

## BC STUDENT OUTCOMES

# information paper

## Studying Again: Former Associate Degree, Diploma, and Certificate Students Who Continue Their Education

*Who continues their studies? What were their pathways to further education? What was their experience?*

### Introduction

Since its inception almost 30 years ago, BC Student Outcomes has looked at the outcomes of students who have taken associate degree, diploma, and certificate programs. Subsequent study or further education has always been considered an important outcome for the students who leave these programs.

Each year for the last two decades, between 40 and 48 percent of respondents have taken some form of further studies. These studies range from continuing education courses for personal interest to credential programs in baccalaureate and postgraduate programs.

The information for this paper comes from the Diploma, Associate Degree, and Certificate Student Outcomes Survey, which is conducted annually, approximately one and a half years after students leave their programs. Unless otherwise noted, the information comes from the 2016 survey.

In the survey, “further studies” refers to courses taken for credit, certification, or professional accreditation, including Continuing Education courses that are greater than one week or greater than 30 hours. In the 2016 survey, 40 percent of all respondents said they took some form of further studies after leaving their associate degree, diploma, or certificate programs.

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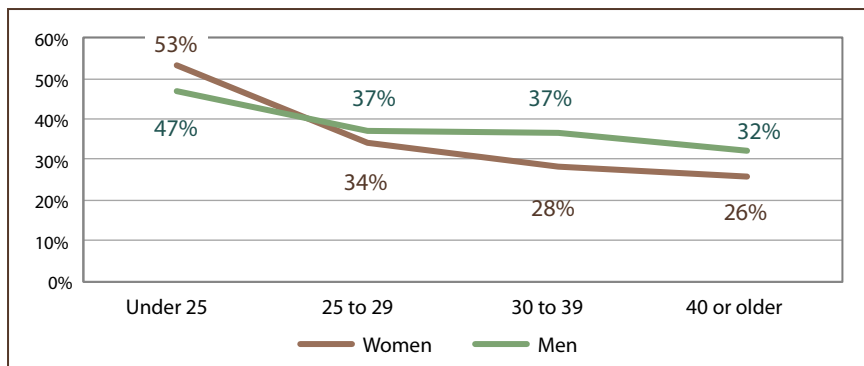
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# Who took further education?

Further studies or further education refers to studies taken at any time after the respondent left their associate degree, diploma, or certificate program.

## Demographics

Overall, 40 percent of respondents to the 2016 Diploma, Associate Degree, and Certificate Student Outcomes Survey said they took further studies.<sup>1</sup> A higher percentage of men than women went on to further education, although the rates are not too different: 42 and 39 percent. There is a definite trend by age, with younger students more likely to pursue additional education. Over half of the women under 25 took further studies; that rate drops to one-quarter of those 40 or older.

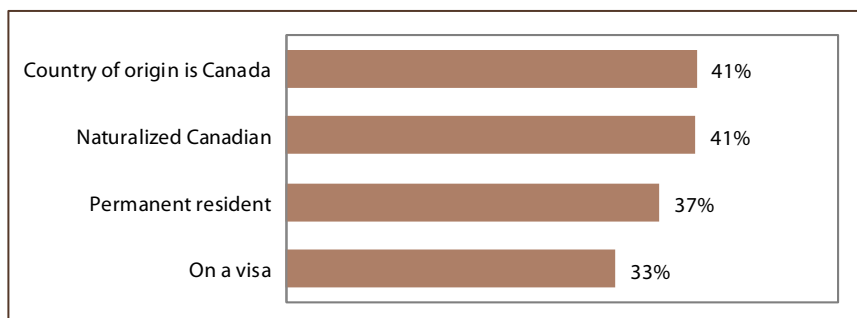


Notes: Further education includes studies taken any time after leaving the original program. Age is at the time of the survey.

### Further education by age and gender

Younger female students are the most likely to continue studying.

Respondents whose country of origin was Canada were more likely than those born outside of Canada to take further education (41 versus 38 percent). However, those from another country who were naturalized citizens at the time of their initial program were just as likely to go on as were those born in Canada.

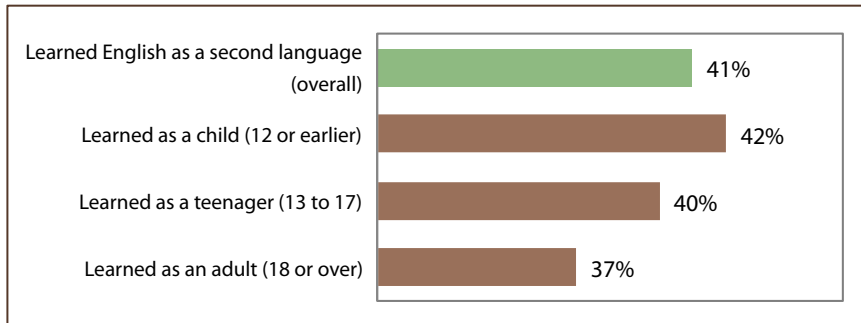


Note: Further education includes studies taken any time after leaving the original program.

### Further education by citizenship

Naturalized Canadians are as likely to take further education as students born in Canada.

There is a pattern in the results for those who learned English as a second or additional language: the younger they were when they learned English, the more likely they were to go on to further education. The respondents who learned English as children (age 12 or earlier) took further education at a noticeably higher rate than those who learned as adults (18 or over).



Note: Further education includes studies taken any time after leaving the original program.

There is an association with age, however. Almost one-third of the respondents who said they learned English as adults were 40 or older when surveyed, and all respondents in that age group were much less likely to take further education.

Respondents who took their initial program in the Mainland/Southwest region were somewhat more likely to continue their studies than were those who took programs elsewhere in the province.



Notes: Further education includes studies taken any time after leaving the original program. Region coding is based on the locations of the institutions where the respondents took their original programs.

Those respondents whose grade point average (GPA) was in the highest group (3.00 to 4.00) were the least likely to take further education.<sup>2</sup>



Notes: The GPA submitted by institutions has been standardized to a 4-point scale. Further education includes studies taken any time after leaving the original program.

**Further education by age of learning English**

Overall, those who learned English as a second language had a high rate of further study.

**Further education by region of original study**

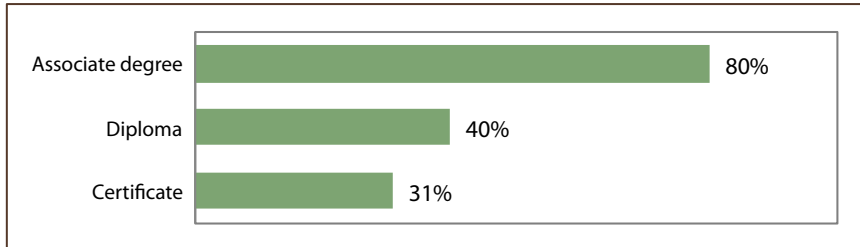
Respondents whose original program was in the Mainland/Southwest were the most likely to take further studies.

**Further education by GPA**

Those whose GPA was between 2 and 2.99 had the highest rate of further education.

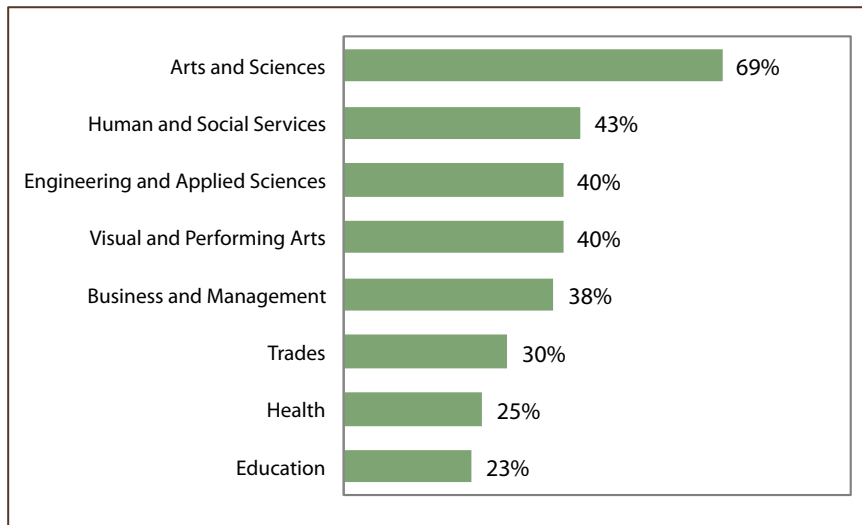
## Program and Credential

The majority of students who took associate degree and university transfer programs went on to further studies.<sup>3</sup> Although overshadowed by the high rates of those from associate degree programs, the former diploma and certificate students had reasonably good rates of further study.



Notes: Credentials have been grouped so that *Associate degree* includes university transfer programs, *Diploma* includes advanced and post-degree diplomas, and *Certificate* includes post-degree certificates. Further education includes studies taken any time after leaving the original program.

The programs most often associated with an associate degree are Arts and Sciences, and in fact, respondents from those programs were the most likely to continue studying.<sup>4</sup>



Notes: Programs are grouped using the [BC CIP Cluster](#), a roll-up based on the Classification of Instructional Programs (CIP). Further education includes studies taken any time after leaving the original program.

### Further education by credential

*The majority of associate degree students went on to further education.*

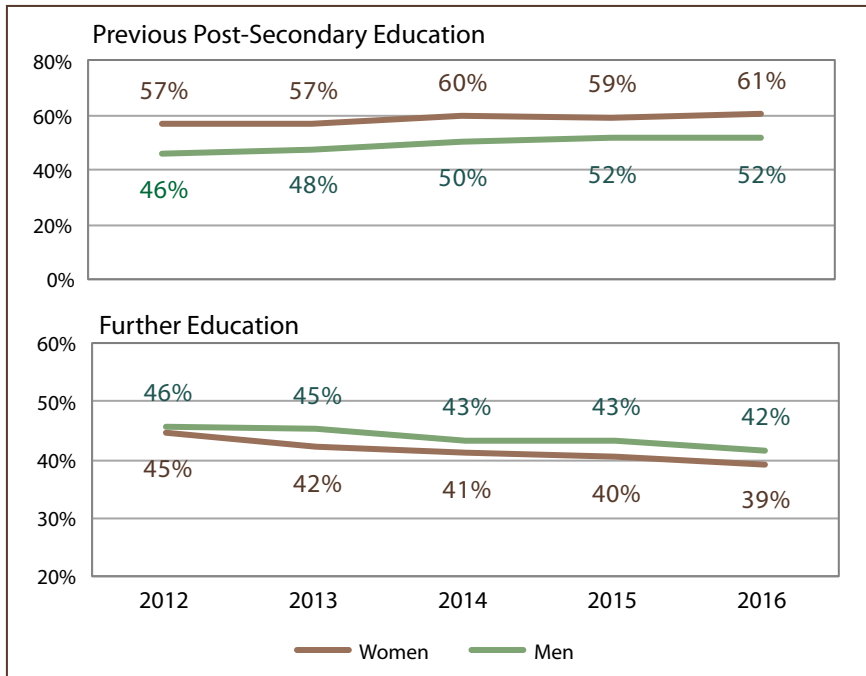
### Further education by program

*Over two-thirds of respondents from Arts and Sciences programs continued studying.*

## Over Time

Since 2012, the percentage of respondents who took further education has declined somewhat, from 45 percent to 40 percent. The decline for women is a little steeper (from 45 to 39 percent) than that of men (46 to 42 percent). The decline is consistent across all age groups.

Over the same period, there has been an increase in the percentage of respondents reporting they took previous post-secondary education, from 52 to 56 percent. The increase over time is not huge, but it is steady. There are differences by gender, with women being much more likely to have taken previous education.

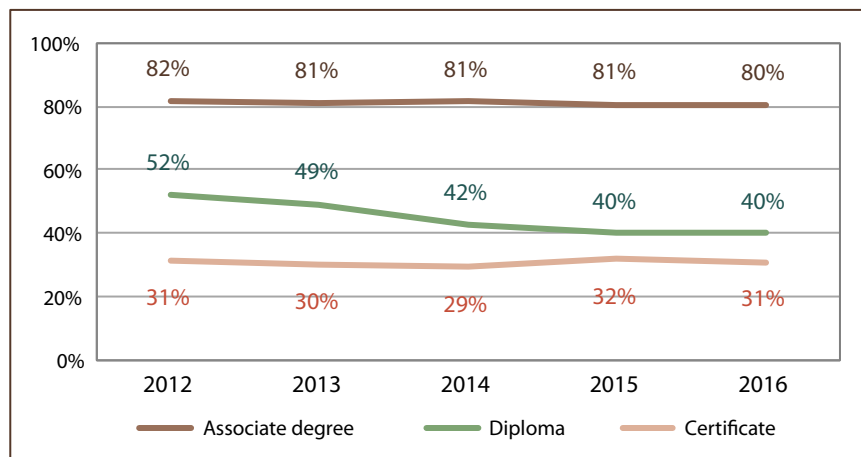


**Previous post-secondary education and further education over time**

The rate of previous education has increased as the rate of further education has declined.

Notes: Further education includes studies taken any time after leaving the original program. Years shown are the survey years.

The overall decline in the rate of further education is not reflected in the rates of those who took associate degree or certificate programs—it is a result of a sharp drop in the percentage of former diploma students who go on to further studies. Their rate was 52 percent in 2012; in 2016 it was 40 percent.



**Further education by credential over time**

The percentage of former diploma students taking further education has dropped sharply.

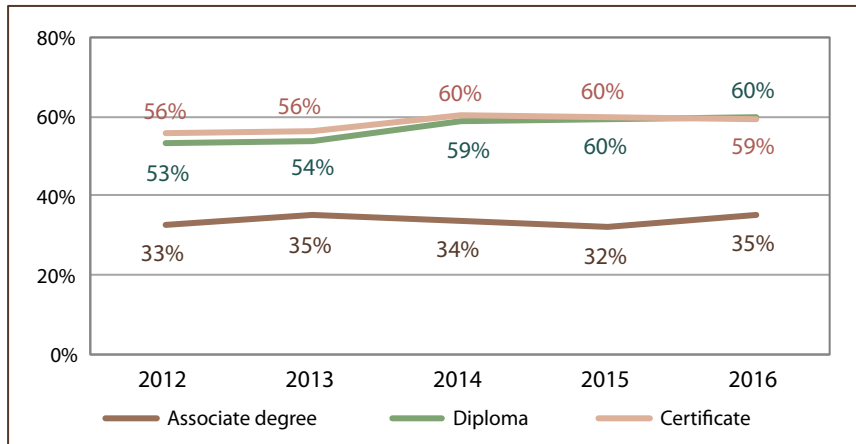
Notes: Credentials have been grouped so that *Associate degree* includes university transfer programs, *Diploma* includes advanced and post-degree diplomas, and *Certificate* includes post-degree certificates. Further education includes studies taken any time after leaving the original program. Years shown are the survey years.

The decline for former diploma students was not associated with a particular program—all program groups with a diploma credential showed a decline in further education rates. Neither was it explained by gender, age group, study region, nor region of residence at the time of the survey.

There is possibly some relationship to the increase in international students that has occurred, from approximately 4 percent of respondents in 2012 to 8 percent in 2016. In 2016, over two-thirds (69 percent) of international students were in

diploma programs. The rate of further education for international diploma students was lower than that of other diploma students and the decline since 2012 is actually steeper, from 48 to 23 percent. However, the numbers of international students are too low to do more than shift the rate of further education for diploma students down by one percentage point.

The decline in further education could be partially explained by an increase in previous post-secondary education for diploma respondents, although the change is not large enough to offset the drop. The other credential types showed modest increases in previous education.



*Previous post-secondary education by credential over time*  
The rate of previous education increased for all credential types.

Notes: Credentials have been grouped so that *Associate degree* includes university transfer programs, *Diploma* includes advanced and post-degree diplomas, and *Certificate* includes post-degree certificates. Years shown are the survey years.

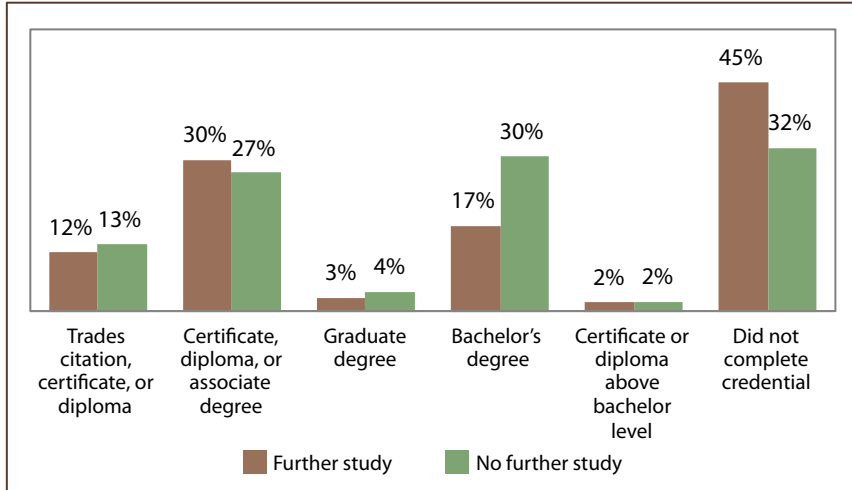
The drop in further education participation for diploma respondents could be the result of the combination of a number of things, including external factors, such as changes in employment opportunities or the cost of living in major urban centres.

## What were their pathways to continued learning?

### Previous Education

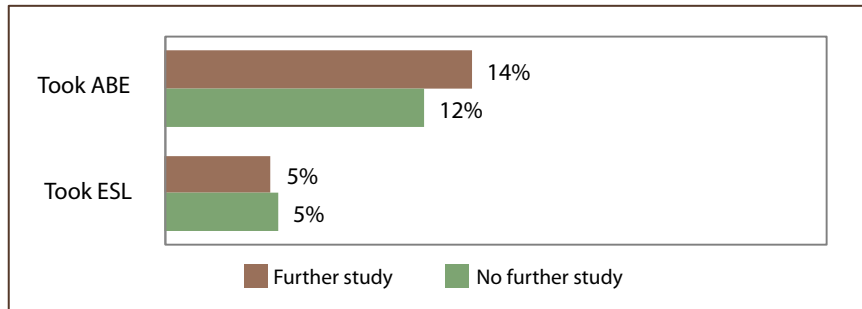
Over half (51 percent) of the respondents who took further education reported they had taken previous post-secondary studies *before* their associate degree, diploma, or certificate programs. A higher percentage (60 percent) of those who did not go on to further education reported previous post-secondary studies.

Many respondents had earned credentials from previous post-secondary studies. Of those who continued their education *after* taking associate degree, diploma, or certificate programs, over half (55 percent) had earned credentials from previous studies. This percentage is higher (68 percent) for those who did not take further education.



Note: Percentages are based on those who said they had taken previous post-secondary education.

Respondents were asked if they had ever taken upgrading, access, bridging, or other preparatory courses, such as Adult Basic Education (ABE) for upgrading in math, English, or science or English language training (ESL). Comparing those who took further education with those who did not, there was not much difference between the percentages of those who had taken these types of courses.



Notes: ABE is Adult Basic Education for upgrading in math, English, or science. ESL stands for English as a Second Language training.

### Previous credentials earned

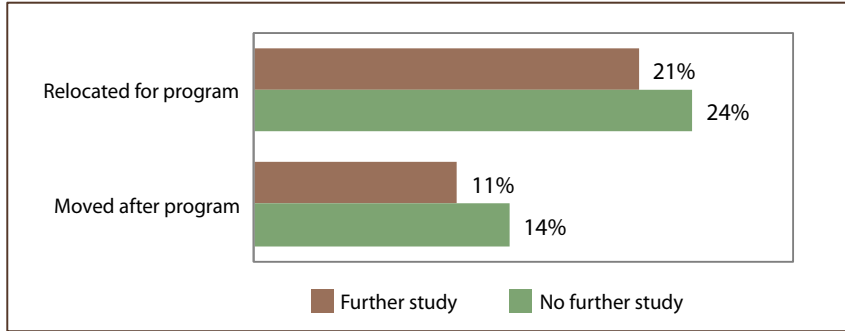
Respondents who did **not** take further education were more likely to have had previous post-secondary credentials than those who took further education.

### Preparatory studies

The rates of preparatory studies were similar for those who took further education and those who did not.

## Location

Each year a number of respondents report they relocated from their home community to take an associate degree, diploma, or certificate program. Those who continue studies after those programs are somewhat less likely to have moved from home in the first place. Based on their location at the time of the survey, the group who took further education was also less likely to move after their associate degree, diploma, or certificate programs.

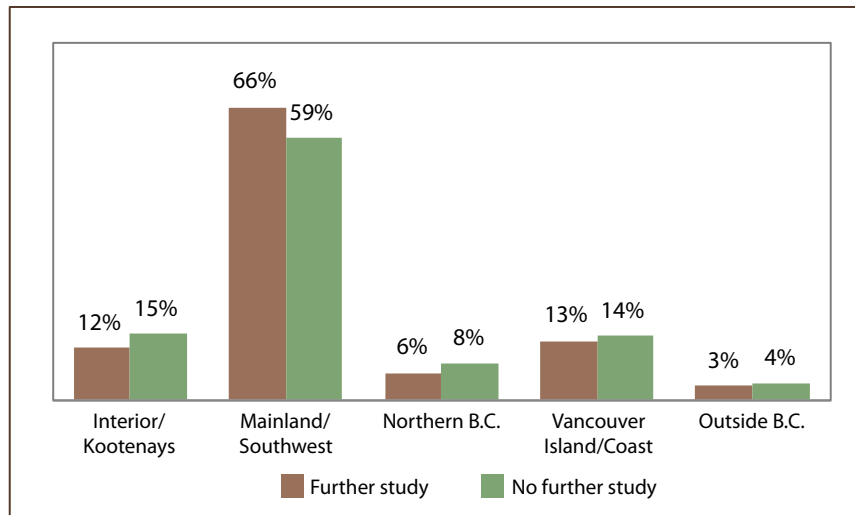


Notes: "Moved" is derived by comparing respondents' study regions (based on institution location) with their regions of residence (based on respondents' postal codes) at the time of the survey. Respondents whose postal codes were invalid or unknown (10 percent) were not included in the calculation of percentages.

The majority of the respondents to the Student Outcomes survey took their associate degree, diploma, or certificate programs in the Mainland/Southwest region and very few moved afterward. Those who continued their studies were more likely than those who did not to remain in the Mainland/Southwest region. In addition, a number of those from other regions in B.C. moved to the Mainland/Southwest to continue their studies. At the time of the survey, two-thirds of those who took further studies were in that region.

**Relocated for program and moved afterward**

Compared with those who did not take further education, respondents who did were less likely to move.



Notes: Coding into regions was based on respondents' postal codes at the time of the survey. Respondents whose postal codes were invalid or unknown (10 percent) were not included in the calculation of percentages.

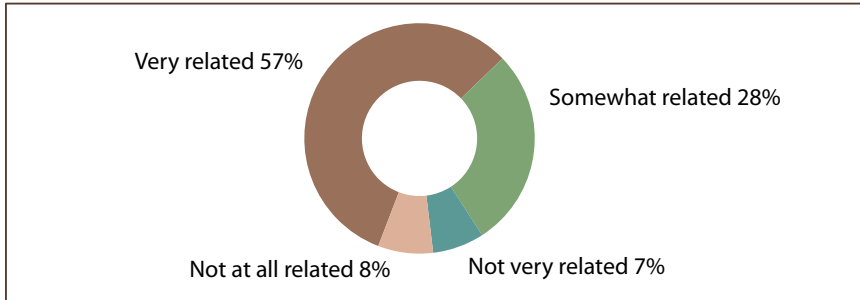
**Location at the time of the survey**

Two-thirds of the respondents who took further education did so in the Mainland/Southwest region.

**Destination Studies**

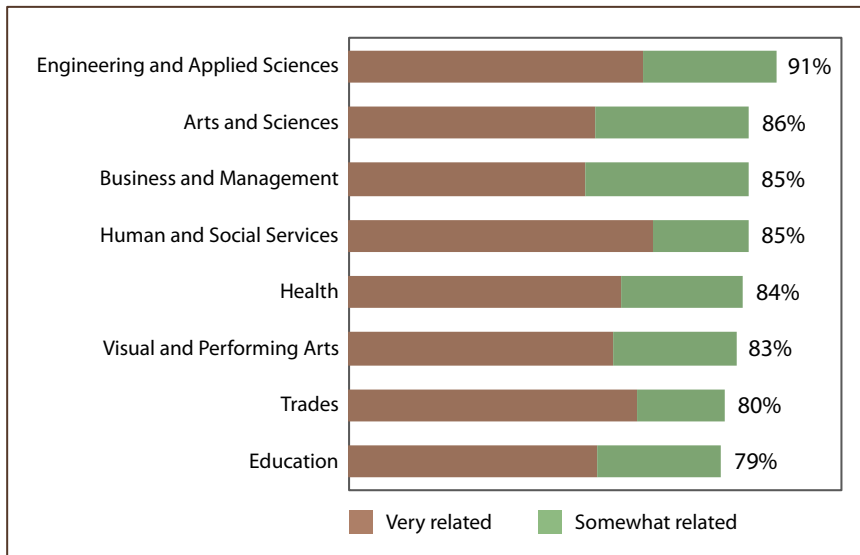
The actual field of study for those who continued their education was not reported; however, respondents were asked how related their further studies were to the programs they recently left. Overall, 85 percent of respondents said their subsequent studies were *very* or *somewhat related* to their programs.





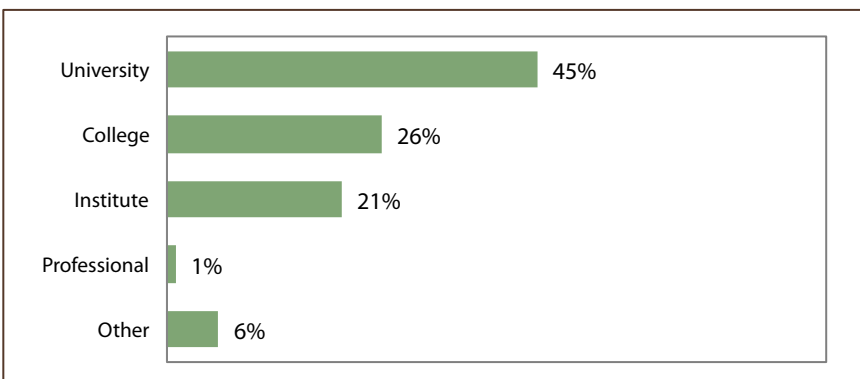
Note: Percentages are based on those who took further education.

Former Engineering and Applied Sciences students were the most likely to report that their further studies were related to their original programs: a very large majority (91 percent) said that their further education was *very* or *somewhat related* to the programs they took.



Notes: Percentages are based on those who took further education. Programs are grouped using the BC CIP Cluster, a roll-up based on the Classification of Instructional Programs (CIP 2011).

The largest portion (45 percent) of those who continued their studies did so at a university, although significant numbers went to colleges or institutes. A few people took specialized training for professionals, such as Certified Professional Accountant or Medical Radiology Technician. Others took courses for personal interest, first aid training, or for a trade through a private institution.



Note: Percentages are based on those who took further education.

### Subsequent education related

*A large majority said their further studies were related to their original programs.*

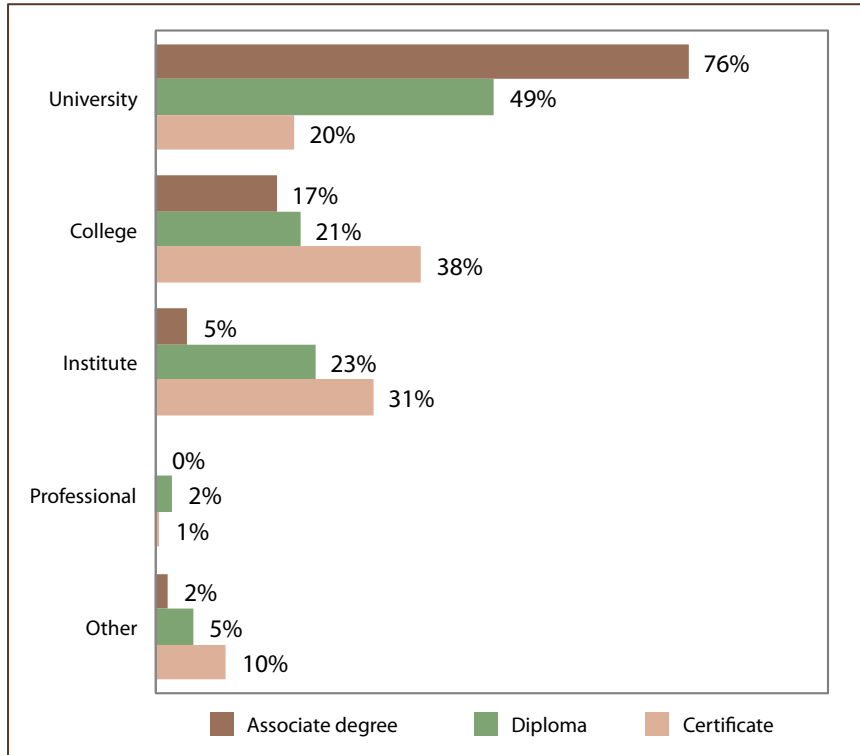
### Subsequent education related, by program

*Former Engineering and Applied Sciences students were the most likely to report their further study was related to their original programs.*

### Type of institution attended for further education

*The largest proportion of those who took further studies did so at a university.*

There are differences by credential: those who took associate degree programs (which include university transfer) were most likely to continue at a university; those who took certificate programs were most likely to go to a college or institute for their further studies. Almost half of respondents from diploma programs went to a university.



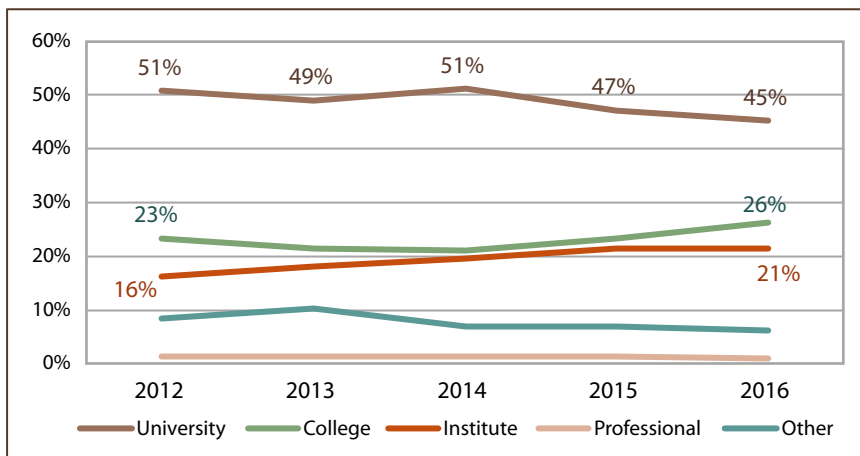
**Type of institution attended for further education, by credential**

Respondents from associate degree programs were the most likely to continue their studies at a university.

Notes: Percentages are based on those who took further education. Credentials have been grouped so that Associate degree includes university transfer programs, Diploma includes advanced and post-degree diplomas, and Certificate includes post-degree certificates.

## Over Time

Overall, there has been a decline in university as a destination for further study, and a slight increase in choosing colleges or institutes.

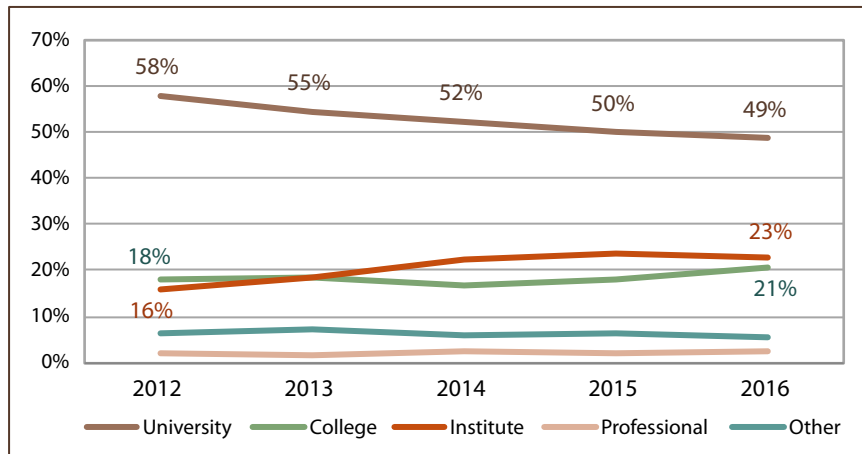


**Type of institution attended for further education, over time**

There has been a decline in university as a destination for further study.

Notes: Percentages are based on those who took further education. Years shown are the survey years.

The decline in the choice of university as a destination was largely due to former diploma students, whose rates of further education at a university dropped sharply between 2012 and 2016. Over the same period, there was an increase in the percentages of these students choosing a college or institute for further education. If the results for college and institute are combined, the increased percentage could account for most of the decline in choice of university.



**Type of institution attended for further education by diploma students, over time**

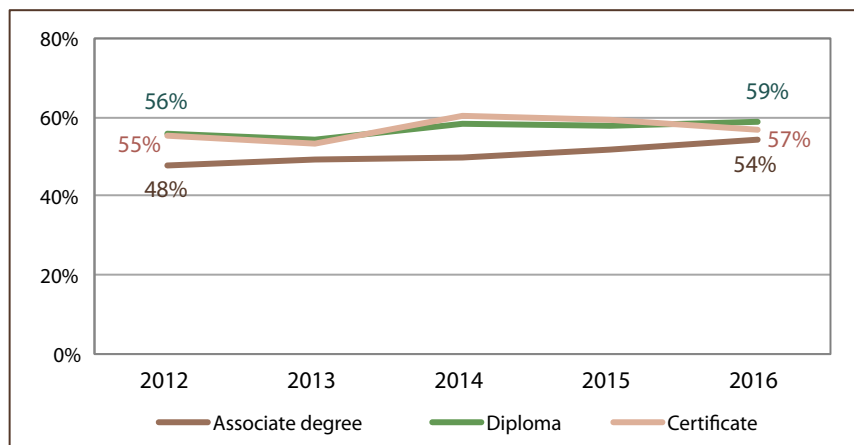
*A shift in the further education choices of former diploma students resulted in a decline in university attendance.*

Notes: Percentages are based on former diploma students who took further education. Diploma includes advanced and post-degree diplomas. Years shown are the survey years.

There was year-to-year variation in the destination institution choices of respondents with other credentials, but the overall changes were modest, showing no significant decline or increase.

Over time, those who went on to further studies became somewhat more likely to say their studies were *very related* to their original program. This held true for respondents from all credential types; overall the percentage saying their further studies were *very related* went from 54 to 57 percent.

Each credential group showed a modest increase in the percentage who said their further studies were *very related* to their original program—former associate degree students reported the greatest increase in relatedness over five years.

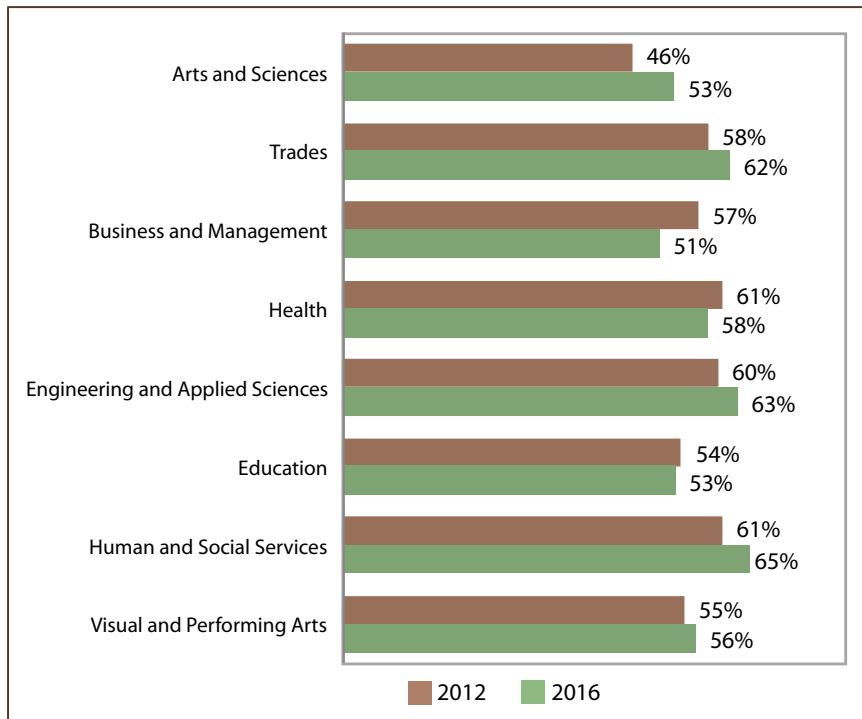


**Further studies very related to original program, by credential, over time**

*Former associate degree students reported the greatest increase in relatedness.*

Notes: Percentages are based on those who took further education. Credentials have been grouped so that *Associate degree* includes university transfer programs, *Diploma* includes advanced and post-degree diplomas, and *Certificate* includes post-degree certificates. Years shown are survey years.

While all credential groups showed a slight increase in the percentage of respondents who said *very related*, not all programs did. For example, Business and Management programs showed a slight drop over the five year period, to 51 percent. Arts and Sciences programs started with the lowest rating (46 percent) in 2012 but showed a significant increase to 53 percent in 2016.



**Further studies very related to original program, by program**

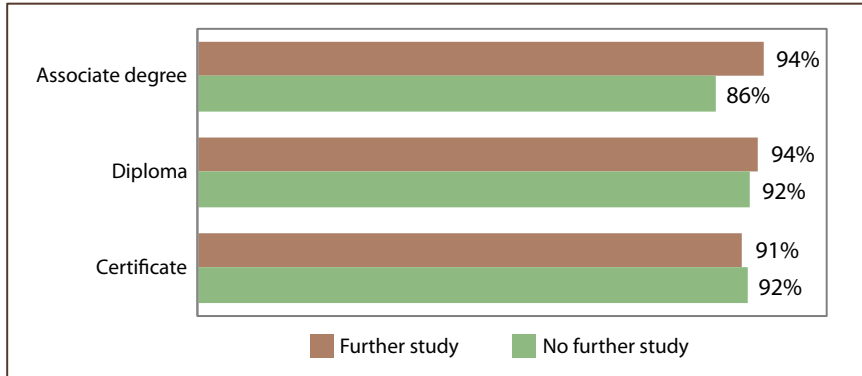
Five of the eight program groups showed an increase in respondents' ratings of relatedness between 2012 and 2016.

Notes: Percentages are of those who said their further study was *very related* to their original program, based on respondents who took further education. Programs are grouped using the [BC CIP Cluster](#), a roll-up based on the Classification of Instructional Programs (CIP 2011). Years shown are survey years.

## What was their experience?

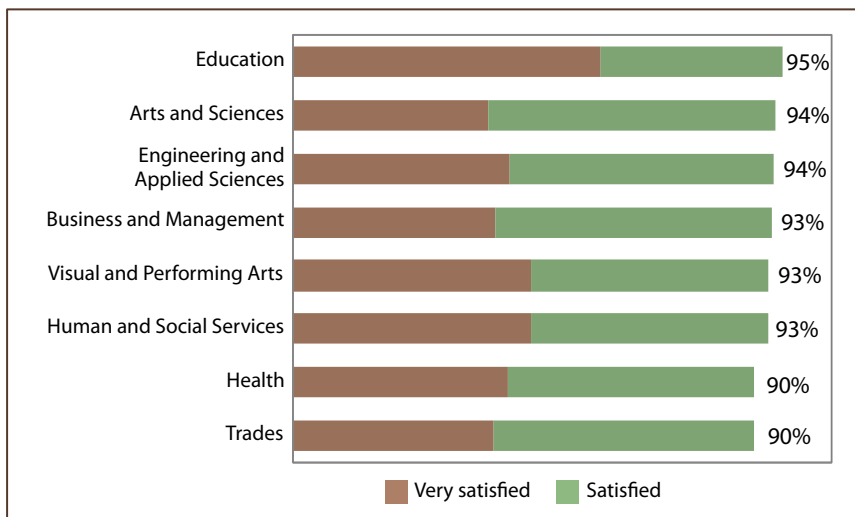
### *Satisfaction with Education*

Most respondents reported high levels of satisfaction with the programs they left. Those who took associate degree programs and went on to further studies were much more likely than their non-studying counterparts to say they were *very satisfied* or *satisfied* with the education they received.



Notes: Percentages are of those who said they were *very satisfied* or *satisfied* with the education they received. Credentials have been grouped so that *Associate degree* includes university transfer programs, *Diploma* includes advanced and post-degree diplomas, and *Certificate* includes post-degree certificates.

Regardless of program, those who took further studies were likely to say they were *very satisfied* or *satisfied* with their education. Satisfaction levels ranged narrowly from former Education students (at 95 percent) to respondents from Health or Trades programs (both at 90 percent).



Notes: Percentages are based on respondents who took further education. Further education includes studies taken any time after leaving the original program. Programs are grouped using the [BC CIP Cluster](#), a roll-up based on the Classification of Instructional Programs (CIP 2011).

***Satisfied with education, by credential***

*Those who took further studies tended to report higher satisfaction with their original program.*

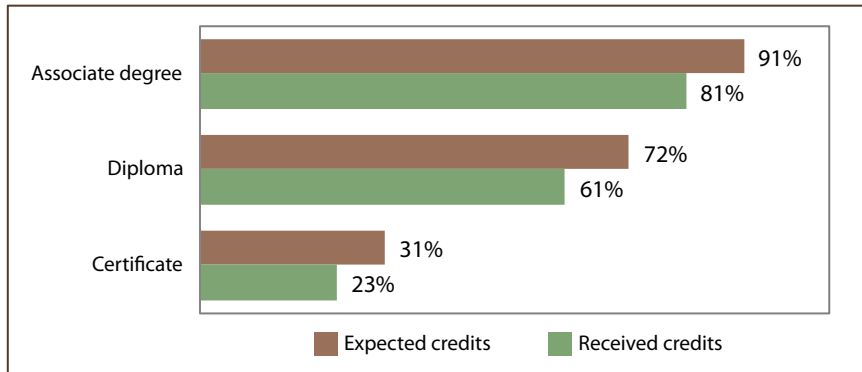
***Satisfied with education, by program***

*Former students from Education programs reported the highest levels of satisfaction.*

***Transfer Credits***

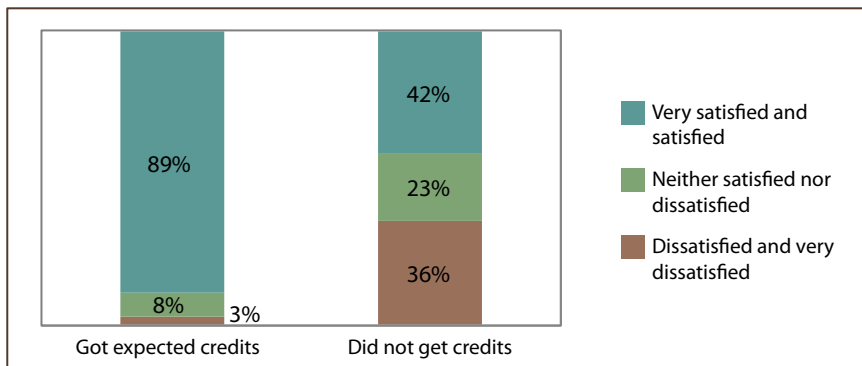
Many of the respondents who took further studies expected to get course transfer credits. Two-thirds (67 percent) of those who continued at a different post-secondary institution expected transfer credits. Generally, those who anticipated credits received them: 87 percent of those who expected credits got the transfer credits they thought they would. Stated another way, 57 percent of all those who took further studies at a different post-secondary institution received transfer credits.

There were differences by credential. Respondents from associate degree programs had high expectations for course transfer credits and most of those expectations were met.



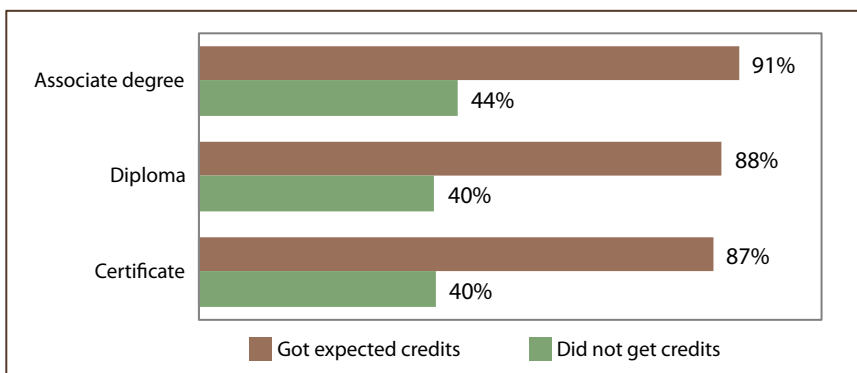
Notes: Percentages are based on respondents who took further education at a different post-secondary institution. Credentials have been grouped so that *Associate degree* includes university transfer programs, *Diploma* includes advanced and post-degree diplomas, and *Certificate* includes post-degree certificates.

The respondents who expected to get course transfer credits were asked how satisfied they were with the transfer process. Those who got the credits they expected were quite satisfied—those who did not get the credits they expected were not as happy with the transfer experience.



Note: Percentages are based on respondents who took further education at a different post-secondary institution and who expected to get course transfer credits.

Respondents from associate degree programs, who were the most likely to expect and receive transfer credits, were the most likely to say they were *very satisfied* or *satisfied* with the transfer experience.



Notes: Percentages are of those who said they were *very satisfied* or *satisfied* with the transfer experience, based on respondents who took further education at a different post-secondary institution and who expected to get course transfer credits. Credentials have been grouped so that *Associate degree* includes university transfer programs, *Diploma* includes advanced and post-degree diplomas, and *Certificate* includes post-degree certificates.

### **Expected and received course transfer credits**

*Respondents from associate degree programs were the most likely to get transfer credits.*

### **Satisfaction with transfer experience**

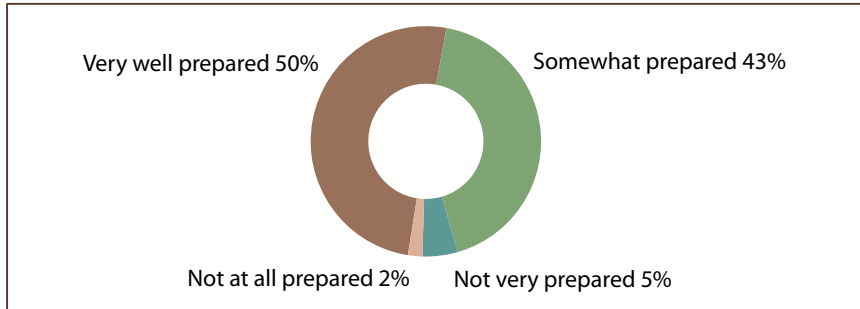
*Respondents who got the course credits they expected were happy with the transfer experience.*

### **Satisfaction with transfer experience, by credential**

*Respondents from associate degree programs were the most likely to say they were satisfied with the transfer experience.*

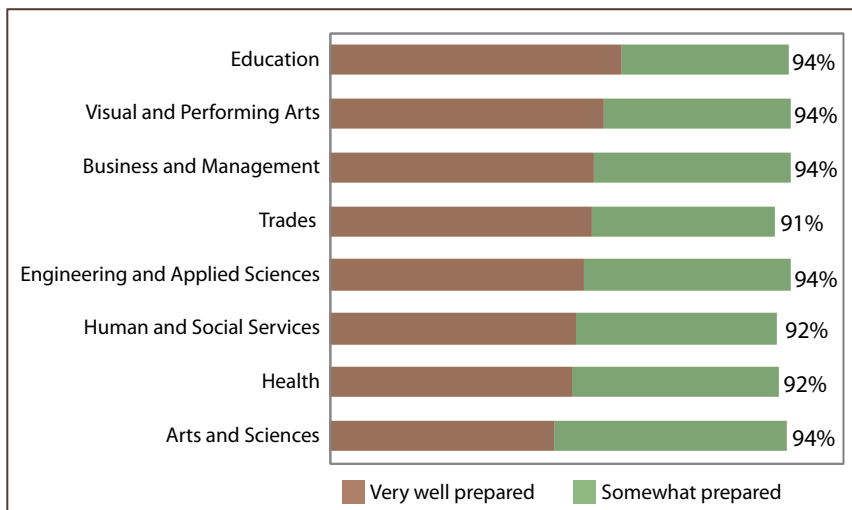
## Prepared for Further Studies

Most of the respondents who continued their studies said they were prepared for further study by their associate degree, diploma, or certificate programs.



Note: Percentages are based on those who took further education.

There were similar results by program. Most respondents from each program group said they were prepared (*very well* or *somewhat prepared*) for further studies. However, there were some differences in the rating of *very well prepared* by program. Former Education students were the most likely to say they were *very well prepared* and former Arts and Sciences students were the least likely.



Notes: Percentages are based on those who took further education. Further education includes studies taken any time after leaving the original program. Programs are grouped using the [BC CIP Cluster](#), a roll-up based on the Classification of Instructional Programs (CIP 2011).

### Prepared for further studies

Most respondents who took further education said they were prepared for those studies.

### Prepared for further studies, by program

Former Education students were the most likely to say they were very well prepared for further education.

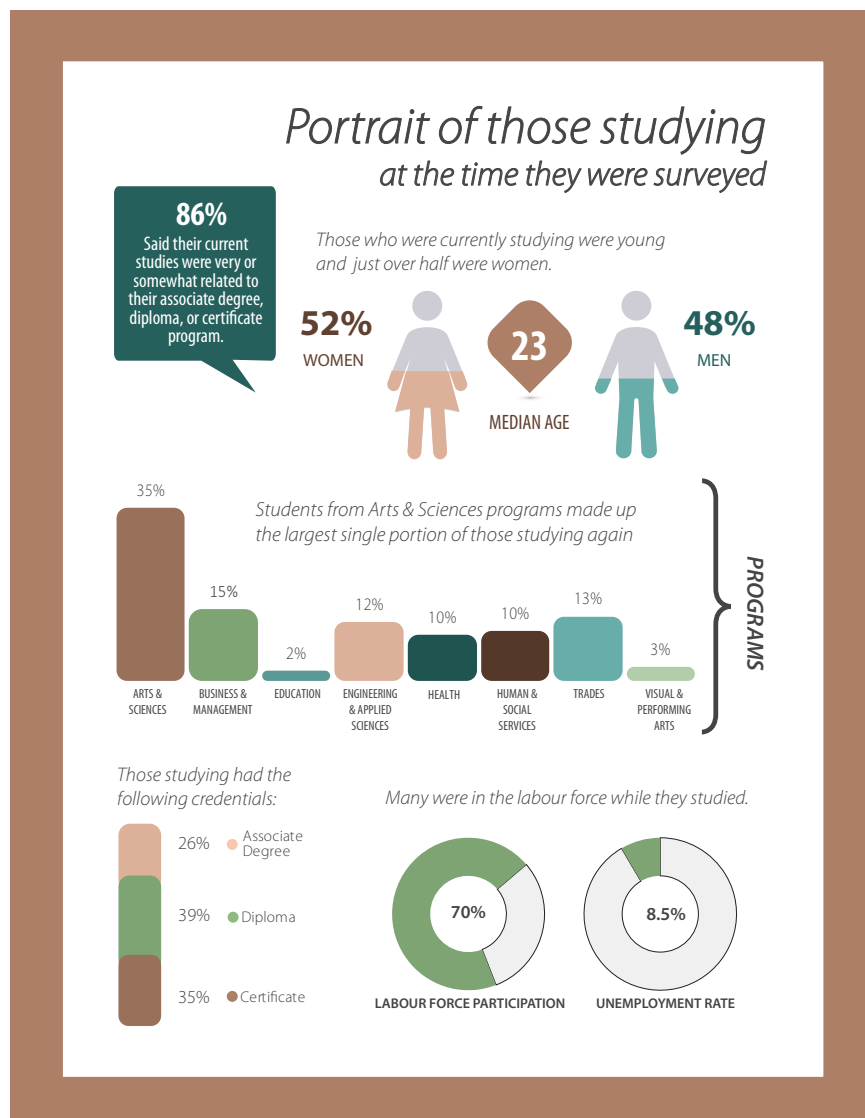
## Portrait of Currently Studying

“Currently studying” refers to those who were studying at the time of the survey.

In 2016, 34 percent of respondents were enrolled in programs of study when they did the survey. The typical student who was currently studying was somewhat more likely to be female.<sup>5</sup> Respondents who were currently studying were significantly younger, on average, than those not studying: their median ages were 23 and 26, respectively.

Understandably, they were also much less likely to be employed or looking for work—their labour force participation rate was 70 percent, compared with 96 percent for those not studying. Among respondents who were in the labour force, those who were currently studying had a lower unemployment rate than those not studying: 8.5 percent compared with 9.4 percent.

The largest portion of those studying came from an Arts and Sciences program, although people from all types of programs continued studying. Overall, 86 percent of those currently enrolled said their studies were *very* or *somewhat* related to their original program.



### Portrait of Currently Studying

A picture of those who were studying again at the time they were surveyed.



## Conclusion

Whether students go on to take baccalaureate studies at a university or take courses for personal interest, further study is an important outcome of associate degree, diploma, and certificate programs. At the time they were surveyed, over one-third of respondents to the 2016 Diploma, Associate Degree, and Certificate Student Outcomes Survey were studying again. In total, 40 percent were taking or had taken further studies, since leaving their programs.

Younger students, particularly women under 25, were much more likely to continue their education than older students. Of those 25 and over, men had a slightly higher rate of further study. Those who took their original program in the Mainland/Southwest region were the most likely to continue their studies.

Former students from associate degree and university transfer programs went on to further education at a very high rate. The programs that most often have an associate degree credential are Arts and Sciences programs, and a large percentage of respondents from those programs went on to further study.

Previous post-secondary education meant less likelihood of continuing, particularly for those who had achieved credentials from their earlier study. Those who kept studying were not as mobile—they had been somewhat less likely to relocate for their associate degree, diploma, or certificate programs and were less likely to move afterward.

The largest percentage of those who continued their education went to a university for their further studies, although significant numbers went to colleges or institutes. The remainder took a variety of professional and personal interest studies.

Respondents from associate degree programs who went on to further education were the most satisfied with the education they received from their original program. By program, the former Education students were the most likely to say they were *very satisfied*. They were also the ones who gave the highest ratings to how well they were prepared for their further education.

Subsequent study was often judged to be *very related* to the associate degree, diploma, and certificate programs that had been taken; the highest rate was reported by respondents from Engineering and Applied Sciences.

Many of the respondents who took further studies expected to get course transfer credits; those from associate degree programs were the most likely to expect and to get transfer credits. The respondents who got the credits they expected were, not surprisingly, the most satisfied with their transfer experience.

Over the past five survey years, there has been a decline in the percentage of respondents taking further studies. At the same time, there has been a modest increase in the rate of respondents who had previous post-secondary education, although it is not enough to account for the drop in further study.

The decline in the rate of further education is not reflected in the rates of those who took associate degree or certificate programs—it is a result of a sharp drop in

the percentage of former diploma students who go on to further studies. For diploma students who did continue, there was a decline in their choice of university as a destination for further study. Over the same period, there was an increase in the percentages from diploma programs choosing a college or institute for further education.

At the same time as participation in further education was declining for diploma students, each credential group showed a modest increase in their *very related* ratings—they were more likely to report their further studies were *very related* to the associate degree, diploma, and certificate programs they had taken earlier. Former associate degree students reported the greatest increase in relatedness over five years.

Although an increase in previous post-secondary education did not entirely offset the decline in further studies, the rates of repeated post-secondary participation remain high. For many respondents, their educational pathway went from previous post-secondary education (perhaps including preparatory courses) through their associate degree, diploma, and certificate programs to subsequent study, most likely at a university.

## About BC Student Outcomes

The annual Diploma, Associate Degree, and Certificate Student Outcomes (DACSO) Survey is one of the BC Student Outcomes surveys that collects information from former post-secondary students. Those who respond are asked to evaluate their educational experiences and to talk about their employment and further education. For more information, see the [BC Student Outcomes](#) website.

The BC Student Outcomes surveys are conducted with funding from the Ministry of Advanced Education, Skills and Training, the participating British Columbia post-secondary institutions, and the Industry Training Authority.

### ENDNOTES

1. There were 14,784 respondents to the 2016 Diploma, Associate Degree, and Certificate Student Outcomes Survey out of 28,134 former students eligible for the survey—the response rate was 52.5 percent.
2. The GPAs submitted by institutions were the students' cumulative grade point averages for the time spent at the institution. All submissions have been standardized to a 4-point scale. Note that GPA was not available for 11 percent of respondents.
3. In the analysis for this paper, credentials have been grouped so that associate degree includes university transfer. In the 2016 survey, 10 percent of respondents were from associate degree programs and 2 percent were from university transfer programs.
4. Of the respondents in programs that offered an associate degree (or were university transfer), 81 percent were Arts and Sciences students.
5. Respondents to the 2016 survey were 53 percent female and 47 percent male. There was no real difference between the rates at which men and women were currently studying: 34 and 33 percent, respectively.