \%$
** indicates a CV greater than $25 \%$ and less or equal to $33.3 \%$
*** indicates a CV greater than $33.3 \%$. Caution should be used when interpreting these results.
F indicates too unreliable to be published.
Estimates in bold indicate a significant difference ( $\mathrm{p}<=.05$ ) between male and female dropouts.
Totals are rounded to the nearest thousand.

Table C12
Characteristics of 18 to 20 year-old dropouts who returned or did not return to high school two years later

|  | Returner | Non-returner | Total |
| :---: | :---: | :---: | :---: |
|  | \% | \% |  |
| Gender |  |  |  |
| Male | 13 | 87 | 83,000 |
| Female | 15 | 85 | 52,000 |
| Age at time of interview in 2000 |  |  |  |
| 18 years old | 21 | 79 | 39,000 |
| 19 years old | 10 | 90 | 48,000 |
| 20 years old | 12 | 88 | 48,000 |
| Province when last in high school |  |  |  |
| Newfoundland and Labrador | F | F | 3,000 |
| Prince Edward Island | F | F | 1,000 |
| Nova Scotia | 9*** | 91 | 3,000 |
| New Brunswick | 11** | 89 | 2,000 |
| Quebec | 23 | 77 | 45,000 |
| Ontario | 11* | 89 | 36,000 |
| Manitoba | 12** | 88 | 6,000 |
| Saskatchewan | 12** | 88 | 3,000 |
| Alberta | 5** | 95 | 18,000 |
| British Columbia | 9** | 91 | 17,000 |
| Parent's highest level of education |  |  |  |
| Less than high school | 15* | 85 | 30,000 |
| High school graduate | 13 | 87 | 43,000 |
| Some postsecondary | 15*** | 85 | 6,000 |
| Postsecondary certificate or diploma | 22 | 78 | 21,000 |
| Bachelor's degree or higher | 8** | 92 | 13,000 |
| Educational aspirations |  |  |  |
| High school or less | 10 | 90 | 71,000 |
| Some postsecondary | 11*** | 89 | 6,000 |
| College diploma or certificate | 20 | 80 | 44,000 |
| University diploma, degree or higher | 13** | 87 | 10,000 |
| Self-reported grade average last year of high school |  |  |  |
| 59\% or less | 10* | 90 | 22,000 |
| 60\% to 69\% | 15 | 85 | 44,000 |
| $70 \%$ to $79 \%$ | 15 | 85 | 44,000 |
| 80\% to 100\% | 15* | 85 | 15,000 |
| Work status in December 1999 |  |  |  |
| No job | 14 | 86 | 42,000 |
| Full-time | 11 | 89 | 68,000 |
| Part-time | 21 | 79 | 25,000 |

Notes: As a measure of sampling error:

* indicates a coefficient of variation (CV) between $16.6 \%$ and $25 \%$
** indicates a CV greater than $25 \%$ and less or equal to $33.3 \%$
*** indicates a CV greater than $33.3 \%$. Caution should be used when interpreting these results.
F indicates too unreliable to be published.
Estimates in bold indicate a significant difference ( $\mathrm{p}<=.05$ ) between the lowest and highest values within each variable in the column.
Totals are rounded to the nearest thousand.

Table C13
Characteristics of those who returned or did not return to high school at age 20 to 22

|  | Total <br> dropouts | Proportion of <br> returners | Proportion of <br> non-returners |
| :--- | ---: | ---: | ---: |
| Total | 135,000 | 19,000 | 116,000 |
|  | $\%$ | $\%$ | $\%$ |
| Gender |  |  |  |
| Male | 62 | 58 |  |
| Female | 38 | 42 | 62 |
| Age at time of interview in 2000 |  |  | 38 |
| 18 years old | 29 | 43 |  |
| 19 years old | 35 | 25 | 26 |
| 20 years old | 36 | 32 | 37 |
| Province when Iast in high school |  |  | 37 |
| Newfoundland and Labrador | 2 | $F^{* *}$ | $1^{* * *}$ |

Notes: As a measure of sampling error:

* indicates a coefficient of variation (CV) between $16.6 \%$ and $25 \%$
** indicates a CV greater than $25 \%$ and less or equal to $33.3 \%$
*** indicates a CV greater than $33.3 \%$. Caution should be used when interpreting these results.
F indicates too unreliable to be published.
Totals are rounded to the nearest thousand.


# Appendix D: Programme for International Student Assessment (PISA) and reading literacy 

PISA defined reading literacy as "understanding, using and reflecting on written texts, in order to achieve one's goals, to develop one's knowledge and potential, and to participate in society". It was then divided into five proficiency levels. A student at one level could be assumed to be able to answer questions at all lower levels. The following presents the range of scores that fall within each reading literacy proficiency level.

Level 1 - score from 335 to 407
Level 2 - score from 408 to 480
Level 3 - score from 481 to 552
Level 4 - score from 553 to 626
Level 5 - score above 626
The dropouts in this report had an average reading score of 467 and the continuers and graduates together had an average reading score of 537. This means, on average, dropouts had a level 2 proficiency in reading literacy while continuers and graduates had a level 3 proficiency. A difference of one proficiency level can be considered a comparatively large difference in student performance in substantive terms.

For example, on the interpreting scale, Level 3 distinguishes students who can typically integrate several parts of a text, understand a relationship or construe the meaning of a word or phrase, and can compare, contrast and categorise competing information according to a range of criteria. At Level 2, students can be expected only to identify the main idea in a text, to understand relationships, make and apply simple categories, and construe meaning within a limited part of a text where information is not prominent but only low-level inferences are required.
For more information about reading literacy proficiency levels, please consult the report Measuring up: The performance of Canada's youth in reading, mathematics and science.

# Appendix E: Explaining the scales and definitions 

## Self-perception scales

Self-esteem measures a respondent's feelings of self-worth or self-acceptance.
Self-efficacy measures a respondent's confidence to achieve a positive outcome.
Self-mastery measures a respondent's sense of the extent to he/she regards his/her chances as being under his/her control.

Item Response Theory (IRT) scores were derived using students' responses to a series of questionnaire items. This score is a value that falls in the range of a standard normal distribution. Students were classified as having "high scores" if their score was greater than one standard deviation from the mean, as having "medium scores" if their score was within or including plus or minus one standard deviation from the mean and as having "low scores" if their score was below one standard deviation from the mean.

## Engagement scales

Academic engagement refers to a student's identification with and behavioural involvement in the academic aspects of school including their dealings with teachers, curriculum and school governance. A number of questions were used to derive this scale including "I complete my assignments", "School is one of the most important things in my life", and "Many of the things we learn in class are useless".

Social engagement refers to a student's identification with and involvement in the social aspects of school life. Social aspects of school life include informal, out-ofclassroom interests and activities associated with school such as students’ relationships with peers. A number of questions were used to derive this scale including "People at school are interested in what I had say", "I have friends at school whom I can talk to about personal things", and "I have friends at school who can help me with school work, if needed".

Item Response Theory (IRT) scores were derived for students' academic and social engagement in schooling. The score is a value that falls in the range of a standard normal distribution. Students were classified as "very engaged" if their score was greater than one standard deviation from the mean, as "engaged" if their score was within or including plus or minus one standard deviation from the mean and as "not very engaged" if their score was below one standard deviation from the mean. Overall engagement is a simple average of the scores of academic and social engagement.

## Volunteerism

To determine volunteer status, students were asked if in the last 12 months they: did any fundraising, canvassing, or campaigning; helped to organize or supervise activities or events for an organization; helped teach or coach for a group or organization; collected, served, or delivered food or other goods as a volunteer through an organization; provided information or help to educate or influence the opinions of others on behalf of an organization; or provided health care or support as a volunteer through an organization, including counselling and friendly visiting; and they participated in another type of volunteer activity for a charity, school, religious organization, community group or other organization. Students were classified as volunteers if they participated in any of these activities.

# Culture, Tourism and the Centre for Education Statistics Research Papers Cumulative Index 

Statistics Canada's Division of Culture, Tourism and the Centre for Education Statistics develops surveys, provides statistics and conducts research and analysis relevant to current issues in its three areas of responsibility.

The Culture Statistics Program creates and disseminates timely and comprehensive information on the culture sector in Canada. The program manages a dozen regular census surveys and databanks to produce data that support policy decision and program management requirements. Issues include the economic impact of culture, the consumption of culture goods and services, government, personal and corporate spending on culture, the culture labour market, and international trade of culture goods and services. Its analytical output appears in the flagship publication Focus on Culture (www.statcan.ca/english/IPS/Data/87-004-XIE.htm) and in Arts, culture and recreation-Research papers.
The Tourism Statistics Program provides information on domestic and international tourism. The program covers the Canadian Travel Survey and the International Travel Survey. Together, these surveys shed light on the volume and characteristics of trips and travellers to, from and within Canada. Its analytical output appears in the flagship publication Travel-log (www.statcan.ca/english/IPS/Data/87-003XIE.htm) and in Travel and tourism - Research papers.
The Centre for Education Statistics develops and delivers a comprehensive program of pan-Canadian education statistics and analysis in order to support policy decisions and program management, and to ensure that accurate and relevant information concerning education is available to the Canadian public and to other educational stakeholders. The Centre conducts fifteen institutional and over ten household education surveys. Its analytical output appears in the flagship publication Education quarterly review (www.statcan.ca/english/IPS/Data/81-003-XIE.htm), in various monographs and in Education, skills and learning - Research papers (www.statcan.ca/english/IPS/Data/81-595-MIE.htm).

Following is a cumulative index of Culture, Tourism and Education research papers published to date

Arts, culture and recreation - Research papers
Forthcoming

Travel and tourism - Research papers
Forthcoming

Education, skills and learning - Research papers

| 81-595-MIE2002001 | Understanding the rural-urban reading gap <br> 81-595-MIE2003002 |
| :--- | :--- |
| Canadian education and training services abroad: <br> the role of contracts funded by international <br> financial institution |  |
| 81-595-MIE2003003 | Finding their way: a profile of young Canadian <br> graduates |
| 81-595-MIE2003004 | Learning, earning and leaving - The relationship <br> between working while in high school and dropping <br> out |
| 81-595-MIE2003005 | Linking provincial student assessments with national <br> and international assessments |
| 81-595-MIE2003006 | Who goes to post-secondary education and when: <br> Pathways chosen by 20 year-olds |
| 81-595-MIE2003007 | Access, persistence and financing: First results from <br> the Postsecondary Education Participation Survey <br> (PEPS) |
| 81-595-MIE2003008 | The labour market impacts of adult education and <br> training in Canada |
| 81-595-MIE2003009 | Issues in the design of Canada's Adult Education and <br> Training Survey |
| 81-595-MIE2003011 | Planning and preparation: First results from the Survey <br> of Approaches to Educational Planning (SAEP) 2002 <br> A new understanding of postsecondary education in <br> Canada: A discussion paper |
| 81-595-MIE2004012 | Variation in literacy skills among Canadian provinces: <br> Findings from the OECD PISA |
| 81-595-MIE2004013 | Salaries and salary scales of full-time teaching staff at <br> Canadian universities, 2001-2002: final report |
| In and out of high school: First results from the second |  |
| cycle of the Youth in Transition Survey, 2002 |  |


[^0]:    1. Prince Edward Island introduced its pre-elemetary program in 2000-2001.
    2. 2002-2003 is the last year for the Ontario Academic Course (13th year of high-school).
