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Educational Trajectories of Youth in New Brunswick: The Impact of Exposure to Career Planning Services and Parental Involvement in Learning

Research Program on Post-Secondary Education and Training Opportunities in New Brunswick

Report #7

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Undertaken by
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Ressources humaines et Développement social Canada

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1.0 Introduction

Obtaining post-secondary education in Canada has become a crucial requirement for a successful transition into the labour market. Among many benefits of obtaining post-secondary education are lower rates of unemployment, lower rates of long term unemployment, more job stability and higher earnings. On the societal level, workers with post-secondary education credentials exhibit higher productivity, less dependence on social assistance and higher civic engagement.

The decision to pursue post-secondary education is an individual choice based on a variety of factors. Two key factors that may influence this choice are parental involvement in students' schooling and counselling for decisions about future careers. These elements combine to help students determine the appropriate type of post-secondary education needed for their career choice.

The objectives of this report were to:

1) Measure the extent to which students in New Brunswick took advantage of career counselling services.
2) Measure the extent to which parents of students in New Brunswick were involved in their children's education.
3) Measure the extent of counselling and its effects on the decision to pursue post-secondary education.
4) Measure the extent of parental school involvement and its effects on the decision to pursue post-secondary education.

The report is structured in the following way. In section 2.0, a description of the data used to produce this report is given. In section 3.0, the transitional pathways between education and the labour market of youth is shown for New Brunswick. In section 4.0, the exposure to education related counselling is measured. In the fifth section, the level of parental involvement in students' educational decisions is described. In the sixth section, multivariate analyses are used to measure the impact of counselling and parental involvement on the decision to pursue post-secondary education. In the seventh section, the findings are discussed.

2.0 Data

Data from the first three cycles of the Youth in Transition Survey (YITS) were used in this study. YITS is a longitudinal survey through which information is collected from the same respondents in the sample every two years. The survey was first administered in 2000 to two groups of respondents – 15-year olds and 18-20-year olds. At that time, the younger group also completed a skills assessment through the OECD's Programme for International Student Assessment (PISA). Except for section 3 of this report which used data from the older cohort (18-20-year olds in 2000), the report was based on analyses of the younger cohort.

YITS was specifically designed to measure transitional pathways between education and the labour market. For the younger cohort it also collected information from the students' parents. This unique design makes it ideal to analyze the effects of school counselling and parental involvement on post-secondary education participation.

New Brunswick began with one of the largest provincial samples in the country in 2000, when nearly 3,000 15-year old students and their parents were tested and interviewed for PISA/YITS. Since then, three cycles of follow-up telephone surveys have been undertaken with the students, and a fourth cycle is currently underway in early 2008.

	Cycle 1	**Cycle 2**	**Cycle 3**	**Cycle 4**
	15 years	**17 years**	**19 years**	**21 years**
	2000	**2002**	**2004**	**2006**
NB English	1,813	1,639	1,357	1,158
NB French	1,150	881	762	629

3.0 Educational and Labour Market Pathways

Educational and labour market pathways are complex. They can be linear in nature, meaning that a student enters post-secondary education straight out of high school, and following that enters the labour market. However, for a large segment of the population, the linear approach does not hold. Post-secondary education and its timing can affect the pathways.

Ensuring that students choose the most efficient pathways between education and the labour market is of benefit to themselves and society. On the personal level, an efficient pathway can maximize potential earnings and minimize potential costs associated with participation in post-secondary education. On the societal level, it maximizes productivity and also minimizes the societal cost associated with providing post-secondary education. Therefore, schools and parents can be key players in ensuring that the right pathways are chosen by students.

Figure 3.1 presents the diverse educational and labour market pathways taken by New Brunswick youth. It also compares them to the rest of Canada. At age 18-20 in 2000, 56% of New Brunswick youth were in school (either high school or post-secondary education). A third of them were working and almost 12% were inactive in terms of schooling or work. Two years later, non-linear pathways were emerging. For example, of the 32.3% of youth not in school but working, almost 6 percentage points returned to education, 20.3 percentage points continued in their status, but 6.1 percentage points went into the inactive mode.

Very similar results were observed between youth from New Brunswick and the rest of Canada. One noticeable exception was a higher proportion of New Brunswick youth in 2000 who were neither in school or working that entered the working category two years later (6.1 percentage points compared to 3.1 points for the rest of Canada).

The complexities of education and labour market pathways and its often non-linear nature are further illustrated in Figure 3.2. A lower proportion on New Brunswick youth in 2004 were in school (23.9%) compared to 31.6% for the rest of Canada.

Figure 3.1 School and labour market pathways between 2000 and 2002 – New Brunswick/rest of Canada (%)

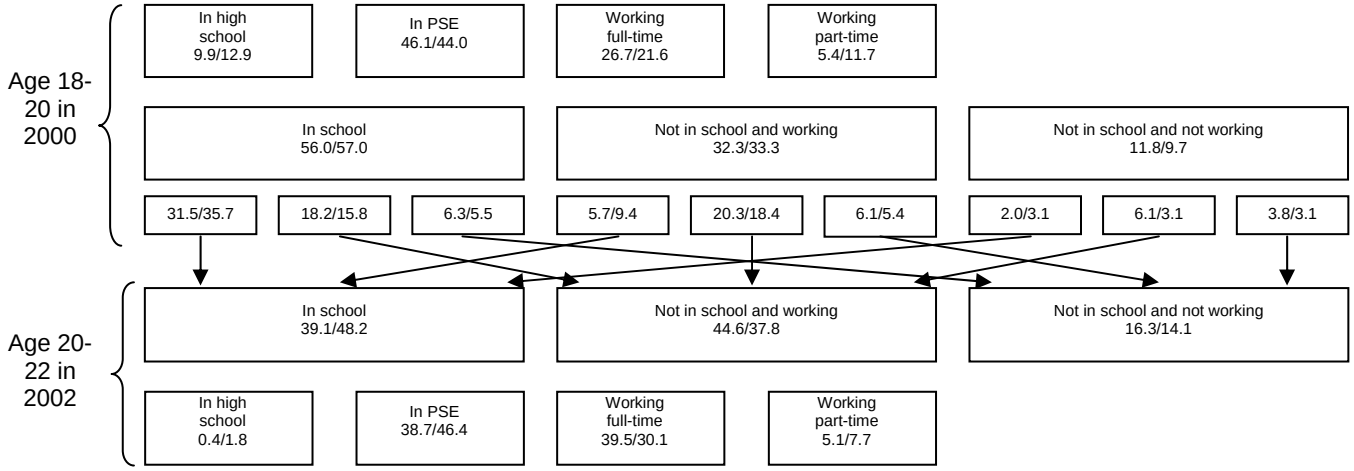
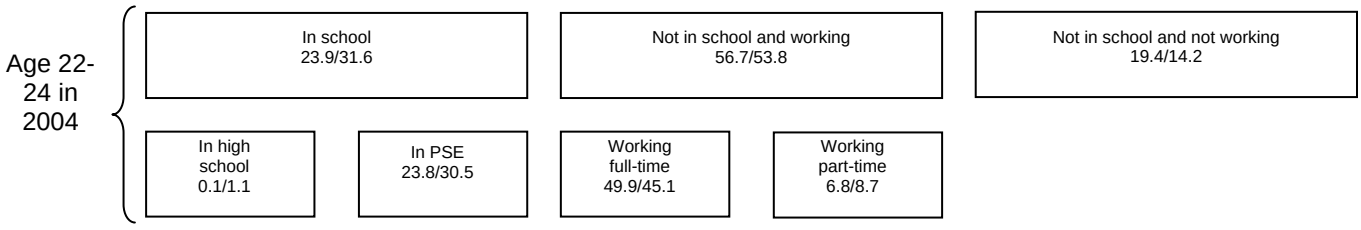


Figure 3.2 School and labour market status in 2004 – New Brunswick/rest of Canada (%)

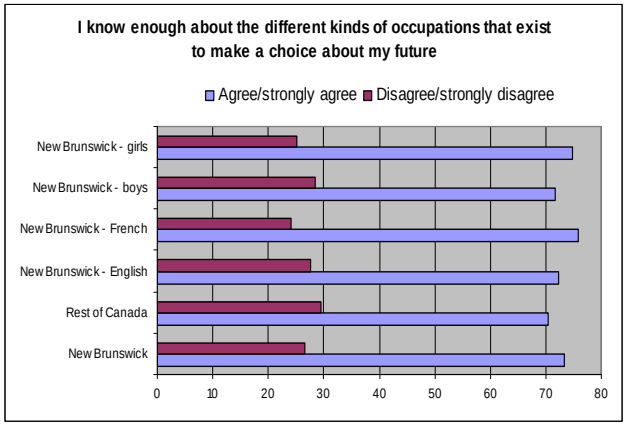


4.0 Exposure to Counselling and Educational Planning

Ensuring that students have the right information about their potential future educational and career choices is one way of creating efficient pathways between education and the labour market. One way of providing students with such information is counselling services. The influence of career counselling on educational planning is examined.

Almost three-quarters of New Brunswick students at age 15 agreed when asked if they knew enough about different types of occupations to make an informed decision about their future (Figure 4.1). This proportion was very similar to that of 15-year-old students in the rest of the country. The level of confidence was very uniform across all analyzed groups (males, females, Francophone students and Anglophone students).

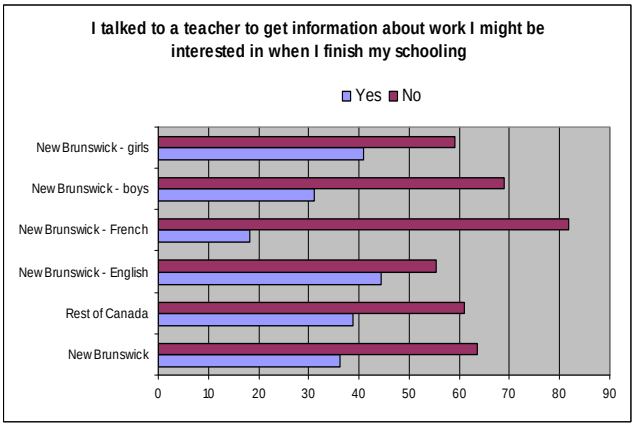
Figure 4.1



Given the high agreement that they had enough information to make an informed decision about their future occupations, the source of information was considered.

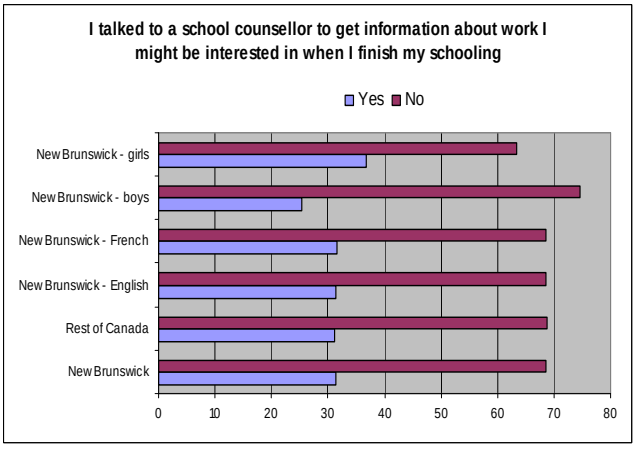
Communication with their teachers about work after school completion was reported by 38.9% of New Brunswick students (Figure 4.2). This was very similar to the rest of Canada. However, significant differences were observed among males and females, and Francophone and Anglophone students. Ten percent more females (40.9%) than males (31.1%) reported talking to their teachers about future careers. More than twice as many New Brunswick students from the Anglophone sector (44.5%) than from the Francophone sector (18.2%) reported communicating with teachers about work after schooling. Compared to other sources of career counselling, teachers were the most commonly used.

Figure 4.2



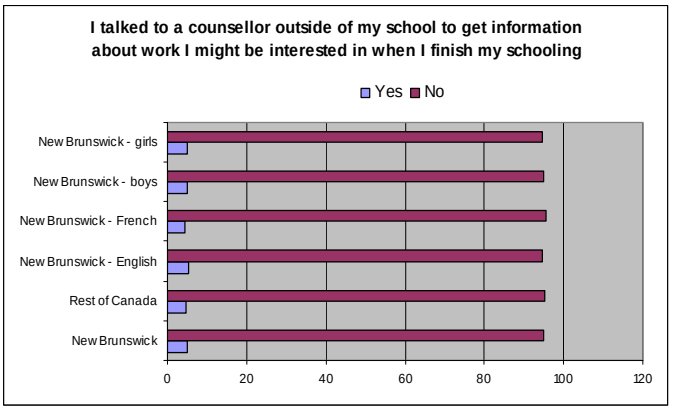
School counsellors are yet another potential source of information about future careers. However, this type of career research was relied on by a small proportion students. Less than a third of New Brunswick 15-year olds took advantage of this resource (Figure 4.3). A very similar result was observed in the rest of the country. No differences were observed between Anglophone and Francophone students (roughly 31% for each). However, boys were much less likely to have used school counselling for career information than were girls (25.3% and 36.7% respectively).

Figure 4.3



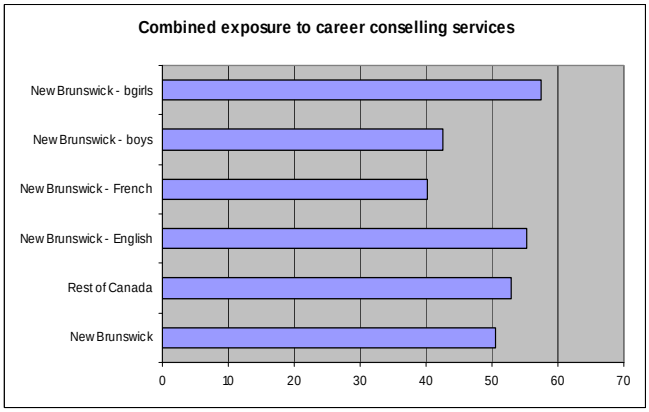
The last source of information about future career options to be analyzed was that of counselling outside of school. The results have shown that this type of information was the least popular since only around 5% of New Brunswick students used it (Figure 4.4). This proportion was similar in the rest of the country and among all analyzed groups of students.

Figure 4.4



To measure the overall exposure to career counselling, the three sources (teacher, school counsellor and outside of school counselling) were combined. As such, the results showed that half of New Brunswick 15-year olds took advantage of at least one of them (Figure 4.5). This was not different from the rest of the country. A higher proportion of girls (57.4%) than boys (42.6%) used them, as well as more Anglophone students (55.2%) than Francophone students (40.1%).

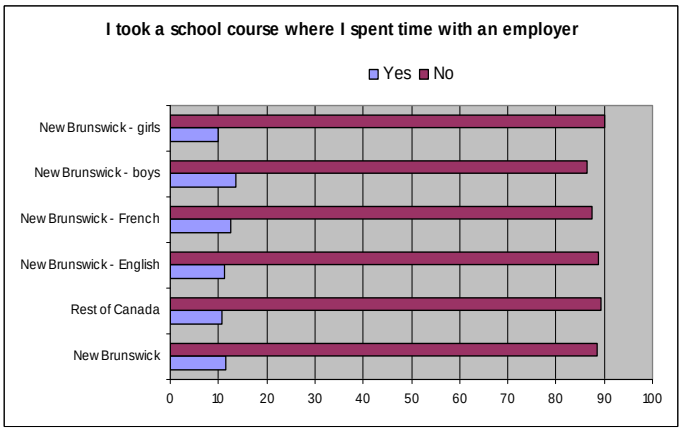
Figure 4.5



In addition to counselling services about future jobs/careers, a number of curricular options were available to high school students that would give them first hand job exposure. Such experiences could provide information that would be used for career choices.

The uptake of courses where the students spent time with an employer was not high in New Brunswick and the rest of the country, with only one-out-of-ten 15-year olds reporting it (Figure 4.6). No significant differences were found among the analyzed sub-groups of students.

Figure 4.6

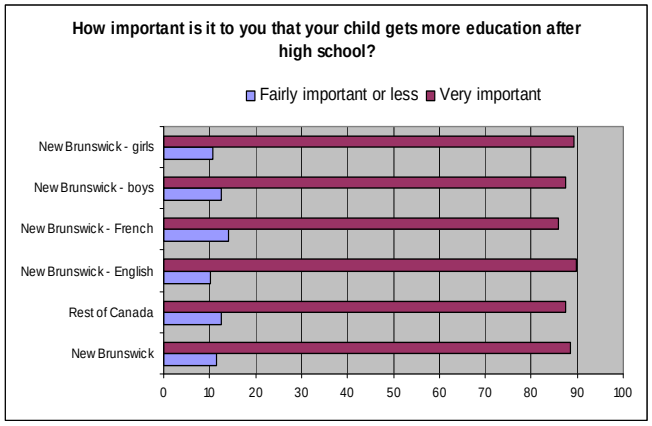


5.0 Parental Involvement and Educational Planning

Parental involvement in students' education is crucial for successful schooling. In addition to help with school material, parents can provide moral support for their children. They can also motivate their children to choose the right educational and labour market pathways, which affect their success later in the labour market.

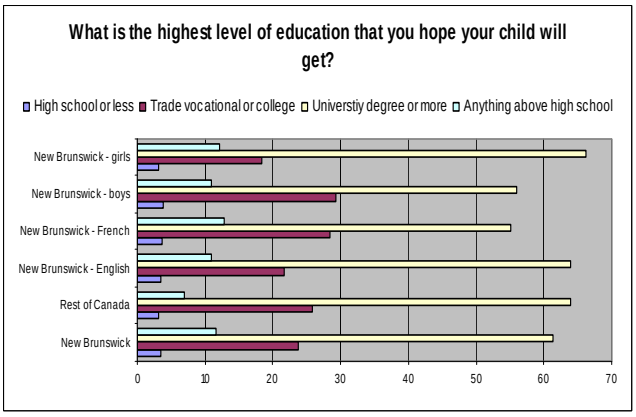
The results were very clear regarding the importance of education for parents of New Brunswick's students. A vast majority of them (88.5%) reported that it was very important for them that their children obtain education beyond high school (Figure 5.1). These results reflected those for the rest of Canada (87.5%). No differences were found in the importance of education among parents of students in all analyzed categories.

Figure 5.1



The high level of importance given to schooling by parents was also similar to the high levels of educational expectations for their children. Only a small fraction (3.5%) of parents of New Brunswick students expected their children to obtain high school education or less (Figure 5.2). A majority of parents (61.3%) expected their children to complete university level education or more – a result similar to the rest of Canada. More parents of girls held university level expectations compared to parents of boys (66.2% and 56% respectively). However, more boys than girls were expected to obtain trade vocational or college level education. More parents of Anglophone students expected their children to finish university than parents of Francophone youth (64% and 55.1% respectively). Just as in the case of boys, more Francophone students opted for trade vocational or college level education (28.4% compared to 21.6% for Anglophone students).

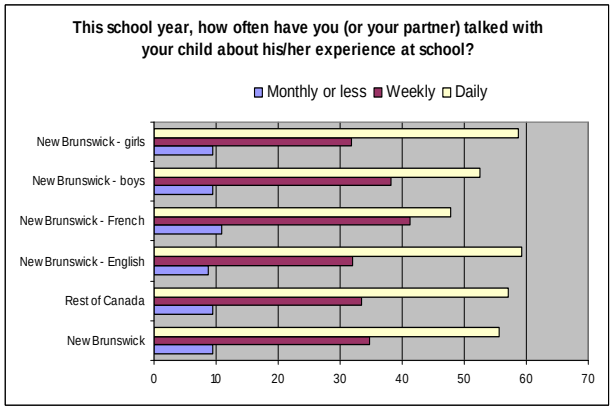
Figure 5.2



Parental involvement in children's schooling can occur in a variety of ways. It can be as basic as simple communication about school experiences and helping with school work, or staying in contact with the children's teachers. How involved were the parents in the schooling of the 15-year-old students in 2000?

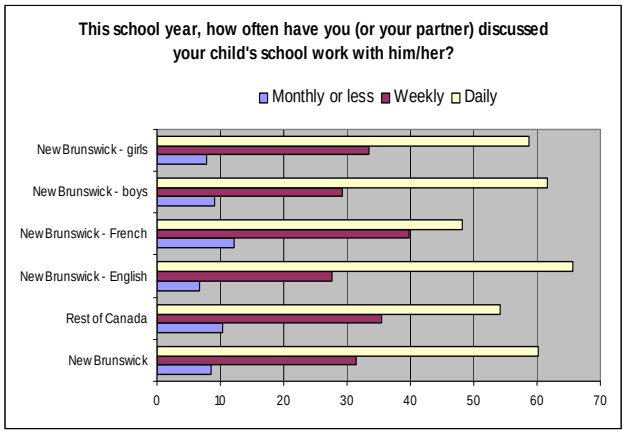
A majority of parents of 15-year old New Brunswick students reported daily communication with their children about their school experiences (Figure 5.3). A slightly higher proportion of parents of girls than boys reported this type of communication (58.7% and 52.5% respectively). There was also a difference among parents of Anglophone and Francophone students, with 11.4% more parents of Anglophone students reporting daily frequency of communication about children's school experiences.

Figure 5.3



Discussion of school work is yet another way for parents to get involved in their children's schooling. A majority of New Brunswick parents reported this on a daily basis (Figure 5.4) – slightly higher than the rest of Canada. Although no differences were found among parents of boys and girls, more parents of Anglophone students (65.8%) than Francophone students (48.1%) reported daily involvement in their children's school work.

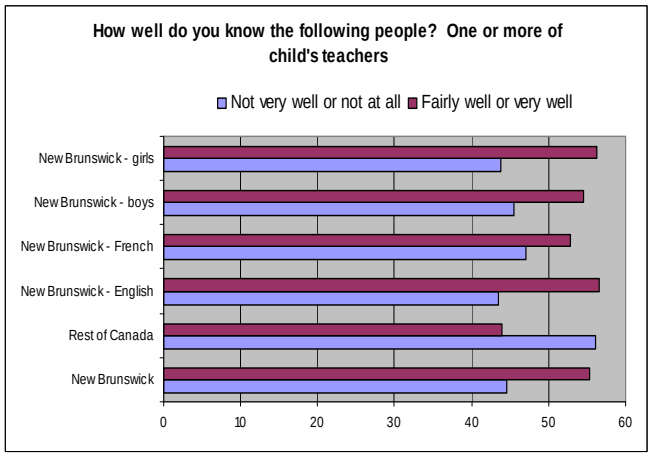
Figure 5.4



Interaction with teachers of their children can be ambiguous in terms of positive or negative reasons linked to their children education. On one hand, it can be an indication of a high level of involvement such as volunteering in extracurricular activities or attending student-parent meetings. On the other hand, student-parent interactions could be a result of academic difficulties or behavioural problems.

Nevertheless, a higher proportion of parents from New Brunswick than from the rest of the country reported knowing one or more of their children's teachers (55.3% and 43.9% respectively). No significant differences were observed among the analyzed sub-groups.

Figure 5.5



6.0 Multivariate Analyses

So far, the results of bivariate analyses showed that the exposure to counselling and parental involvement had a relationship to career choices and further education. However, these results did not consider the effect of other factors that affect students' pathways between education and the labour market. In light of exposure to counselling and parental engagement in their education, in this section the results of multivariate analyses are discussed. Given that the data employed was longitudinal, the information on counselling and parental engagement at age 15 was used to explain student participation in post-secondary education at age 19 (Table 6.1).

A logistic regression was employed to model the effect of key variables on whether the youth, aged 15 in 2000, undertook some form of postsecondary education by 2004.

Two models were used in the multivariate analyses to measure the effects of counselling and parental engagement on the students' decision to pursue post-secondary education. The first model looks at the overall effects of exposure to career counselling at age 15, as well as the overall parental involvement in children's education on post-secondary education participation four years later. The second model analyzes more detailed types of career counselling and parental involvement on participation in post-secondary education at age 19. Both models use the same set of control variables (gender, PISA reading levels and socio-economic status).

The results presented in table 6.1 showed that females were much more likely to have pursued post-secondary education. Irrespectively of the model used, females from New Brunswick were between 60% and 71% more likely to have attended post-secondary education. Very similar results were obtained for females from the rest of Canada.

The first model which investigated the impact of overall levels of parental communication about children's school experience on participation in post-secondary education did not yield significant results. This meant that less frequent discussions about school experience (monthly or less) did not change the odds of their children's participation in post-secondary education. The insignificant results were most likely caused by a small sample size in the infrequent category, which was reinforced by significant results obtained by the rest of Canada. For students outside of New Brunswick, infrequent parental communication about school experience decreased the odds of participation in post-secondary education by 15%.

Again, most likely due to small sample sizes, the results for model 2 which analyzed more detailed frequencies of parental communication on school experience also did not yield significant results for New Brunswick.

Parental communication about school work did not obtain significant results in either model 1 or 2 for both New Brunswick and the rest of Canada. Again, a possible explanation is the low sample sizes in the infrequent categories.

The results showed significant effects in terms of career counselling on subsequent participation in post-secondary education. In model 1, New Brunswick students reporting access to career counselling services had 52% higher odds of pursuing post-secondary education by age 19. This was higher than for the rest of the country with 22% higher odds.

The analysis of the more detailed sources of career counselling for New Brunswick students revealed that access to school career counselling increased their odds of pursuing post-secondary education by 38%. Although communication with teachers was the most commonly reported source of career counselling, it did not have a significant impact on post-secondary education participation. Very similar results were obtained for the rest of Canada.

It has been well documented that socio-economic status is a strong explanatory variable in terms of post-secondary education participation. This was the case in both models. However, for New Brunswick the socio-economic status of the student's family had a much higher effect on participation. For example, in model 1, a one standard deviation increase in the socio-economic status led to an increase of 547% in the odds of pursuing post-secondary education, much higher than the 334% increase in odds for the rest of Canada.

Reading skills as measured by PISA also held high explanatory power on participation in post-secondary education. New Brunswick students scoring at the higher levels (level 3 and above) at age 15 were 335% (model 1) more likely to have pursued post-secondary education by age 19. Similar results were obtained for the rest of Canada. However, less than a third of New Brunswick students reported taking advantage of this resource.

7.0 Conclusions

Accessing information about one's future occupational opportunities can be a key factor in the decision to pursue post-secondary education. Increasingly, the Canadian labour market is becoming dependant on highly qualified workers. Workers possessing these qualifications are being rewarded accordingly with higher employment rates, better job stability and higher earnings. A highly qualified worker generally requires post-secondary education. Therefore, ensuring that all capable students do make the decision to obtain post-secondary education is essential for future competitiveness and prosperity in Canada.

Proper information and encouragement is important for ensuring that a decision to pursue post-secondary education is made by students. Among a long list of sources from where this type of information can be obtained are parents and counselling services at or outside school. Therefore, the two main objectives of this report were to:

1. Measure the extent to which students in New Brunswick are taking advantage of career counselling services.
2. Measure the extent to which parents of students in New Brunswick are involved in their children's education.
3. Measure the extent of counselling and its effects on the decision to pursue post-secondary education.
4. Measure the extent of parental school involvement and its effects on the decision to pursue post-secondary education

In general, roughly half of New Brunswick students reported accessing career counselling at age 15. Teachers were the most popular option, with school counselling services in second place. Girls were more likely than boys to have accessed any type of career counseling, and more Anglophone students than their Francophone peers accessed these types of career counselling.

Parents of New Brunswick students were just as involved in their children's schooling as were parents in the rest of the country. They also held very high educational expectations for their children. More parents of females and Anglophone students wanted their children to finish university, while a higher proportion of parent of boys and Francophone students were opting for trade vocational or college education.

Multivariate analysis has shown that being a female, coming from a family of higher socio-economic status, and possessing higher reading skills at age 15 increased the likelihood of participation in post-secondary education by age 19.

The frequency and type of parental involvement in children's schooling did not have a significant impact on post-secondary education participation. This was true for New Brunswick and the rest of Canada.

Access to career counselling did increase the odds of PSE participation, both in New Brunswick and the rest of the country. In terms of sources of counselling services, school career counselling was the only one with a significant positive impact. Of all of the factors examined, reading skills at age 15 and the socio-economic status of the family had by far the greatest impact on post-secondary education participation.

Appendix A: Bivariate Analyses

Table 4.1 – I know enough about the different kinds of occupations that exist to make a choice about my future (%)

	New Brunswick	Rest of Canada	New Brunswick - English	New Brunswick - French	New Brunswick - boys	New Brunswick - girls
Agree/strongly agree	73.4	70.5	72.3	75.8	71.6	74.9
Disagree/strongly disagree	26.6	29.5	27.7	24.2	28.4	25.1

Table 4.2 – I talked to a teacher to get information about work I might be interested in when I finish my schooling (%)

	New Brunswick	Rest of Canada	New Brunswick - English	New Brunswick - French	New Brunswick - boys	New Brunswick - girls
Yes	36.3	38.9	44.5	18.2	31.1	40.9
No	63.7	61.1	55.5	81.8	68.9	59.1

Table 4.3 – I talked to a school counsellor to get information about work I might be interested in when I finish my schooling (%)

	New Brunswick	Rest of Canada	New Brunswick - English	New Brunswick - French	New Brunswick - boys	New Brunswick - girls
Yes	31.4	31.2	31.4	31.5	25.3	36.7
No	68.6	68.8	68.6	68.5	74.7	63.3

Table 4.4 – I talked to a counsellor outside of my school to get information about work I might be interested in when I finish my schooling (%)

	New Brunswick	Rest of Canada	New Brunswick - English	New Brunswick - French	New Brunswick - boys	New Brunswick - girls
Yes	5.1	4.6	5.4	4.3	5.1	5.1
No	94.9	95.4	94.6	95.7	94.9	94.5

Table 4.5 – Combined exposure to career counselling services (%)

New Brunswick	50.50
Rest of Canada	52.90
NB - English	55.20
NB - French	40.10
NB - boys	42.60
NB - girls	57.40

Table 4.6 – I took a school course where I spent time with an employer (%)

	New Brunswick	Rest of Canada	New Brunswick - English	New Brunswick - French	New Brunswick - boys	New Brunswick - girls
Yes	11.5	10.6	11.1	12.6	13.5	9.9
No	88.5	89.4	88.9	87.4	86.5	90.1

Table 5.1 – How important is it to you that child gets more education after high school? (%)

	New Brunswick	Rest of Canada	New Brunswick - English	New Brunswick - French	New Brunswick - boys	New Brunswick - girls
Fairly important or less	11.5	12.5	10.3	14.2	12.6	10.6
Very important	88.5	87.5	89.7	85.8	87.4	89.4

Table 5.2 – What is the highest level of education that you hope your child will get? (%)

	New Brunswick	Rest of Canada	New Brunswick - English	New Brunswick - French	New Brunswick - boys	New Brunswick - girls
High school or less	3.5	3.2	3.4	3.7	3.8	3.2
Trade vocational or college	23.7	25.9	21.6	28.4	29.3	18.4
University degree or more	61.3	64	64	55.1	56	66.2
Anything above high school	11.6	6.9	11	12.8	10.9	12.2

Table 5.3 – This school year, how often have you (or your partner) talked with child about his/her experience at school? (%)

	New Brunswick	Rest of Canada	New Brunswick - English	New Brunswick - French	New Brunswick - boys	New Brunswick - girls
Monthly or less	9.4	9.5	8.7	10.9	9.4	9.4
Weekly	34.8	33.5	32	41.2	38.1	31.8
Daily	55.7	57	59.3	47.9	52.5	58.7

Table 5.4 – This school year, how often have you (or your partner) discussed child's school work with him/her? (%)

	New Brunswick	Rest of Canada	New Brunswick - English	New Brunswick - French	New Brunswick - boys	New Brunswick - girls
Monthly or less	8.5	10.4	6.8	12.1	9.1	7.9
Weekly	31.4	35.5	27.6	39.8	29.3	33.4
Daily	60.1	54.1	65.6	48.1	61.6	58.8

Table 5.5 – How well do you know the following people? One or more of child's teachers (%)

	New Brunswick	Rest of Canada	New Brunswick - English	New Brunswick - French	New Brunswick - boys	New Brunswick - girls
Not very well or not at all	44.6	56.1	43.5	47.1	45.5	43.8
Fairly well or very well	55.4	43.9	56.5	52.9	54.5	56.2

Appendix B: Multivariate Analyses

Table 6.1 – Results from a logistic regression

	Model 1		Model 2	
VARIABLE	**NEW BRUNSWICK**	**REST OF CANADA**	**NEW BRUNSWICK**	**REST OF CANADA**
Constant	0.76* (0.151)	0.76*** (0.066)	0.77 (0.199)	0.73*** (0.081)
Gender (female)	1.60*** (0.052)	1.72*** (0.125)	1.71*** (0.127)	1.59*** (0.054)
Talk with child re. school experience (weekly)			BASE	BASE
Talk with child re. school experience (not this year)			0.5 (2.39)	1.04 (0.435)
Talk with child re. school experience (less than monthly)			0.9 (1.225)	0.73 (0.227)
Talk with child re. school experience (monthly)			0.92 (0.279)	0.92 (0.111)
Talk with child re. school experience (daily)			1.18 (0.142)	1.11** (0.054)
Talk with child re. school experience (monthly or less)	0.82 (0.239)	0.85* (0.089)		
Talk with child re. school experience (weekly or more)	BASE	BASE		
Talk with child re. school work (weekly)			BASE	BASE
Talk with child re. school work (not this year)			0.4 (1.573)	0.72 (0.25)
Talk with child re. school work (less than monthly)			1.21 (0.298)	1.21* (0.094)
Talk with child re. school work (monthly)			1.08 (0.151)	1.04 (0.059)
Talk with child re. school work (daily)			0.88 (0.212)	1.06 (0.104)
Talk with child re. school work (monthly or less)	1.06 (0.130)	1.03 (0.051)		
Talk with child re. school work (weekly or more)	BASE	BASE		
Career info from school counsellor			1.38** (0.161)	1.26** (0.06)
Career info from outside counsellor			1.04 (0.312)	0.85 (0.135)
Career info from teacher			1.15 (0.148)	1.02 (0.054)
No career counseling from any source	BASE	BASE		
Career info from any counseling source	1.52*** (0.127)	1.22*** (0.052)		
PISA score above or at level 3	3.35*** (0.155)	2.98*** (0.065)	3.20*** (0.161)	2.97*** (0.70)
SES - standardized	5.47*** (0.257)	3.34*** (0.104)	5.33*** (0.268)	3.29*** (1.07)

* Significance at 10% level
** Significance at 5% level
*** Significance at 1% level