

2013 BACCALAUREATE  
GRADUATES SURVEY

# report of findings

*The Class of 2011 Two Years After Graduation*



# Contents

## Acknowledgments 5

## Highlights 7

Baccalaureate Graduates Survey.....	7
Baccalaureate Graduates .....	7
Education Evaluation .....	7
Further Education.....	8
Labour Force Outcomes .....	8
Education Financing.....	8

## Introduction 9

Background.....	9
About the Survey .....	9
About the Report.....	10

## Baccalaureate Graduates 13

Demographic Breakdown.....	13
Location by Region .....	14

## Education Evaluation 17

Satisfaction.....	17
Quality of Course Instruction .....	18
Quality of Education .....	19
Skills Development .....	22

## Further Education 25

Type of Further Education .....	25
Preparation for Further Education.....	26

## Labour Force Outcomes 29

Labour Force Participation .....	29
Employment.....	29
Income.....	30
Program-related Employment .....	31
Usefulness of Education .....	32
Skill Level of Jobs .....	34

<b>Education Financing</b>	<b>37</b>
Sources of funding .....	37
Incurred and Remaining Debt .....	39
<b>Conclusion</b>	<b>43</b>
<b>Appendices</b>	<b>45</b>
Appendix A—Survey Methodology .....	45
Appendix B—BC CIP Program Clusters.....	47
Appendix C—National Occupational Classification (NOC) .....	49

# Acknowledgments

The Baccalaureate Graduates Survey (BGS) is directed at graduates from all public degree-granting institutions in British Columbia. It is one of the annual surveys that make up [BC Student Outcomes](#). The other surveys are the Diploma, Associate Degree, and Certificate Student Outcomes (DACSO) Survey, and the Apprenticeship Student Outcomes (APPSO) Survey. The DACSO Survey collects information from former students who took diploma, associate degree, and certificate programs and the APPSO Survey targets former apprenticeship students who have completed the final level of their technical training.

The BC Student Outcomes surveys are conducted with funding from the Ministry of Advanced Education and the participating British Columbia post-secondary institutions. Additional funding for the APPSO Survey is provided by the Industry Training Authority (ITA).

The Ministry of Advanced Education, the Research Universities' Council of British Columbia, and the [BC Student Outcomes Research Forum](#) (the Forum) collaborate on the BGS. The Forum oversees the Student Outcomes program, from data collection to the reporting of survey results. The Forum represents a longstanding partnership among the ministry responsible for post-secondary education, participating post-secondary institutions, and system-wide organizations, such as the BC Council on Admissions and Transfer, the Council of Senior Student Affairs Leaders, and the BC Registrars' Association.

BC Stats acts as steward of the Student Outcomes data and is responsible for providing operational support, day-to-day management, advice, and reports.



# Highlights

## Baccalaureate Graduates Survey

Twenty public post-secondary institutions in British Columbia participated in the 2013 Baccalaureate Graduates Survey (BGS). There were 16,919 baccalaureate graduates eligible to participate in the survey. Of these, 8,802 graduates participated in the survey, resulting in a response rate of 52 percent. The following are highlights from the survey, which was conducted from September 23, 2013 through late December 2013.

## Baccalaureate Graduates

- 24% of respondents graduated from Social Sciences programs
- 62% of respondents were female
- 27 was the median age at the time of the survey
- 62% lived in the Lower Mainland/Southwest region of B.C. at the time of the survey
- 26% had moved from their study region after graduating

## Education Evaluation

- 93% of respondents were *very satisfied* or *satisfied* with their baccalaureate education
- 94% gave positive ratings to the quality of their course instruction
- 89% evaluated the core program of required courses positively
- 76% would select the same program again
- 37% had difficulty scheduling required courses
- 81% said the program helped develop their written communication skills
- 79% said the program helped develop their verbal communication skills
- 86% said the program helped develop their reading and comprehension skills
- 78% said the program helped develop their ability to work effectively with others
- 90% said the program helped develop their critical analysis skills
- 79% said the program helped develop their problem resolution skills
- 56% said the program helped develop their use of mathematics
- 74% said the program helped develop their research skills
- 88% said the program helped develop their ability to learn independently

## Further Education

- 54% had taken or were taking other formal post-secondary education or training since graduating with their baccalaureate
- 30% of respondents were enrolled in a program at the time of the survey
- 19% of respondents were enrolled in full-time studies
- 88% of graduates who were pursuing a master's or doctoral degree said they were well-prepared for their subsequent studies

## Labour Force Outcomes

- 88% were in the labour force at the time of the survey
- Of employed respondents:
  - 84% were working full-time
  - 21% were employed at two or more jobs
  - \$50,000 was the median annual salary of respondents employed full-time
  - 74% said their main job was related to their program of study
  - 56% were employed in professional occupations and 7% in management occupations
  - 85% said the knowledge, skills, and abilities they had learned were *very useful* or *somewhat useful* in their work

## Education Financing

- 51% of graduates said family or friends were a primary or secondary funding source
- 50% said employment was a primary or secondary funding source
- 49% incurred debt to pay for costs associated with the program they graduated from in 2011
- \$20,000 was the median amount borrowed from all sources, by those who borrowed
- 35% of graduates received government student loans
- \$20,000 was the median amount of government student loans borrowed by respondents who used this funding source
- 24% of graduates who had used government student loans to help fund their education had no student loans left to repay two years post-graduation



# Introduction

## Background

Students who participate in British Columbia's public baccalaureate programs expand their intellectual and social resources and improve their economic prospects while gaining experience in their chosen field. To assess how well programs and institutions perform, graduates are asked about the quality of their educational experience, skill development, relevance of education and skills, and about post-graduate outcomes, such as employment, income and remaining debt load. This information can assist program and policy decision-makers, as well as inform prospective students who are trying to plan their future.

The Baccalaureate Graduates Survey (BGS) is part of BC Student Outcomes, which is an ongoing research program that gathers student outcomes information for B.C.'s public post-secondary institutions and the Province of British Columbia. Since 2000, the BGS has been tracking the outcomes of baccalaureate graduates, both two and five years post-graduation.

## About the Survey

The BGS is designed to gather information to meet the following objectives:

- to meet the demand for post-secondary accountability at the system level in B.C.;
- to gather timely and relevant data for use in program evaluation and planning processes at the institution level; and
- to ensure that new, continuing, and prospective students are provided with information they can use to help them make informed decisions about education.

These objectives are met through a rigorous process of data collection, data management, and outcomes reporting. Outcomes data are collected from graduates through a mixed-mode survey (telephone and web). This report presents a summary of the main findings from the 2013 survey of 2011 baccalaureate graduates. (Note that international students were not included.)

The two-year-out BGS survey instrument employed a set of standardized questions. The core questionnaire areas are:

- Education Evaluation and Skill Development
- Participation in Further Education Since Graduation
- Labour Market Participation
- Education Financing and Debt

In 2013, twenty public post-secondary institutions in British Columbia participated in the Baccalaureate Graduates Survey (BGS). Four of the institutions were classified as research universities, seven were teaching universities, six were colleges, and three were institutes. The majority of respondents (71 percent) were from research universities, and the three largest universities in B.C. made up 68 percent of respondents overall.

There were a total of 16,919 graduates who were eligible and invited to participate in the survey. Of these, 8,802 graduates completed the 2013 Baccalaureate Graduates Survey of 2011 graduates for an overall response rate of 52 percent.

## About the Report

For the purposes of this report, respondents were aggregated using the Classification of Instructional Programs (CIP) codes. A standard method of grouping CIP codes has been developed by the B.C. public post-secondary system for use across all reporting projects. The program groups are shown in the table below. Note that the Arts and Sciences program group has been broken into four program areas; these areas will be used throughout the report.

Almost one-quarter of respondents graduated from Social Sciences programs (24 percent), followed by Business & Management (15 percent). Engineering & Applied Sciences and Health each represented approximately one-tenth of the graduates surveyed. Physical Sciences made up 3 percent of those surveyed.

*Almost one-quarter of respondents graduated from Social Sciences programs*

Program Area	Respondents	Percentage of Respondents
Business & Management	1,347	15%
Education	779	9%
Engineering & Applied Sciences	954	11%
Health	884	10%
Human & Social Services	664	8%
Visual & Performing Arts	374	4%
Arts and Sciences:		
Social Sciences	2,075	24%
Humanities	832	9%
Biological Science & Life Sciences	657	7%
Physical Sciences & Math	236	3%
<b>Total Respondents</b>	<b>8,802</b>	<b>100%</b>

This report presents a summary of the findings from the 2013 Baccalaureate Graduates Survey of 2011 graduates. This report does not include an analysis of the results by institution; data for each institution were distributed to the respective participating institutions in April 2014 and are available in aggregate form on the [BC Student Outcomes](#) website.

System-wide summary analyses for the 10 post-secondary program areas are provided in this report. Included are the respondents' demographic characteristics, evaluation of their education, further education, labour force outcomes, and education financing and debt incurred.

The percentages presented may not total to 100 or to associated subtotals, due to rounding.

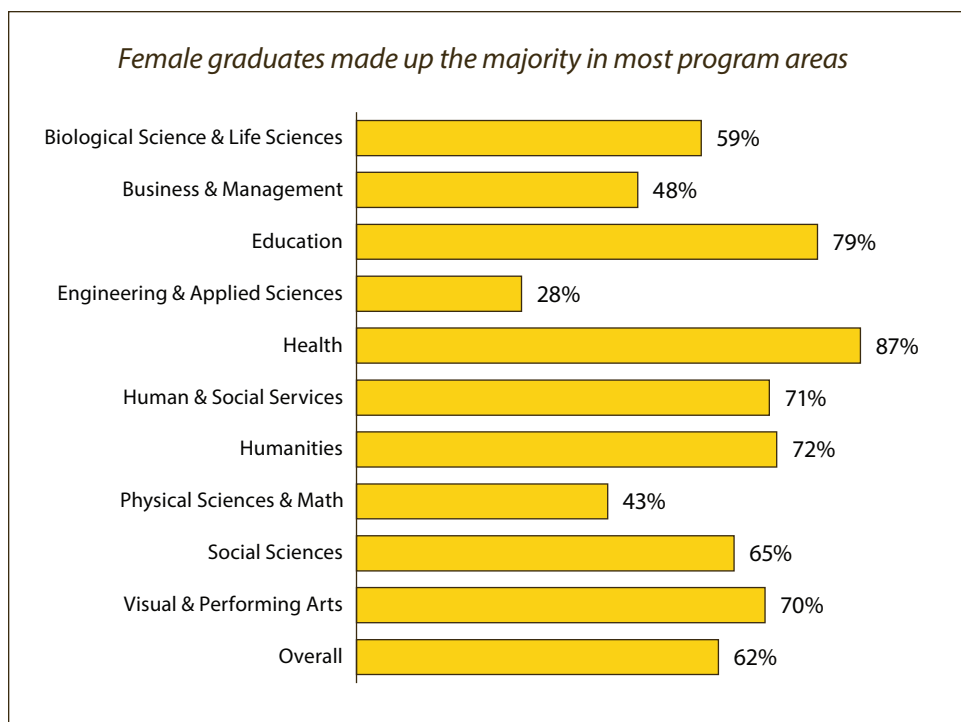
Throughout this report, the word *graduates* is often used instead of respondents. For the purposes of this report, the two are synonymous.



# Baccalaureate Graduates

## Demographic Breakdown

As in previous years, the percentage of female graduates was significantly higher than the percentage of males (62 percent versus 38 percent). Female graduates were in the majority in all but three program areas—Business & Management, Physical Science & Math, and Engineering & Applied Sciences. Just over half of Business & Management and Physical Sciences & Math graduates were males (52 and 57 percent, respectively), and almost three-quarters of Engineering & Applied Sciences graduates were males (72 percent).



The median age of respondents was 27 at the time of the survey. The program areas with the highest median age among their graduates were Education (30), Human & Social Services (29), and Health (28).

*Education graduates' median age was highest*

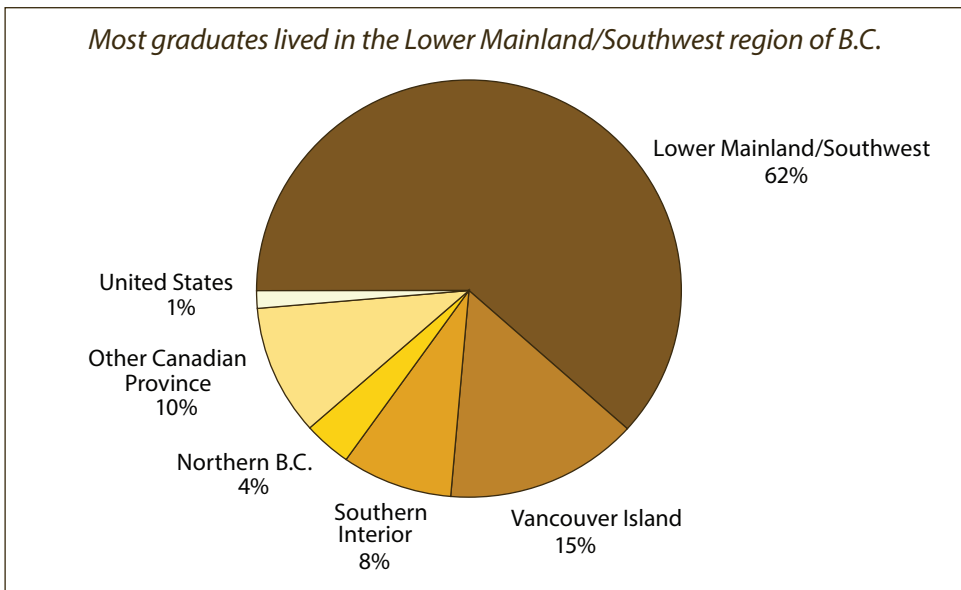
Program Area	Median Age (years)
Biological Science & Life Sciences	25
Business & Management	26
Education	30
Engineering & Applied Sciences	27
Health	28
Human & Social Services	29
Humanities	27
Physical Sciences & Math	26
Social Sciences	26
Visual & Performing Arts	26
Overall	27

Note: Age is at the time of the survey.

Respondents were asked if they identified themselves as an Aboriginal person (that is, First Nations, Métis, or Inuit)—3.4 percent said yes. The largest proportion of respondents who self-identified as Aboriginal persons (8.4 percent) was among graduates of Human & Social Services programs.

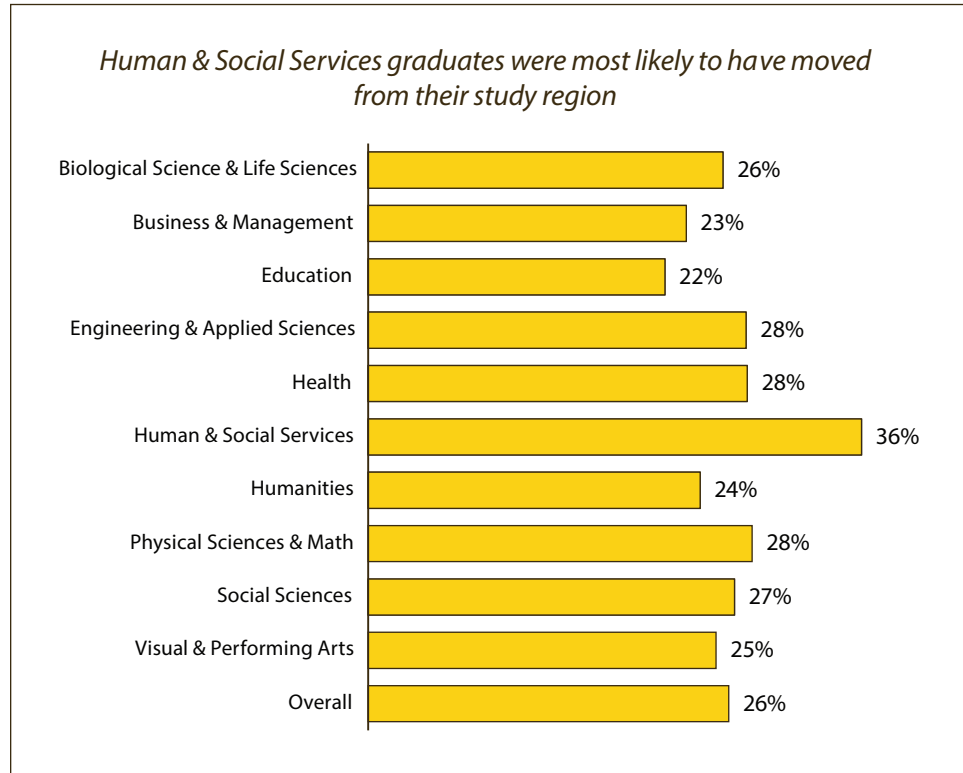
### Location by Region

Respondents were also asked to indicate where they were currently living. The majority of graduates (62 percent) were living in the Lower Mainland/Southwest region two years post-graduation. Just over one out of ten respondents reported having moved out of British Columbia—10 percent of respondents had moved to another Canadian province and 1 percent had moved to the United States.<sup>1</sup>



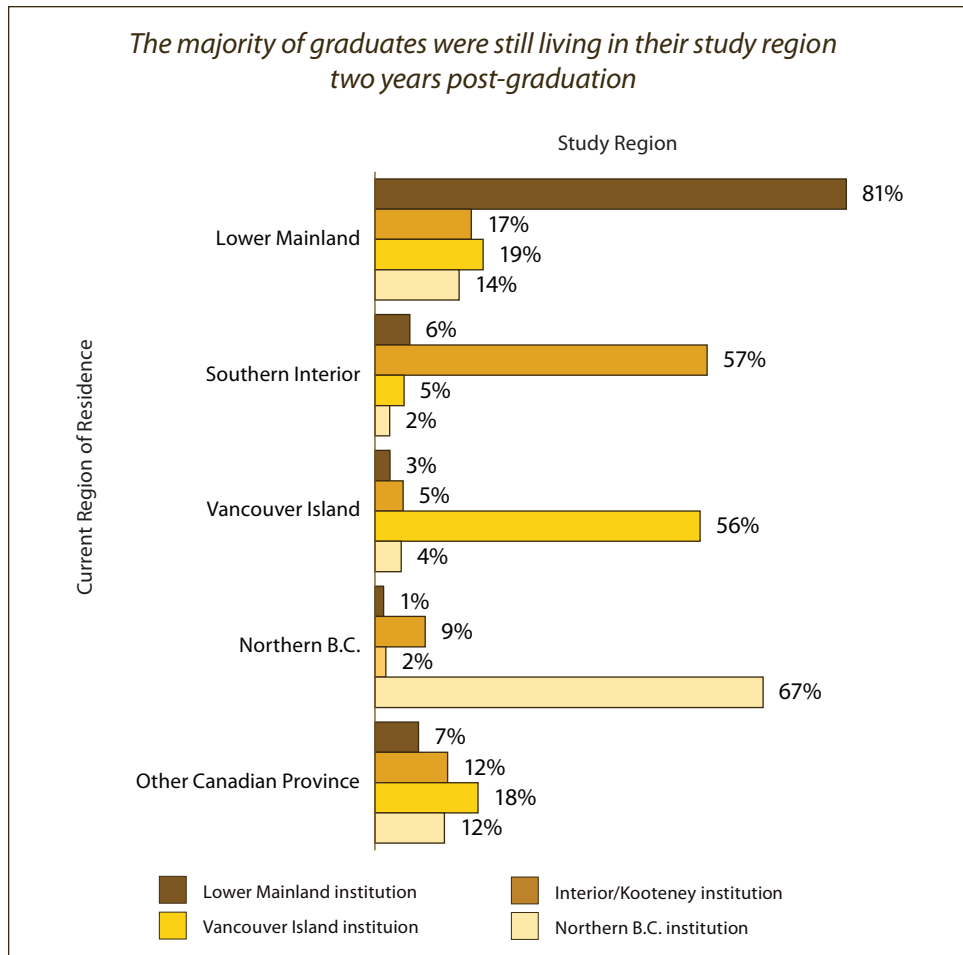
<sup>1</sup> Note: This is not a good measure of intra- or inter-provincial migration, since graduates who have left the region where they studied may have been returning to their home region or province. Also, those who remained in B.C. may have been more likely than other graduates to have responded to the survey, so students outside of B.C. may be underrepresented in the results.

At the time of the survey, just over one-quarter (26 percent) of respondents had moved away from the region where they completed their studies. Human & Social Services graduates were most likely to have moved out of the region where they completed their studies (36 percent), followed by graduates from Engineering & Applied Sciences (28 percent), Health (28 percent), and Physical Sciences & Math (28 percent) programs. Business & Management (23 percent) and Education (22 percent) graduates were least likely to report moving post-graduation.



The majority of graduates (81 percent) who completed their studies in the Lower Mainland/Southwest region remained in this region two years post-graduation. Two-thirds (67 percent) of those who attended school in Northern B.C. stayed in this area after they graduated. A smaller proportion of respondents who attended school in the Interior and Kootenay region and the Vancouver Island region continued to live in these areas once they had finished their studies (57 percent and 56 percent, respectively).

Vancouver Island graduates were most likely (18 percent) to move to another Canadian province. A smaller proportion of graduates from Lower Mainland institutions (7 percent) left B.C. for elsewhere in Canada.

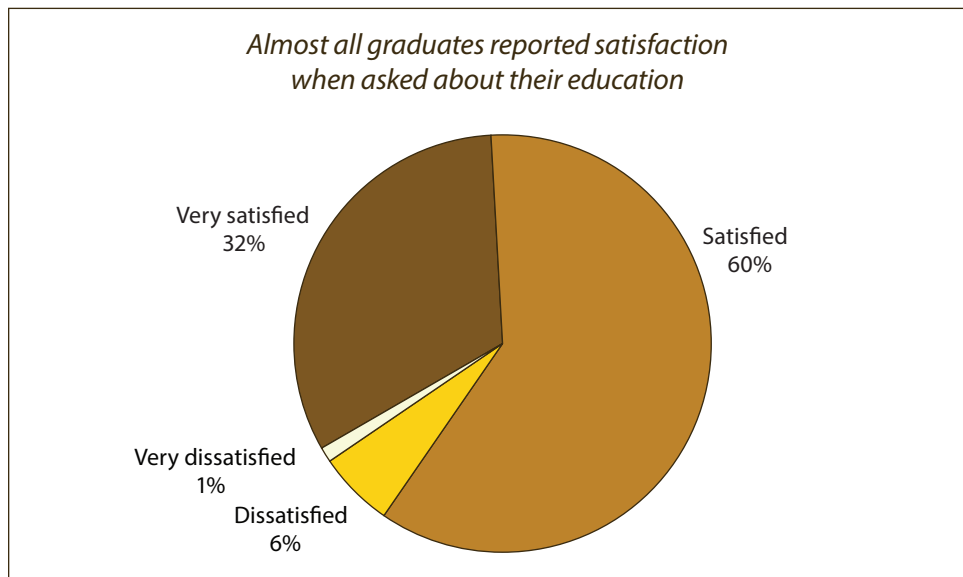




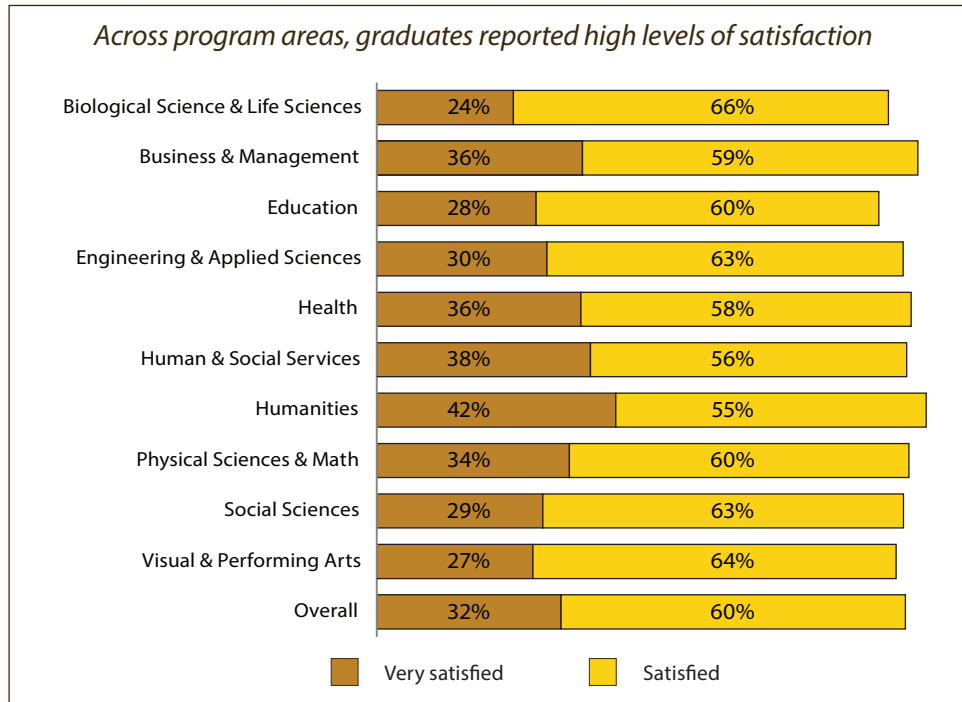
# Education Evaluation

## Satisfaction

Graduates were asked about their overall satisfaction with their baccalaureate education two years after completing their degree. Almost all respondents were positive in their feedback—93 percent were *very satisfied* or *satisfied*, and only 7 percent of graduates said they were dissatisfied or very dissatisfied with the education they received.

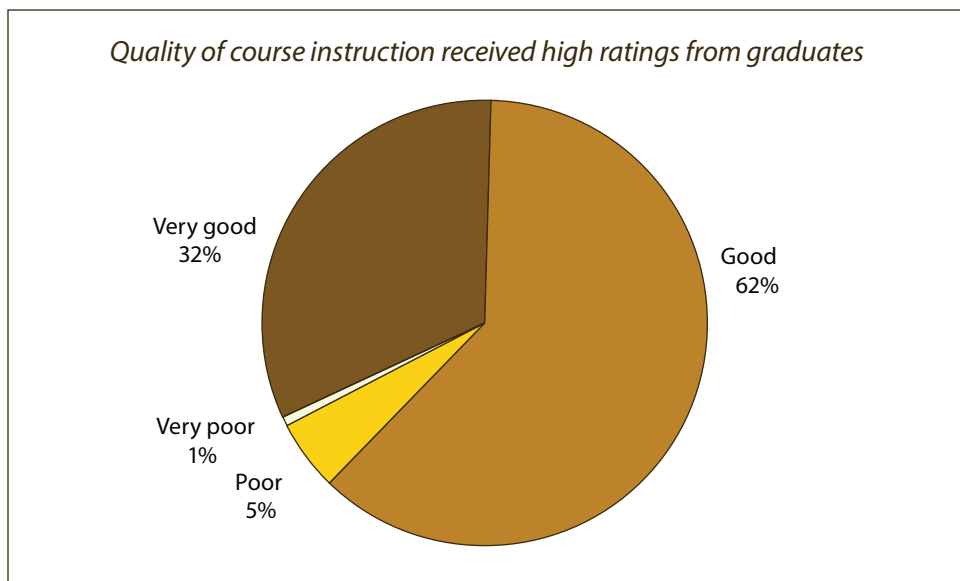


Positive ratings (that is, *very satisfied* or *satisfied*) ranged from 88 percent for Education respondents to 97 percent for Humanities graduates. There were also some differences by program area on the most positive end of the scale—those who said they were *very satisfied* with their education. Overall, 32 percent of respondents reported that they were *very satisfied* with the education they received. By program area, *very satisfied* ranged from 24 percent for Biological Science & Life Sciences graduates to 42 percent for Humanities graduates.

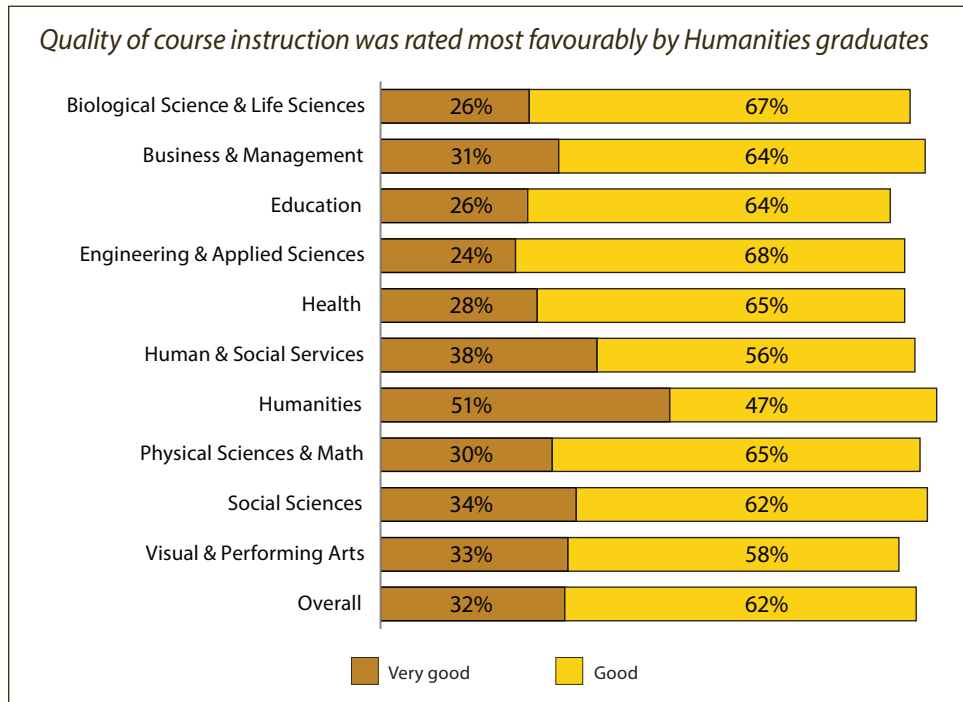


### Quality of Course Instruction

A key part of students' educational experience is the quality of course instruction. Almost all graduates (94 percent) gave high ratings to this aspect of their education.

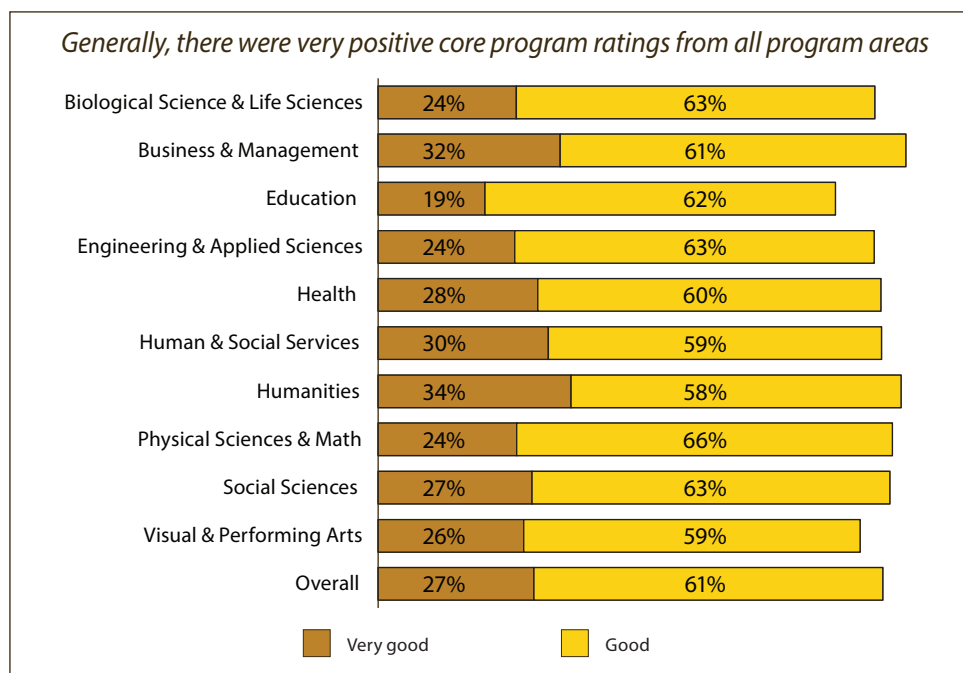


There was some variability in course instruction ratings across program areas. Positive ratings (that is, *very good* or *good*) ranged from 90 percent for Education respondents to 98 percent for Humanities graduates. The percentage of graduates who rated their instruction as *very good* also varied, ranging from 24 percent for Engineering & Applied Sciences graduates to 51 percent for those from Humanities programs.



### Quality of Education

In addition to course instruction, graduates evaluated how well the core program of required courses provided a comprehensive understanding of their field of study. Most graduates were positive—89 percent rated their core program as *very good* or *good*, with 27% of respondents rating it as *very good*. The ratings varied somewhat by program area—positive ratings (that is, *very good* or *good*) ranged from 80 percent for Education respondents to 93 percent for graduates from Business & Management programs. The percentage of respondents who said the quality of their core program as *very good* also varied, ranging from 19 percent for Education respondents to 34 percent for those from Humanities programs.



Graduates from baccalaureate programs were asked, given their experiences in their program, whether they would select the same program again. Over three-quarters of graduates (76 percent) said that they would. In particular, over 80 percent of graduates from Business & Management, Engineering & Applied Sciences, Health, and Human & Social Services programs reported that they would select the same program again.

*The majority of graduates would select the same program again*

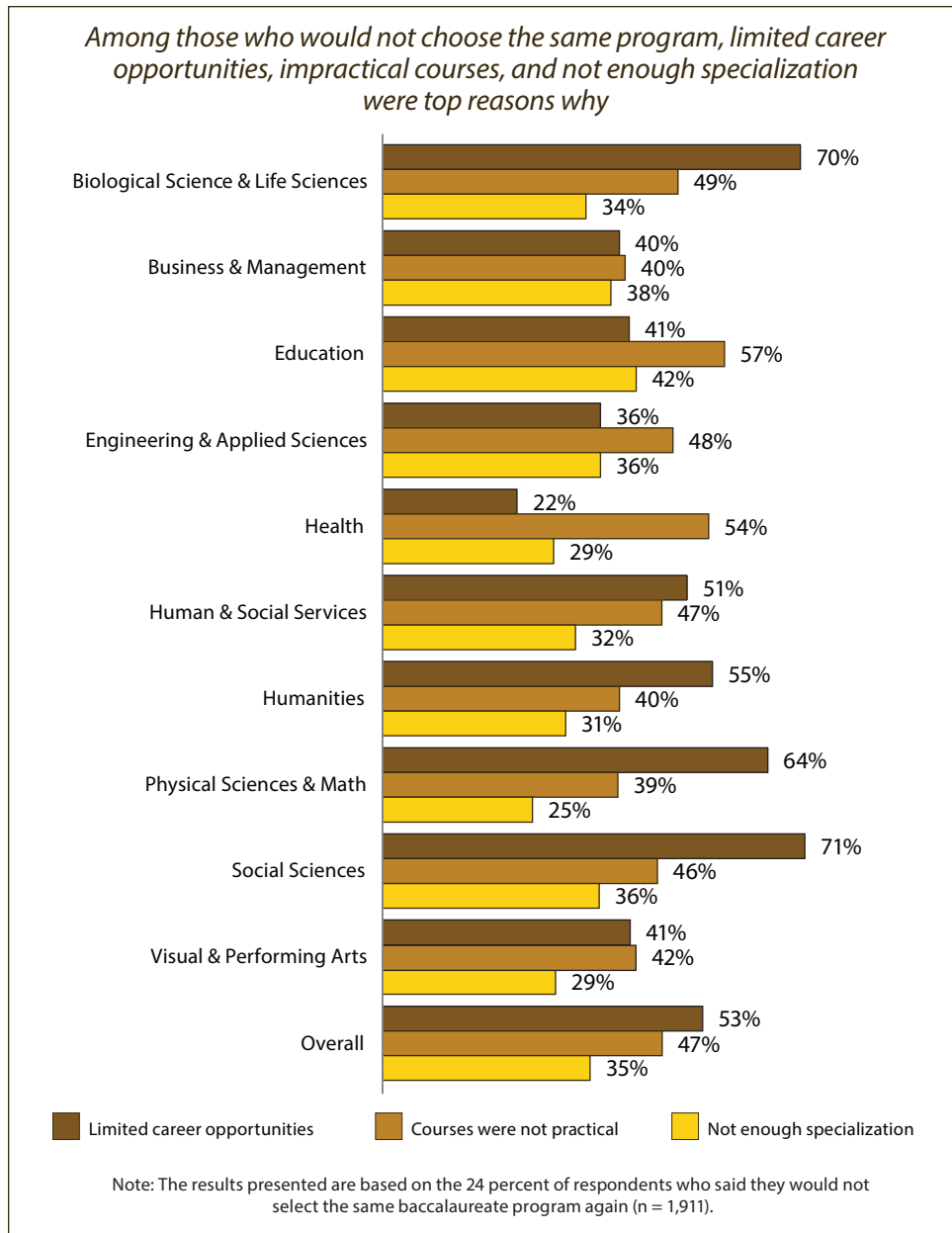
Program Area	Percentage
Biological Science & Life Sciences	63%
Business & Management	83%
Education	76%
Engineering & Applied Sciences	81%
Health	82%
Human & Social Services	81%
Humanities	78%
Physical Sciences & Math	73%
Social Sciences	70%
Visual & Performing Arts	70%
Overall	76%

Graduates who said they would not select the same baccalaureate program again most often said the reason had to do with the lack of career opportunities, (im)practicality of their courses, or that the program was too general.

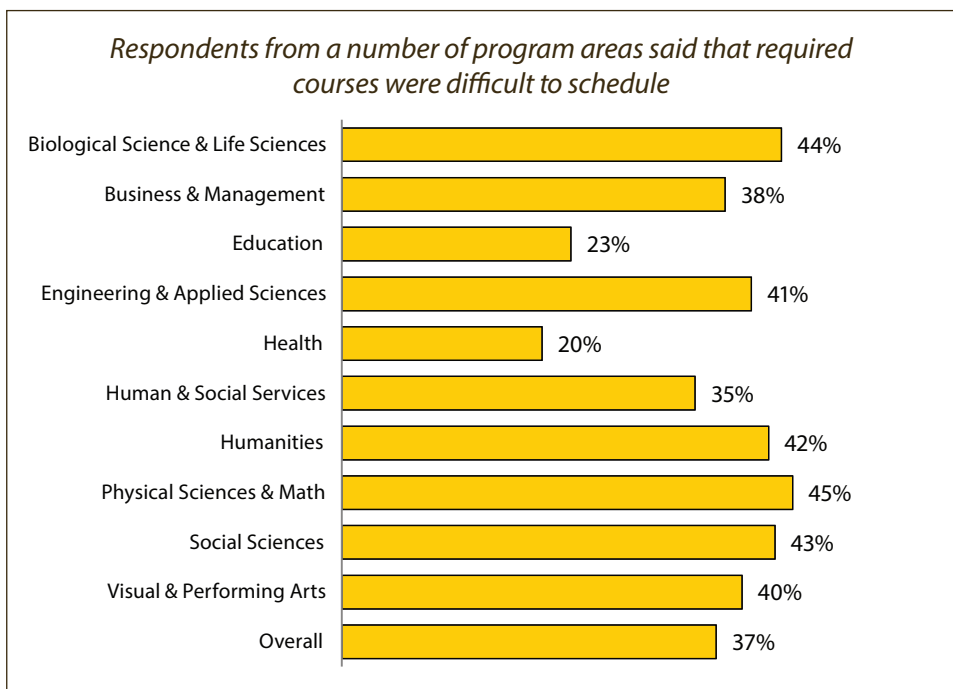
Of the minority who said they would not select the same program again, over half (53 percent) of respondents cited “little or no career opportunities” as a reason. This reason was most frequently mentioned by the Social Sciences and Biological Science & Life Sciences graduates who said they would not choose the same program again—seven out of ten graduates from these programs gave this explanation. This reason was less prevalent among Health graduates who would not select the same program again, with just 22 percent saying this was due to limited career opportunities.

Almost half (47 percent) of the graduates who would not select the same program again cited reasons related to the lack of practicality of their courses. Education and Health graduates tended to give this reason for not selecting the same program again.

Approximately one-third (35 percent) of graduates who would not choose the same program thought their program was not specialized enough or was too general. This reason was most often mentioned by Education graduates (cited by 42 percent of those who would not choose the same program, which is 10 percent of Education graduates overall).



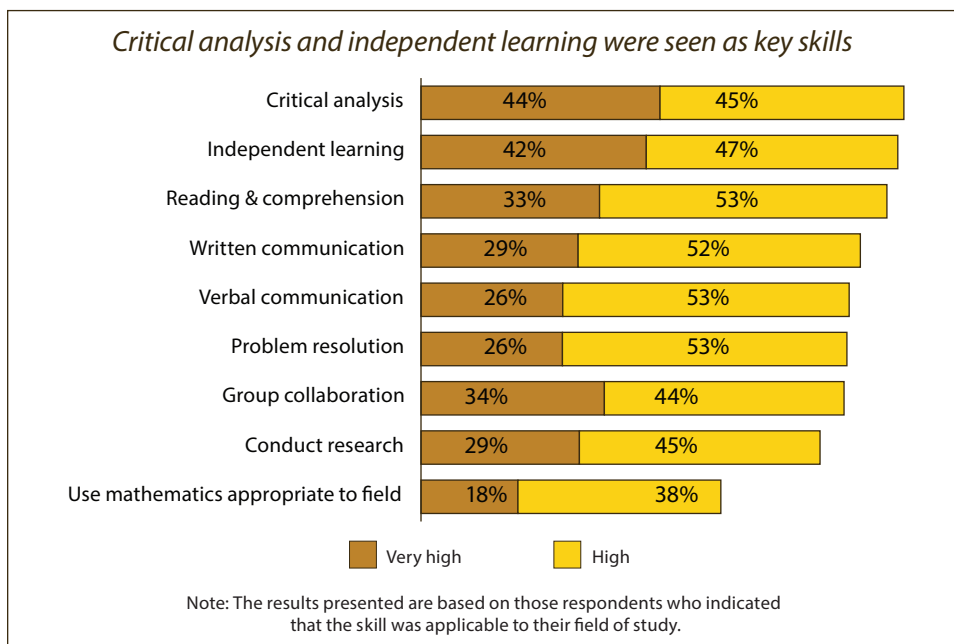
Respondents were also asked if there were required courses that they had difficulty scheduling because they were either not available, not offered, always full or had limited enrolment policies. Over one-third (37 percent) said that they had difficulty scheduling required courses. This was more prevalent among Arts and Sciences program respondents (e.g., Physical Sciences & Math, 45 percent; Biological Science & Life Sciences, 44 percent) and less common among Education (23 percent) and Health (20 percent) respondents.



## Skills Development

A baccalaureate education develops both a student’s intellectual and social skills. Generally, when asked about a variety of such skills, the majority of respondents said that their institution had helped them to develop their abilities in these areas (respondents provided ratings for only those skills they saw as being applicable to their field). Notably, it was most common for respondents to say that the use of mathematics was not applicable to their field (23 percent).

As in 2012, critical analysis and independent learning skills were rated the highest (90 and 88 percent *very high* or *high*, respectively). Communication skills—reading and comprehending material, writing clearly and concisely, and verbally expressing opinions or ideas—also received high ratings. More than eight out of ten graduates gave high ratings to reading comprehension (86 percent) and written communication (81 percent), and almost eight out of ten (79 percent) said their verbal communication skills were highly developed. A similar proportion gave *very high* or *high* ratings to skills associated with problem resolution (79 percent) and group collaboration (working effectively with others, 78 percent). Almost three-quarters (74 percent) of graduates said that their research skills were highly developed. As in previous years, the development of mathematics skills was given *very high* or *high* ratings by just over half of the graduates (56 percent of those who thought the question was applicable).



Skill ratings varied widely across program areas. When the *very high* and *high* ratings were combined and compared by program area, the variation ranged from a 12 percentage point difference for independent learning to a 65 percentage point difference for mathematics skills. Overall, 88 percent of graduates gave *very high* or *high* ratings to independent learning. Among the program areas, however, the ratings ranged from 80 percent for Education to 91 percent for both Health and Humanities.

When asked about the development of mathematics skills, just over half of the graduates (56 percent) who saw this as a relevant skill rated their skill development in this area as *very high* or *high*. When the program areas were compared, though, the positive ratings ranged from 26 percent for Visual & Performing Arts to 91 percent for Physical Sciences & Math, with the next highest ratings found among Engineering & Applied Sciences graduates (76 percent).

Within program areas there were also several patterns that emerged. Humanities graduates were most likely to give high ratings to communication skills development (written and verbal communication and reading comprehension). In fact, Humanities graduates had the highest proportion of positive ratings in six skill development areas. Education graduates tended not to assign high ratings when asked about their skill development.

In addition to in-school training, a number of respondents (44 percent) participated in paid or unpaid work experience as part of their program. More than six out of ten graduates from Human & Social Services (63 percent) and Engineering & Applied Sciences (63 percent), and more than half of the graduates from Health (59 percent) and Education (58 percent) said they had participated in program-related work experience. Almost one-quarter of Humanities graduates (21 percent) reported paid or unpaid work experience.

*In some program areas, paid and unpaid work experience was fairly common*

Program Area	Percentage
Biological Science & Life Sciences	44%
Business & Management	40%
Education	58%
Engineering & Applied Sciences	63%
Health	59%
Human & Social Services	63%
Humanities	21%
Physical Sciences & Math	48%
Social Sciences	27%
Visual & Performing Arts	46%
Overall	44%

Note: Paid and unpaid work experience referenced above was part of the educational program.



# Further Education

## Type of Further Education

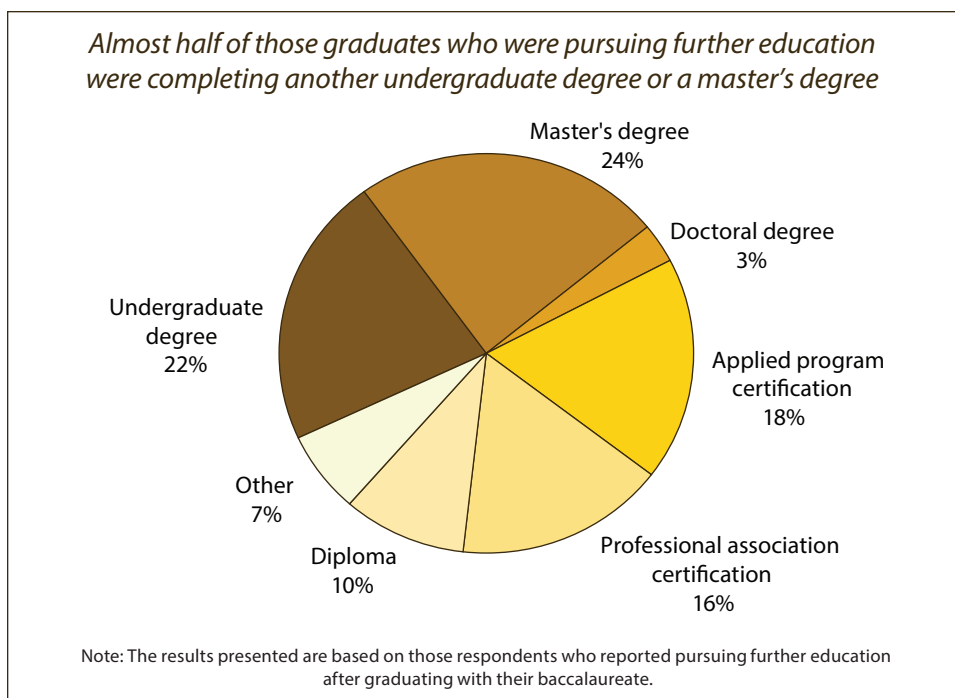
At the time of the survey, over half of the respondents (54 percent) said they had taken or were taking other formal post-secondary education or training since graduating from their baccalaureate program. Thirty percent of respondents were currently enrolled in a program, and 19 percent of graduates were enrolled in full-time studies.

Respondents' enrolment in further education varied by program area. Graduates from all four Arts and Sciences program areas were most likely to have pursued further studies. In particular, almost three-quarters of Biological Science & Life Sciences graduates (74 percent) took additional education. In comparison, fewer than one-third of Engineering & Applied Sciences graduates (32 percent) went on to enrol in additional studies.

*Graduates from Arts & Sciences programs often enrolled in further education*

Program Area	Percentage
Biological Science & Life Sciences	74%
Business & Management	53%
Education	36%
Engineering & Applied Sciences	32%
Health	51%
Human & Social Services	45%
Humanities	68%
Physical Sciences & Math	70%
Social Sciences	62%
Visual & Performing Arts	47%
Overall	54%

Of those who reported participating in further education or training, 22 percent were in another undergraduate program, 24 percent were working on a master's degree, 18 percent were taking applied program certification, and another 16 percent were being certified by a professional association.

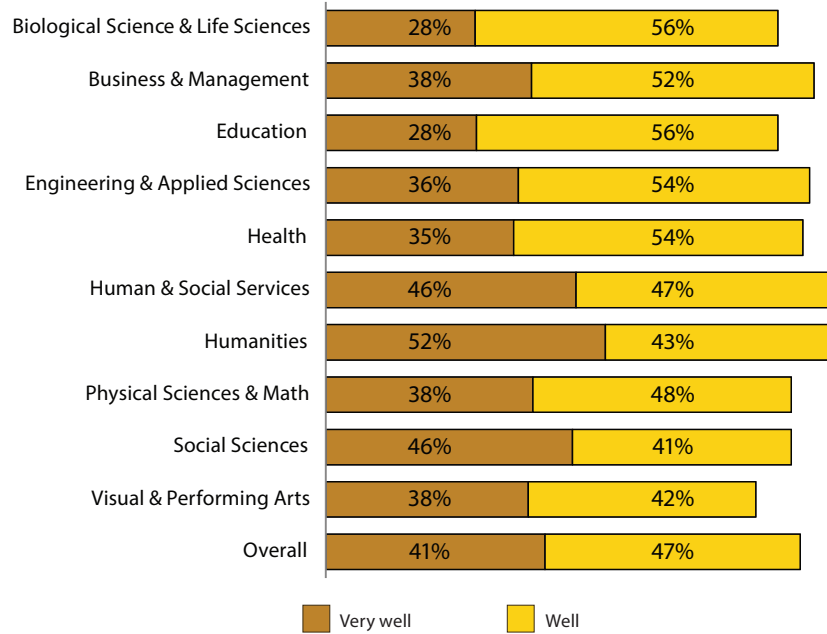


The additional education or training pursued by respondents varied widely by program of study. For example, 60 percent of Business & Management graduates pursued professional association certification, but only 7 percent enrolled in another undergraduate program. In comparison, Arts and Sciences graduates often sought another undergraduate degree or a master's degree. This was particularly true of Biological Science & Life Sciences graduates (42 percent of those who pursued further education undertook another undergraduate degree) and graduates from Physical Sciences & Math (30 percent went on to a master's degree program). Further, of those who pursued further education, 15 percent of Physical Sciences & Math graduates entered doctoral programs. Master's programs were popular among graduates from Engineering & Applied Sciences (38 percent) and Human & Social Services (37 percent) programs.

## Preparation for Further Education

The majority of respondents (88 percent) who were pursuing a master's or a doctoral degree said that their previous degree program had prepared them *very well* or *well* for their subsequent program. This varied somewhat by program of study—ranging from 95 percent for Humanities graduates to 80 percent for Visual & Performing Arts graduates.

*The majority of graduates pursuing post-graduate degrees felt well-prepared for their subsequent studies*



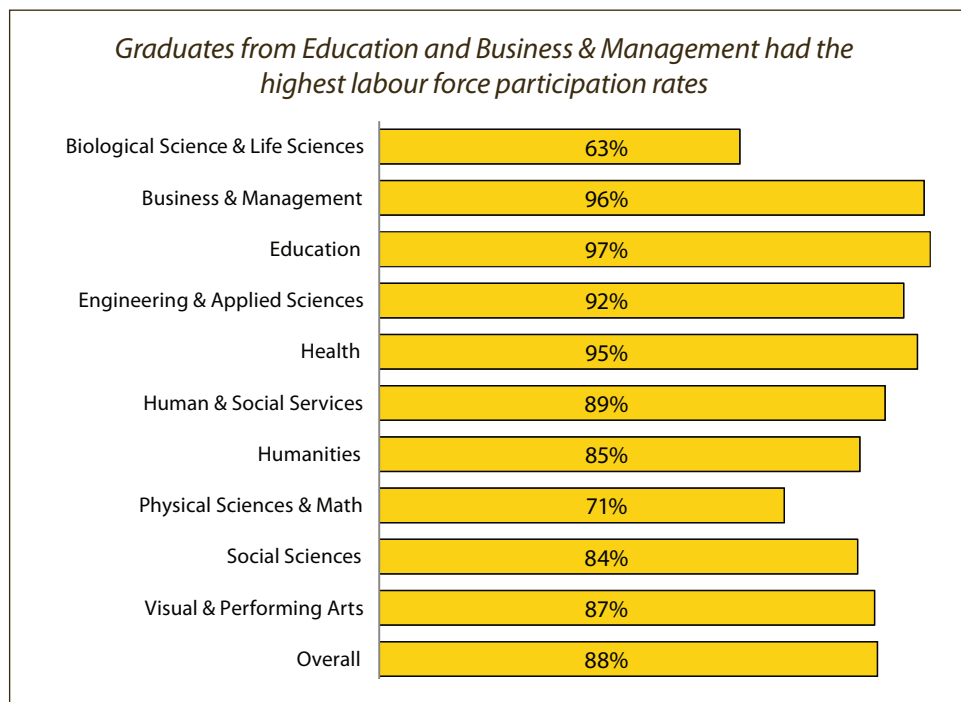
Note: The results presented are based on those respondents who reported pursuing further education--specifically a master's or doctoral degree--after graduating with their baccalaureate program in 2011.



# Labour Force Outcomes

## Labour Force Participation

At the time of the survey, 88 percent of graduates were in the labour force (that is, employed or looking for employment). The percentage of graduates in the labour force ranged from 63 percent for Biological Science & Life Sciences to 97 percent for graduates from Education programs.



## Employment

Of those in the labour force, 92 percent were employed at the time of the survey, 1 percent had a paid job lined up, and 7 percent were unemployed.

*In most program areas, at least nine out of ten graduates were employed two years post-graduation*

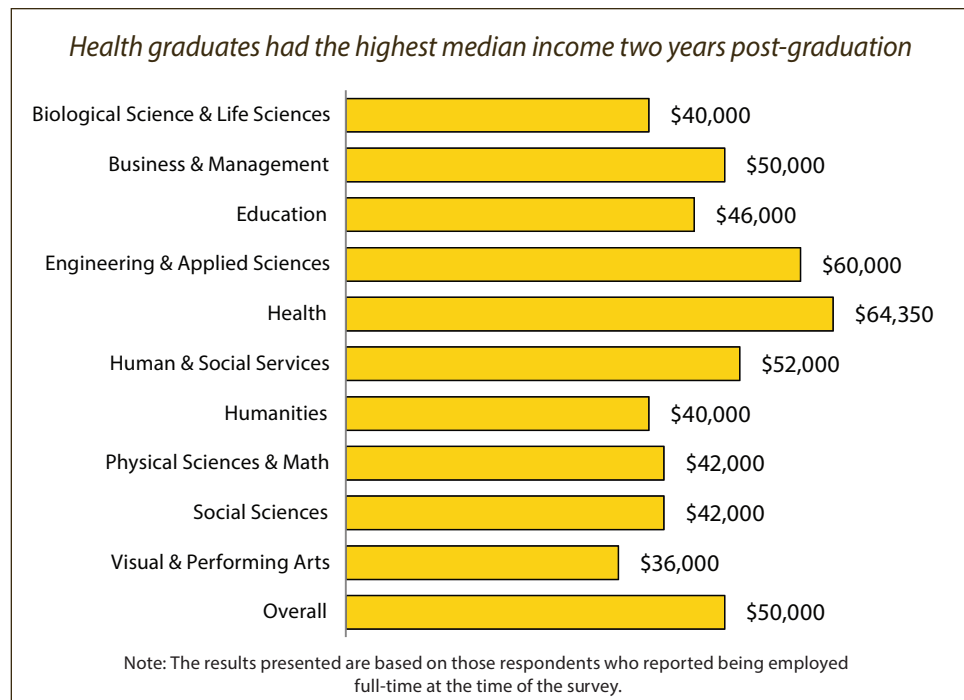
Program Area	Employed (of those in labour force)	Unemployed	Paid job lined up
Biological Science & Life Sciences	85%	13%	2%
Business & Management	95%	4%	1%
Education	95%	5%	0%
Engineering & Applied Sciences	93%	6%	1%
Health	98%	2%	0%
Human & Social Services	95%	4%	1%
Humanities	91%	9%	1%
Physical Sciences & Math	89%	10%	1%
Social Sciences	90%	9%	1%
Visual & Performing Arts	87%	10%	3%
Overall	92%	7%	1%

Note: Percentages are based on those who were in the labour force at the time of the survey.

Of those who were employed, 84 percent reported working full-time (i.e., 30 or more hours a week). Almost nine out of ten employed graduates (89 percent) said they are paid workers, 5 percent said they are self-employed, and 7 percent reported being both a paid worker and self-employed. Just over one-fifth of respondents (21 percent) said they were currently employed at more than one job or business. Further, of those who said they held more than one job, 78 percent held two jobs and 22 percent worked at three or more jobs.

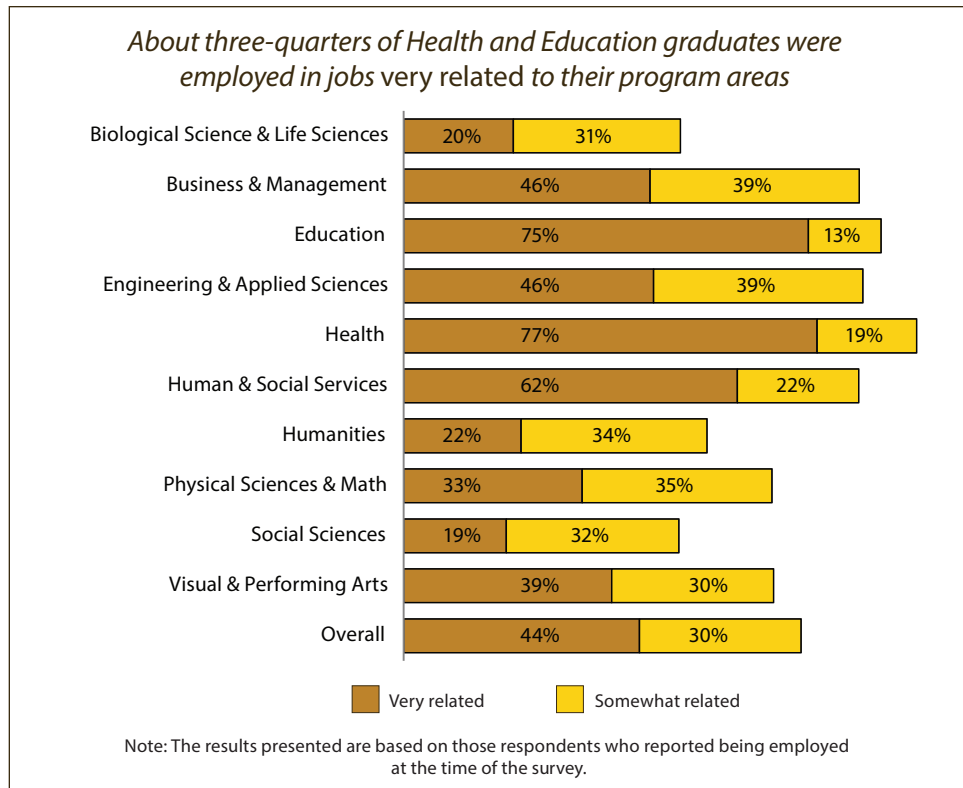
## Income

Overall, in 2013, baccalaureate graduates who were working full-time earned a median income of \$50,000 from their main job two years post-graduation. Looking at program area, there were some differences in employment income. Visual & Performing Arts graduates, and those from Biological Science & Life Sciences and Humanities programs, reported the lowest median earnings two years post-graduation (\$36,000, \$40,000, and \$40,000, respectively). Health graduates had the highest median full-time earnings (\$64,350), followed by those from Engineering & Applied Sciences (\$60,000).



## Program-related Employment

Employed graduates were asked to indicate the extent to which their main job was related to their program. Approximately three-quarters of employed respondents said their job was *very related* or *somewhat related* to their program of study (74 percent). The degree to which graduates' jobs were related to their program varied across program areas. Health and Education graduates were most likely to report that their main job was *very* or *somewhat related* to the program they studied (95 percent and 88 percent, respectively). Social Sciences graduates (51 percent) and those who graduated from Biological Science & Life Sciences (51 percent) programs were least likely to report that their jobs were related to their program of study.

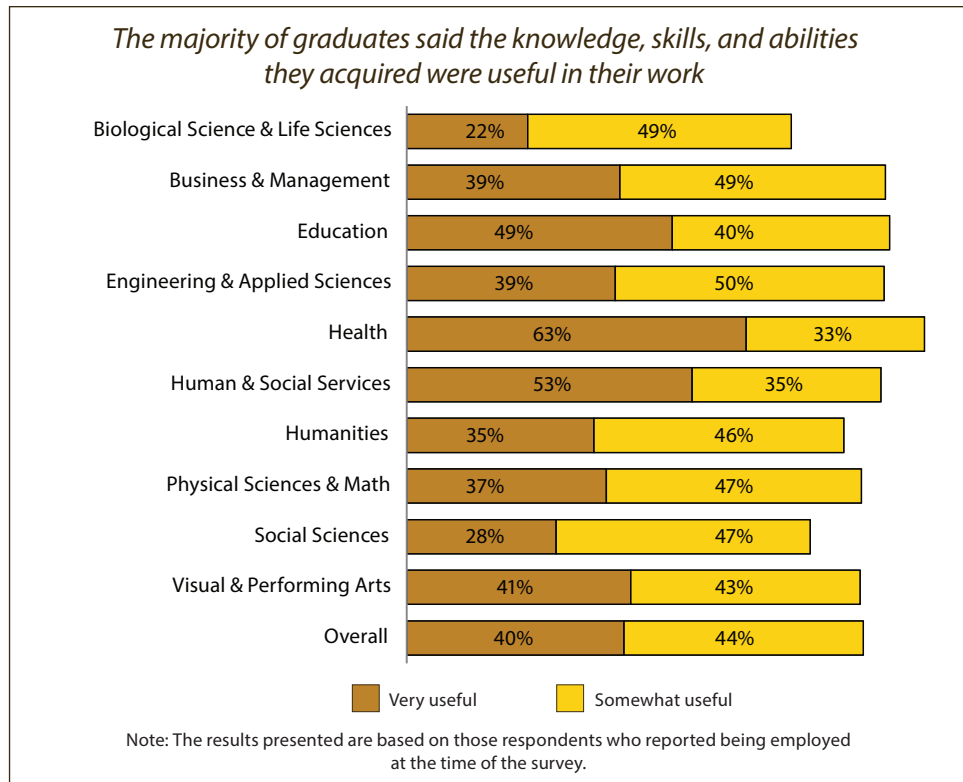


## Usefulness of Education

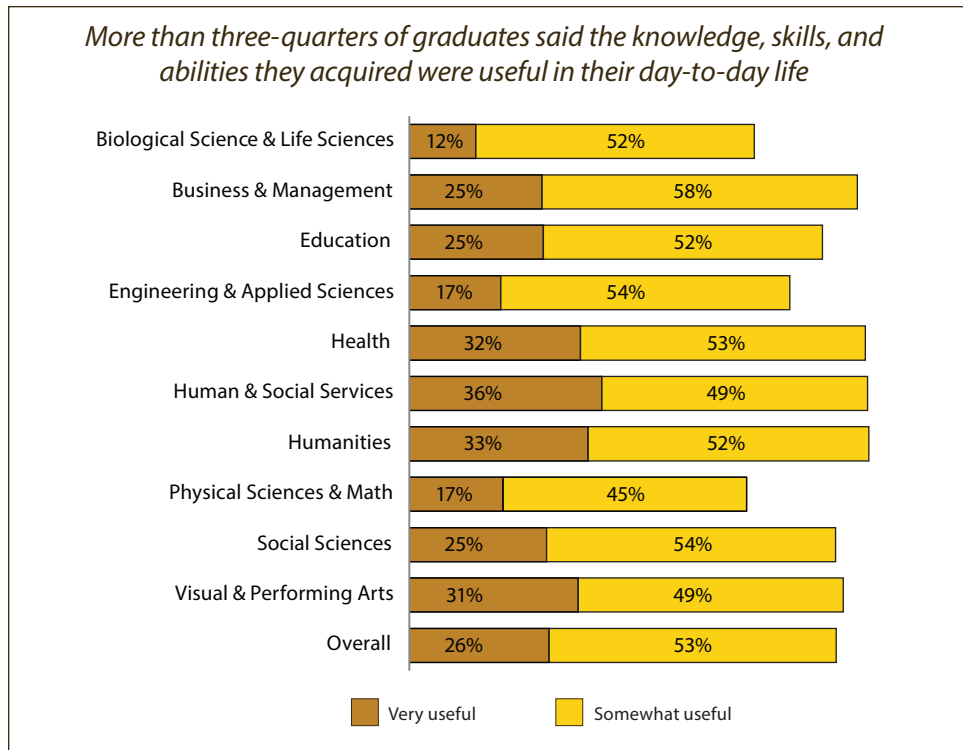
Employed respondents were also asked to rate the usefulness of knowledge, skills, and abilities they acquired during their baccalaureate education in both their work and their day-to-day life. The majority of graduates said that the knowledge, skills, and abilities they gained were *very useful* or *somewhat useful* in their work (85 percent) and in their day-to-day life (79 percent).

Health graduates were most likely to say that the knowledge, skills, and abilities they acquired were *very useful* or *somewhat useful* in their work (96 percent). Biological Science & Life Sciences graduates were least likely to indicate that what they acquired during their studies were useful in their work (71 percent).





Health graduates (85 percent) and those from Humanities (85 percent) and Human & Social Services (85 percent) were most likely to say that the knowledge, skills, and abilities they acquired were *very useful* or *somewhat useful* in their day-to-day life. Graduates of Physical Sciences & Math and Biological Science & Life Sciences programs were least likely to report that the knowledge, skills, and abilities they acquired were useful in their day-to-day life (63 percent and 64 percent, respectively).

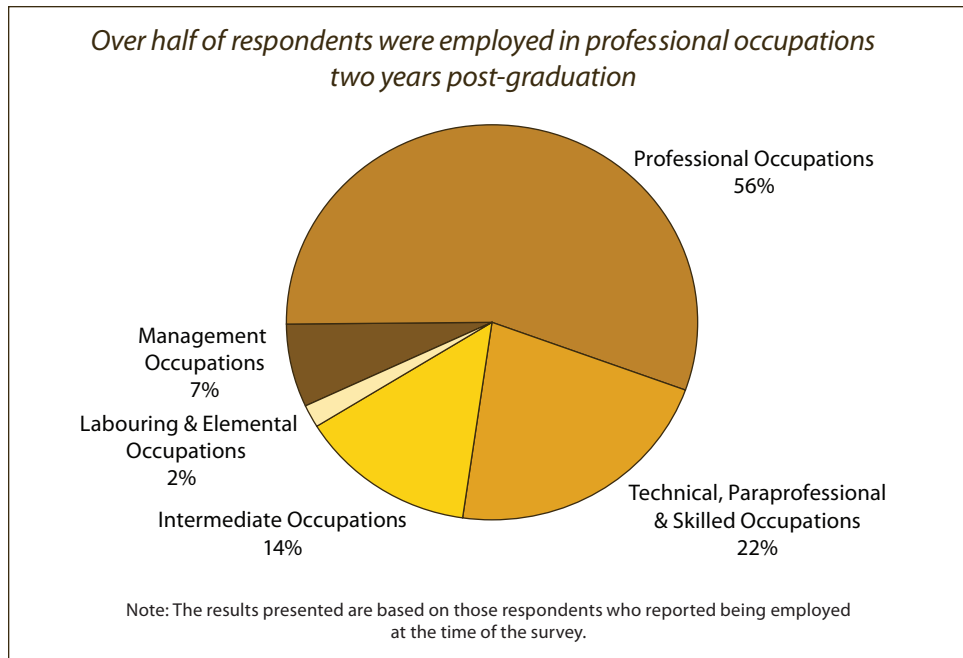


## Skill Level of Jobs

The National Occupational Classification (NOC) provides a standardized language for describing the work performed by Canadians in the labour market. It gives statisticians, labour market analysts, career counsellors, employers, and individual job seekers a consistent way to collect data and describe and understand the nature of work.<sup>2</sup> The NOC is used to classify occupations into one of four skill levels that correspond to the training or education (kind and/or amount) required for going into an occupation. Though not separated in the NOC skill levels, management occupations have been separated out here for descriptive purposes.

Looking at the NOC skill level of respondents' main jobs shows that the majority of employed respondents were in professional occupations (56 percent) or management occupations (7 percent) at the time of the survey. Another 22 percent of employed graduates were in technical, paraprofessional, and skilled occupations two years post-graduation.

<sup>2</sup> More information about the NOC can be found at: <http://www.hrsdc.gc.ca/eng/jobs/lmi/noc/index.shtml>.





# Education Financing

## Sources of Funding

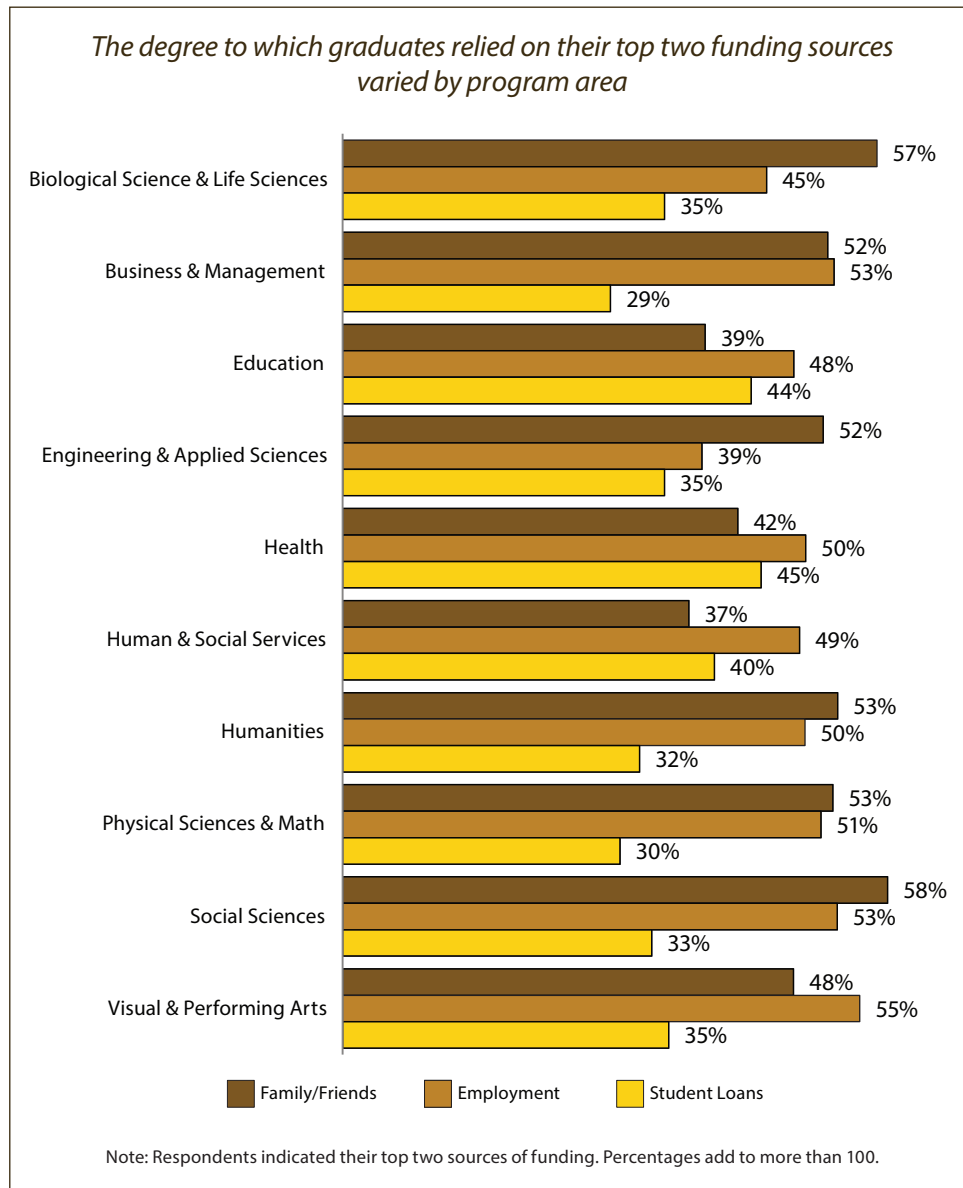
Graduates were asked to indicate the primary and secondary sources of funding that they relied on to help pay for the education they completed in 2011. Half of the graduates indicated that employment was a top source of funding. Half of the graduates also stated that family or friends were one of their top two funding sources. Over one-third said student loans were a primary or secondary resource.

*Employment and family or friends were the most common funding sources mentioned by graduates*

Sources of funding	Percentage
Family or friends	51%
Employment	50%
Student loans	35%
Scholarships, bursaries, or grants	16%
Personal savings	12%
Bank loans	9%
Co-op program	4%
Other	5%

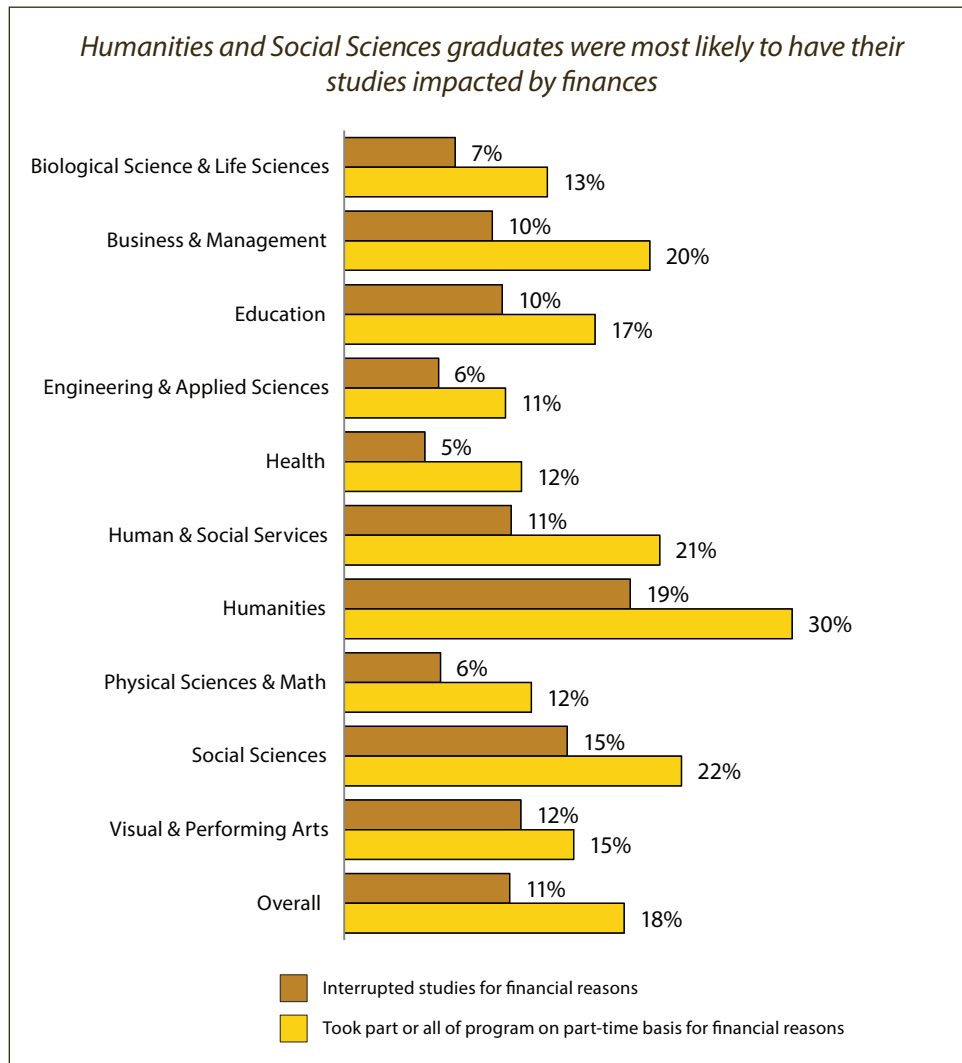
Note: Respondents indicated their top two sources of funding. Percentages add to more than 100.

Across program areas, graduates' assessments of the most important funding sources varied. For example, 58 percent of Social Sciences graduates and 57 percent of those from Biological Science & Life Sciences said family or friends were one of their two main funding sources, while 37 percent of Human & Social Services graduates called mainly on friends or family. The percentage of graduates who said student loans were their primary or secondary funding source varied by 16 percentage points across program areas—45 percent of Health graduates relied on student loans, while 29 percent of graduates with Business & Management degrees depended on funding from this source.



Sometimes, students have to suspend their studies due to financial strain. About one in ten graduates (11 percent) reported that they had interrupted their studies for financial reasons, and almost one in five (18 percent) said that they had to take at least some of their program on a part-time basis due to finances.

The proportion of graduates who said they had to interrupt their studies for financial reasons varied across program areas—from a high of 19 percent for Humanities graduates to a low of 5 percent among Health graduates. The need to take some or all of their program on a part-time basis was also highest among Humanities graduates (30 percent).

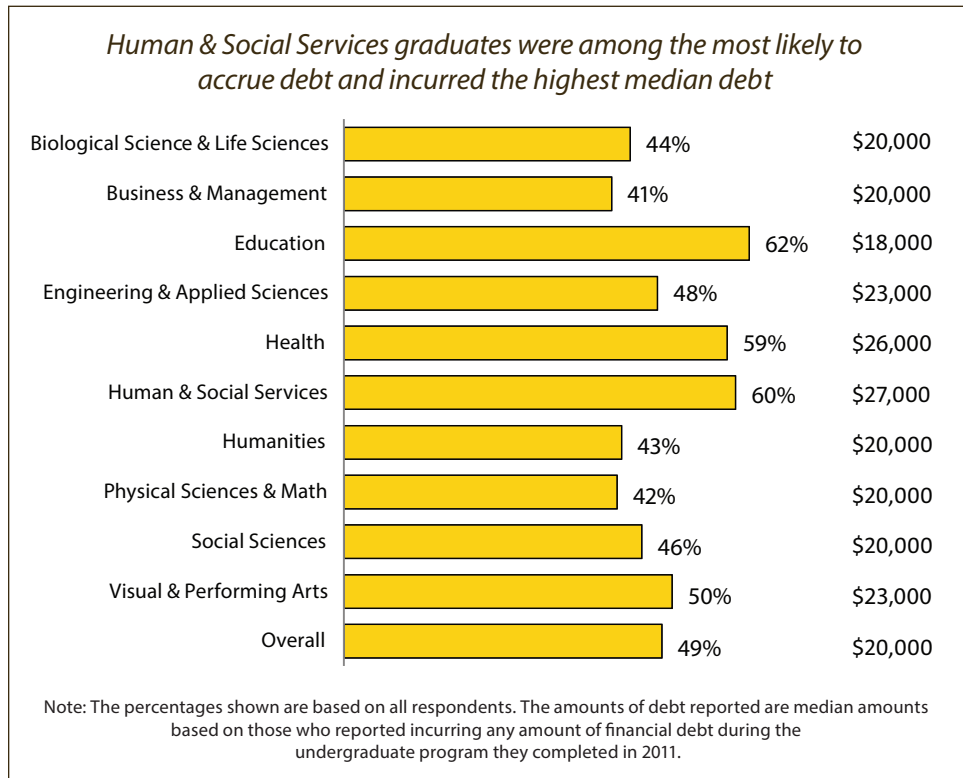


## Incurred and Remaining Debt

Almost half (49 percent) of graduates incurred debt to pay for the education and living expenses associated with the program they graduated from in 2011. Graduates from Education programs and those from Human & Social Services programs were most likely to accrue debt (62 percent and 60 percent, respectively), and graduates from Business & Management and Physical Sciences & Math were least likely (41 percent and 42 percent, respectively).

For those who did accrue debt, the median amount borrowed from all sources (including student loan debt and other personal loans or debts) was \$20,000 overall. The greatest amount of debt was incurred by Human & Social Services graduates and those from Health programs—the median amounts they borrowed from all sources were \$27,000 and \$26,000, respectively. While the debt incurred by Health graduates was lower than was reported last

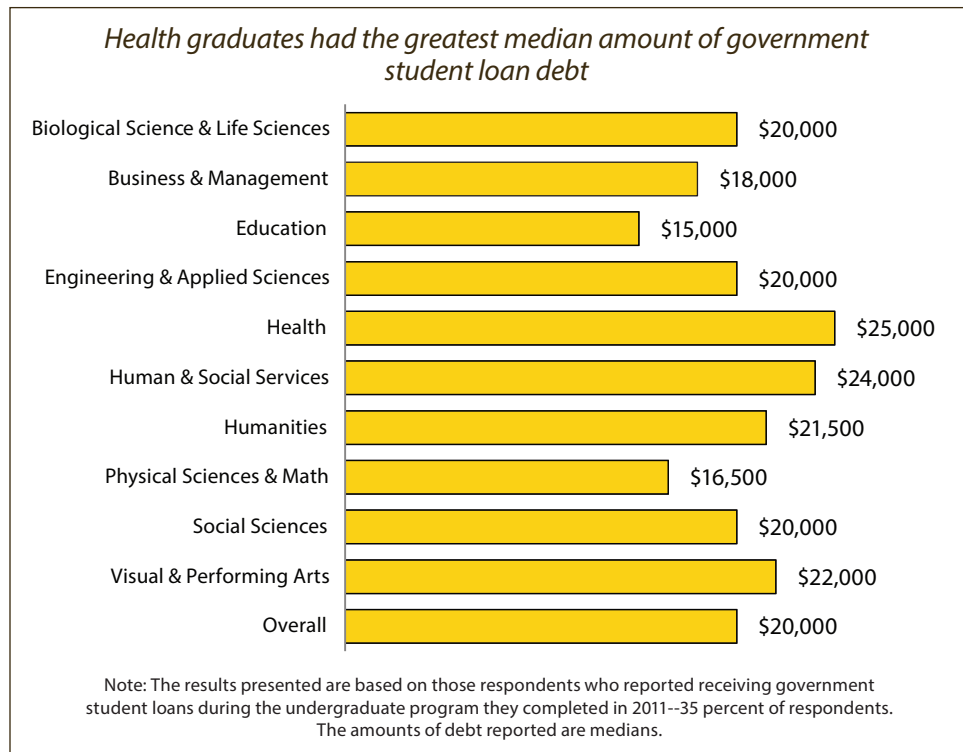
year (\$30,000), the debt load among Human & Social Services graduates was higher by \$7,000. The median amount borrowed by Education graduates was the lowest among the program areas at \$18,000, which was \$1000 higher than the amount reported by Education graduates last year.



Thirty-five percent of graduates reported receiving government student loans. This percentage has decreased since the 2006 survey of 2004 graduates when 40 percent of graduates reported receiving government student loans.

For those who had government student loans, the median amount borrowed by those who graduated in 2011 was \$20,000. As with overall debt, Human & Social Services graduates and those from Health programs had the greatest median amount of government student loan debt at \$24,000 and \$25,000, respectively. Education graduates and Physical Sciences & Math graduates borrowed the least amount in the form of government student loans—with median debt loads of \$15,000 and \$16,500, respectively.





At the time of the survey, 24 percent of graduates who had received government student loans had no student loan balance left to repay. Among those with remaining debt, the median balance owing was \$18,000.

Across program areas, Physical Sciences & Math and Engineering & Applied Sciences borrowers were the most successful at paying off the student loans they acquired during the program they graduated from in 2011—37 percent and 34 percent, respectively, had no remaining government loan debt. Approximately one out of five graduates in Visual & Performing Arts (17 percent), Social Sciences (18 percent), and Humanities (19 percent) had no government student loan debt remaining from the baccalaureate program they graduated from in 2011.

*Of those students who had student loan debt,  
Physical Sciences & Math and Engineering & Applied Sciences graduates  
were most successful at paying it off*

Program Area	Percentage of borrowers with student loan debt completely repaid
Biological Science & Life Sciences	20%
Business & Management	30%
Education	23%
Engineering & Applied Sciences	34%
Health	27%
Human & Social Services	20%
Humanities	19%
Physical Sciences & Math	37%
Social Sciences	18%
Visual & Performing Arts	17%
Overall	24%

Note: The percentages shown are based on those respondents who reported receiving financial support in the form of government student loans for the undergraduate program they completed in 2011.

# Conclusion

The Baccalaureate Graduates Survey (BGS) provides valuable information to inform prospective students, help institutions evaluate programs, and ensure post-secondary accountability. Twenty public post-secondary institutions participated in the 2013 survey of 2011 graduates. Almost three-quarters of respondents were from research universities, and over two-thirds graduated from the three largest universities in British Columbia. Overall, 52 percent of eligible graduates participated in the survey.

Almost one-quarter of the respondents graduated from Social Sciences programs, and just over one out of seven were Business & Management graduates. The graduates surveyed were predominantly female and living in the Lower Mainland/Southwest region of B.C.; their median age was 27 years old. Graduates, particularly those from the Lower Mainland/Southwest region, tended to still reside in their study region two years post-graduation.

Graduates typically gave high ratings to their baccalaureate education, quality of course instruction, and core program of required courses. When asked if they would select the same program again, just over three-quarters said that they would. Those who would not, most often mentioned limited career opportunities, impractical coursework, and a too-general program.

When graduates were asked to think about their educational experience and how well their program had helped to develop their skills, they gave high ratings to almost all of the skills listed in the survey. Critical analysis and independent learning skills were given the highest ratings. Among respondents who said the use of mathematics was an applicable skill, over half said it had been highly developed during their program.

Over half (54 percent) of the graduates surveyed had taken or were taking other formal post-secondary education or training since graduating with their baccalaureate degree. It was common for graduates to move on to another undergraduate degree or Master's degree. Almost nine out of ten respondents who went on to pursue a Master's or doctoral degree said they were well-prepared for their subsequent studies.

Two years post-graduation, more than eight out of ten graduates were employed, the majority of whom were working full-time. Graduates who were employed full-time were earning a median annual income of \$50,000, mainly from professional occupations. Notably, just over one-fifth were employed at two or more jobs.

Almost three-quarters of graduates said their main job was *very related* or *somewhat related* to their program of study, and a large majority said the knowledge, skills, and abilities they had learned were *very useful* or *somewhat useful* in both their work and day-to-day life.

Family or friends, employment, and government student loans were important primary and secondary funding sources for respondents. Almost half incurred debt to pay for costs associated with the program they graduated from in 2011, with a median of \$20,000 borrowed. More than one out of three took out government student loans to fund their education, borrowing a median amount of \$20,000 from this source. During their education, about one in ten graduates had to interrupt their studies for financial reasons and almost one out of five said they had to take at least part of their program on a part-time basis due to finances. Among those who had government student loans, almost one-quarter had repaid the loan debt they had incurred within two years of graduation. Those who still had government student loan debt at the time of the survey owed a median amount of \$18,000.

A baccalaureate education at a B.C. public post-secondary institution leaves graduates well-poised to enter the work force or pursue further education. They report high satisfaction with the quality of their education, well-developed and useful skills and abilities, and strong labour market outcomes.

# Appendices

## Appendix A—Survey Methodology

### *Cohort*

The 2013 Baccalaureate Graduates Survey collected feedback from B.C. baccalaureate graduates, two years after their 2011 degree completion. The valid survey cohort consisted of 16,919 baccalaureate graduates from B.C. public research universities, teaching universities, colleges, and institutes. International students and those living outside North America were excluded, as were graduates for whom no contact data were available.

There were twenty B.C. post-secondary institutions that participated in this project—four were classified as research universities, seven were teaching universities, six were colleges, and three were institutes. The following table lists the participating institutions, the number of graduates who were eligible for the survey, the number of respondents, and the response rate.

*BGS 2013 Response Rates by Institution*

Institution	Cohort	Respondents	Response Rate
British Columbia Institute of Technology	632	371	59%
Camosun College	101	70	69%
Capilano College	166	80	48%
Douglas College	282	151	54%
Emily Carr University of Art and Design	235	124	53%
Justice Institute of British Columbia	3	3	100%
Kwantlen Polytechnic University	487	257	53%
Langara College	204	107	52%
North Island College	50	33	66%
Nicola Valley Institute of Technology	20	15	75%
Okanagan College	143	77	54%
Royal Roads University	311	177	57%
Simon Fraser University	3,649	1,916	53%
Thompson Rivers University	618	372	60%
University of British Columbia	5,484	2,633	48%
University of the Fraser Valley	652	359	55%
University of Northern British Columbia	387	235	61%
University of Victoria	2,950	1,469	50%
Vancouver Community College	55	24	44%
Vancouver Island University	490	329	67%
<b>Overall</b>	<b>16,919</b>	<b>8,802</b>	<b>52%</b>

Note: University of British Columbia includes both the Okanagan and Vancouver campuses.

### *Data Collection*

A field test cohort of former students was randomly selected for the BGS survey from the available institutional samples.

Field-testing was conducted from Wednesday, September 4, 2013 to Monday, September 9, 2013 between the hours of 1700 and 2100. Call attempts were made to 2,886 survey cases to obtain 228 survey completions. The field test was characterized by a gross completion rate of 7.9 percent.

The 2013 survey was administered as a mixed-mode survey, with interviews conducted by telephone and online using an integrated Computer Assisted Telephone Interview (CATI)/ Computer Assisted Web Interview (CAWI) system. Full telephone survey administration was undertaken from September 23, 2013 through late December 2013. Online survey administration was undertaken with telephone survey administration, with invitation emails first sent on September 12, 2013 and continuing through mid-January 2014.

A total of 8,802 survey completions were obtained, for a final response rate of 52 percent. More than half (59 percent) of all surveys were completed over the web.

### *Analysis and Reporting*

BC Stats was responsible for cleaning and validating the data received from the data collection contractor. Based on these data—the responses to the survey questionnaire—the necessary variables were derived for analysis and reporting. Data from the 2013 survey were first released in April 2014 online and are available here: [Baccalaureate Graduates Survey](#).

Analysis for this report included frequencies, crosstabs, and comparisons of medians and means.

### *Limitations*

The former students who were interviewed—52 percent of those eligible for surveying—were those from the cohort who could be located and who agreed to be surveyed. They may not be representative of all former students.

### *Percentages*

For consistency and ease of presentation, most percentages in the report text, tables, and charts have been rounded and may not always add to 100.

Unless otherwise noted, each percentage is based on the number of students who gave a valid response to the question—those who refused the question, or said *don't know*, were not included in the calculation.

## Appendix B—BC CIP Program Clusters

The Classification of Instructional Programs (CIP) is a standard taxonomy used to describe educational programs. A standard method of grouping CIP codes into CIP clusters has been developed for use by the Student Outcomes Project and the B.C. public post-secondary system.

For more information about the CIP, visit: <http://www.statcan.gc.ca/subjects-sujets/standard-norme/cip-cpe/2011/introduction-eng.htm>

### *CIP Cluster: Arts and Sciences, subgroup Biological Science & Life Sciences*

2-Digit CIP Code	Title
26	Biological and biomedical sciences
30	Multidisciplinary/interdisciplinary studies

### *CIP Cluster: Business & Management*

2-Digit CIP Code	Title
52	Business, management, marketing and related support services

### *CIP Cluster: Education*

2-Digit CIP Code	Title
13	Education

### *CIP Cluster: Engineering & Applied Sciences*

2-Digit CIP Code	Title
01	Agriculture, agriculture operations and related sciences
03	Natural resources and conservation
04	Architecture and related services
11	Computer and information sciences and support services
14	Engineering
15	Engineering technologies/technicians

### *CIP Cluster: Health*

2-Digit CIP Code	Title
51	Health professions and related clinical sciences

*CIP Cluster: Human & Social Services*

2-Digit CIP Code	Title
19	Family and consumer sciences/human sciences
22	Legal professions and studies
31	Parks, recreation, leisure, and fitness studies
43	Security and protective services
44	Public administration and social service professionals

*CIP Cluster: Arts and Sciences, subgroup Humanities*

2-Digit CIP Code	Title
05	Area, ethnic, cultural, gender, and group studies
16	Aboriginal and foreign languages, literatures and linguistics
23	English language and literature/letters
24	Liberal arts and sciences, general studies and humanities
38	Philosophy and religions studies
55	French language and literature/letters

*CIP Cluster: Arts and Sciences, subgroup Physical Sciences & Math*

2-Digit CIP Code	Title
27	Mathematics and statistics
40	Physical sciences

*CIP Cluster: Arts and Sciences, subgroup Social Sciences*

2-Digit CIP Code	Title
09	Communication, journalism and related programs
10	Communications technologies/technicians and support services
42	Psychology
45	Social sciences
54	History

*CIP Cluster: Visual & Performing Arts*

2-Digit CIP Code	Title
50	Visual and performing arts



## Appendix C—National Occupational Classification (NOC)

The National Occupational Classification (NOC) provides a standardized language for describing the work performed by Canadians in the labour market. It gives statisticians, labour market analysts, career counsellors, employers, and individual job seekers a consistent way to collect data and describe and understand the nature of work. More information about the NOC can be found at: <http://www.hrsdc.gc.ca/eng/jobs/lmi/noc/index.shtml>.

The NOC matrix is available at: <http://www5.hrsdc.gc.ca/noc/english/noc/2011/pdf/Matrix.pdf>



BCStats

Go to the [BC Student Outcomes](#) website for more information on the [Baccalaureate Graduates Survey](#).