



Preparing to Access Post-secondary Education: The Influence of *Future to Discover* on High School Academic Choices

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Introduction

Future to Discover (FTD) is a pilot project established by the Canadian Millennium Scholarship Foundation in collaboration with the governments of New Brunswick and Manitoba. The goal of FTD is to test early high school interventions that may increase access to postsecondary education (PSE), particularly for students from families with lower incomes and or little or no postsecondary education experience. Two interventions, *Explore your Horizons* (EYH) and *Learning Accounts* (LA), are pilot tested through FTD.

This paper presents the impact of *Future to Discover* on a number of high school outcomes, using administrative data. It is intended to augment the analyses presented in *Future to Discover: Interim Impacts Report*, which were primarily based on survey data. The goal is to complete the account of FTD's effects on participants' behaviour and experiences up to the end of high school. The paper begins by presenting a brief description of the FTD project and an overview of the findings.¹ It then discusses the data and methodology used in calculating the impacts of FTD up to the end of Grade 12. The remaining sections present the interim impacts of FTD on some of the outcomes that the original program logic model (SRDC, 2007) anticipated would be affected while still in high school.

The first of the two interventions tested by FTD is *Explore your Horizons* (called *Future to Discover* in Manitoba). It provides Grade 10 to Grade 12 students with enhanced career education and advice about postsecondary education, through a series of workshops for participants and their parents, a Web site, and a magazine. It is intended to help students learn about various types of postsecondary education, how to access them, and to explore possible options for PSE. It also aims to teach parents how to support their children in their career exploration process. Ultimately, participation in EYH is expected to increase high school students' participation in postsecondary education.

The second intervention, *Learning Accounts*, which was implemented only in New Brunswick, is a financial incentive aimed at students with family incomes below the provincial median. It provides, early in Grade 10, a guarantee of a grant worth up to \$8,000, conditional upon high school completion and subsequent participation in postsecondary education. A combination of *Explore Your Horizons* and *Learning Accounts* is also offered to some New Brunswick students simultaneously.

The central goal of FTD is to learn whether either or both of these interventions will increase access to postsecondary education. The primary impact of interest of FTD is the enrolment in postsecondary education studies, which will be presented in the final impact report to be published in October 2012. This paper, however, looks at whether students who received the enhanced career education as part of *Explore your Horizons* and or *Learning Accounts* took the steps that the logic model assumed would occur while still in high school, in order to achieve this goal. The logic models of FTD posit that students will start responding in high school in ways that reflect increased motivation to pursue postsecondary education goals. In particular, the logic models anticipate that in the short-term, while in high school, they will have:

¹ The *Future to Discover: Implementation Report* and *Future to Discover: Interim Impact Report* present detailed description on FTD design features and its implementation.

- increased interest in high school and attendance at high school;
- lower high school drop-out rates;
- changes in chosen high school courses;
- increased chances of high school graduation; and
- improved course grades, test scores, and overall grade point average.

These expected impacts, while in high school, originate mainly from the assumption that students newly motivated to enrol in postsecondary education or motivated to pursue different postsecondary goals (e.g., university enrolment instead of college or college instead of university) will engage more in behaviours conducive to achieving these goals. For instance, they may decide to make changes in course choices in order to meet the necessary requirements for their choice of PSE, work harder to get better grades, ensure they fulfill the requirements to get a high school diploma, and so on. However, because these are only interim impacts, they do not determine whether FTD's interventions are successful. The interim impacts provide an indication as to whether changes are occurring in line with the assumptions of the logic model and an indication therefore of the mechanism through which the intervention operates. The true impact of FTD's interventions can only be determined by examining data on postsecondary education enrolment. A positive or negative impact on the outcomes examined in this paper only indicates that the interventions did or did not change the high school behaviour of those in the program. In either case, the interventions might still have an effect on enrolment in postsecondary education. For example, the interventions can have a positive effect on postsecondary enrolment without changes in the rates of high school graduation. This can occur if participants would normally graduate high school, even in the absence of the interventions, but not go on to postsecondary education. In this case, an impact can be realised if the interventions encourage more graduates to enrol in and complete the first year of a postsecondary education program.

Overview of the findings

As will be shown in the results sections, both FTD interventions yielded a few impacts on course choices and course marks of participants, but no impacts on “on-time” graduation rates.

In brief, the main findings of these FTD interventions are as follows:

- Because of the timing of random assignment and the start of the treatment for both interventions, no differences were expected in course choices or course grades in Grade 9 (except by chance) and hardly any were detected.
- *Explore Your Horizons* led to positive impacts on Grade 11 course choices for two subgroups of New Brunswick Francophone families — those whose families have lower incomes and whose parents have no or less than two years of postsecondary education (“lower income and lower education”) and those whose parents have no postsecondary education experience (“first generation families”). Both subgroups of participants increased their enrolment in mathematics, French, science and social studies courses in Grade 11.
- The *Learning Accounts* intervention appears to have caused an improvement on the Grades 10, 11, and 12 course marks of some students in the Anglophone sector. In particular, fewer of them were passing only up to 50 per cent of their courses.
- *Explore Your Horizons* plus *Learning Accounts* yielded increased enrolment in Mathematics for Grade 12 Francophone students in “lower income and lower education” and “first generation families” subgroups by 8.74 percentage points.
- *Explore Your Horizons* plus *Learning Accounts* positively influenced the course marks results in Grade 10 among Anglophone students, leading to a drop in the proportion who passed half their courses or fewer.
- There are no impacts on “on time” high school graduation rates for the full sample or any of the two subgroups of interest by any of the FTD interventions in New Brunswick and Manitoba.

Data and methodology

The data and analytical methods used to estimate the impacts presented below are discussed in this section. It first briefly describes the data and the effect of data availability and quality on the analyses. The section then reviews the statistical model used in estimating the impacts. Lastly, it explains the sample divisions for the presentation of the impacts.

Data sources

The administrative data for the analyses conducted in this paper come from the respective provincial education departments in New Brunswick and Manitoba. They provided individual level high school data on course choices and course grades in Grades 9 through 12, and high school graduation status.

The data files on high school participation have a number of limitations for calculating all the anticipated short-term impacts as documented in the project's logic model. The FTD logic model discusses looking at short-term impacts on:

- Increased interest in high school and attendance at high school
- Lower high school drop-out rates
- Changes in chosen high school courses
- Increased chances of high school graduation; and
- Improved course grades, test scores, and overall grade point average.

However, the information required for calculating some of these measures using administrative data were not available or of poor quality. For example, attendance data was not available for the Manitoba sample and only available for at most two years for the New Brunswick sample. Survey measures were used instead in the Interim Impacts Report (Smith Fowler et al., 2009). As a result, the analyses presented in this paper looks at the impacts of FTD on three outcomes that could be accurately determined from the administrative data. They are:

- changes in high school course choices in Grades 9, 10, 11, and 12;
- changes in course grades in Grades 9, 10, 11, and 12; and
- rate of high school graduation.

Calculating impacts

The impact estimates consist of the difference in outcomes — averages or proportions — between those who were assigned to receive one or both FTD treatments and the equivalent comparison group. Both interventions were tested using an experimental design, in which students were randomly assigned to receive either or both interventions, or to a comparison group. Because students were assigned at random, each treatment group should be similar in observed and unobserved characteristics to the equivalent comparison group. Therefore, whatever happens, on average, to students in the comparison group in terms of course choices, course grades, and high school graduation

(or any other outcome) can be reliably assumed *would* have happened to students in the treatment group in the absence of FTD interventions. Therefore, any statistically significant differences that emerge in measured outcomes between a treatment group and the equivalent comparison group can be confidently attributed to the intervention.

Notwithstanding that random assignment is generally accepted as the best mechanism to obtain similar experimental groups, it is not uncommon that a well designed and implemented random assignment procedure yields, by chance, groups that are different in one or more characteristics. These differences are caused by sampling variation and are accounted for in the declared levels of statistical confidence in the findings. Nonetheless, to compensate, a standard practice by researchers is to use regression adjustment to increase the precision of the estimated impact. Following this practice, the impact estimates presented in this paper are based on an adjusted general linear regression model. The “regression adjustment” is made by including important baseline measures as covariates in the impact estimation model.²

Because this paper is a supplement to *Future to Discover: Interim Impacts Report*, and because that report was restricted to students who received and responded to the Grade 12 survey the same is done here.³ From this sample, all students offered the FTD interventions are included in the analyses, even though some assigned to *Explore your Horizons* and or *Learning Accounts* may not have experienced any or all of the related activities such as attending workshops, reading the magazine, visiting the Web site or initiating the process to receive their *Learning Account*. Thus, the impacts estimated and reported are for those who received an offer to participate in FTD interventions, commonly called “intent-to-treat” analysis, rather than just those who participated in the interventions. This analysis compares the results of program and comparison groups, producing valid estimates of impact. It also simulates the effects of programs that *offer* treatments but do not mandate participation.

Sample divisions

In the analyses presented below, the composition of the analytical samples varies, because different students are subject to different group assignment based on eligibility for the interventions. For example, the comparison group for the analysis on *Learning Accounts* in New Brunswick is a sub-sample of the comparison group used for examining the results of *Explore Your Horizons*. The sample allocation for all comparisons using *Learning Accounts* eligible participants is based on known family income. That is, only those who at baseline provided the required income information from the previous year’s income tax returns and whose family incomes were determined to be below the provincial median were deemed Learning Accounts-eligible. LA-eligible students were assigned to

² The adjusted impact model used for this paper is a slightly modified version of the model used in the *Future to Discover: Interim Impacts report*. Two changes were made to the regression model for this report: 1) addition of a covariate to account for within school effects; and 2) calculation of standard errors using bootstrapping.

³ In order to reduce programming and survey costs, not every participant received a follow-up survey, but every participant is tracked with administrative data. This design feature is part of the complex sample allocation and analytical assignment of the FTD project. Details on the sample division and allocation are detailed in the *Future to Discover: Early Implementation Report*.

either *Explore your Horizons*, *Learning Accounts*, *Explore your Horizons* plus *Learning Accounts*, or the comparison group. Only LA-eligible students could receive *Learning Accounts*. Therefore, all results presented for *Learning Accounts* and *Explore your Horizons* plus *Learning Accounts* are from the sample of LA-eligible students.

LA-ineligible participants in New Brunswick (those who did not provide the required information or those with income higher than the provincial median) and all Manitoba participants were assigned either to *Explore your Horizons* or to the comparison group.

Since the project aims to determine the impacts on those most likely to need the support to access PSE, it was also necessary to define and allocate such subgroups of students from the outset. Two overlapping subgroups were defined:

- students from families that have lower incomes and whose parents have no or less than two years postsecondary education experience, also called LILE (lower income and lower education); and
- “first generation families” (FGF) or students whose parents have no PSE experience.

Thus, results are examined for the full analytical sample and the two subgroups. The estimated impacts are presented separately for Manitoba and New Brunswick. New Brunswick results are then further separated by Francophone and Anglophone sectors.

Structure of the paper

The remainder of this paper presents estimates of the impacts of offering FTD interventions on the three outcomes of interest in the following order: *Impacts on Course Choices in Grades 9, 10, 11, and 12*; *Impacts on Course Grades in Grades 9, 10, 11, and 12*; and *Impacts on High school Graduation*. These results are presented first for students in *Explore Your Horizons*, then *Learning Accounts*, and then *Explore Your Horizons* plus *Learning Accounts*. In order to place the impact results in context, this section begins with a brief summary on the high school curriculum in Manitoba and New Brunswick.

Background: Structure of high school curriculum

All high school students in Manitoba and New Brunswick complete a mix of compulsory and elective courses in similar subject areas, from Grade 9 through to Grade 12. Compulsory courses are usually in mathematics, language arts, science, and social studies, while elective courses are typically in the arts, languages, and applied skills, but can also include additional courses in mathematics, science, or social studies.

Despite the similarities in courses or subject areas covered by these high schools, the graduation requirements in Manitoba and New Brunswick are quite different. More specifically, in Manitoba a minimum of 28 credits from a mix of compulsory and elective courses is required for graduation. Individual schools have the authority to exceed the minimum 28-credit graduation requirement. In Manitoba's English schools, Grades 9 and 10 students have five compulsory subject areas — English language arts, mathematics, science, social studies and physical/health education. There are three compulsory subject areas in Grade 11 (English language arts, mathematics, and social studies) and two in Grade 12 (English language arts and mathematics). An additional 13 elective credits are required over the course of Grades 9, 10, 11, and 12. The elective courses can be additional mathematics, language arts, sciences, social studies, basic French or other second languages, the arts, physical education, applied skills areas (e.g., independent living, technology education) and career education.

Manitoba's French and French Immersion schools have a slightly different curriculum to that of the English schools. In addition to the compulsory subjects in the English schools, French is a compulsory subject in Grades 9 through 12. Nine optional credits are required over the course of Grades 9, 10, 11, and 12 in Manitoba's French and French Immersion schools.

New Brunswick has two parallel but separate education systems in recognition of the province's Anglophone and Francophone sectors. High schools from the Anglophone sector have the option of organizing credits in a 16-credit or 20-credit system. A credit is granted for 90 instructional hours of course work in the Anglophone sector. In the Anglophone 20-credit system, a student's course load is typically 10 credits per year and made up of a combination of two- and one-credit courses. Their compulsory subject areas in Grade 9 and 10 includes two credits each in mathematics and English Language arts, and one credit each in French, social studies, and science. Grade 11 compulsory courses consist of a 2-credit English course, and one credit each in mathematics, social studies, science or approved technology course, fine arts or life role development cluster. In Grade 12 there is a single compulsory one-credit English course.

High schools in the New Brunswick Francophone sector use a 30-credit system. The 30 credits are accumulated from Grades 10 to 12. A credit is granted for 93.5 instructional hours of work. In Grade 9, there are eight compulsory subjects — French, English as a second language, mathematics, science, social science, physical education, and “formation personnelle et sociale.” In Grade 10, the compulsory subjects consist of two credits each in French and mathematics, and one credit each in English as a second language, science, social studies, physical education, technology, and “formation personnelle et sociale.” There are six compulsory credits in Grade 11 (2 credits of French, and one credit each of mathematics, social science, science and English as a second language). Students must accumulate a minimum of 24 credits — 17 compulsory and 7 electives — by the end of Grade 12 to satisfy graduation requirements.

Interim impacts

Impacts of *Explore Your Horizons*

The *Explore Your Horizons* integrated components were each designed to reinforce key concepts of career exploration and development. The logic model assumed that by providing career education and advice, *Explore Your Horizons* would lead to increase interest in postsecondary education and thus induce a change in chosen high school courses, improved course grades and increase rates of graduation. The impacts presented below for *Explore Your Horizons*, examine whether these changes did occur.

Impacts on courses in Grades 9, 10, 11, and 12

While the *Explore Your Horizons* logic model supposes that changes would occur in course choices, it is not clear how these changes would transpire. A sizable number of courses are mandatory high school graduation requirements, therefore, one possibility is that students may change the focus of their elective courses from arts and applied skills to additional courses in mathematics, science and social studies or vice versa.

Tables 1.1, 1.2, 1.3, and 1.4 present the results on high school courses taken in Grades 9, 10, 11, and 12, by the full sample of participants. The tables reveal that *Explore Your Horizons* had very little influence on the course choices on the full sample of students in Manitoba and both New Brunswick linguistic sectors.

Table 1.1 presents estimates on course choices for Grade 9. Because random assignment occurred at the end of the Grade 9 year, when courses would have already been completed, differences in course choices are not expected at this point, except by chance resulting from random assignment. As the table demonstrates, Manitoba ninth graders in the *Explore Your Horizons* and comparison groups enrolled in most courses in similar proportions, with two exceptions. Students in the comparison group were more likely to have enrolled in arts and physical education courses than *Explore Your Horizons* students. About seven percentage points fewer *Explore Your Horizons* students enrolled in arts courses, while approximately three percentage points fewer enrolled in physical education and leadership courses.

In the New Brunswick Francophone sector, *Explore Your Horizons* and comparison group students in Grade 9 were equally likely to enrol in at least one course in all subject areas, except for social studies. While enrolment in social studies was very high for both *Explore Your Horizons* and comparison group students, it was slightly higher (2.55 percentage points) for comparison group students. In NB Anglophone sector, the *Explore Your Horizons* group had a 3.33 percentage point higher enrolment in arts courses than the comparison group.

In Grade 10, students' selection of courses occurred prior to the *Explore Your Horizons* workshops began, and therefore, although it is post random assignment, it is still very early to expect any changes. As shown in Table 1.2, minimal changes were detected on course choices in Grade 10. In contrast with the comparison group, Manitoba *Explore Your Horizons* students were more likely to enrol in at least one French course. In New Brunswick, Francophone *Explore Your Horizons* students were more likely

to enrol in arts courses. There were no detectable impacts on course choices for New Brunswick Anglophone participants in Grade 10.

Any impacts on course choices for students in the EYH group, should only be noticeable starting in Grade 11. As shown in Table 1.3, in Grade 11, students in both the comparison and *Explore Your Horizons* groups, in both provinces, enrolled in most courses in equivalent proportions. The one exception is the observed difference among New Brunswick Anglophone participants' enrolment in physical education and leadership courses. Grade 11 New Brunswick Anglophone students were 4.37 percentage points less likely to enrol in physical education and leadership courses than their counterparts in the comparison group.

In Grade 12 (Table 1.4), similar proportions of *Explore Your Horizons* and comparison students in Manitoba enrolled in all courses, except French. In New Brunswick, statistically significant impacts are only detected for enrolment in physical education courses by Francophone *Explore Your Horizons* students — approximately 6 percentage points fewer of them were enrolled in these courses compared to students in the comparison group.

Table 1.1: Differences in Grade 9 Course Choices for *Explore Your Horizon* Participants

	Manitoba			New Brunswick					
	EYH Group	Comparison Group	Impact (s.e)	Francophone			Anglophone		
				EYH Group	Comparison Group	Impact (s.e)	EYH Group	Comparison Group	Impact (s.e)
Known to have taken at least one course in the following subject areas:									
Math	96.92	96.84	0.08 (1.14)	98.30	98.95	-0.65 (0.76)	96.03	95.03	0.99 (0.97)
English	98.00	97.92	0.07 (0.87)	97.73	98.07	-0.34 (0.91)	96.26	94.97	1.29 (0.97)
French	38.47	33.38	5.09 (3.14)	25.43	26.22	-0.79 (1.87)	58.42	58.52	-0.10 (2.93)
Science	95.85	95.24	0.61 (1.29)	96.97	97.16	-0.19 (1.01)	95.58	93.86	1.73 (1.15)
Social studies	97.26	97.48	-0.22 (1.05)	95.54	98.08	-2.55 ** (1.04)	96.32	95.11	1.21 (0.99)
Fine Arts	66.18	73.12	-6.94 ** (2.97)	59.26	57.66	1.61 (2.48)	95.14	91.81	3.33 ** (1.36)
Business and computer-related courses	61.25	61.30	-0.06 (3.18)	-	-	-	7.20	7.06	0.14 (1.10)
Technology and applied skills	79.35	82.99	-3.64 (2.64)	-	-	-	63.45	65.33	-1.88 (2.38)
Career Development and Planning	4.19	4.72	-0.53 (1.04)	69.61	70.19	-0.58 (2.35)	36.64	36.89	-0.25 (2.02)
Physical Education and leadership	95.19	97.78	-2.59 ** (1.18)	70.72	72.18	-1.46 (2.27)	90.97	88.89	2.08 (1.59)
Other courses	36.62	38.06	-1.44 (2.79)	-	-	-	2.64	2.27	0.38 (0.97)
Sample Size	444	391		454	673		432	610	

Source: Course participation data

Notes: Sample sizes vary for individual measures because of missing values.
Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.
Rounding may cause slight discrepancies in sums and differences.
A dash denotes statistics based on a sample size of 5 or less.

Table 1.2: Impacts of *Explore Your Horizon* on Courses Taken in Grade 10

	Manitoba			New Brunswick					
				Francophone			Anglophone		
	EYH Group	Comparison Group	Impact (s.e)	EYH Group	Comparison Group	Impact (s.e)	EYH Group	Comparison Group	Impact (s.e)
Known to have taken at least one course in the following subject areas:									
Math	90.40	92.72	-2.32 (1.85)	96.77	95.41	1.37 (1.22)	86.42	85.45	0.97 (2.02)
English	93.37	93.96	-0.58 (1.57)	93.82	95.26	-1.44 (1.45)	86.53	85.94	0.60 (2.01)
French	28.54	22.64	5.91 ** (2.71)	90.75	93.33	-2.58 (1.80)	52.97	51.62	1.34 (3.09)
Science	91.89	93.59	-1.70 (1.77)	94.78	94.79	-0.02 (1.29)	90.46	92.81	-2.35 (1.71)
Social studies	92.34	94.36	-2.03 (1.68)	91.84	93.56	-1.73 (1.49)	86.38	85.89	0.49 (2.03)
Fine Arts	48.23	53.30	-5.07 (3.42)	18.37	12.63	5.74 *** (2.17)	79.48	82.26	-2.78 (2.20)
Business and computer-related courses	39.83	40.56	-0.73 (3.47)	3.05	2.93	0.12 (1.01)	15.41	13.70	1.71 (2.13)
Technology and applied skills	69.93	67.82	2.12 (3.11)	61.45	65.21	-3.76 (2.84)	58.36	59.79	-1.43 (2.80)
Career Development and Planning	-	-	-	78.04	79.11	-1.07 (2.12)	25.21	24.73	0.48 (2.13)
Physical Education and leadership	83.56	80.77	2.78 (2.32)	78.77	78.27	0.50 (2.38)	73.68	77.40	-3.73 (2.48)
Other courses	14.42	14.35	0.08 (2.32)	3.45	3.60	-0.15 (1.13)	5.00	4.84	0.16 (1.34)
Sample Size	444	391		454	673		432	610	

Source: Course participation data

Notes: Sample sizes vary for individual measures because of missing values.
Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.
Rounding may cause slight discrepancies in sums and differences.
A dash denotes statistics based on a sample size of 5 or less.

Table 1.3: Impacts of *Explore Your Horizon* on Courses Taken in Grade 11

	Manitoba			New Brunswick					
				Francophone			Anglophone		
	EYH Group	Comparison Group	Impact (s.e)	EYH Group	Comparison Group	Impact (s.e)	EYH Group	Comparison Group	Impact (s.e)
Known to have taken at least one course									
in the following subject areas:									
Math	83.16	83.79	-0.63 (2.43)	88.16	86.12	2.04 (1.85)	91.49	90.20	1.29 (1.82)
English	85.79	85.41	-0.37 (2.17)	84.27	84.54	-0.27 (2.10)	91.70	90.62	1.08 (1.84)
French	18.07	14.82	3.25 (2.21)	87.28	86.03	1.25 (1.98)	11.43	12.72	-1.29 (2.17)
Science	70.65	73.93	-3.28 (2.95)	85.18	83.70	1.48 (2.11)	83.31	85.30	-2.00 (2.49)
Social studies	78.29	81.13	-2.84 (2.68)	84.76	81.83	2.93 (2.15)	85.18	84.66	0.52 (2.45)
Fine Arts	32.79	32.92	-0.13 (3.37)	20.63	18.41	2.22 (2.39)	32.78	32.35	0.43 (3.29)
Business and computer-related courses	25.42	28.24	-2.82 (2.83)	27.38	29.30	-1.92 (2.68)	45.69	45.81	-0.12 (3.27)
Technology and applied skills	48.14	49.04	-0.91 (3.24)	56.71	53.83	2.88 (2.94)	57.08	62.43	-5.36 (3.40)
Career Development and Planning	3.94	2.18	1.76 (1.14)	22.57	21.87	0.71 (2.50)	3.69	2.63	1.06 (1.11)
Physical Education and leadership	47.13	46.35	0.78 (3.16)	24.18	22.58	1.60 (2.63)	19.88	24.25	-4.37 (2.47) *
Other courses	16.23	14.09	2.14 (2.24)	6.00	7.34	-1.34 (1.48)	4.23	5.91	-1.69 (1.38)
Sample Size	444	391		454	673		432	610	

Source: Course participation data

Notes: Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Table 1.4: Impacts of *Explore Your Horizon* on Courses Taken in Grade 12

	Manitoba			New Brunswick					
				Francophone			Anglophone		
	EYH Group	Comparison Group	Impact (s.e)	EYH Group	Comparison Group	Impact (s.e)	EYH Group	Comparison Group	Impact (s.e)
Known to have taken at least one course									
in the following subject areas:									
Math	82.02	80.21	1.81 (2.46)	71.56	67.51	4.05 (2.54)	62.22	63.22	-1.00 (2.96)
English	83.48	86.50	-3.02 (2.37)	46.16	43.51	2.65 (2.91)	90.38	90.45	-0.08 (1.78)
French	16.47	12.02	4.46 ** (2.24)	83.91	83.03	0.88 (1.91)	5.40	6.51	-1.11 (1.50)
Science	57.42	58.22	-0.81 (3.29)	70.81	68.73	2.08 (2.67)	69.82	73.18	-3.36 (2.70)
Social studies	44.61	46.91	-2.30 (3.49)	40.49	41.18	-0.70 (2.97)	66.86	71.28	-4.42 (3.05)
Fine Arts	26.20	29.91	-3.71 (3.42)	20.46	21.38	-0.92 (2.55)	40.16	41.60	-1.45 (3.12)
Business and computer-related courses	17.75	17.48	0.27 (2.73)	40.72	39.29	1.43 (3.15)	45.52	47.69	-2.16 (3.03)
Technology and applied skills	37.36	41.57	-4.21 (3.14)	61.30	61.09	0.21 (2.49)	72.99	73.69	-0.69 (2.83)
Career Development and Planning	10.89	13.24	-2.35 (2.11)	24.66	27.99	-3.33 (2.47)	2.62	2.19	0.43 (0.93)
Physical Education and leadership	25.42	21.57	3.85 (2.92)	29.35	35.76	-6.41 ** (2.53)	25.22	27.96	-2.74 (2.78)
Other courses	20.18	18.57	1.61 (2.60)	25.91	28.36	-2.45 (2.66)	37.93	34.42	3.51 (2.93)
Sample Size	444	391		454	673		432	610	

Source: Course participation data

Notes: Sample sizes vary for individual measures because of missing values.
Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.
Rounding may cause slight discrepancies in sums and differences.
A dash denotes statistics based on a sample size of 5 or less.

While *Explore Your Horizons* seems to have had very little influence on the course choices of the full analytical sample of participants, it appears to have caused changes in the course composition for subgroups of participants. The results presented in Tables 1.5 to 1.12 show that *Explore Your Horizons* had an impact on several Grade 11 course choices for New Brunswick Francophone students in the LILE and FGF subgroups. These students had very similar course choices with the comparison group in Grades 9 and 10, but by Grade 11 were more likely to enrol in mathematics, French, science and social studies courses. Subgroup results on course choices were not as clear for Manitoba and New Brunswick Anglophone participants, and there were very few measurable changes in course composition for these participants.

Table 1.5: Differences in Grade 9 Course Choices for *Explore Your Horizon* Participants (LILE and Non-LILE Subgroups)

	Manitoba			New Brunswick					
				Francophone			Anglophone		
	EYH Group	Comparison Group	Impact (s.e)	EYH Group	Comparison Group	Impact (s.e)	EYH Group	Comparison Group	Impact (s.e)
Known to have taken at least one course in the following subject areas:									
LILE									
Math	95.33	94.99	0.34 (2.70)	96.38	98.00	-1.61 (1.52)	95.28	94.51	0.78 (1.79)
English	97.36	95.44	1.92 (2.58)	97.47	96.14	1.33 (1.55)	95.91	94.48	1.43 (1.71)
French	17.04	31.75	-14.70 ** (5.96)	33.77	33.22	0.55 (3.31)	67.14	69.47	-2.33 (4.39)
Science	93.78	92.02	1.76 (3.12)	95.60	95.76	-0.16 (1.92)	95.17	92.00	3.17 (2.01)
Social studies	95.45	94.84	0.61 (2.77)	92.10	95.80	-3.69 * (2.13)	95.84	94.53	1.31 (1.73)
Fine Arts	61.68	65.92	-4.24 (6.57)	51.47	50.44	1.02 (4.51)	95.76	93.65	2.11 (1.97)
Business and computer-related courses	49.87	62.78	-12.90 ** (6.33)	-	-	-	7.98	8.52	-0.54 (2.17)
Technology and applied skills	81.07	78.32	2.75 (5.72)	-	-	- (0.90)	64.60	65.93	-1.33 (3.86)
Career Development and Planning	2.96	2.24	0.72 (1.80)	64.68	66.10	-1.43 (4.06)	36.98	35.85	1.13 (3.77)
Physical Education and leadership	93.57	95.18	-1.61 (3.07)	67.03	66.19	0.84 (4.26)	90.39	87.77	2.61 (2.61)
Other courses	42.25	32.22	10.03 * (5.15)	-	-	-	3.22	2.79	0.43 (1.63)
Sample Size	125	103		174	246		171	238	
Non-LILE									
Math	97.67	97.63	0.03 (1.24)	99.25	99.49	-0.24 (0.59)	96.55	95.69	0.86 (1.24)
English	98.50	99.18	-0.68 (0.84)	97.47	99.48	-2.01 * (1.04)	96.55	95.69	0.86 (1.24)
French	45.33	36.09	9.24 ** (4.00)	20.46	21.99	-1.53 (2.65)	52.22	52.06	0.16 (3.94)
Science	96.93	96.69	0.24 (1.38)	97.19	98.33	-1.14 (1.20)	95.72	95.52	0.21 (1.39)
Social studies	98.13	98.89	-0.77 (0.93)	97.56	99.43	-1.86 * (0.96)	96.93	95.66	1.28 (1.20)
Fine Arts	69.16	75.81	-6.66 * (3.41)	64.63	62.64	1.98 (3.39)	95.03	90.85	4.18 *** (1.59)
Business and computer-related courses	64.86	61.48	3.37 (3.47)	-	-	-	6.53	5.98	0.54 (1.52)
Technology and applied skills	79.33	84.35	-5.02 (3.08)	-	-	-	63.03	64.54	-1.52 (3.07)
Career Development and Planning	4.89	5.54	-0.65 (1.17)	71.58	72.56	-0.98 (3.03)	36.80	37.36	-0.57 (3.18)
Physical Education and leadership	96.04	99.08	-3.03 ** (1.21)	74.02	74.78	-0.77 (3.06)	91.58	89.82	1.76 (2.02)
Other courses	35.08	39.29	-4.21 (2.99)	-	-	-	2.61	1.70	0.90 (1.08)
Sample Size	313	283		278	426		260	368	

Source: Course participation data

Notes: Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Table 1.6: Differences in Grade 9 Course Choices for *Explore Your Horizon* Participants (Parent's Education Subgroups)

	Manitoba			New Brunswick					
				Francophone			Anglophone		
	EYH Group	Comparison Group	Impact (s.e)	EYH Group	Comparison Group	Impact (s.e)	EYH Group	Comparison Group	Impact (s.e)
Known to have taken at least one course in the following subject areas:									
Parents with any PSE									
Math	97.75	97.53	0.22 (1.38)	99.23	99.60	-0.37 (0.46)	96.59	95.36	1.23 (1.14)
English	98.53	98.79	-0.26 (0.95)	97.99	99.36	-1.37 (0.84)	96.55	95.63	0.91 (1.11)
French	42.81	36.77	6.04 * (3.65)	22.64	23.39	-0.76 (2.42)	51.89	52.76	-0.87 (3.58)
Science	97.69	96.20	1.49 (1.45)	97.05	97.95	-0.90 (1.24)	96.55	94.69	1.86 (1.20)
Social studies	97.66	99.02	-1.36 (1.14)	97.72	99.49	-1.77 * (0.90)	96.60	95.14	1.46 (1.20)
Fine Arts	67.25	75.13	-7.87 ** (3.50)	62.00	61.53	0.47 (3.27)	94.63	91.42	3.21 * (1.78)
Business and computer-related courses	60.63	58.83	1.81 (3.77)	-	-	-	6.23	6.06	0.18 (1.32)
Technology and applied skills	79.24	83.89	-4.65 * (2.75)	-	-	-	65.04	66.92	-1.89 (3.00)
Career Development and Planning	4.31	5.15	-0.84 (1.16)	71.20	71.96	-0.76 (2.73)	36.25	37.45	-1.20 (2.64)
Physical Education and leadership	96.81	98.89	-2.08 * (1.18)	72.53	73.29	-0.76 (3.11)	92.07	90.34	1.73 (1.61)
Other courses	36.87	38.97	-2.11 (3.18)	-	-	-	2.70	1.95	0.74 (1.08)
Sample Size	308	286		299	455		297	422	
Parents with high school or less									
Math	94.90	95.13	-0.24 (2.81)	96.58	97.51	-0.92 (1.94)	94.11	94.79	-0.68 (2.23)
English	96.16	96.36	-0.20 (2.53)	96.78	95.93	0.85 (1.93)	95.33	93.84	1.48 (2.04)
French	27.40	25.71	1.70 (5.43)	31.48	31.54	-0.06 (3.56)	73.06	70.29	2.77 (4.94)
Science	91.17	93.28	-2.10 (3.40)	96.34	96.00	0.34 (2.18)	93.76	91.64	2.12 (2.60)
Social studies	95.35	94.54	0.81 (2.87)	91.30	95.15	-3.84 (2.43)	96.10	94.76	1.34 (1.89)
Fine Arts	65.32	65.54	-0.22 (6.81)	53.65	50.29	3.36 (4.58)	95.60	93.48	2.11 (2.21)
Business and computer-related courses	62.99	67.63	-4.65 (6.01)	-	-	-	9.44	9.23	0.21 (2.51)
Technology and applied skills	78.90	81.43	-2.53 (5.24)	-	-	-	61.14	60.86	0.28 (4.87)
Career Development and Planning	3.99	3.43	0.56 (2.00)	65.91	66.83	-0.92 (4.35)	37.34	35.62	1.72 (4.35)
Physical Education and leadership	90.90	95.55	-4.64 (3.17)	67.66	69.49	-1.83 (4.20)	88.91	85.31	3.61 (3.31)
Other courses	37.05	34.24	2.81 (5.03)	-	-	-	-	-	-
Sample Size	136	104		155	217		135	188	

Source: Course participation data

Notes: Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Table 1.7: Impacts of *Explore Your Horizon* on Courses Taken in Grade 10 (LILE Non-LILE Subgroups)

	Manitoba			New Brunswick					
				Francophone			Anglophone		
	EYH Group	Comparison Group	Impact (s.e)	EYH Group	Comparison Group	Impact (s.e)	EYH Group	Comparison Group	Impact (s.e)
Known to have taken at least one course in the following subject areas:									
LILE									
Math	86.71	92.83	-6.12 (3.91)	96.58	92.99	3.59 (2.36)	85.78	83.40	2.38 (3.45)
English	88.26	92.89	-4.63 (3.72)	92.93	93.89	-0.96 (2.46)	85.25	83.96	1.29 (3.43)
French	10.33	24.36	-14.04 *** (5.32)	86.98	89.65	-2.67 (3.10)	56.63	63.02	-6.38 (4.86)
Science	84.28	92.86	-8.58 ** (4.10)	95.21	91.92	3.29 (2.16)	86.07	90.40	-4.34 (3.00)
Social studies	87.03	93.41	-6.39 * (3.72)	90.87	91.55	-0.68 (2.77)	84.13	83.96	0.18 (3.34)
Fine Arts	38.15	45.93	-7.78 (6.86)	16.34	11.59	4.76 (3.16)	79.44	82.96	-3.52 (3.83)
Business and computer-related courses	32.48	36.31	-3.83 (6.24)	-	-	-	15.27	14.73	0.54 (3.41)
Technology and applied skills	78.65	70.57	8.07 (6.01)	60.25	65.56	-5.31 (4.33)	57.25	62.19	-4.94 (5.00)
Career Development and Planning	-	-	-	74.53	75.46	-0.92 (3.62)	23.57	27.70	-4.14 (3.53)
Physical Education and leadership	77.35	77.00	0.35 (5.30)	76.11	71.70	4.41 (3.91)	69.77	75.34	-5.57 (4.36)
Other courses	13.46	11.82	1.64 (4.83)	4.82	7.81	-2.99 (2.24)	8.29	4.24	4.04 * (2.39)
Sample Size	125	103		174	246		171	238	
Non-LILE									
Math	91.98	92.97	-1.00 (1.99)	96.47	97.08	-0.61 (1.52)	86.51	86.90	-0.38 (2.23)
English	95.03	95.25	-0.22 (1.69)	93.43	96.52	-3.09 (1.93)	86.98	87.24	-0.26 (2.18)
French	34.95	23.89	11.07 *** (3.58)	92.52	95.99	-3.47 ** (1.76)	50.62	44.67	5.95 (3.80)
Science	94.35	94.95	-0.60 (1.78)	93.90	96.68	-2.77 * (1.68)	92.79	94.23	-1.44 (2.13)
Social studies	94.25	95.41	-1.16 (1.83)	92.06	94.69	-2.63 (1.97)	87.79	87.09	0.70 (2.22)
Fine Arts	52.21	56.39	-4.19 (4.21)	18.94	13.72	5.23 ** (2.62)	78.83	81.57	-2.74 (3.20)
Business and computer-related courses	42.36	42.20	0.16 (4.05)	4.07	2.96	1.11 (1.27)	16.33	13.15	3.17 (2.69)
Technology and applied skills	65.99	66.94	-0.95 (3.60)	62.63	64.91	-2.28 (3.55)	58.44	57.80	0.64 (3.23)
Career Development and Planning	-	-	-	80.50	81.21	-0.71 (2.66)	26.66	22.73	3.92 (2.89)
Physical Education and leadership	86.05	82.21	3.85 * (2.32)	80.53	82.26	-1.73 (2.63)	75.46	78.76	-3.30 (2.61)
Other courses	15.52	14.99	0.54 (2.88)	-	-	-	3.38	5.08	-1.70 (1.66)
Sample Size	313	283		278	426		260	368	

Source: Course participation data

Notes: Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Table 1.8: Impacts of *Explore Your Horizon* on courses Taken in Grade 10 (Parent's Education Subgroups)

	Manitoba			New Brunswick					
				Francophone			Anglophone		
	EYH Group	Comparison Group	Impact (s.e)	EYH Group	Comparison Group	Impact (s.e)	EYH Group	Comparison Group	Impact (s.e)
Known to have taken at least one course in the following subject areas:									
Parents with any PSE									
Math	91.86	94.79	-2.93 (2.10)	96.81	96.68	0.13 (1.52)	88.06	86.69	1.37 (2.12)
English	95.15	96.49	-1.34 (1.67)	94.28	96.77	-2.49 (1.75)	87.32	86.88	0.43 (2.26)
French	33.81	24.08	9.73 *** (3.27)	92.81	96.39	-3.58 ** (1.79)	47.75	46.60	1.16 (3.58)
Science	93.64	95.66	-2.02 (1.81)	94.76	96.61	-1.85 (1.62)	92.98	93.87	-0.90 (1.85)
Social studies	94.26	97.44	-3.17 * (1.72)	92.72	94.66	-1.93 (1.92)	86.48	87.59	-1.11 (2.28)
Fine Arts	50.89	57.09	-6.20 (3.94)	18.04	13.73	4.31 (2.71)	78.21	83.01	-4.79 * (2.77)
Business and computer-related courses	40.55	45.49	-4.94 (3.98)	3.41	2.68	0.73 (1.14)	13.74	13.14	0.60 (2.60)
Technology and applied skills	65.57	68.90	-3.33 (3.42)	61.12	65.09	-3.97 (3.29)	59.06	58.85	0.21 (3.16)
Career Development and Planning	-	-	-	78.40	81.26	-2.86 (2.39)	24.24	23.77	0.48 (2.61)
Physical Education and leadership	85.48	82.77	2.71 (2.44)	80.66	80.40	0.26 (2.88)	75.46	77.62	-2.15 (2.74)
Other courses	15.49	15.13	0.36 (3.06)	2.46	2.08	0.38 (1.24)	4.73	5.61	-0.88 (1.56)
Sample Size	308	286		299	455		297	422	
Parents with high school or less									
Math	85.50	89.16	-3.66 (4.32)	96.72	93.17	3.54 (2.38)	81.07	84.47	-3.40 (4.47)
English	88.36	88.29	0.07 (4.12)	92.05	93.19	-1.14 (2.98)	83.66	84.94	-1.27 (4.26)
French	15.64	19.93	-4.29 (4.59)	85.59	88.32	-2.73 (3.63)	63.40	63.19	0.21 (5.37)
Science	86.69	89.53	-2.84 (4.37)	94.51	91.33	3.18 (2.34)	85.50	89.90	-4.40 (3.57)
Social studies	87.16	86.99	0.17 (4.26)	89.77	91.57	-1.80 (3.10)	84.12	83.65	0.47 (4.30)
Fine Arts	42.00	43.15	-1.15 (6.96)	18.91	10.18	8.73 ** (3.60)	79.91	82.15	-2.24 (5.05)
Business and computer-related courses	37.57	27.79	9.78 (6.47)	2.31	3.77	-1.46 (1.85)	19.02	14.95	4.07 (3.73)
Technology and applied skills	79.70	65.01	14.68 ** (5.84)	61.61	66.42	-4.80 (5.06)	56.55	61.97	-5.43 (5.82)
Career Development and Planning	-	-	-	77.62	74.91	2.70 (4.24)	26.13	27.86	-1.74 (3.95)
Physical Education and leadership	79.19	75.29	3.91 (5.15)	76.16	73.22	2.95 (3.95)	68.64	77.75	-9.12 * (4.83)
Other courses	12.35	11.73	0.62 (4.10)	5.83	6.57	-0.73 (2.60)	7.11	2.38	4.74 * (2.87)
Sample Size	136	104		155	217		135	188	

Source: Course participation data

Notes: Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Table 1.9: Impacts of *Explore Your Horizon* on Courses Taken in Grade 11 (LILE and Non-LILE Subgroups)

	Manitoba			New Brunswick					
				Francophone			Anglophone		
	EYH Group	Comparison Group	Impact (s.e)	EYH Group	Comparison Group	Impact (s.e)	EYH Group	Comparison Group	Impact (s.e)
Known to have taken at least one course in the following subject areas:									
LILE									
Math	78.68	77.33	1.35 (5.14)	88.34	80.31	8.03 ** (3.24)	88.46	85.44	3.01 (3.41)
English	78.22	75.95	2.28 (5.55)	84.23	78.57	5.66 (3.45)	88.70	85.84	2.86 (3.16)
French	8.16	15.34	-7.19 (4.42)	87.73	81.00	6.74 ** (3.26)	10.81	14.13	-3.32 (3.35)
Science	57.84	71.55	-13.71 ** (6.22)	84.51	76.61	7.90 ** (3.36)	77.80	78.48	-0.68 (4.06)
Social studies	71.03	73.02	-2.00 (5.59)	83.93	77.10	6.83 * (3.53)	79.98	80.45	-0.46 (3.71)
Fine Arts	24.71	29.24	-4.53 (5.64)	22.56	16.33	6.24 (3.95)	35.78	33.13	2.66 (5.04)
Business and computer-related courses	26.49	28.05	-1.56 (5.65)	26.58	29.74	-3.16 (4.70)	42.33	45.18	-2.85 (5.24)
Technology and applied skills	53.99	55.84	-1.85 (6.82)	65.70	60.92	4.77 (4.72)	61.76	66.86	-5.10 (5.28)
Career Development and Planning	6.69	0.61	6.08 ** (2.38)	24.82	24.43	0.40 (4.10)	4.22	5.12	-0.90 (2.35)
Physical Education and leadership	44.72	40.87	3.85 (6.23)	29.14	25.43	3.71 (4.40)	18.73	25.49	-6.76 * (3.85)
Other courses	12.34	8.32	4.02 (3.87)	5.79	8.10	-2.31 (2.38)	6.34	9.69	-3.35 (2.64)
Sample Size	125	103		174	246		171	238	
Non-LILE									
Math	84.66	86.94	-2.28 (2.74)	87.64	89.77	-2.12 (2.10)	93.48	93.82	-0.34 (2.09)
English	88.51	90.10	-1.59 (2.47)	83.88	88.46	-4.58 * (2.63)	94.01	94.00	0.01 (2.01)
French	21.50	15.80	5.71 * (3.00)	86.94	89.00	-2.06 (2.24)	11.72	11.49	0.22 (2.57)
Science	75.42	75.25	0.17 (3.15)	84.48	88.45	-3.97 * (2.32)	86.98	89.89	-2.91 (2.62)
Social studies	80.49	85.19	-4.70 (3.09)	84.98	84.97	0.02 (2.64)	89.00	87.38	1.62 (2.73)
Fine Arts	35.11	35.73	-0.62 (4.06)	19.83	20.20	-0.37 (3.22)	31.28	31.61	-0.33 (4.04)
Business and computer-related courses	25.04	28.14	-3.10 (3.47)	27.24	28.85	-1.62 (3.06)	48.15	46.22	1.93 (3.83)
Technology and applied skills	45.85	46.46	-0.61 (3.74)	51.24	49.58	1.66 (3.54)	53.32	60.95	-7.62 ** (3.88)
Career Development and Planning	2.79	2.57	0.22 (1.35)	22.69	20.55	2.14 (2.97)	3.52	0.87	2.65 ** (1.12)
Physical Education and leadership	47.37	49.38	-2.01 (3.79)	21.50	20.05	1.45 (2.95)	19.79	23.39	-3.60 (3.18)
Other courses	18.21	15.90	2.30 (2.79)	6.36	6.88	-0.52 (1.87)	2.98	3.60	-0.62 (1.55)
Sample Size	313	283		278	426		260	368	

Source: Course participation data

Notes: Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Table 1.10: Impacts of *Explore Your Horizon* on courses Taken in Grade 11 (Parent's Education Subgroups)

	Manitoba			New Brunswick					
				Francophone			Anglophone		
	EYH Group	Comparison Group	Impact (s.e)	EYH Group	Comparison Group	Impact (s.e)	EYH Group	Comparison Group	Impact (s.e)
Known to have taken at least one course in the following subject areas:									
Parents with any PSE									
Math	85.18	87.99	-2.82 (2.81)	88.54	90.46	-1.92 (2.00)	93.17	93.19	-0.02 (1.86)
English	88.76	89.73	-0.97 (2.88)	85.42	88.90	-3.48 (2.37)	93.86	93.66	0.21 (1.89)
French	20.66	16.56	4.10 (3.03)	87.18	89.86	-2.68 (2.10)	10.82	11.10	-0.28 (2.45)
Science	75.02	76.90	-1.89 (3.61)	85.76	89.33	-3.57 (2.41)	84.46	88.01	-3.55 (2.61)
Social studies	79.52	85.69	-6.18 ** (2.77)	85.62	85.99	-0.37 (2.34)	87.51	86.30	1.21 (2.46)
Fine Arts	35.98	35.03	0.94 (4.08)	21.44	19.51	1.93 (2.90)	32.97	33.61	-0.64 (3.35)
Business and computer-related courses	24.01	31.13	-7.12 ** (3.43)	27.63	28.88	-1.25 (3.14)	45.79	47.49	-1.70 (3.75)
Technology and applied skills	46.55	48.47	-1.92 (3.69)	52.99	52.18	0.81 (3.51)	53.74	59.87	-6.13 * (3.68)
Career Development and Planning	3.94	2.05	1.88 (1.43)	20.85	20.15	0.70 (2.96)	2.20	1.36	0.84 (0.98)
Physical Education and leadership	49.44	49.20	0.24 (3.92)	21.58	21.17	0.41 (2.78)	22.55	23.23	-0.69 (3.61)
Other courses	17.52	14.70	2.82 (3.04)	4.85	8.12	-3.27 * (1.86)	2.69	4.53	-1.84 (1.46)
Sample Size	308	286		299	455		297	422	
Parents with high school or less									
Math	77.61	73.52	4.09 (5.46)	87.14	77.53	9.61 *** (3.56)	87.90	83.62	4.28 (4.41)
English	76.66	76.67	-0.01 (5.60)	81.32	75.95	5.37 (3.60)	88.06	83.14	4.92 (4.44)
French	11.46	10.98	0.47 (3.83)	87.03	78.60	8.43 *** (3.21)	13.17	15.59	-2.42 (4.77)
Science	59.99	66.75	-6.76 (6.08)	82.92	72.58	10.34 *** (3.92)	79.25	80.75	-1.50 (4.82)
Social studies	74.02	70.52	3.50 (5.87)	83.04	73.25	9.78 ** (3.87)	81.58	79.71	1.87 (4.75)
Fine Arts	25.77	26.87	-1.10 (6.68)	18.68	16.42	2.26 (4.46)	33.49	29.18	4.31 (6.07)
Business and computer-related courses	28.33	20.65	7.68 (5.40)	26.61	30.31	-3.70 (4.46)	45.36	42.63	2.73 (5.68)
Technology and applied skills	50.29	52.50	-2.21 (6.81)	62.93	58.17	4.76 (5.21)	64.09	69.01	-4.93 (6.12)
Career Development and Planning	4.00	2.47	1.53 (2.30)	27.73	24.39	3.33 (4.91)	5.55	6.31	-0.76 (2.76)
Physical Education and leadership	40.99	39.66	1.33 (6.36)	29.52	25.12	4.40 (4.55)	15.97	24.38	-8.41 * (4.38)
Other courses	13.21	12.53	0.69 (4.14)	8.58	5.84	2.74 (2.93)	7.26	9.13	-1.86 (3.20)
Sample Size	136	104		155	217		135	188	

Source: Course participation data

Notes: Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Table 1.11: Impacts of *Explore Your Horizon* on Courses Taken in Grade 12 (LILE and Non-LILE Subgroups)

	Manitoba			New Brunswick					
				Francophone			Anglophone		
	EYH Group	Comparison Group	Impact (s.e)	EYH Group	Comparison Group	Impact (s.e)	EYH Group	Comparison Group	Impact (s.e)
Known to have taken at least one course in the following subject areas:									
LILE									
Math	74.86	72.25	2.61 (5.89)	60.40	54.50	5.91 (4.76)	50.13	52.44	-2.31 (5.25)
English	75.58	75.27	0.31 (6.12)	43.79	33.43	10.36 ** (5.12)	84.19	83.37	0.83 (3.89)
French	6.43	10.64	-4.21 (3.64)	77.52	72.78	4.74 (3.61)	4.81	6.02	-1.21 (2.38)
Science	38.49	44.55	-6.06 (6.86)	59.99	54.42	5.57 (4.77)	56.52	65.67	-9.16 * (4.91)
Social studies	42.15	41.08	1.07 (7.10)	42.28	38.30	3.97 (4.87)	62.57	67.59	-5.01 (5.13)
Fine Arts	18.71	28.75	-10.05 (6.20)	21.64	21.57	0.07 (4.15)	34.71	37.98	-3.27 (5.02)
Business and computer-related courses	17.69	22.23	-4.54 (5.36)	38.82	37.60	1.22 (4.58)	48.36	43.69	4.67 (4.75)
Technology and applied skills	39.96	42.77	-2.81 (6.75)	66.25	62.10	4.15 (4.31)	71.08	76.08	-5.00 (4.53)
Career Development and Planning	8.52	11.99	-3.47 (3.82)	29.29	31.62	-2.32 (4.49)	-	-	-
Physical Education and leadership	23.16	18.50	4.66 (5.16)	27.88	29.47	-1.59 (4.32)	15.96	23.17	-7.21 * (3.84)
Other courses	21.46	13.77	7.69 (5.15)	25.03	26.48	-1.45 (4.27)	36.90	30.81	6.09 (5.30)
Sample Size	125	103		174	246		171	238	
Non-LILE									
Math	85.29	83.76	1.54 (2.94)	76.82	76.55	0.27 (3.11)	69.46	69.83	-0.37 (3.92)
English	86.81	90.92	-4.11 (2.62)	47.10	50.04	-2.94 (3.91)	94.96	95.15	-0.19 (1.82)
French	20.18	13.37	6.80 ** (2.81)	86.61	89.71	-3.09 (2.37)	5.27	7.08	-1.81 (2.04)
Science	63.75	65.54	-1.79 (3.74)	76.62	78.45	-1.83 (3.30)	78.22	78.28	-0.06 (3.31)
Social studies	46.69	47.65	-0.96 (3.97)	38.35	43.29	-4.95 (3.86)	69.46	73.56	-4.10 (3.69)
Fine Arts	28.06	31.87	-3.81 (4.02)	19.66	20.76	-1.10 (3.06)	44.65	44.04	0.62 (4.22)
Business and computer-related courses	17.65	15.82	1.82 (3.14)	40.81	40.19	0.62 (3.82)	43.33	50.77	-7.44 * (4.14)
Technology and applied skills	37.09	40.25	-3.15 (3.89)	57.65	60.92	-3.27 (3.44)	74.78	72.07	2.71 (3.85)
Career Development and Planning	11.59	13.68	-2.09 (2.26)	21.70	26.15	-4.45 (3.40)	-	-	-
Physical Education and leadership	26.66	22.46	4.20 (3.21)	29.89	39.40	-9.52 ** (3.95)	30.94	31.45	-0.51 (4.17)
Other courses	21.07	18.75	2.32 (3.33)	25.85	30.52	-4.67 (3.51)	40.15	36.26	3.89 (3.94)
Sample Size	313	283		278	426		260	368	

Source: Course participation data

Notes: Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Table 1.12: Impacts of *Explore Your Horizon* on courses Taken in Grade 12 (Parent's Education Subgroups)

	Manitoba			New Brunswick					
				Francophone			Anglophone		
	EYH Group	Comparison Group	Impact (s.e)	EYH Group	Comparison Group	Impact (s.e)	EYH Group	Comparison Group	Impact (s.e)
Known to have taken at least one course in the following subject areas:									
Parents with any PSE									
Math	84.83	84.52	0.30 (2.86)	75.40	75.54	-0.14 (2.95)	69.17	68.12	1.06 (3.27)
English	87.77	91.49	-3.71 (2.52)	43.74	49.12	-5.38 (3.58)	94.59	94.71	-0.12 (1.66)
French	19.26	14.23	5.03 (2.85)	86.09	88.49	-2.40 (2.20)	5.70	6.59	-0.89 (1.89)
Science	62.91	65.11	-2.20 (4.07)	75.24	76.41	-1.16 (3.13)	77.44	79.44	-2.00 (3.07)
Social studies	49.76	48.16	1.60 (4.05)	40.06	43.17	-3.11 (3.79)	72.64	73.49	-0.84 (3.14)
Fine Arts	28.54	32.20	-3.66 (3.79)	20.64	22.23	-1.60 (2.99)	43.42	42.02	1.40 (3.74)
Business and computer-related courses	18.02	16.61	1.41 (3.12)	41.50	41.85	-0.34 (3.74)	44.13	47.35	-3.23 (3.76)
Technology and applied skills	35.99	40.61	-4.62 (3.67)	58.62	61.62	-3.00 (3.51)	72.02	70.84	1.17 (3.38)
Career Development and Planning	10.88	13.46	-2.57 (2.35)	22.87	26.84	-3.97 (2.89)	-	-	-
Physical Education and leadership	27.15	22.86	4.29 (3.18)	29.21	39.69	-10.48 *** (3.45)	29.45	31.41	-1.95 (3.39)
Other courses	21.60	18.35	3.25 (2.97)	24.00	30.33	-6.33 ** (2.96)	37.85	33.75	4.09 (3.70)
Sample Size	308	286		299	455		297	422	
Parents with high school or less									
Math	73.39	71.34	2.04 (6.16)	64.30	51.38	12.91 ** (5.37)	45.42	52.99	-7.57 (6.79)
English	71.11	76.24	-5.12 (5.67)	49.38	32.76	16.63 *** (5.05)	80.69	81.58	-0.88 (4.94)
French	9.75	6.48	3.26 (3.07)	78.65	72.77	5.89 (4.21)	4.18	6.49	-2.31 (3.33)
Science	43.61	41.05	2.55 (6.71)	61.65	53.82	7.83 (4.77)	51.01	61.01	-10.00 (6.22)
Social studies	35.38	40.28	-4.90 (6.63)	41.13	37.19	3.94 (5.21)	53.38	66.86	-13.48 ** (5.37)
Fine Arts	21.22	23.21	-1.99 (5.56)	19.39	19.49	-0.09 (4.37)	33.56	40.22	-6.67 (5.46)
Business and computer-related courses	16.17	21.16	-4.98 (5.52)	38.04	34.60	3.43 (4.55)	51.38	46.55	4.84 (5.93)
Technology and applied skills	40.04	44.76	-4.72 (6.68)	66.43	59.78	6.65 (4.92)	75.21	80.05	-4.83 (5.45)
Career Development and Planning	10.82	12.78	-1.96 (3.99)	27.37	30.90	-3.53 (5.10)	-	-	-
Physical Education and leadership	19.81	20.25	-0.44 (5.27)	28.38	28.46	-0.08 (4.90)	15.55	20.67	-5.12 (4.49)
Other courses	17.25	18.78	-1.53 (5.12)	28.24	25.57	2.67 (4.55)	36.76	36.66	0.10 (5.66)
Sample Size	136	104		155	217		135	188	

Source: Course participation data.

Notes: Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Impacts on course grades

The Manitoba and New Brunswick education systems evaluate high school students using percentages. A passing grade in Manitoba is 50 per cent, in the New Brunswick Francophone school system 55 per cent, and in the New Brunswick Anglophone system it is 60 per cent. The analyses presented below look at what proportion of courses students were able to pass in Grades 9, 10, 11, and 12. The *Explore Your Horizons* logic model hypothesizes that the program would encourage participants to work towards better grades than they normally would have done in the absence of the program. As the results below would show, this was indeed the case for some students, but not all.

As with course choices, *Explore Your Horizons* could not have influenced the Grade 9 course grades of participants, because random assignment occurred at the end of the Grade 9 school year.⁴ Indeed, as expected, there are no differences between the results for the full sample of students in the comparison group or *Explore Your Horizons* participants in Manitoba or New Brunswick Francophone schools in Grade 9 (first panel of Table 2.1). Likewise, the proportion of courses passed by students in the LILE and FGF subgroups were quite similar for the EYH and comparison group, with the exception of the Anglophone LILE subgroup. In ninth grade, among the New Brunswick Anglophone LILE subgroup, a higher proportion of those in the EYH group (6.96 percentage points) pass over 75 per cent of their courses.

By Grade 10, EYH workshops can begin to influence course grades. In Grade 10, students assigned to the EYH group are expected to attend a number of workshops that explore career and education options, meet with postsecondary ambassadors, read two issues of the *Future to discover* magazine and browse the FTD Web site. These activities are expected to influence several short-term and intermediate outcomes that include improved course grades. As shown in Table 2.2, in Grade 10 *Explore Your Horizons* had no effect on course grades for the full sample of participants and LILE subgroup from Manitoba, but did yield a slight shift in course grades for Manitoba FGF subgroup. Within the New Brunswick Francophone sector, more of them (2.48 percentage points) pass between 50 and 75 per cent of their Grade 10 courses than would have occurred in the absence of *Explore Your Horizons*. The Grade 10 results for New Brunswick Anglophone participants show a shift towards more students passing more of their courses. This result was observed among all participants from that sector and among the LILE subgroup.

In Grades 11 (Table 2.3) and 12 (Table 2.4), there are no observable impacts on course grades for the full sample and subgroups of *Explore Your Horizons* participants in Manitoba and New Brunswick, except for the New Brunswick Anglophone sector. Among the New Brunswick Anglophone participants in the FGF subgroup, EYH led to more of them (9.26 percentage points) passing between 50 and 75 per cent of their courses.

⁴ A detailed description of the FTD recruitment and random assignment process is provided in the *Future to Discover: Early Implementation Report* and *Future to Discover: Interim Impacts Report*.

Table 2.1: Differences in Grade 9 Course Marks for *Explore Your Horizon* Participants

	Manitoba			New Brunswick					
	EYH Group	Comparison Group	Impact (s.e)	EYH Group	Comparison Group	Impact (s.e)	EYH Group	Comparison Group	Impact (s.e)
Proportion of courses pass in Grade 9 (%)									
ALL									
Zero to 50 per cent	2.90	2.17	0.73 (1.15)	28.54	27.31	1.22 (1.99)	12.86	12.45	0.41 (1.90)
Above 50 up to 75 per cent	4.89	4.06	0.84 (1.28)	5.55	6.73	-1.18 (1.43)	6.28	8.52	-2.25 (1.74)
More than 75 per cent	92.21	93.78	-1.57 (1.76)	65.91	65.95	-0.04 (2.18)	80.86	79.02	1.84 (2.46)
LILE group									
Zero to 50 per cent	7.93	4.21	3.72 (3.45)	42.91	42.41	0.50 (3.90)	16.87	16.88	-0.01 (3.08)
Above 50 up to 75 per cent	9.34	6.44	2.90 (3.76)	7.22	6.73	0.48 (2.50)	7.91	14.86	-6.95 ** (3.18)
More than 75 per cent	82.73	89.35	-6.62 (4.80)	49.87	50.85	-0.98 (4.06)	75.22	68.26	6.96 * (4.01)
Non-LILE group									
Zero to 50 per cent	0.86	1.19	-0.32 (0.79)	20.21	18.16	2.05 (2.35)	10.37	9.36	1.01 (1.87)
Above 50 up to 75 per cent	3.49	2.94	0.54 (1.51)	4.70	6.89	-2.19 (1.58)	5.46	3.95	1.51 (1.79)
More than 75 per cent	95.65	95.87	-0.22 (1.71)	75.09	74.95	0.15 (2.66)	84.17	86.69	-2.52 (2.50)
Parents with high school or less									
Zero to 50 per cent	6.63	7.04	-0.41 (3.24)	42.67	40.51	2.16 (4.36)	22.25	19.77	2.48 (4.29)
Above 50 up to 75 per cent	8.46	7.60	0.85 (3.51)	8.58	7.81	0.77 (3.01)	9.14	14.02	-4.88 (4.07)
More than 75 per cent	84.91	85.36	-0.45 (4.77)	48.75	51.68	-2.93 (4.54)	68.61	66.21	2.40 (5.03)
Parents with any PSE									
Zero to 50 per cent	1.32	0.35	0.97 (0.84)	21.48	20.66	0.82 (2.22)	8.74	9.00	-0.26 (1.72)
Above 50 up to 75 per cent	3.67	2.42	1.25 (1.36)	4.50	5.84	-1.35 (1.66)	4.83	6.23	-1.40 (1.59)
More than 75 per cent	95.00	97.23	-2.23 (1.61)	74.03	73.50	0.53 (2.60)	86.43	84.77	1.66 (2.27)
Average course mark in Grade 9 (%)									
All	73.85	74.14	-0.28 (0.76)	75.49	75.36	0.12 (0.61)	76.33	75.65	0.69 (0.71)
LILE	67.64	70.16	-2.51 (1.75)	71.31	69.90	1.41 (1.04)	72.76	71.23	1.52 (1.09)
Non-LILE	76.19	75.87	0.31 (0.71)	77.74	78.73	-0.99 (0.73)	78.56	78.55	0.01 (0.73)
Parents with high school or less	68.88	69.96	-1.08 (1.78)	70.46	70.01	0.45 (1.13)	71.43	70.28	1.15 (1.26)
Parents with any PSE	75.82	75.87	-0.05 (0.76)	77.89	78.11	-0.21 (0.74)	78.57	78.07	0.50 (0.64)
Sample Size	444	391		454	673		432	610	

Source: Course participation data

Notes: Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Table 2.2: Impacts of *Explore Your Horizon* on Course Marks in Grade 10

	Manitoba			New Brunswick					
	EYH Group	Comparison Group	Impact (s.e)	EYH Group	Comparison Group	Impact (s.e)	EYH Group	Comparison Group	Impact (s.e)
Proportion of courses pass in Grade 10 (%)									
ALL									
Zero to 50 per cent	2.90	2.82	0.08 (1.18)	27.46	27.22	0.24 (1.97)	11.40	15.50	-4.09 ** (1.82)
Above 50 per cent up to 75 per cent	4.82	5.43	-0.62 (1.55)	6.48	4.00	2.48 * (1.36)	5.15	6.13	-0.99 (1.49)
More than 75 per cent	92.28	91.75	0.53 (1.88)	66.06	68.79	-2.72 (2.26)	83.45	78.37	5.08 ** (2.32)
LILE group									
Zero to 50 per cent	6.49	6.34	0.14 (3.07)	40.16	40.61	-0.45 (4.23)	14.21	21.45	-7.24 ** (2.91)
Above 50 per cent up to 75 per cent	10.11	8.05	2.07 (4.10)	8.89	6.17	2.72 (2.85)	8.25	7.78	0.47 (2.80)
More than 75 per cent	83.40	85.61	-2.21 (4.90)	50.95	53.21	-2.27 (4.47)	77.54	70.77	6.77 * (3.89)
Non-LILE group									
Zero to 50 per cent	1.44	1.33	0.12 (1.05)	19.94	19.49	0.45 (2.41)	10.33	11.29	-0.96 (2.01)
Above 50 per cent up to 75 per cent	3.45	3.86	-0.42 (1.65)	5.31	2.78	2.54 * (1.52)	2.73	5.48	-2.75 * (1.52)
More than 75 per cent	95.11	94.81	0.30 (1.95)	74.75	77.74	-2.98 (2.68)	86.94	83.23	3.71 (2.50)
Parents with high school or less									
Zero to 50 per cent	6.19	6.20	0.00 (3.25)	39.94	38.24	1.71 (4.28)	18.50	23.46	-4.96 (4.65)
Above 50 per cent up to 75 per cent	10.05	4.22	5.83 * (3.51)	11.56	7.04	4.52 (3.64)	9.49	6.84	2.64 (3.50)
More than 75 per cent	83.76	89.58	-5.83 (4.28)	48.50	54.73	-6.23 (4.90)	72.01	69.70	2.31 (5.20)
Parents with any PSE									
Zero to 50 per cent	1.73	1.37	0.36 (1.04)	21.53	21.55	-0.02 (2.43)	8.23	11.80	-3.56 * (2.07)
Above 50 per cent up to 75 per cent	3.16	5.24	-2.08 (1.60)	4.05	2.42	1.63 (1.37)	3.58	5.59	-2.01 (1.62)
More than 75 per cent	95.11	93.39	1.72 (1.75)	74.42	76.03	-1.61 (2.60)	88.19	82.61	5.58 ** (2.50)
Average course mark in Grade 10 (%)									
All	73.01	73.27	-0.26 (0.77)	74.52	74.22	0.29 (0.62)	75.93	75.28	0.65 (0.72)
LILE	67.97	69.76	-1.79 (1.56)	70.84	68.87	1.96 * (1.01)	72.41	71.14	1.28 (1.11)
Non-LILE	74.96	74.79	0.17 (0.88)	76.44	77.45	-1.01 (0.79)	77.97	78.00	-0.03 (0.80)
Parents with high school or less	68.17	70.70	-2.54 (1.78)	70.09	68.75	1.34 (1.09)	71.28	70.32	0.96 (1.34)
Parents with any PSE	74.81	74.46	0.35 (0.89)	76.64	76.97	-0.33 (0.78)	78.09	77.50	0.59 (0.72)
Sample Size	444	391		454	673		432	610	

Source: Course participation data

Notes: Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Table 2.3: Impacts of *Explore Your Horizon* on Course Marks in Grade 11

	Manitoba			New Brunswick					
	EYH Group	Comparison Group	Impact (s.e)	EYH Group	Comparison Group	Impact (s.e)	EYH Group	Comparison Group	Impact (s.e)
Proportion of courses pass in Grade 11 (%)									
ALL									
Zero to 50 per cent	3.10	4.48	-1.39 (1.37)	28.00	26.98	1.02 (2.12)	12.64	14.39	-1.75 (1.99)
Above 50 up to 75 per cent	4.55	5.87	-1.32 (1.65)	8.71	8.89	-0.18 (2.00)	10.22	8.13	2.10 (1.99)
More than 75 per cent	92.35	89.64	2.71 (2.10)	63.29	64.13	-0.84 (2.68)	77.14	77.48	-0.34 (2.60)
LILE group									
Zero to 50 per cent	8.54	8.45	0.09 (4.26)	40.54	39.25	1.29 (4.07)	14.22	19.39	-5.17 (3.46)
Above 50 up to 75 per cent	5.65	9.80	-4.15 (4.31)	12.17	10.43	1.74 (3.23)	14.29	11.90	2.39 (3.55)
More than 75 per cent	85.81	81.74	4.07 (5.90)	47.29	50.32	-3.03 (4.44)	71.49	68.72	2.77 (4.20)
Non-LILE group									
Zero to 50 per cent	1.12	3.21	-2.09 * (1.20)	20.24	20.55	-0.31 (2.38)	11.80	10.62	1.18 (2.30)
Above 50 up to 75 per cent	4.45	4.38	0.06 (1.83)	7.21	7.02	0.19 (2.13)	7.82	6.17	1.65 (2.15)
More than 75 per cent	94.44	92.40	2.03 (2.08)	72.55	72.42	0.12 (3.07)	80.38	83.21	-2.83 (3.00)
Parents with high school or less									
Zero to 50 per cent	9.40	7.74	1.66 (3.79)	37.31	37.81	-0.49 (4.31)	16.90	21.86	-4.96 (4.42)
Above 50 up to 75 per cent	9.29	7.90	1.39 (4.42)	13.70	10.22	3.48 (3.89)	15.40	6.14	9.26 ** (4.37)
More than 75 per cent	81.31	84.36	-3.05 (5.62)	48.99	51.97	-2.98 (5.00)	67.70	72.00	-4.30 (5.61)
Parents with any PSE									
Zero to 50 per cent	0.60	3.36	-2.76 ** (1.14)	24.25	21.70	2.55 (2.56)	10.59	11.29	-0.70 (2.19)
Above 50 up to 75 per cent	2.92	4.91	-1.99 (1.66)	6.34	7.84	-1.51 (2.05)	8.71	8.49	0.21 (2.15)
More than 75 per cent	96.49	91.74	4.75 ** (1.95)	69.42	70.46	-1.04 (3.05)	80.70	80.21	0.49 (2.96)
Average course mark in Grade 11 (%)									
All	72.58	72.28	0.30 (0.83)	71.52	71.43	0.08 (0.77)	72.70	71.61	1.09 (0.77)
LILE	67.76	68.23	-0.48 (2.23)	67.41	66.74	0.66 (1.22)	69.38	67.46	1.92 (1.22)
Non-LILE	74.18	73.86	0.32 (0.99)	73.79	74.19	-0.40 (0.93)	74.59	74.28	0.31 (0.93)
Parents with high school or less	67.78	68.98	-1.20 (2.10)	67.20	66.60	0.60 (1.42)	67.80	67.38	0.42 (1.65)
Parents with any PSE	74.27	73.62	0.65 (0.95)	73.32	73.87	-0.55 (0.90)	74.62	73.56	1.06 (0.82)
Sample Size	444	391		454	673		432	610	

Source: Course participation data

Notes: Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Table 2.4: Impacts of *Explore Your Horizon* on Course Marks in Grade 12

	Manitoba			New Brunswick					
	EYH Group	Comparison Group	Impact (s.e)	EYH Group	Comparison Group	Impact (s.e)	EYH Group	Comparison Group	Impact (s.e)
Proportion of courses pass in Grade 12 (%)									
ALL									
Zero to 50 per cent	2.24	3.38	-1.14 (1.26)	24.80	24.58	0.22 (2.04)	12.30	12.70	-0.39 (1.89)
Above 50 up to 75 per cent	3.53	2.79	0.74 (1.34)	5.67	5.94	-0.27 (1.58)	5.01	4.33	0.68 (1.40)
More than 75 per cent	94.23	93.83	0.40 (1.91)	69.53	69.48	0.05 (2.52)	82.69	82.98	-0.29 (2.08)
LILE group									
Zero to 50 per cent	4.81	3.50	1.32 (3.57)	37.25	37.52	-0.27 (3.94)	13.73	18.39	-4.66 (3.46)
Above 50 up to 75 per cent	3.39	4.04	-0.65 (3.13)	4.69	6.68	-1.99 (2.57)	5.65	5.24	0.41 (2.43)
More than 75 per cent	91.80	92.46	-0.66 (4.78)	58.06	55.80	2.26 (4.64)	80.62	76.38	4.25 (4.01)
Non-LILE group									
Zero to 50 per cent	1.70	3.01	-1.30 (1.35)	18.67	18.15	0.52 (2.30)	12.28	8.92	3.36 (2.18)
Above 50 up to 75 per cent	3.14	2.94	0.20 (1.36)	6.36	5.49	0.87 (1.96)	4.41	4.28	0.14 (1.74)
More than 75 per cent	95.15	94.05	1.10 (1.93)	74.97	76.36	-1.39 (2.82)	83.31	86.81	-3.50 (2.69)
Parents with high school or less									
Zero to 50 per cent	4.26	1.53	2.72 (2.85)	35.61	37.04	-1.42 (4.30)	19.86	20.56	-0.70 (4.41)
Above 50 up to 75 per cent	5.57	3.35	2.22 (3.07)	5.24	8.42	-3.18 (2.89)	7.24	5.32	1.92 (3.04)
More than 75 per cent	90.18	95.12	-4.94 (4.08)	59.15	54.55	4.60 (4.77)	72.90	74.13	-1.23 (5.17)
Parents with any PSE									
Zero to 50 per cent	1.75	3.66	-1.91 (1.27)	20.33	19.15	1.18 (2.42)	9.29	9.44	-0.14 (2.08)
Above 50 up to 75 per cent	2.70	2.67	0.03 (1.35)	5.62	5.23	0.39 (1.78)	4.07	3.94	0.14 (1.57)
More than 75 per cent	95.55	93.67	1.88 (1.82)	74.05	75.62	-1.57 (2.77)	86.64	86.63	0.01 (2.50)
Average course mark in Grade 12 (%)									
All	73.61	73.76	-0.15 (0.86)	73.64	74.00	-0.36 (0.71)	74.64	74.42	0.22 (0.80)
LILE	71.34	71.63	-0.30 (2.13)	70.31	70.35	-0.04 (1.29)	71.31	71.28	0.03 (1.43)
Non-LILE	74.47	74.47	0.00 (0.95)	75.08	75.93	-0.85 (0.81)	76.32	76.22	0.10 (0.97)
Parents with high school or less	71.39	72.38	-1.00 (1.90)	69.72	70.35	-0.63 (1.44)	69.53	70.60	-1.07 (1.78)
Parents with any PSE	74.39	74.27	0.12 (0.96)	75.30	75.65	-0.35 (0.88)	76.58	76.05	0.52 (0.82)
Sample Size	444	391		454	673		432	610	

Source: Course participation data

Notes: Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Impacts on graduating from high school

The *Explore Your Horizons* logic model anticipated that students in the program would eventually be more likely to graduate from high school than their counterparts in the comparison group. As shown in Table 3.1, this was not the case at the end of the fourth year of the intervention. In Manitoba and both New Brunswick linguistic sectors, for the full sample and for both LILE and FGF subgroups, students in *Explore Your Horizons* and the comparison group were equally likely to graduate from high school “on time.” Longer-term impacts on graduation (beyond “on time”) are included in the Future to Discover Post-secondary Impacts Report.

Table 3.1: Impacts of *Explore Your Horizon* on High School Graduation

	Manitoba			New Brunswick					
				Francophone			Anglophone		
	EYH Group	Comparison Group	Impact (s.e)	EYH Group	Comparison Group	Impact (s.e)	EYH Group	Comparison Group	Impact (s.e)
Graduated from high school (%)									
All	81.67	80.51	1.16 (2.54)	85.47	87.55	-2.08 (2.14)	83.71	82.81	0.91 (2.74)
LILE group	69.01	68.38	0.63 (6.36)	77.86	78.67	-0.81 (4.28)	78.79	73.34	5.45 (4.54)
Non-LILE group	86.73	85.30	1.43 (2.87)	88.92	93.11	-4.19 * (2.20)	86.35	88.69	-2.34 (2.55)
Parents with high school or less	67.82	66.77	1.06 (6.16)	75.04	80.34	-5.29 (4.62)	72.57	76.26	-3.69 (5.64)
Parents with any PSE	86.77	86.58	0.19 (2.78)	89.54	91.65	-2.11 (2.17)	88.96	85.25	3.71 (2.63)
Sample Size	444	391		454	673		432	610	

Source: Course participation data

Notes: Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Impacts of *Learning Accounts*

As mentioned in the introduction, the *Learning Accounts* intervention is a financial incentive program aimed only at students in New Brunswick with family incomes below the provincial median. This intervention provides an early guarantee of a grant worth up to \$8,000, conditional upon high school completion and subsequent participation in postsecondary education. Unlike the *Explore Your Horizons* intervention, *Learning Accounts* did not include ongoing career advice workshops for the students assigned to the *Learning Accounts* group. Instead, students randomly selected for the *Learning Accounts* group were made aware of the rules that regulated *Learning Accounts* instalments and how to take the necessary steps to receive the funds.⁵ They and their parents received regular reminders about their

⁵ The detailed procedures for opening the *Learning Accounts* are clearly documented in the *Future to Discover: Implementation Report* and not repeated here. In summary, participants and parents received reminders by mail and telephone about eligibility rules for accumulating instalments, account balances, and closure dates. A system of verification and follow-up procedures were also put in place to ensure that eligible students could easily access their funds and receive help in doing so.

Learning Accounts. In general, the project's logic model expected *Learning Accounts* students to make behavioural changes while in high school towards accomplishing the goal of postsecondary enrolment. Students were expected to be encouraged by the awareness of holding a *Learning Account* to ultimately pursue postsecondary education. With postsecondary education as a goal, it was assumed that students may change the composition of their high school courses, achieve better grades, and attain higher rates of high school graduation. The results below investigate whether any such changes did occur.

Impacts on course choices

As discussed above, the FTD interventions, including *Learning Accounts*, could not influence course choices made in Grade 9 and the FTD programs are unlikely to have run for long enough to have influenced Grade 10 choices substantially. Therefore any observed differences occurred by chance. As shown in Tables 4.1 and 4.2 there is only one such chance occurrence in each of those Grade years. In Grades 11 and 12, the offer of a *Learning Accounts* yielded hardly any changes in the courses that LA-eligible New Brunswick Francophone and Anglophone participants took. In Grade 11 (Table 4.3), there were no noticeable impacts of *Learning Accounts* on course choices for Francophone participants. Among Anglophone participants, the only observed change that can be attributed to *Learning Accounts* was a decrease (8.45 percentage points) in enrolment in physical education classes.

In Grade 12 (Table 4.4), among Francophone students that were offered *Learning Accounts*, the lone statistically significant differences in enrolment were observed for courses in physical education. Among Anglophone students, those offered *Learning Accounts* enrolled in business and computer related courses in higher proportions than those in the comparison group. This was the only detectable impact for Anglophone *Learning Accounts* students in Grade 12.

Table 4.1: Differences in Grade 9 Course Choices for *Learning Accounts* Participants

	New Brunswick LA-Eligible					
	Francophone			Anglophone		
	LA Group	Comparison Group	Impact (s.e)	LA Group	Comparison Group	Impact (s.e)
Known to have taken at least one course in the following subject areas:						
Math	95.38	97.98	-2.60 * (1.49)	95.45	94.28	1.18 (1.71)
English	96.35	96.33	0.03 (1.45)	95.02	94.30	0.71 (1.71)
French	30.72	31.68	-0.96 (2.65)	67.06	65.59	1.48 (4.38)
Science	95.14	95.22	-0.08 (1.81)	94.78	92.08	2.70 (1.86)
Social studies	95.27	96.22	-0.96 (1.67)	95.42	94.72	0.70 (1.51)
Fine Arts	56.89	55.30	1.60 (3.68)	94.83	92.43	2.40 (1.88)
Business and computer-related courses	-	-	-	7.45	7.33	0.12 (1.71)
Technology and applied skills	-	-	-	61.93	63.33	-1.39 (3.38)
Career Development and Planning	66.08	66.84	-0.76 (3.37)	38.67	37.71	0.97 (3.42)
Physical Education and leadership	66.77	68.81	-2.04 (3.30)	88.45	87.32	1.13 (2.19)
Other courses	-	-	-	3.71	4.50	-0.79 (1.60)
Sample size	254	270		244	243	

Source: Course participation data

Notes: Estimates regression adjusted.

Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Table 4.2: Impacts of *Learning Accounts* on Courses Taken in Grade 10

	New Brunswick LA-Eligible					
	Francophone			Anglophone		
	LA Group	Comparison Group	Impact (s.e)	LA Group	Comparison Group	Impact (s.e)
Known to have taken at least one course in the following subject areas:						
Math	93.05	91.95	1.10 (2.02)	88.15	82.68	5.46 ** (2.75)
English	91.55	92.98	-1.43 (2.23)	87.71	83.12	4.59 (2.87)
French	88.62	89.02	-0.40 (2.56)	62.13	56.95	5.18 (4.08)
Science	90.95	91.31	-0.37 (2.04)	88.85	90.21	-1.36 (2.66)
Social studies	90.33	90.03	0.30 (2.47)	86.90	83.53	3.37 (2.62)
Fine Arts	15.13	13.07	2.06 (2.61)	80.78	82.67	-1.90 (3.03)
Business and computer-related courses	5.23	1.82	3.41 ** (1.66)	16.69	14.52	2.17 (3.02)
Technology and applied skills	60.17	63.05	-2.88 (3.68)	63.50	60.93	2.56 (3.70)
Career Development and Planning	74.07	75.78	-1.72 (3.29)	26.12	24.80	1.31 (3.30)
Physical Education and leadership	71.25	73.20	-1.95 (3.85)	78.06	75.94	2.12 (3.20)
Other courses	3.75	5.07	-1.31 (1.72)	2.53	4.46	-1.93 (1.55)
Sample size	254	270		244	243	

Source: Course participation data

Notes: Estimates regression adjusted.

Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Table 4.3: Impacts of *Learning Accounts* on Courses Taken in Grade 11

	New Brunswick LA-Eligible					
	Francophone			Anglophone		
	LA Group	Comparison Group	Impact (s.e)	LA Group	Comparison Group	Impact (s.e)
Known to have taken at least one course in the following subject areas:						
Math	79.03	79.71	-0.68 (3.13)	86.11	86.37	-0.26 (3.04)
English	79.36	79.78	-0.43 (3.07)	86.04	86.86	-0.83 (2.98)
French	79.72	80.56	-0.85 (3.08)	10.56	14.09	-3.53 (2.95)
Science	74.39	77.34	-2.95 (3.40)	80.38	78.55	1.83 (3.54)
Social studies	75.53	77.77	-2.24 (3.24)	81.60	81.03	0.57 (3.54)
Fine Arts	19.17	15.62	3.55 (3.43)	34.36	34.64	-0.28 (4.11)
Business and computer-related courses	25.85	27.66	-1.81 (3.44)	45.11	46.07	-0.96 (4.26)
Technology and applied skills	58.15	58.97	-0.81 (4.36)	69.03	64.84	4.19 (4.15)
Career Development and Planning	24.31	25.36	-1.05 (3.90)	1.87	4.70	-2.83 (1.60) *
Physical Education and leadership	23.89	21.66	2.23 (3.72)	15.50	23.95	-8.45 (3.41) **
Other courses	8.00	6.69	1.30 (2.22)	7.95	8.06	-0.11 (2.52)
Sample size	254	270		244	243	

Source: Course participation data

Notes: Estimates regression adjusted.

Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Table 4.4: Impacts of *Learning Accounts* on Courses Taken in Grade 12

	New Brunswick LA-Eligible					
	Francophone			Anglophone		
	LA Group	Comparison Group	Impact (s.e)	LA Group	Comparison Group	Impact (s.e)
Known to have taken at least one course in the following subject areas:						
Math	59.20	57.24	1.96 (4.17)	52.69	55.74	-3.05 (4.40)
English	38.57	37.38	1.19 (4.45)	85.16	85.27	-0.11 (3.07)
French	76.02	74.33	1.69 (3.34)	4.65	5.61	-0.96 (2.12)
Science	61.13	59.91	1.21 (3.69)	62.75	64.56	-1.81 (4.39)
Social studies	38.18	38.86	-0.68 (3.95)	66.61	68.10	-1.49 (4.71)
Fine Arts	22.25	20.95	1.30 (3.46)	39.68	40.40	-0.72 (4.27)
Business and computer-related courses	39.05	38.80	0.25 (4.25)	52.57	44.75	7.82 * (4.43)
Technology and applied skills	64.81	59.82	4.99 (4.34)	77.57	76.43	1.15 (3.79)
Career Development and Planning	28.61	31.78	-3.17 (4.21)	3.20	2.14	1.06 (1.66)
Physical Education and leadership	19.93	28.35	-8.43 ** (3.81)	21.23	24.36	-3.12 (3.83)
Other courses	24.91	24.80	0.11 (3.35)	30.98	32.26	-1.28 (3.79)
Sample size	254	270		244	243	

Notes: Estimates regression adjusted.

Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

The subgroup results for *Learning Accounts* are presented in Tables 4.5 to 4.12 below. As expected, Grades 9 and 10 course choices are similar for the Francophone and Anglophone LILE and FGF subgroups (Table 4.5 to 4.8) participants that received an offer of a *Learning Account* and those who did not.

Learning Accounts appears to have had no influence on the course choices of Francophone LILE students in Grade 11 (Table 4.9). Among Anglophone LILE students, those in the *Learning Accounts* and comparison groups took all courses in equivalent proportions, except for physical education courses. Similarly, among the FGF subgroup, in the Francophone and Anglophone sectors, those in the *Learning Accounts* and comparison groups took almost all courses in equivalent proportions. The exceptions included, enrolment of fewer Francophone LA group students in business and computer-related courses (8.47 percentage points) and fewer Anglophone LA students enrolled in physical education courses (10.06 percentage points).

In Grade 12 (Tables 4.11 and 4.12), there was only a single noticeable difference in course choices for LILE Francophone and Anglophone subgroups. Fewer Francophone *Learning Accounts* LILE students enrolled in physical education, while there was increased enrolment in business and computer related courses by Anglophone *Learning Accounts* LILE students. Among the FGF subgroup, a higher proportion of Francophone *Learning Accounts* students enrolled in English, while fewer of them enrolled in physical education courses, compared to those in the comparison group. Anglophone *Learning Accounts* FGF students, enrolled in almost all course in equal proportions, except for business and computer related courses.

Table 4.5: Differences in Grade 9 Course Choices for *Learning Accounts* Participants (LILE Subgroup)

	New Brunswick LA-Eligible					
	Francophone			Anglophone		
	LA Group	Comparison Group	Impact (s.e)	LA Group	Comparison Group	Impact (s.e)
Known to have taken at least one course in the following subject areas:						
LILE						
Math	95.29	97.84	-2.55 (1.71)	94.98	93.30	1.68 (2.29)
English	96.44	95.74	0.71 (1.79)	94.48	93.26	1.22 (2.34)
French	33.10	32.92	0.18 (3.40)	67.77	68.61	-0.85 (4.69)
Science	95.34	94.89	0.45 (2.16)	93.92	90.82	3.10 (2.49)
Social studies	95.37	95.34	0.03 (1.97)	94.80	93.96	0.84 (1.93)
Fine Arts	56.84	52.24	4.60 (3.95)	94.50	92.75	1.76 (2.22)
Business and computer-related courses	-	-	-	8.45	8.47	-0.02 (2.28)
Technology and applied skills	-	-	- (0.79)	61.79	64.27	-2.48 (4.16)
Career Development and Planning	63.95	66.10	-2.15 (4.35)	38.56	36.90	1.66 (3.84)
Physical Education and leadership	66.48	67.50	-1.02 (4.26)	87.83	87.56	0.27 (3.03)
Other courses	-	-	-	4.64	3.61	1.02 (1.91)
Sample size	203	207		187	203	

Source: Course participation data

Notes: Estimates regression adjusted.

Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

**Table 4.6: Differences in Grade 9 Course Choices for *Learning Accounts* Participants
(Parent's Education Subgroups)**

	New Brunswick LA-Eligible					
	Francophone			Anglophone		
	LA Group	Comparison Group	Impact (s.e)	LA Group	Comparison Group	Impact (s.e)
Known to have taken at least one course in the following subject areas:						
Parents with any PSE						
Math	98.22	99.28	-1.06 (1.20)	97.70	96.76	0.94 (1.81)
English	96.93	98.89	-1.96 (2.02)	97.56	97.76	-0.20 (1.63)
French	23.67	26.92	-3.25 (4.51)	68.80	59.37	9.44 (6.60)
Science	97.50	95.89	1.61 (2.43)	97.81	95.78	2.04 (1.94)
Social studies	98.06	99.43	-1.37 (1.28)	97.68	96.78	0.90 (1.84)
Fine Arts	58.87	61.43	-2.55 (6.01)	95.55	93.34	2.20 (2.57)
Business and computer-related courses	-	-	-	4.97	5.20	-0.23 (2.26)
Technology and applied skills	-	-	- (0.00)	62.49	65.05	-2.56 (4.69)
Career Development and Planning	70.04	69.39	0.66 (5.26)	37.09	41.37	-4.29 (4.95)
Physical Education and leadership	65.83	69.39	-3.56 (5.70)	92.14	88.85	3.30 (3.45)
Other courses	-	-	-	4.30	4.29	0.01 (2.25)
Sample size	119	123		138	118	

Table 4.6: Differences in Grade 9 Course Choices by Learning Accounts Participants (Cont'd)

	New Brunswick LA-Eligible					
	Francophone			Anglophone		
	LA Group	Comparison Group	Impact (s.e)	LA Group	Comparison Group	Impact (s.e)
Parents with high school or less						
Math	93.06	96.69	-3.63 (2.49)	93.10	91.45	1.66 (3.03)
English	95.25	94.71	0.54 (2.62)	92.57	90.30	2.26 (3.31)
French	36.49	36.19	0.30 (4.67)	65.16	71.14	-5.98 (6.28)
Science	92.87	94.80	-1.93 (2.71)	91.31	88.17	3.15 (4.13)
Social studies	93.15	93.18	-0.03 (2.74)	93.19	92.17	1.02 (3.04)
Fine Arts	56.75	48.69	8.05 (5.68)	93.37	92.02	1.35 (3.12)
Business and computer-related courses	-	-	-	10.11	9.83	0.29 (3.22)
Technology and applied skills	-	-	-	61.63	61.34	0.30 (5.72)
Career Development and Planning	63.12	64.17	-1.05 (5.30)	40.37	34.57	5.80 (4.81)
Physical Education and leadership	66.43	69.39	-2.95 (4.67)	85.76	84.08	1.68 (3.94)
Other courses	-	-	-	3.92	3.88	0.04 (2.39)
Sample size	132	146		106	125	

Source: Course participation data

Notes: Estimates regression adjusted.

Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Table 4.7: Impacts of Learning Accounts on Courses Taken in Grade 10 (LILE Subgroup)

	New Brunswick LA-Eligible					
	Francophone			Anglophone		
	LA Group	Comparison Group	Impact (s.e)	LA Group	Comparison Group	Impact (s.e)
Known to have taken at least one course in the following subject areas:						
LILE						
Math	93.64	92.19	1.45 (2.51)	86.88	83.03	3.85 (3.33)
English	91.01	93.33	-2.32 (2.81)	86.44	83.43	3.01 (3.40)
French	88.58	88.43	0.15 (3.20)	63.74	60.99	2.75 (4.40)
Science	89.91	91.49	-1.58 (2.91)	87.28	89.55	-2.27 (3.24)
Social studies	88.77	90.68	-1.90 (2.86)	85.54	83.27	2.28 (3.35)
Fine Arts	15.64	12.74	2.90 (3.17)	80.21	83.26	-3.05 (3.80)
Business and computer-related courses	6.52	1.83	4.69 ** (1.96)	17.08	15.79	1.29 (3.15)
Technology and applied skills	59.72	65.43	-5.71 (4.41)	64.13	61.12	3.00 (4.17)
Career Development and Planning	71.76	75.41	-3.65 (3.81)	25.83	25.96	-0.13 (3.58)
Physical Education and leadership	70.91	72.35	-1.44 (4.44)	76.04	75.76	0.28 (3.95)
Other courses	4.50	6.73	-2.23 (2.15)	2.19	4.39	-2.20 (1.73)
Sample size	203	207		187	203	

Source: Course participation data

Notes: Estimates regression adjusted.

Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Table 4.8: Impacts of *Learning Accounts* on Courses Taken in Grade 10 (Parent's Education Subgroups)

	New Brunswick LA-Eligible					
	Francophone			Anglophone		
	LA Group	Comparison Group	Impact (s.e)	LA Group	Comparison Group	Impact (s.e)
Known to have taken at least one course in the following subject areas:						
Parents with any PSE						
Math	95.37	93.04	2.33 (3.53)	89.18	82.99	6.19 * (3.72)
English	95.74	95.14	0.60 (3.25)	89.23	82.93	6.30 * (3.80)
French	94.66	92.09	2.57 (3.50)	63.10	49.09	14.01 ** (6.67)
Science	97.61	94.14	3.47 (2.97)	94.46	91.22	3.24 (3.41)
Social studies	97.34	92.76	4.58 (3.30)	87.67	85.60	2.07 (3.55)
Fine Arts	11.86	15.48	-3.61 (4.56)	81.66	81.61	0.05 (4.63)
Business and computer-related courses	-	-	-	13.69	15.34	-1.65 (4.16)
Technology and applied skills	64.12	60.41	3.71 (6.40)	60.87	61.87	-1.00 (5.99)
Career Development and Planning	77.74	79.09	-1.36 (5.09)	24.60	22.93	1.67 (4.01)
Physical Education and leadership	78.14	75.43	2.71 (5.29)	80.07	77.54	2.53 (4.35)
Other courses	-	-	-	-	-	-
Sample size	119	123		138	118	

**Table 4.8: Impacts of *Learning Accounts* on Courses Taken in Grade 10 (Parent's Education Subgroups)
(Cont'd)**

	New Brunswick LA-Eligible					
	Francophone			Anglophone		
	LA Group	Comparison Group	Impact (s.e)	LA Group	Comparison Group	Impact (s.e)
Parents with high school or less						
Math	90.71	91.28	-0.57 (3.25)	84.92	83.99	0.93 (4.21)
English	87.54	91.40	-3.87 (3.95)	84.10	84.69	-0.59 (4.22)
French	82.31	87.23	-4.92 (4.41)	62.43	63.06	-0.63 (6.19)
Science	85.23	88.70	-3.47 (3.84)	82.12	88.76	-6.64 (4.58)
Social studies	83.59	88.13	-4.54 (3.94)	85.29	82.08	3.21 (4.62)
Fine Arts	17.35	11.72	5.63 (4.11)	79.00	84.21	-5.20 (5.15)
Business and computer-related courses	-	-	-	19.27	14.86	4.41 (4.77)
Technology and applied skills	56.05	65.76	-9.71 * (5.52)	63.65	62.83	0.82 (6.61)
Career Development and Planning	69.87	73.82	-3.95 (5.05)	26.55	27.88	-1.33 (4.62)
Physical Education and leadership	66.49	70.03	-3.54 (6.05)	73.97	75.67	-1.70 (5.64)
Other courses	-	-	-	-	-	-
Sample size	132	146		106	125	

Source: Course participation data

Notes: Estimates regression adjusted.

Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Table 4.9: Impacts of *Learning Accounts* on Courses Taken in Grade 11 (LILE Subgroup)

	New Brunswick LA-Eligible					
	Francophone			Anglophone		
	LA Group	Comparison Group	Impact (s.e)	LA Group	Comparison Group	Impact (s.e)
Known to have taken at least one course in the following subject areas:						
LILE						
Math	78.06	77.44	0.62 (4.09)	86.19	85.14	1.05 (3.71)
English	79.08	76.92	2.16 (3.89)	86.42	85.42	1.00 (3.57)
French	79.55	78.40	1.15 (4.00)	10.43	14.04	-3.61 (3.57)
Science	72.95	75.20	-2.25 (4.31)	81.02	77.58	3.45 (4.01)
Social studies	74.50	76.10	-1.61 (4.14)	80.93	80.12	0.81 (4.00)
Fine Arts	19.94	14.82	5.13 (3.75)	36.17	33.67	2.50 (4.96)
Business and computer-related courses	26.21	28.06	-1.84 (4.47)	45.81	44.01	1.80 (5.04)
Technology and applied skills	60.35	60.92	-0.57 (4.83)	70.74	66.86	3.88 (5.14)
Career Development and Planning	25.32	25.53	-0.21 (3.72)	-	-	-
Physical Education and leadership	20.81	23.67	-2.85 (4.25)	16.97	25.25	-8.28 ** (4.12)
Other courses	8.44	7.22	1.23 (2.71)	7.82	8.56	-0.73 (2.71)
Sample size	203	207		187	203	

Source: Course participation data

Notes: Estimates regression adjusted.

Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Table 4.10: Impacts of *Learning Accounts* on Courses Taken in Grade 11 (Parent's Education Subgroups)

	New Brunswick LA-Eligible					
	Francophone			Anglophone		
	LA Group	Comparison Group	Impact (s.e)	LA Group	Comparison Group	Impact (s.e)
Known to have taken at least one course in the following subject areas:						
Parents with any PSE						
Math	87.25	85.38	1.87 (4.06)	87.93	90.39	-2.46 (4.28)
English	83.09	86.17	-3.08 (4.47)	88.63	91.26	-2.62 (4.12)
French	87.25	85.39	1.86 (4.38)	12.74	12.22	0.52 (4.37)
Science	85.75	83.57	2.19 (4.29)	80.68	81.92	-1.24 (5.12)
Social studies	87.08	83.91	3.18 (4.58)	87.19	81.08	6.12 (5.30)
Fine Arts	22.96	16.13	6.83 (5.33)	40.59	38.97	1.61 (7.25)
Business and computer-related courses	30.67	27.46	3.21 (6.05)	43.72	53.11	-9.39 (5.98)
Technology and applied skills	57.70	60.93	-3.24 (6.50)	62.41	61.76	0.65 (7.23)
Career Development and Planning	19.12	22.33	-3.21 (5.32)	-	-	-
Physical Education and leadership	26.41	21.78	4.62 (5.50)	16.36	23.24	-6.88 (5.12)
Other courses	6.52	7.58	-1.06 (3.14)	6.28	7.07	-0.79 (3.41)
Sample size	119	123		138	118	

Table 4.10: Impacts of *Learning Accounts* on courses Taken in Grade 11 (Parent's Education Subgroups) (Cont'd)

	New Brunswick LA-Eligible					
	Francophone			Anglophone		
	LA Group	Comparison Group	Impact (s.e)	LA Group	Comparison Group	Impact (s.e)
Parents with high school or less						
Math	72.49	74.19	-1.71 (5.02)	84.87	81.63	3.23 (5.04)
English	75.90	74.53	1.37 (4.79)	85.03	80.70	4.33 (5.34)
French	73.59	75.93	-2.35 (4.85)	8.31	15.35	-7.04 (4.83)
Science	66.01	70.46	-4.45 (5.66)	79.79	75.54	4.25 (5.35)
Social studies	66.02	71.82	-5.80 (4.88)	78.13	77.74	0.39 (5.89)
Fine Arts	16.22	14.79	1.43 (4.20)	28.49	28.64	-0.15 (6.65)
Business and computer-related courses	20.37	28.84	-8.47 * (4.77)	47.34	39.06	8.28 (7.10)
Technology and applied skills	58.27	57.59	0.68 (5.93)	76.96	68.33	8.63 (6.96)
Career Development and Planning	27.17	29.54	-2.37 (5.41)	-	-	-
Physical Education and leadership	21.50	21.66	-0.15 (5.19)	14.47	24.53	-10.06 * (5.22)
Other courses	9.49	5.80	3.69 (3.40)	10.09	9.04	1.05 (4.55)
Sample size	132	146		106	125	

Source: Course participation data

Notes: Estimates regression adjusted.

Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Table 4.11: Impacts of Learning Accounts on Courses Taken in Grade 12 (LILE Subgroup)

	New Brunswick LA-Eligible					
	Francophone			Anglophone		
	LA Group	Comparison Group	Impact (s.e)	LA Group	Comparison Group	Impact (s.e)
Known to have taken at least one course in the following subject areas:						
LILE						
Math	56.40	54.61	1.79 (4.76)	53.93	53.77	0.16 (5.09)
English	39.63	35.70	3.93 (4.56)	86.12	83.23	2.88 (3.70)
French	75.53	71.21	4.32 (4.27)	5.45	6.31	-0.87 (2.30)
Science	57.62	55.36	2.26 (4.62)	65.86	64.46	1.40 (4.79)
Social studies	37.55	37.76	-0.21 (4.93)	67.28	66.59	0.69 (4.87)
Fine Arts	21.65	22.35	-0.70 (4.27)	39.77	37.75	2.03 (4.82)
Business and computer-related courses	37.75	38.04	-0.30 (4.56)	54.08	44.76	9.32 * (5.32)
Technology and applied skills	66.94	61.22	5.72 (4.59)	77.01	76.35	0.66 (4.11)
Career Development and Planning	27.56	34.01	-6.45 (4.66)	-	-	-
Physical Education and leadership	18.51	28.37	-9.86 ** (4.04)	22.32	21.80	0.52 (4.49)
Other courses	25.89	24.49	1.40 (4.33)	30.80	32.71	-1.91 (4.60)
Sample size	203	207		187	203	

Source: Course participation data

Notes: Estimates regression adjusted.

Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Table 4.12: Impacts of *Learning Accounts* on courses Taken in Grade 12 (Parent's Education Subgroups)

	New Brunswick LA-Eligible					
	Francophone			Anglophone		
	LA Group	Comparison Group	Impact (s.e)	LA Group	Comparison Group	Impact (s.e)
Known to have taken at least one course in the following subject areas:						
Parents with any PSE						
Math	71.70	66.95	4.75 (6.07)	53.31	58.84	-5.53 (7.06)
English	37.01	46.69	-9.68 (6.61)	87.00	91.48	-4.48 (3.97)
French	84.40	83.25	1.16 (4.34)	5.82	4.21	1.61 (2.71)
Science	76.49	69.65	6.84 (5.13)	59.66	73.45	-13.78 ** (5.63)
Social studies	36.43	42.33	-5.90 (6.58)	68.22	71.92	-3.70 (6.38)
Fine Arts	25.36	21.99	3.37 (5.60)	41.08	40.95	0.13 (6.02)
Business and computer-related courses	44.79	47.30	-2.51 (5.94)	51.81	44.49	7.33 (7.11)
Technology and applied skills	66.46	63.86	2.59 (5.47)	79.68	74.62	5.06 (5.40)
Career Development and Planning	30.39	30.19	0.20 (5.68)	-	-	-
Physical Education and leadership	21.67	32.15	-10.48 * (5.94)	23.01	29.87	-6.86 (6.09)
Other courses	28.12	23.40	4.72 (5.41)	24.76	32.91	-8.15 (6.16)
Sample size	119	123		138	118	

Table 4.12: Impacts of *Learning Accounts* on Courses Taken in Grade 12 (Parent's Education Subgroup) (Cont'd)

	New Brunswick LA-Eligible					
	Francophone			Anglophone		
	LA Group	Comparison Group	Impact (s.e)	LA Group	Comparison Group	Impact (s.e)
Parents with high school or less						
Math	48.58	48.55	0.03 (6.21)	53.22	51.67	1.55 (6.77)
English	40.72	28.94	11.78 * (6.79)	85.00	77.52	7.48 (5.32)
French	68.47	66.86	1.61 (4.92)	-	-	-
Science	49.31	49.94	-0.64 (6.08)	64.73	57.91	6.81 (6.40)
Social studies	38.92	36.73	2.19 (5.96)	64.89	64.17	0.71 (6.68)
Fine Arts	22.04	17.74	4.30 (4.92)	38.36	39.47	-1.11 (6.87)
Business and computer-related courses	32.91	32.58	0.33 (5.60)	55.18	43.60	11.58 * (6.99)
Technology and applied skills	62.48	57.21	5.26 (6.09)	77.45	75.93	1.52 (6.34)
Career Development and Planning	27.11	33.03	-5.92 (5.45)	-	-	-
Physical Education and leadership	17.13	26.29	-9.16 * (5.38)	19.96	18.28	1.68 (5.95)
Other courses	24.46	23.77	0.69 (5.42)	37.36	33.12	4.25 (6.85)
Sample size	132	146		106	125	

Source: Course participation data

Notes: Estimates regression adjusted.

Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Impacts on course grades

In Grade 9 (Table 5.1), *Learning Accounts* could not influence course grades and therefore any differences are merely by chance. Oddly, while in Grade 9, a lower proportion of Francophone FGF participants who were offered *Learning Accounts* had achieved passing grades in over 75 per cent of their courses compared to those in the comparison group.

Starting in Grade 10, *Learning Accounts* is expected to influence the course grades of students offered the intervention. As shown in Table 5.2, *Learning Accounts* had no effect on the course grades of Francophone students in Grade 10. At the same time though, *Learning Accounts* appears to cause an improvement in course grades for those in the Anglophone sector. Fewer students (6.88 percentage points) in the *Learning Accounts* group in the Anglophone sector passed between zero and fifty per cent of their courses. Similar results were observed for Anglophone *Learning Accounts* participants in the LILE subgroup. Compared to the comparison group fewer of them (7.56 percentage) passed between zero and fifty percent of their Grade 10 courses.

In Grade 11 (Table 5.3), there is no evidence that *Learning Accounts* had any impact on course grades for the full sample or LILE and FGF subgroups. In Grade 12 (Table 5.4), *Learning Accounts* had no impacts on the course grades of Francophone participants. However, *Learning Accounts* did have a positive impact on the course grades of Anglophone participants, with an increase proportion of them passing more of their courses. This was true overall, as well as for the LILE subgroup.

Table 5.1: Differences in Grade 9 Course Marks for *Learning Accounts* Participants

	New Brunswick LA-Eligible					
	Francophone			Anglophone		
	LA Group	Comparison Group	Impact (s.e)	LA Group	Comparison Group	Impact (s.e)
Proportion of courses passed in Grade 9 (%)						
All						
Zero to 50 per cent	38.66	37.45	1.21 (3.06)	15.72	16.33	-0.61 (3.11)
Above 50 up to 75 per cent	8.08	7.39	0.69 (2.51)	12.91	11.88	1.03 (2.96)
More than 75 per cent	53.26	55.16	-1.90 (3.49)	71.37	71.79	-0.42 (3.69)
LILE						
Zero to 50 per cent	41.70	41.92	-0.22 (3.97)	17.18	17.66	-0.48 (3.02)
Above 50 up to 75 per cent	8.80	6.87	1.93 (2.70)	12.81	14.46	-1.64 (3.44)
More than 75 per cent	49.51	51.22	-1.71 (4.36)	70.01	67.89	2.12 (3.99)
Parents with high school or less						
Zero to 50 per cent	50.94	46.41	4.53 (5.32)	20.78	23.24	-2.46 (5.08)
Above 50 up to 75 per cent	12.04	5.55	6.49 * (3.44)	16.38	15.92	0.46 (5.27)
More than 75 per cent	37.02	48.04	-11.02 ** (5.39)	62.84	60.84	2.00 (6.21)
Parents with any PSE						
Zero to 50 per cent	25.44	26.22	-0.78 (4.44)	10.97	10.51	0.46 (3.50)
Above 50 up to 75 per cent	4.84	8.43	-3.58 (3.27)	8.71	9.70	-0.99 (3.94)
More than 75 per cent	69.72	65.35	4.36 (5.16)	80.33	79.79	0.53 (4.91)
Average course mark in Grade 9 (%)						
All	71.36	71.21	0.15 (0.90)	72.22	71.99	0.22 (1.08)
LILE	70.60	69.20	1.39 (1.10)	71.99	70.90	1.09 (1.23)
Parents with high school or less	67.69	68.26	-0.57 (1.36)	69.95	69.00	0.96 (1.70)
Parents with any PSE	75.89	74.32	1.57 (1.19)	74.23	74.63	-0.40 (1.33)
Sample size	254	270		244	243	

Source: Course participation data

Notes: Estimates regression adjusted.

Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Table 5.2: Impacts of *Learning Accounts* on Course Marks in Grade 10

	New Brunswick LA-Eligible					
	Francophone			Anglophone		
	LA Group	Comparison Group	Impact (s.e)	LA Group	Comparison Group	Impact (s.e)
Proportion of courses passed in Grade 10 (%)						
All						
Zero to 50 per cent	36.94	38.03	-1.10 (3.25)	12.87	19.76	-6.88 ** (2.68)
Above 50 up to 75 per cent	7.78	6.54	1.23 (2.33)	10.75	7.39	3.36 (2.64)
More than 75 per cent	55.29	55.42	-0.13 (3.75)	76.37	72.85	3.52 (3.43)
LILE group						
Zero to 50 per cent	39.11	41.07	-1.96 (3.82)	13.71	21.27	-7.56 ** (3.28)
Above 50 up to 75 per cent	8.53	6.53	2.00 (2.76)	10.08	7.90	2.18 (2.97)
More than 75 per cent	52.36	52.40	-0.04 (4.50)	76.21	70.83	5.38 (3.93)
Parents with high school or less						
Zero to 50 per cent	47.15	44.77	2.39 (5.44)	16.28	24.02	-7.74 (4.90)
Above 50 up to 75 per cent	12.00	7.63	4.37 (3.79)	10.52	7.49	3.04 (4.16)
More than 75 per cent	40.85	47.61	-6.76 (5.87)	73.20	68.49	4.70 (6.03)
Parents with any PSE						
Zero to 50 per cent	25.58	30.36	-4.78 (5.02)	9.38	16.23	-6.85 * (3.84)
Above 50 up to 75 per cent	3.78	4.69	-0.91 (2.72)	10.29	8.07	2.22 (3.99)
More than 75 per cent	70.64	64.95	5.69 (5.28)	80.34	75.70	4.63 (5.54)
Average course mark in Grade 10 (%)						
All	69.90	69.74	0.16 (0.97)	72.22	72.11	0.11 (1.04)
LILE	69.50	67.79	1.71 (1.11)	71.72	71.22	0.50 (1.24)
Parents with high school or less	66.86	66.54	0.32 (1.32)	70.81	69.79	1.02 (1.66)
Parents with any PSE	73.91	72.83	1.07 (1.50)	73.67	74.17	-0.50 (1.57)
Sample size	254	270		244	243	

Source: Course participation data

Notes: Estimates regression adjusted.

Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Table 5.3: Impacts of *Learning Accounts* on Course Marks in Grade 11

	New Brunswick LA-Eligible					
	Francophone			Anglophone		
	LA Group	Comparison Group	Impact (s.e)	LA Group	Comparison Group	Impact (s.e)
Proportion of courses passed in Grade 11 (%)						
All						
Zero to 50 per cent	35.69	36.67	-0.98 (3.34)	15.67	17.16	-1.49 (3.08)
Above 50 up to 75 per cent	9.32	10.11	-0.79 (2.79)	13.07	12.20	0.87 (3.04)
More than 75 per cent	54.99	53.22	1.77 (3.78)	71.26	70.64	0.62 (3.78)
LILE group						
Zero to 50 per cent	38.22	39.22	-1.00 (4.11)	17.29	19.03	-1.74 (3.65)
Above 50 up to 75 per cent	10.54	10.84	-0.30 (3.51)	12.63	11.10	1.54 (2.94)
More than 75 per cent	51.24	49.94	1.30 (4.74)	70.08	69.87	0.20 (4.15)
Parents with high school or less						
Zero to 50 per cent	43.59	45.68	-2.10 (5.49)	17.69	24.76	-7.08 (5.64)
Above 50 up to 75 per cent	15.44	8.81	6.63 (4.27)	12.99	7.33	5.66 (4.61)
More than 75 per cent	40.98	45.51	-4.53 (5.67)	69.32	67.90	1.41 (6.50)
Parents with any PSE						
Zero to 50 per cent	27.33	27.30	0.03 (5.01)	13.75	10.05	3.70 (3.91)
Above 50 up to 75 per cent	3.70	10.98	-7.28 ** (3.48)	14.11	15.89	-1.79 (4.82)
More than 75 per cent	68.97	61.72	7.24 (5.70)	72.14	74.06	-1.92 (5.59)
Average course mark in Grade 11 (%)						
All	68.15	67.79	0.36 (1.06)	68.54	68.19	0.34 (1.11)
LILE	67.54	65.94	1.60 (1.19)	68.09	67.64	0.45 (1.41)
Parents with high school or less	66.06	64.15	1.90 (1.46)	67.37	66.29	1.07 (1.69)
Parents with any PSE	71.21	70.82	0.39 (1.40)	69.27	70.27	-1.00 (1.69)
Sample size	254	270		244	243	

Source: Course participation data

Notes: Estimates regression adjusted.

Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

Table 5.4: Impacts of *Learning Accounts* on Course Marks in Grade 12

	New Brunswick LA-Eligible					
	Francophone			Anglophone		
	LA Group	Comparison Group	Impact (s.e)	LA Group	Comparison Group	Impact (s.e)
Proportion of courses pass in Grade 12 (%)						
All						
Zero to 50 per cent	35.38	33.10	2.29 (3.20)	11.62	17.63	-6.01 ** (3.01)
Above 50 up to 75 per cent	6.29	6.81	-0.51 (2.53)	9.87	4.97	4.90 * (2.55)
More than 75 per cent	58.32	60.10	-1.78 (4.26)	78.51	77.40	1.11 (3.62)
LILE group						
Zero to 50 per cent	38.01	36.15	1.86 (4.25)	11.61	19.66	-8.05 ** (3.45)
Above 50 up to 75 per cent	7.09	8.03	-0.94 (3.08)	7.81	5.09	2.72 (2.72)
More than 75 per cent	54.90	55.82	-0.92 (4.75)	80.58	75.24	5.34 (3.82)
Parents with high school or less						
Zero to 50 per cent	46.52	42.55	3.97 (5.90)	15.32	22.62	-7.30 (5.13)
Above 50 up to 75 per cent	5.30	6.67	-1.37 (3.80)	9.29	4.15	5.14 (3.81)
More than 75 per cent	48.17	50.77	-2.60 (6.20)	75.39	73.23	2.16 (5.57)
Parents with any PSE						
Zero to 50 per cent	25.25	23.82	1.43 (4.64)	9.56	12.03	-2.47 (3.76)
Above 50 up to 75 per cent	7.99	6.17	1.82 (3.49)	9.53	6.61	2.92 (3.64)
More than 75 per cent	66.76	70.00	-3.25 (5.75)	80.90	81.35	-0.45 (4.85)
Average course mark in Grade 12 (%)						
All	70.96	71.48	-0.52 (1.12)	71.78	71.79	-0.02 (1.13)
LILE	70.70	69.99	0.71 (1.16)	71.71	71.24	0.47 (1.40)
Parents with high school or less	69.30	69.59	-0.29 (1.68)	70.44	69.89	0.55 (2.01)
Parents with any PSE	73.07	72.74	0.34 (1.56)	72.90	73.48	-0.57 (1.75)
Sample size	254	270		244	243	

Source: Course participation data

Notes: Estimates regression adjusted.

Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Impacts on graduating from high school

As shown in Table 6.1, the offer of a *Learning Accounts* had no impact on “on time” graduation rates of LA Eligible students that received an offer of a Learning Account. Impacts on graduation later than “on time” are included in the *Future to Discover Post-secondary Impacts Report*.

Table 6.1: Impacts of *Learning Accounts* on High School Graduation

	New Brunswick LA-Eligible					
	Francophone			Anglophone		
	LA Group	Comparison Group	Impact (s.e)	LA Group	Comparison Group	Impact (s.e)
Graduated from high school (%)						
All	80.78	80.00	0.79 (3.75)	72.59	75.50	-2.91 (3.95)
LILE group	80.72	76.57	4.15 (4.09)	70.97	75.41	-4.44 (4.89)
Parents with high school or less	75.35	75.08	0.27 (6.60)	68.86	74.20	-5.34 (6.26)
Parents with any PSE	86.77	84.78	2.00 (4.52)	74.41	78.26	-3.85 (5.77)
Sample size	254	270		244	243	

Source: Course participation data

Notes: Estimates regression adjusted.

Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

Impacts of *Explore Your Horizons* plus *Learning Accounts*

The analysis of the combined programs seek to evaluate what additional impact, if any, can be accredited to *Explore Your Horizons* over and above the effects of *Learning Accounts* and vice versa. Any observed impacts are expected to be larger in magnitude than those observed for just *Explore Your Horizons* or *Learning Accounts*, because the expected impacts of both programs will be occurring simultaneously. As with *Explore Your Horizons* and *Learning Accounts* interventions, the logic model posits that students who received the offer for the combined program will be more engaged in their high school work and more likely to stay on and graduate. The results below will examine whether participants' experiences were in line with these expectations.

Impacts on course choices

The calculated impact of *Explore Your Horizons* plus *Learning Accounts* on course choices for the LA-eligible sample is presented in Tables 7.1, 7.2, 7.3, and 7.4 below. *Explore Your Horizons* plus *Learning Accounts* could not have influenced the course choices of participants in Grades 9 and 10. It is therefore not surprising that there are no statistically significant differences in course choices for these grades.

Explore Your Horizons plus *Learning Accounts* had little or no influence on course choices in Grades 11 and 12 (Tables 7.3 and 7.4). The only observed impact over these two grades is a decline in the proportion (9.98 percentage points) of Anglophone students that participated in physical education courses while in Grade 11.

Table 7.1: Differences in Grade 9 Course Choices for *EYH+LA* Participants

	New Brunswick LA-Eligible					
	Francophone			Anglophone		
	EYH/LA Group	Comparison Group	Impact (s.e)	EYH/LA Group	Comparison Group	Impact (s.e)
Known to have taken at least one course in the following subject areas:						
Math	98.32	97.81	0.51 (1.07)	94.41	94.30	0.11 (1.73)
English	95.97	95.88	0.10 (1.61)	95.29	94.26	1.03 (1.62)
French	32.13	32.71	-0.58 (2.61)	64.08	65.61	-1.53 (4.44)
Science	93.80	95.27	-1.47 (1.89)	93.69	92.11	1.57 (1.84)
Social studies	96.41	96.22	0.19 (1.46)	94.96	94.59	0.37 (1.44)
Fine Arts	57.01	55.29	1.72 (3.67)	92.24	92.69	-0.46 (2.06)
Business and computer-related courses	-	-	-	7.27	7.37	-0.11 (1.75)
Technology and applied skills	-	-	- (0.93)	64.98	63.49	1.49 (3.68)
Career Development and Planning	64.89	66.69	-1.79 (3.81)	36.48	38.39	-1.91 (3.56)
Physical Education and leadership	65.58	69.78	-4.20 (3.21)	86.53	87.52	-0.99 (2.43)
Other courses	-	-	-	4.04	4.32	-0.28 (1.65)
Sample size	247	270		235	243	

Source: Course participation data

Notes: Estimates regression adjusted.

Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Table 7.2: Impacts of *Explore Your Horizon* plus *Learning Accounts* on Grade 10 Course Choices

	New Brunswick LA-Eligible					
	Francophone			Anglophone		
	EYH/LA Group	Comparison Group	Impact (s.e)	EYH/LA Group	Comparison Group	Impact (s.e)
Known to have taken at least one course in the following subject areas:						
Math	93.84	91.87	1.96 (2.20)	84.25	83.14	1.11 (3.34)
English	91.06	92.57	-1.51 (2.57)	85.49	83.58	1.92 (3.36)
French	84.88	88.56	-3.68 (2.81)	60.45	57.18	3.27 (4.62)
Science	90.94	91.18	-0.24 (2.41)	88.95	89.70	-0.74 (3.04)
Social studies	91.64	89.79	1.85 (2.53)	85.06	84.41	0.65 (3.16)
Fine Arts	14.99	12.30	2.69 (2.58)	79.29	82.99	-3.69 (3.55)
Business and computer-related courses	3.92	1.98	1.94 (1.41)	12.38	14.36	-1.98 (2.70)
Technology and applied skills	61.97	63.41	-1.44 (3.52)	58.16	61.45	-3.29 (4.09)
Career Development and Planning	75.31	75.74	-0.43 (3.37)	27.15	25.60	1.55 (3.43)
Physical Education and leadership	72.27	72.95	-0.68 (3.90)	74.01	76.99	-2.98 (3.61)
Other courses	6.30	5.02	1.28 (2.10)	4.63	4.57	0.06 (1.96)
Sample size	247	270		235	243	

Source: Course participation data

Notes: Estimates regression adjusted.

Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Table 7.3: Impacts of *Explore Your Horizon* plus *Learning Accounts* on Grade 11 Course Choices

	New Brunswick LA-Eligible					
	Francophone			Anglophone		
	EYH/LA Group	Comparison Group	Impact (s.e)	EYH/LA Group	Comparison Group	Impact (s.e)
Known to have taken at least one course in the following subject areas:						
Math	81.66	80.33	1.33 (3.24)	87.23	86.42	0.81 (3.17)
English	81.33	80.27	1.06 (3.04)	87.17	86.89	0.28 (3.18)
French	83.86	80.92	2.94 (2.99)	15.46	14.26	1.20 (3.34)
Science	78.33	77.44	0.89 (3.14)	80.71	77.92	2.79 (3.84)
Social studies	79.50	78.22	1.28 (3.05)	82.88	80.34	2.54 (3.62)
Fine Arts	19.68	16.19	3.50 (3.08)	34.45	32.53	1.92 (4.19)
Business and computer-related courses	27.94	28.36	-0.42 (3.83)	42.20	46.84	-4.64 (4.54)
Technology and applied skills	53.37	59.76	-6.39 (4.24)	62.60	65.38	-2.78 (4.47)
Career Development and Planning	27.40	25.12	2.28 (3.80)	4.22	4.56	-0.34 (2.02)
Physical Education and leadership	25.15	23.46	1.68 (3.57)	14.80	24.78	-9.98 (3.64) ***
Other courses	6.01	6.77	-0.76 (2.30)	4.49	7.59	-3.09 (2.26)
Sample size	247	270		235	243	

Source: Course participation data

Notes: Estimates regression adjusted.

Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Table 7.4: Impacts of *Explore Your Horizon* plus *Learning Accounts* on Course Choices in Grade 12

	New Brunswick LA-Eligible					
	Francophone			Anglophone		
	EYH/LA Group	Comparison Group	Impact (s.e)	EYH/LA Group	Comparison Group	Impact (s.e)
Known to have taken at least one course in the following subject areas:						
Math	62.25	56.06	6.20 (3.81)	57.56	55.45	2.11 (4.83)
English	42.75	37.46	5.29 (3.78)	86.08	85.07	1.01 (3.28)
French	75.13	74.41	0.72 (3.36)	8.21	5.23	2.97 (2.18)
Science	60.15	59.49	0.67 (3.94)	66.32	64.67	1.65 (4.62)
Social studies	35.60	38.45	-2.85 (3.87)	66.56	66.91	-0.35 (4.33)
Fine Arts	20.13	21.37	-1.24 (3.52)	36.29	40.21	-3.92 (4.67)
Business and computer-related courses	32.38	38.82	-6.44 (4.00)	43.10	43.92	-0.82 (4.60)
Technology and applied skills	64.44	60.76	3.68 (3.97)	72.54	75.94	-3.40 (3.96)
Career Development and Planning	29.81	31.48	-1.68 (4.22)	-	-	-
Physical Education and leadership	29.14	28.37	0.77 (4.04)	22.25	24.17	-1.92 (3.90)
Other courses	23.72	24.04	-0.32 (3.37)	37.56	32.81	4.75 (4.67)
Sample size	247	270		235	243	

Notes: Estimates regression adjusted.

Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

The findings for LILE and FGF subgroups (Tables 7.5 to 7.12) show that *Explore Your Horizons* plus *Learning Accounts* did not have much influence on the course choices of its participants. In Grade 11, fewer Anglophone *Explore Your Horizons* plus *Learning Accounts* LILE and FGF students enrolled in physical education courses, while there were no impacts for the Francophone LILE or FGF subgroup.

In the final year of high school, *Explore Your Horizons* plus *Learning Accounts* was influential in the decisions made by Francophone LILE and FGF subgroups to enrol in mathematics courses. Enrolment in mathematics increased by 8.47 percentage points among *Explore Your Horizons* plus *Learning Accounts* Francophone LILE students, and by 12.08 percentage points among those in the FGF subgroup. Enrolment in English courses also increased among Francophone and Anglophone FGF students that were offered *Explore Your Horizons* plus *Learning Accounts*. Enrolment in the Francophone sector increased by 10.14 percentage points and by 8.55 percentage points in the Anglophone sector.

Table 7.5: Differences in Grade 9 Course Choices for *Explore Your Horizon Plus Learning Accounts* Participants (LILE Subgroup)

	New Brunswick LA-Eligible					
	Francophone			Anglophone		
	EYH/LA Group	Comparison Group	Impact (s.e)	EYH/LA Group	Comparison Group	Impact (s.e)
Known to have taken at least one course in the following subject areas:						
LILE						
Math	98.33	97.65	0.67 (1.53)	94.76	93.70	1.06 (1.94)
English	96.74	95.22	1.52 (2.14)	95.29	93.69	1.60 (1.88)
French	33.71	33.15	0.57 (3.54)	64.59	68.50	-3.90 (4.74)
Science	94.10	94.73	-0.64 (2.50)	93.01	91.44	1.57 (2.28)
Social studies	97.04	95.43	1.61 (1.88)	94.51	94.44	0.08 (1.79)
Fine Arts	55.87	52.14	3.72 (4.43)	92.34	93.57	-1.23 (2.44)
Business and computer-related courses	-	-	-	8.48	8.60	-0.11 (2.34)
Technology and applied skills	1.09	1.91	-0.82 (1.23)	65.61	64.56	1.05 (4.15)
Career Development and Planning	64.94	67.11	-2.17 (4.43)	35.25	37.57	-2.31 (3.90)
Physical Education and leadership	64.19	69.26	-5.07 (4.16)	87.06	88.29	-1.23 (2.64)
Other courses	-	-	-	-	-	-
Sample size	189	207		195	203	

Source: Course participation data

Notes: Estimates regression adjusted.

Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

**Table 7.6: Differences in Grade 9 Course Choices for *Explore Your Horizon Plus Learning Accounts* Participants
(Parents Education Subgroups)**

	New Brunswick LA-Eligible					
	Francophone			Anglophone		
	EYH/LA Group	Comparison Group	Impact (s.e)	EYH/LA Group	Comparison Group	Impact (s.e)
Known to have taken at least one course in the following subject areas:						
Parents with any PSE						
Math	98.76	99.60	-0.84 (1.01)	95.20	96.65	-1.45 (2.25)
English	94.93	98.47	-3.54 (2.41)	96.27	97.21	-0.94 (1.96)
French	26.88	29.90	-3.02 (4.80)	64.24	59.37	4.87 (6.49)
Science	92.35	96.11	-3.76 (3.21)	96.45	95.32	1.14 (2.37)
Social studies	95.97	99.08	-3.11 * (1.87)	96.46	96.15	0.32 (2.26)
Fine Arts	56.75	60.93	-4.18 (6.64)	92.34	92.92	-0.58 (3.23)
Business and computer-related courses	-	-	-	4.51	4.51	- (1.82)
Technology and applied skills	-	-	-	63.92	66.49	-2.57 (4.82)
Career Development and Planning	64.68	67.00	-2.32 (5.38)	39.27	39.43	-0.16 (5.63)
Physical Education and leadership	69.43	67.21	2.22 (5.49)	89.20	88.65	0.56 (3.72)
Other courses	-	-	-	5.99	4.62	1.37 (2.97)
Sample size	121	123		126	118	

Table 7.6: Differences in Grade 9 Course Choices for *Explore Your Horizon Plus Learning Accounts* Participants (continued)

	New Brunswick LA-Eligible					
	Francophone			Anglophone		
	EYH/LA Group	Comparison Group	Impact (s.e)	EYH/LA Group	Comparison Group	Impact (s.e)
Parents with high school or less						
Math	97.06	97.06	0.01 (2.19)	93.17	92.36	0.81 (2.96)
English	96.53	94.09	2.44 (2.65)	93.66	91.93	1.73 (2.85)
French	36.61	35.53	1.08 (4.46)	64.65	70.83	-6.18 (5.98)
Science	94.47	95.19	-0.72 (2.56)	90.67	88.94	1.73 (3.86)
Social studies	97.36	93.37	3.99 (2.72)	93.23	93.11	0.12 (2.82)
Fine Arts	58.70	49.34	9.37 * (5.23)	91.79	92.76	-0.98 (3.13)
Business and computer-related courses	-	-	-	9.75	10.70	-0.95 (3.13)
Technology and applied skills	-	-	-	65.82	61.01	4.81 (5.36)
Career Development and Planning	64.93	66.57	-1.63 (5.21)	34.53	36.29	-1.76 (5.29)
Physical Education and leadership	63.44	70.59	-7.15 (5.05)	84.81	85.24	-0.43 (4.10)
Other courses	-	-	-	-	-	-
Sample size	126	146		109	125	

Source: Course participation data

Notes: Estimates regression adjusted.

Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Table 7.7: Impacts of EYH+LA on Grade 10 Course Choices (LILE Subgroup)

	New Brunswick LA-Eligible					
	Francophone			Anglophone		
	EYH/LA Group	Comparison Group	Impact (s.e)	EYH/LA Group	Comparison Group	Impact (s.e)
Known to have taken at least one course in the following subject areas:						
LILE						
Math	93.68	91.72	1.96 (2.56)	82.86	83.46	-0.59 (3.59)
English	90.47	92.73	-2.26 (2.91)	83.76	84.07	-0.31 (3.49)
French	82.61	87.80	-5.20 (3.65)	60.28	60.81	-0.53 (4.74)
Science	90.87	90.90	-0.03 (2.74)	88.34	89.53	-1.19 (3.15)
Social studies	91.42	89.91	1.51 (2.97)	83.69	84.14	-0.46 (3.45)
Fine Arts	16.35	12.67	3.68 (3.36)	78.12	83.58	-5.46 (3.51)
Business and computer-related courses	3.80	2.34	1.47 (1.66)	13.00	14.60	-1.60 (3.37)
Technology and applied skills	60.37	66.46	-6.09 (4.35)	57.52	62.49	-4.97 (4.31)
Career Development and Planning	74.99	74.89	0.11 (4.24)	27.30	27.47	-0.17 (3.60)
Physical Education and leadership	72.23	72.08	0.14 (3.89)	72.07	76.59	-4.52 (3.97)
Other courses	7.46	7.23	0.22 (2.56)	4.44	4.11	0.33 (2.02)
Sample size	189	207		195	203	

Source: Course participation data

Notes: Estimates regression adjusted.

Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Table 7.8: Impacts of EYH+LA on Grade 10 Course Choices (Parent's Education Subgroups)

	New Brunswick LA-Eligible					
	Francophone			Anglophone		
	EYH/LA Group	Comparison Group	Impact (s.e)	EYH/LA Group	Comparison Group	Impact (s.e)
Known to have taken at least one course in the following subject areas:						
Parents with any PSE						
Math	94.28	93.38	0.91 (3.23)	83.88	83.32	0.56 (4.92)
English	92.79	94.03	-1.24 (3.11)	84.24	83.77	0.47 (4.68)
French	87.63	91.78	-4.15 (3.88)	59.34	51.05	8.29 (6.49)
Science	90.44	93.91	-3.48 (3.53)	88.87	90.70	-1.83 (4.00)
Social studies	90.54	91.35	-0.82 (4.00)	82.07	86.94	-4.87 (4.69)
Fine Arts	11.85	13.66	-1.81 (4.40)	77.65	82.34	-4.70 (5.25)
Business and computer-related courses	-	-	-	10.99	16.23	-5.23 (4.02)
Technology and applied skills	60.36	60.63	-0.27 (6.79)	56.31	61.06	-4.75 (6.32)
Career Development and Planning	76.86	74.59	2.27 (5.53)	23.73	25.50	-1.77 (4.96)
Physical Education and leadership	69.44	72.94	-3.50 (5.46)	76.25	77.05	-0.80 (4.89)
Other courses	-	-	-	4.37	5.50	-1.13 (3.08)
Sample size	121	123		126	118	

Table 7.8: Impacts of EYH+LA on Grade 10 Course Choices (Parent's Education Subgroups) (continued)

	New Brunswick LA-Eligible					
	Francophone			Anglophone		
	EYH/LA Group	Comparison Group	Impact (s.e)	EYH/LA Group	Comparison Group	Impact (s.e)
Parents with high school or less						
Math	92.28	91.59	0.69 (3.23)	82.74	84.65	-1.92 (4.87)
English	88.51	92.11	-3.60 (3.58)	84.49	85.52	-1.03 (4.56)
French	81.21	86.76	-5.55 (4.73)	61.85	62.87	-1.02 (6.51)
Science	91.16	89.13	2.03 (3.31)	88.44	89.28	-0.83 (4.19)
Social studies	92.85	88.37	4.48 (3.24)	86.95	83.38	3.57 (4.76)
Fine Arts	17.79	11.36	6.43 (4.28)	79.50	85.08	-5.58 (4.82)
Business and computer-related courses	-	-	-	13.70	12.85	0.85 (4.89)
Technology and applied skills	61.90	67.13	-5.23 (5.46)	58.14	63.70	-5.56 (6.49)
Career Development and Planning	74.85	75.82	-0.97 (5.02)	29.25	27.29	1.96 (5.41)
Physical Education and leadership	76.55	71.61	4.95 (5.36)	72.19	76.25	-4.07 (6.09)
Other courses	7.71	7.73	-0.01 (3.11)	-	-	-
Sample size	126	146		109	125	

Source: Course participation data

Notes: Estimates regression adjusted.

Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Table 7.9: Impacts of EYH+LA on Grade 11 Course Choices (LILE Subgroup)

	New Brunswick LA-Eligible					
	Francophone			Anglophone		
	EYH/LA Group	Comparison Group	Impact (s.e)	EYH/LA Group	Comparison Group	Impact (s.e)
Known to have taken at least one course in the following subject areas:						
LILE						
Math	81.33	78.29	3.04 (3.54)	88.51	84.93	3.57 (3.64)
English	81.74	77.43	4.31 (3.54)	88.19	85.73	2.46 (3.51)
French	84.10	79.15	4.95 (3.31)	15.53	14.64	0.90 (3.48)
Science	77.77	74.76	3.01 (4.10)	80.78	77.09	3.69 (4.06)
Social studies	79.32	76.25	3.07 (3.86)	83.70	79.20	4.50 (3.96)
Fine Arts	19.49	15.61	3.88 (3.74)	35.07	31.34	3.73 (4.82)
Business and computer-related courses	25.78	28.77	-2.99 (3.75)	43.31	44.60	-1.29 (5.06)
Technology and applied skills	57.63	62.17	-4.54 (4.50)	64.41	67.69	-3.28 (5.12)
Career Development and Planning	28.00	25.76	2.24 (3.92)	4.03	5.98	-1.96 (2.25)
Physical Education and leadership	27.38	25.85	1.52 (4.47)	13.92	27.03	-13.11 *** (4.12)
Other courses	6.10	7.51	-1.41 (2.37)	4.90	8.59	-3.69 (2.29)
Sample size	189	207		195	203	

Source: Course participation data

Notes: Estimates regression adjusted.

Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Table 7.10: Impacts of EYH+LA on Grade 11 Course Choices (Parent's Education Subgroups)

	New Brunswick LA_Eligible					
	Francophone			Anglophone		
	EYH/LA Group	Comparison Group	Impact (s.e)	EYH/LA Group	Comparison Group	Impact (s.e)
Known to have taken at least one course in the following subject areas:						
Parents with any PSE						
Math	84.88	86.31	-1.42 (4.57)	83.79	91.89	-8.10 * (4.77)
English	83.95	86.41	-2.46 (4.68)	85.96	92.11	-6.15 (4.69)
French	86.53	86.31	0.22 (4.26)	19.39	10.65	8.74 (5.34)
Science	80.95	85.29	-4.35 (5.02)	80.41	81.09	-0.68 (5.98)
Social studies	83.11	84.78	-1.67 (4.45)	81.18	82.81	-1.63 (5.43)
Fine Arts	19.80	17.24	2.56 (5.22)	31.55	40.04	-8.50 (6.07)
Business and computer-related courses	29.06	28.56	0.50 (5.82)	41.41	53.24	-11.83 * (6.64)
Technology and applied skills	50.19	61.70	-11.50 * (5.93)	56.20	63.72	-7.53 (6.74)
Career Development and Planning	24.66	20.62	4.04 (5.59)	4.04	1.61	2.43 (2.39)
Physical Education and leadership	28.45	21.79	6.66 (6.06)	14.32	24.54	-10.22 * (5.35)
Other courses	5.85	8.13	-2.27 (3.92)	-	-	-
Sample size	121	123		126	118	

Table 7.10: Impacts of *EYH+LA* on Grade 11 Course Choices (Parent's Education Subgroups) (Cont'd)

	New Brunswick LA_Eligible					
	Francophone			Anglophone		
	EYH/LA Group	Comparison Group	Impact (s.e)	EYH/LA Group	Comparison Group	Impact (s.e)
Parents with high school or less						
Math	78.48	75.42	3.05 (4.89)	89.28	82.95	6.34 (4.48)
English	78.64	75.29	3.35 (4.95)	87.71	82.72	4.99 (5.12)
French	81.05	76.62	4.43 (4.86)	11.65	17.04	-5.40 (4.99)
Science	75.98	70.73	5.26 (4.71)	77.79	77.77	0.02 (5.61)
Social studies	75.75	72.98	2.77 (5.28)	83.61	79.09	4.52 (5.50)
Fine Arts	17.64	16.97	0.67 (4.58)	36.48	26.59	9.89 (6.53)
Business and computer-related courses	24.80	29.97	-5.16 (5.31)	42.74	41.13	1.61 (7.27)
Technology and applied skills	55.76	58.73	-2.97 (5.93)	65.50	70.88	-5.38 (6.72)
Career Development and Planning	30.07	28.84	1.23 (5.45)	3.05	8.54	-5.49 * (3.13)
Physical Education and leadership	22.23	24.65	-2.42 (5.77)	14.79	25.50	-10.72 * (6.22)
Other courses	5.76	5.99	-0.22 (2.79)	7.00	9.89	-2.89 (3.73)
Sample size	126	146		109	125	

Source: Course participation data

Notes: Estimates regression adjusted.

Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Table 7.11: Impacts of EYH+LA on Grade 12 Course Choices (LILE Subgroup)

	New Brunswick LA-Eligible					
	Francophone			Anglophone		
	EYH/LA Group	Comparison Group	Impact (s.e)	EYH/LA Group	Comparison Group	Impact (s.e)
Known to have taken at least one course in the following subject areas:						
LILE						
Math	62.14	53.67	8.47 * (4.76)	57.39	52.75	4.64 (5.17)
English	40.61	35.55	5.06 (4.95)	87.32	82.63	4.69 (3.45)
French	74.94	72.51	2.42 (3.98)	9.73	5.92	3.81 (3.02)
Science	59.66	54.97	4.69 (4.60)	66.66	64.05	2.61 (5.34)
Social studies	38.27	38.68	-0.41 (4.53)	68.12	64.61	3.50 (4.90)
Fine Arts	21.61	21.93	-0.32 (3.92)	35.79	36.56	-0.77 (4.60)
Business and computer-related courses	32.63	38.51	-5.89 (4.72)	45.45	44.02	1.43 (4.82)
Technology and applied skills	68.69	62.71	5.98 (4.20)	75.76	75.99	-0.23 (4.56)
Career Development and Planning	31.43	33.79	-2.36 (4.70)	2.47	2.55	-0.08 (1.71)
Physical Education and leadership	29.76	29.01	0.75 (4.52)	20.33	22.35	-2.02 (4.68)
Other courses	25.02	23.65	1.38 (4.26)	37.07	32.86	4.21 (4.93)
Sample size	189	207		195	203	

Source: Course participation data

Notes: Estimates regression adjusted.

Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Table 7.12: Impacts of EYH+LA on Grade 12 Course Choices (Parent's Education Subgroups)

	New Brunswick LA-Eligible					
	Francophone			Anglophone		
	EYH/LA Group	Comparison Group	Impact (s.e)	EYH/LA Group	Comparison Group	Impact (s.e)
Known to have taken at least one course in the following subject areas:						
Parents with any PSE						
Math	65.10	65.76	-0.67 (6.83)	59.25	58.77	0.47 (6.91)
English	47.01	47.64	-0.63 (6.73)	84.76	92.54	-7.78 * (4.46)
French	79.80	81.51	-1.72 (4.97)	9.82	3.92	5.90 (3.81)
Science	65.37	68.77	-3.40 (6.07)	66.23	72.50	-6.27 (5.60)
Social studies	33.64	41.23	-7.60 (6.60)	68.54	70.03	-1.49 (6.04)
Fine Arts	19.39	23.40	-4.01 (5.69)	38.80	41.62	-2.82 (6.54)
Business and computer-related courses	34.04	46.57	-12.52 * (6.43)	38.10	44.91	-6.81 (6.88)
Technology and applied skills	65.99	64.06	1.94 (6.00)	68.30	75.37	-7.07 (6.84)
Career Development and Planning	28.77	31.30	-2.52 (6.67)	0.94	2.38	-1.44 (1.99)
Physical Education and leadership	32.95	31.26	1.69 (6.43)	23.13	28.70	-5.57 (6.21)
Other courses	28.40	23.47	4.92 (5.78)	36.30	33.28	3.02 (6.15)
Sample size	121	123		126	118	

Table 7.12: Impacts of EYH+LA on Grade 12 Course Choices (Parent's Education Subgroups) (Cont'd)

	New Brunswick LA-Eligible					
	Francophone			Anglophone		
	EYH/LA Group	Comparison Group	Impact (s.e)	EYH/LA Group	Comparison Group	Impact (s.e)
Parents with high school or less						
Math	59.80	47.71	12.08 ** (5.63)	56.56	51.48	5.07 (7.11)
English	38.90	28.76	10.14 * (5.58)	87.05	78.50	8.55 * (4.45)
French	71.02	68.16	2.86 (4.96)	7.06	5.84	1.22 (3.46)
Science	57.28	49.88	7.39 (6.10)	65.04	58.49	6.55 (7.19)
Social studies	37.70	35.96	1.75 (6.19)	66.83	61.73	5.10 (6.82)
Fine Arts	21.01	19.54	1.48 (5.30)	33.16	39.09	-5.93 (6.11)
Business and computer-related courses	27.60	35.09	-7.49 (5.54)	49.28	42.63	6.66 (6.79)
Technology and applied skills	63.04	57.92	5.12 (5.77)	76.48	77.31	-0.83 (6.13)
Career Development and Planning	28.95	33.24	-4.29 (6.07)	3.32	1.91	1.41 (2.25)
Physical Education and leadership	25.68	25.78	-0.11 (6.10)	20.87	20.20	0.67 (6.20)
Other courses	19.52	24.25	-4.73 (5.51)	36.22	34.82	1.40 (6.45)
Sample size	126	146		109	125	

Source: Course participation data

Notes: Estimates regression adjusted.

Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Impacts on course grades

As expected, Grade 9 results (Table 8.1) show no differences in the proportion of *Explore Your Horizons* plus *Learning Accounts* students enrolled in the various courses, when compared to the comparison group. This is true for the full analytical sample of LA-eligible participants and for the two subgroups.

In Grade 10 (Table 8.2), there are no discernable impacts on course grades for Francophone participants, but among Anglophone participants, *Explore Your Horizons* plus *Learning Accounts* positively influenced course grade results for the full sample and for both subgroups. The proportion of Anglophone participants in the full sample, LILE, and FGF subgroups, who passed half of their courses or fewer, dropped by 5.34, 7.15, and 10 percentage points, respectively.

In Grade 11 and Grade 12, *Explore Your Horizons* plus *Learning Accounts* yielded no impacts on course grades for the overwhelming majority of the sample. Nonetheless, in Grade 11 there is a slight shift in the proportion of Francophone FGF subgroup offered *Explore Your Horizons* plus *Learning Accounts* that passed their courses — a higher proportion of them passed between 50 and 75 per cent of their courses.

Table 8.1: Differences in Grade 9 Course Marks for *EYH+LA* Participants

	New Brunswick LA-Eligible					
	Francophone			Anglophone		
	EYH/LA Group	Comparison Group	Impact (s.e)	EYH/LA Group	Comparison Group	Impact (s.e)
Proportion of courses pass in Grade 9 (%)						
All						
Zero to half	39.00	38.69	0.31 (3.14)	17.14	15.57	1.58 (2.93)
Up to three-fourth	9.29	7.48	1.81 (2.39)	11.38	12.13	-0.75 (2.91)
More than three-fourth	51.71	53.83	-2.12 (3.58)	71.47	72.30	-0.83 (3.43)
LILE group						
Zero to half	41.39	42.61	-1.22 (4.34)	17.98	17.12	0.86 (3.31)
Up to three-fourth	9.98	6.87	3.11 (2.84)	11.98	13.64	-1.65 (3.25)
More than three-fourth	48.63	50.52	-1.89 (4.64)	70.04	69.24	0.80 (4.44)
Parents with high school or less						
Zero to half	44.62	46.42	-1.81 (5.60)	21.69	22.59	-0.90 (5.25)
Up to three-fourth	8.81	5.41	3.41 (3.09)	13.69	14.32	-0.63 (4.67)
More than three-fourth	46.57	48.17	-1.60 (5.73)	64.62	63.09	1.53 (6.03)
Parents with any PSE						
Zero to half	33.53	29.04	4.49 (4.97)	13.72	7.99	5.73 (4.42)
Up to three-fourth	11.54	8.23	3.32 (4.29)	9.81	9.51	0.29 (4.08)
More than three-fourth	54.93	62.73	-7.80 (5.82)	76.48	82.50	-6.03 (5.50)
Average course mark in Grade 9 (%)						
All	70.93	70.87	0.06 (0.88)	71.96	71.98	-0.03 (0.98)
LILE	69.97	68.74	1.22 (1.10)	71.62	70.89	0.73 (1.30)
Parents with high school or less	70.05	68.39	1.65 (1.39)	69.75	69.34	0.41 (1.77)
Parents with any PSE	71.89	73.80	-1.91 (1.37)	73.46	75.06	-1.60 (1.38)
Sample size	247	270		235	243	

Source: Course participation data

Notes: Estimates regression adjusted.

Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Table 8.2: Impacts of *EYH+LA* on Course Marks in Grade 10

	New Brunswick LA-Eligible					
	Francophone			Anglophone		
	EYH/LA Group	Comparison Group	Impact (s.e)	EYH/LA Group	Comparison Group	Impact (s.e)
Proportion of courses pass in Grade 10 (%)						
All						
Zero to half	38.27	38.52	-0.26 (3.45)	14.37	19.70	-5.34 * (2.82)
Up to three-fourth	9.63	6.48	3.15 (2.43)	9.13	8.43	0.70 (2.52)
More than three-fourth	52.10	55.00	-2.90 (3.91)	76.50	71.87	4.64 (3.55)
LILE group						
Zero to half	41.27	40.62	0.66 (4.27)	14.41	21.56	-7.15 ** (3.38)
Up to three-fourth	10.34	6.90	3.43 (2.87)	9.55	8.84	0.71 (3.06)
More than three-fourth	48.39	52.48	-4.09 (4.58)	76.04	69.59	6.44 (4.22)
Parents with high school or less						
Zero to half	45.05	43.36	1.70 (5.29)	15.44	25.45	-10.01 * (5.38)
Up to three-fourth	10.45	7.12	3.32 (3.32)	8.69	8.99	-0.29 (4.14)
More than three-fourth	44.50	49.52	-5.02 (5.75)	75.87	65.57	10.30 * (5.43)
Parents with any PSE						
Zero to half	31.26	32.57	-1.31 (5.14)	13.53	13.42	0.11 (4.26)
Up to three-fourth	9.69	4.80	4.88 (3.65)	9.16	8.22	0.94 (3.59)
More than three-fourth	59.06	62.63	-3.58 (6.00)	77.31	78.36	-1.05 (5.25)
Average course mark in Grade 10 (%)						
All	70.29	69.65	0.64 (0.90)	71.36	71.78	-0.42 (0.98)
LILE	68.80	67.52	1.27 (1.12)	70.88	70.84	0.05 (1.29)
Parents with high school or less	68.60	66.84	1.76 (1.45)	70.99	69.30	1.69 (1.59)
Parents with any PSE	72.14	72.96	-0.82 (1.36)	71.65	74.48	-2.82 (1.60)
Sample size	247	270		235	243	

Source: Course participation data

Notes: Estimates regression adjusted.

Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Table 8.3: Impacts of EYH+LA on Course Marks in Grade 11

	New Brunswick LA-Eligible					
	Francophone			Anglophone		
	EYH/LA Group	Comparison Group	Impact (s.e)	EYH/LA Group	Comparison Group	Impact (s.e)
Proportion of courses pass in Grade 11 (%)						
All						
Zero to half	36.85	37.73	-0.87 (3.31)	13.88	17.50	-3.62 (2.99)
Up to three-fourth	11.78	8.97	2.81 (2.54)	10.55	12.66	-2.11 (3.32)
More than three-fourth	51.36	53.30	-1.94 (3.55)	75.57	69.85	5.73 (3.96)
LILE group						
Zero to half	37.57	39.99	-2.42 (4.21)	14.31	19.33	-5.03 (3.40)
Up to three-fourth	14.58	9.14	5.45 (3.38)	10.41	11.32	-0.91 (3.18)
More than three-fourth	47.85	50.87	-3.03 (4.90)	75.29	69.34	5.94 (4.47)
Parents with high school or less						
Zero to half	40.12	45.10	-4.98 (5.68)	18.75	26.02	-7.27 (5.31)
Up to three-fourth	14.05	6.57	7.48 * (4.30)	10.72	7.26	3.46 (4.24)
More than three-fourth	45.82	48.33	-2.50 (6.53)	70.53	66.72	3.81 (6.07)
Parents with any PSE						
Zero to half	33.47	29.87	3.60 (5.71)	8.79	9.81	-1.02 (3.64)
Up to three-fourth	12.01	9.12	2.89 (4.29)	12.57	15.78	-3.21 (4.82)
More than three-fourth	54.52	61.01	-6.49 (6.69)	78.64	74.42	4.22 (5.54)
Average course mark in Grade 11 (%)						
All	68.35	67.59	0.76 (1.01)	69.18	67.80	1.38 (1.17)
LILE	66.76	65.93	0.83 (1.20)	68.88	67.05	1.83 (1.38)
Parents with high school or less	66.70	65.00	1.70 (1.57)	67.64	65.63	2.01 (1.85)
Parents with any PSE	69.70	70.68	-0.98 (1.26)	70.31	70.19	0.12 (1.84)
Sample size	247	270		235	243	

Source: Course participation data

Notes: Estimates regression adjusted.

Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Table 8.4: Impacts of *EYH+LA* on Course Marks in Grade 12

	New Brunswick LA-Eligible					
	Francophone			Anglophone		
	EYH/LA Group	Comparison Group	Impact (s.e)	EYH/LA Group	Comparison Group	Impact (s.e)
Proportion of courses pass in Grade 12 (%)						
All						
Zero to half	37.18	33.92	3.26 (3.37)	15.82	17.74	-1.92 (3.11)
Up to three-fourth	7.43	6.69	0.74 (2.58)	7.78	5.28	2.50 (2.25)
More than three-fourth	55.39	59.39	-4.00 (3.60)	76.40	76.98	-0.58 (3.58)
LILE group						
Zero to half	38.93	36.98	1.95 (4.60)	16.52	19.47	-2.95 (3.27)
Up to three-fourth	7.37	7.83	-0.46 (3.04)	8.90	5.67	3.22 (2.65)
More than three-fourth	53.70	55.19	-1.50 (5.18)	74.59	74.85	-0.27 (3.81)
Parents with high school or less						
Zero to half	43.03	41.84	1.19 (5.82)	19.75	22.72	-2.98 (5.20)
Up to three-fourth	8.79	5.83	2.95 (3.99)	8.78	4.80	3.98 (3.32)
More than three-fourth	48.18	52.33	-4.14 (6.69)	71.47	72.48	-1.00 (6.07)
Parents with any PSE						
Zero to half	31.60	25.90	5.70 (5.45)	13.69	11.52	2.17 (4.21)
Up to three-fourth	7.99	5.70	2.29 (3.65)	6.97	5.63	1.33 (3.60)
More than three-fourth	60.41	68.40	-7.99 (6.53)	79.34	82.85	-3.51 (5.64)
Average course mark in Grade 12 (%)						
All	70.18	70.84	-0.66 (1.07)	71.33	71.39	-0.07 (1.23)
LILE	69.16	69.38	-0.22 (1.35)	70.60	70.78	-0.19 (1.33)
Parents with high school or less	68.75	69.75	-1.00 (1.62)	70.44	69.83	0.62 (1.77)
Parents with any PSE	71.14	72.38	-1.24 (1.93)	71.63	73.41	-1.78 (1.91)
Sample size	247	270		235	243	

Source: Course participation data

Notes: Estimates regression adjusted.

Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Impacts on graduating from high school

The offer of *Explore Your Horizons* plus *Learning Accounts* did not lead to increased “on time” graduation rates among Francophone and Anglophone students. This is true for the full sample and the LILE and FGF subgroups in both linguistic sectors. Impacts on graduation that occurred later than “on time” are reported in the *Future to Discover* Post-secondary Impacts Report.

Table 9.1: Impacts of *EYH+LA* on on High School Graduation

	New Brunswick LA-Eligible					
	Francophone			Anglophone		
	EYH/LA Group	Comparison Group	Impact (s.e)	EYH/LA Group	Comparison Group	Impact (s.e)
Graduated from high school (%)						
All	74.83	79.48	-4.65 (3.70)	77.38	74.55	2.82 (4.05)
LILE group	75.14	75.95	-0.81 (4.40)	77.22	73.98	3.24 (4.42)
Parents with high school or less	70.35	75.67	-5.32 (6.35)	77.06	72.80	4.26 (6.10)
Parents with any PSE	78.05	84.88	-6.83 (5.43)	76.33	77.79	-1.45 (5.55)
Sample size	247	270		235	243	

Source: Course participation data

Notes: Estimates regression adjusted.

Sample sizes vary for individual measures because of missing values.

Statistical significance levels are indicated as * = 10 per cent; ** = 5 per cent; *** = 1 per cent.

Rounding may cause slight discrepancies in sums and differences.

A dash denotes statistics based on a sample size of 5 or less.

Conclusion

This paper reported on the experimental impacts of *Explore Your Horizons*, *Learning Accounts*, and *Explore Your Horizons* plus *Learning Accounts* on course choices, course grades and high school graduation. The results indicate that these interventions had little influence on high school course choices and course grades, and none on “on time” graduation rates.

While *Explore Your Horizons* had virtually no effect on Manitoba students’ behaviour in these three domains, it had more of its expected impacts on Francophone LILE and FGF participants’ Grade 11 course choices and on the Grade 10 course marks of students in the Anglophone sector. Despite these positive changes, *Explore Your Horizons* had no impacts on “on time” high school graduation rates.

The *Learning Accounts* intervention had very little effect on students in the Francophone sector, but did lead to a decrease in the proportion of Anglophone students who failed up to half of their courses in Grades 10 and 12. This was evident for all LA-Eligible Anglophone students and those in the LILE subgroup.

Explore Your Horizons plus *Learning Accounts* yielded few changes in course choices and course marks, and no changes in “on time” graduation rates. One notable result is the increased enrolment in Grade 12 mathematics courses by the Francophone LILE subgroup and by both Francophone and Anglophone FGF subgroup.

While these interventions led to only a few positive changes in course choices and course grades and no changes in “on time” graduation rates, it is far from clear whether this translates into the interventions being unsuccessful in increasing enrolment in and completion of the first year of a postsecondary education program. The success or failure of the interventions will be determined by analyses of postsecondary education enrolment data. These results do show, however, that though seemingly small, the interventions may nonetheless have affected the academic pathways pursued by some groups of students.

References

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- Smith Fowler, H., Currie, S., Hébert, S., Kwakye, I., Ford, R., Hutchison, J., and Dobrer, S. (2009). *Future to Discover Pilot Project: Interim Impacts Report*. Social Research and Demonstration Corporation.