

# Stepping Out:

A look at the mid-program transfer patterns of BC post-secondary students

*Prepared for BCCAT by Plaid Consulting*

*January 2020*



**BCCAT**

# Stepping Out:

A look at the mid-program transfer patterns of BC post-secondary students

*Prepared for BCCAT by Plaid Consulting*

*© BCCAT January 2020*



BC COUNCIL ON ADMISSIONS & TRANSFER  
Web/Email: [bccat.ca](http://bccat.ca) | [bctransferguide.ca](http://bctransferguide.ca) | [info@bccat.ca](mailto:info@bccat.ca)  
Twitter: [@bccat\\_org](https://twitter.com/bccat_org) | [@bctransferguide](https://twitter.com/bctransferguide)

# Executive Summary

This project focuses on the student practice of “stepping out” to earn transfer credits at a second or additional (“host”) institution, while continuing in a program at their first (“home”) institution. It is based on data from a cohort of students who graduated in 2015/2016 from any of the 21 public institutions in British Columbia that report to the British Columbia Central Data Warehouse (CDW). Since there is limited research on visiting students in a domestic context, this report aimed to understand both general themes and a variety of research questions related to the following areas:

- Volume of transfer credits being imported to the home institution, generally, as well as by course and student disciplines;
- The number and type of host institutions at which the imported credits were earned;
- The level of credits being transferred;
- Domestic/international status of students requesting credit;
- Identifiable patterns to the courses transferred, such as semester of enrolment, number of semesters that transfer courses are taken in, and common disciplines resulting in assigned or unassigned transfer credit; and,
- Whether the student attended the host institution, either previously or in the future.

For this study, the student’s home institution was defined as the first institution in which the student appeared in the CDW data. As the CDW data cannot capture student intentions, it is our belief that this method is the best way to identify a student’s home institution for this type of study; we acknowledge that it is imperfect and may not fully represent a student’s long-term intended study path. Our total analysis cohort included 21,590 students. Within the CDW data, there were 12,000 transfer courses and associated credits. About half of the transfer courses came from another CDW institution (the remaining half was a mix of non-CDW institutions in BC, institutions outside of BC, and unknown institutions).

Of the 21,590 students in the analysis cohort, just over 11% stepped out. Stepping out was more common for domestic students than international, and more common for female than male students. We may be underrepresenting stepping out by international students, as a number of private institutions which cater primarily to international students are not present in the CDW data. Students who stepped out tend to have a lower grade point average across all credential types. Those who stepped out did so fairly quickly: more than 60% stepped out before their third year in the system. The largest group of stepping out students was in business and management programs, followed by English and the social sciences, and mathematics and statistics.



*Of the 21,590 students in the analysis cohort, just over 11% stepped out. Stepping out was more common for domestic students than international, and more common for female than male students.*

Our analysis shows that there are two groups within the stepping-out data.

One group could be viewed as traditional visiting students who pursued one or two courses at a host institution and remained connected to the home institution where they were pursuing their credential. Within this group, there was a smaller subgroup pursuing courses at a higher level through stepping out. This may indicate that they are taking courses not available at their home institution.

The other group pursued a larger number of credits, with some students completing a credential at a host institution before returning to their home institution. This complex pathway indicates that some students are pursuing multiple credential options.

Forty-four percent of students who stepped out received transfer credit, and only 34% of successfully completed stepping out credits received transfer credit at the home institution. This suggests either that acquiring transfer credits was not the goal of students who stepped out, or that institutions were reluctant to award transfer credit. This area deserves further research.

There was strong representation in the stepping out data from institutions with larger online presences – particularly TRU and BCIT, which were the largest receivers of stepping out students. As the data provided did not specify whether a course was offered online or in the classroom, we were unable to determine their impact.

# Table of Contents

<b>EXECUTIVE SUMMARY</b>	<b>1</b>
Table of Figures	4
<b>BACKGROUND</b>	<b>5</b>
<b>RESEARCH QUESTIONS</b>	<b>5</b>
<b>DATA &amp; METHODOLOGY</b>	<b>6</b>
Transfer Credits	8
<b>RESULTS</b>	<b>9</b>
Students	9
Home vs. Host Institutions for Stepping Out Students	18
Course Enrolments	18
Transfer Credits	25
Disciplines	28
<b>CONCLUSION</b>	<b>31</b>
<b>REFERENCES</b>	<b>33</b>

# Table of Figures

<b>Figure 1:</b>	Domestic/international status of students who stepped out vs. those who did not	10
<b>Figure 2:</b>	The number and proportion of stepping out students by credential type	11
<b>Figure 3:</b>	Average letter-grade point average of students who stepped out vs. those who did not, by credential pursued at time of entry	11
<b>Figure 4:</b>	Average percentage average of students who stepped out vs. those who did not, by credential pursued at time of entry	12
<b>Figure 5:</b>	The number of students who stepped out, by year of first entry into a CDW institution	12
<b>Figure 6:</b>	The number of years of enrollment before the student's first stepping out experience	13
<b>Figure 7:</b>	The number and proportion of students who stepped out, by home institution	14
<b>Figure 8:</b>	Credential patterns of stepping out students	15
<b>Figure 9:</b>	The number and proportion of stepping out students, by CIP cluster of the student's program at time of entry	16
<b>Figure 10:</b>	Stepping out rates, by CIP2 code for student's program at time of entry	17
<b>Figure 11:</b>	Percentages of students stepping out, by home and host institution	19
<b>Figure 12:</b>	The number and proportion of course enrolments by stepping out status and course institution	20
<b>Figure 13:</b>	The number of students by number of courses taken at host institution	20
<b>Figure 14:</b>	Average number of courses attempted and completed for stepping out students vs. those who did not step out	21
<b>Figure 15:</b>	The number and percent of host institution enrolments, by passed, failed, and withdrawn status	22
<b>Figure 16:</b>	Number and proportion of enrolments, by start month of course	22
<b>Figure 17:</b>	The number and proportion of all enrolments at a host institution taken by incoming stepping out students	23
<b>Figure 18:</b>	The number and proportion of all home institution student enrolments taken at a host institution	24
<b>Figure 19:</b>	Number and proportion of total transfer credits by sending institution type	25
<b>Figure 20:</b>	Proportion of received transfer courses at each course year level for students who stepped out	26
<b>Figure 21:</b>	Comparison of sending and receiving course year level for matched stepping out transfer credits	26
<b>Figure 22:</b>	Comparison of stepped out credits passed to stepped out transfer credits granted	27
<b>Figure 23:</b>	The proportion of enrolled courses at host institutions and transferred courses for students who stepped out, classified by the top 20 CIP2 codes	29
<b>Figure 24:</b>	Number of students by CIP cluster of the student's program at time of entry and the CIP cluster of courses taken at the host institution while stepping out	30



# Background

This project follows up on a previous report on the policies and practices related to visiting students at British Columbia (BC) post-secondary institutions (I.S. Educational Consulting, 2015). The focus of the current study was to identify and analyze significant trends or issues associated with the student practice of “stepping out” to earn transfer credits at a second or additional (“host”) institution while continuing in a program at their first (or “home”) institution. These mid-program requests for recognition of transfer credit must be considered in light of the home institution’s residency policy and any relevant policy pertaining to student status (e.g. visiting or international/visa student status).

As noted by I.S. Educational Consulting (2015), the trend towards increasing student mobility can have an impact on a broad range of administrative decisions - particularly enrolment and course planning. There is limited research into visiting students in a domestic context; this study aims to better understand the dynamics of this student population, and to inform the development of policies and practices that will support their success.

This report delves into a series of research questions, as shown in the section that follows. At a high level, the analysis focuses on students, enrolments, and transfer credits. We begin with a review of the research questions and the data provided to answer them, provide the high-level results, and finish by discussing our findings and context.

## Research Questions

The goal of this project is to better understand stepping out and any possible barriers to successful credit transfer in the context of stepping out within the British Columbia Transfer System (BCTS). Thus, we looked at general information about students who stepped out, the courses they took, and the transfer credits they accumulated through this process. We also addressed some specific research questions. Those specifics were:

- What is the volume of credits being imported back to the home institution (e.g., a series of single courses or a one-time transfer of a block);
- What is the volume of credits being imported by course and student disciplines;
- What is the number and type of institution at which the imported credits were earned;
- What is the level of credits being transferred (i.e., lower- vs. upper-division = note that some credits could be one level at the home institution and a different level at the host institution);
- What is the status of the students making these requests (i.e., domestic or international);
- Are there any identifiable patterns to the courses transferred – for example:
  - patterns in which semesters transfer courses are taken in;
  - number of semesters that transfer courses are taken in;
  - the most common disciplines and/or subjects that result in assigned vs. unassigned transfer credit; and
  - had the student attended the host institution previously, or does the student attend the host institution again in the future?

# Data & Methodology

To answer the research questions above, we requested data from the British Columbia Post-Secondary Central Data Warehouse (CDW; Government of British Columbia, n.d.). The CDW covers 21 of the 25 public post-secondary institutions within BC. Excluded from this group are the four public institutions covered by the province's *University Act* (1996) – Simon Fraser University and the Universities of British Columbia, Northern British Columbia, and Victoria – and private members of the BC Transfer System (BCTS). These institutions do not submit data to the CDW. Additionally, the *University Act* institutions typically require students to seek and be granted a letter of permission to attend another institution in parallel with the home institution, for valid academic reasons (see, as examples, Simon Fraser University, n.d. and the University of Victoria, n.d.). A number of the private institutions cater particularly to international students, and so our data may be under-representing stepping out by international students.

Our cohort consisted of students who graduated with an undergraduate certificate, diploma, or bachelor's degree in the 2015/2016 academic year (September 1, 2015 to August 31, 2016) from the first institution in which they were associated within the CDW. The first institution with which they were associated in the CDW was determined by selecting the earliest session start date when the student was registered at the institution.

The data were provided by the CDW as five primary datasets and six secondary definitions datasets (**Table 1**):

**TABLE 1: List of Central Data Warehouse datasets**

Primary Datasets	
Student sessions	One record for each session in which a student is enrolled between their first entry into the CDW and the end of the 2015/2016 academic year. Each session includes information on the student's primary academic program. Information from ALL institutions at which a student was enrolled is included.
Student transfer credits	One record for each course for which a student is granted transfer credit between their first entry into the CDW and the end of the 2015/2016 academic year. Information from ALL institutions at which a student was enrolled is included.
Student enrolments	One record for each enrolment in which a student is enrolled between their first entry into the CDW and the end of the 2015/2016 academic year. Information from ALL institutions at which a student was enrolled is included.
Student information	One record per student, including information on the student's gender, birthdate, and postal code at first contact with the home institution. Information from only the first institution at which a student was enrolled in the CDW is included. (Additional detail on this table is below.)
Student credentials	One record per credential received by the student between their first entry into the CDW and the end of the 2015/2016 academic year. Information is included from ALL institutions at which a student was enrolled.
Secondary definitions	
CIP codes and descriptions	Mapping from Classification of Instructional Program codes to descriptions; CIP codes are applied to programs in the student session dataset.
Credential type descriptions	Mapping from credential type codes to descriptions.
Discipline descriptions	Mapping from discipline codes to descriptions; discipline codes use the same classification as CIP codes (with one exception, there is no "undeclared activity" code) but are applied to courses.
CDW institution list	Mapping of CDW institution codes to descriptions. This list contains only current and former British Columbia public post-secondary institutions.
Transfer institution list	Mapping of transfer institution codes to descriptions. This list is more comprehensive than the CDW institution list as it contains all Canadian public post-secondary institutions, many Canadian private post-secondary institutions, and a code for "unknown institution."
Course discipline codes	Mapping of course codes to disciplines.



The datasets were processed and augmented with a number of derived indicators. We defined a student's home institution as the first institution in which they appeared in the CDW; in the relatively few (37) cases where a student entered two institutions simultaneously at first entry to the CDW, we further defined "home institution" as the institution they graduated from in 2015/2016. We defined students who stepped out as those students who appeared in more than one institution in our dataset and added an indicator for how many institutions each student attended. Finally, we pulled in some information from the student's initial entry into the CDW, such as national status (domestic or international), as in some cases this status may change as students move through their educational career.

*Our cohort consisted of students who graduated with an undergraduate certificate, diploma, or bachelor's degree in the 2015/2016 academic year.*

Our initial cohort included 21,824 students in the CDW. However, due to some data quality issues within the CDW submissions from institutions, 47 students did not appear in all data sets and were excluded from our analysis. The issue with these student records was the dates: for example, some students were listed as having started at an institution *after* they had already achieved a credential from that institution, and that resulted in them being included in some data tables but not in others. A second issue affected students who entered the CDW in September 2001 or earlier where we did not have the session information corresponding to the date they entered the CDW. We excluded the 187 students affected as we could not definitively identify their home institution. This left us with a total analysis cohort of 21,590 students.

Our student information extract contained a separate issue requiring clean-up. Occasionally students hold two separate student IDs at the same institution, which may have slightly different identification information; these student IDs are, however, linked to the same Provincial Education Number (PEN). Our CDW extract was based on PEN, not student ID, and in these cases, we received multiple records for these students. There were 187 cases of doubles, and two cases of triples. The only information provided in these records are birthdates, genders, and postal codes. There is no way to determine with CDW data which is the correct information, and so we utilized the following strategy:

- Where all records had the same information for the particular field, we used that information.
- Where one record had information and the others do not, we used the provided information.
- For postal codes, where one record was a Canadian postal code and the others were not, we used the non-Canadian postal code. (The primary use of this element in our analysis was identifying whether students stepped out to a host institution nearer their familial home. We hypothesized that if a student had a non-Canadian postal code, the student was more likely international, and the concept of taking a course nearer to their familial home was less likely to apply.)
- Where all records had information and they disagreed, we selected the first record.

Of 189 students with duplicate information, birthdates disagreed between records in 24 cases the birthdates were not consistent across records. Most of these had month and date reversed; one student had a data entry error, and the birthdates disagreed by a decade, but all other dates were within 18 months. Genders disagreed between records in 12 cases, and postal codes disagreed between records in 175 cases.

The CDW does not record an aggregate performance indicator such as session or cumulative grade point average; it only records grades in specific courses. Some institutions use percentage scales for grades, while others use letter grades. To rectify this, we created a grade point average calculation that converted letter grades onto a 4.33-scale system; and for both letter and percentage grades, we weighted the average based on credits attempted. Three institutions reported both letter and percentage grades for different enrolments – the Justice Institute of British Columbia, Northern Lights College, and Vancouver Community College – but did not provide conversion scales between them. Letter grades outnumbered percentage grades in all three cases, and we ignored the percentage-scale grades. We kept letter-scale and percentage-scale averages separate to avoid artificially conflating the two.

*In addition to the CDW data, BCCAT provided an extract of all course transfer agreements in the BC Transfer Guide between CDW institutions in place prior to December 31, 2016.*

Of the 21,590 students in our analysis dataset, 152 had session data from more than one institution but were only enrolled in courses at a single institution. Possible explanations here are that these students applied at an institution aside from their home institution but did not attend, or that there was an issue with the data submission to the CDW and the coursework for some of these students was coded incorrectly (perhaps with dates, as noted above). As we neglected to request application status as part of our CDW data request, we cannot definitively say which of these is true, but we lean towards it being an application for admission.

There were three enrolments in our dataset that occurred at Okanagan University College (OUC), prior to the transformation of the institution into the University of British Columbia - Okanagan and Okanagan College. These enrolments were for students who stepped out from their home institution to OUC, but as OUC is no longer extant there were no home students or enrolments, leading to the institution being 100% stepping out. We removed OUC from the graphs that show the proportion of host enrolments.

## Transfer Credits

In addition to the CDW data, the British Columbia Council on Admissions and Transfer (BCCAT) provided an extract of all course transfer agreements in the BC Transfer Guide (BCTG) between CDW institutions in place prior to December 31, 2016. We used this extract to attempt to connect the CDW enrolment data to the CDW transfer credit data. The CDW does not collect these data from institutions, so using the BCTG as the “glue” was the next best solution. However, this solution also had a number of issues.

First, the institutional enrolment data collects a “course code” from institutions but does not collect subject and course number separately and specifically. While most institutions provide subject and course number as part of the course code, this is not universal practice, and some institutions provide only a numeric code. As the BCTG data is reliant on subject and course number, in these cases we cannot connect enrolment and transfer data.

Second, there appears to be a timing disconnect between the BCTG data and institutional academic calendars. In some cases, institutions updated course subjects and numbers, and the BCTG was subsequently updated. The historical CDW data, however, were not updated, leading to disconnects between the available CDW data and the BCTG, and an inability to connect the enrolment and transfer data.

In total, the CDW data contained 12,000 transfer courses and associated credits. Many of these credits were transferred from non-CDW institutions (such as the *University Act* institutions, private BCTS members, and institutions external to British Columbia) and so these could not be connected to original enrolment data, as the original enrolment data was not part of the CDW. For these courses, this left us with knowing what institution the course was taken at and, assuming it was not classified as general credit, the receiving course's Classification of Instructional Programs (CIP) code, but little else. A large subset of transfer credits was also recorded as coming from courses taken at an "unknown institution."

Using the BCTG data, we connected approximately 1,104 of the transfer courses (49.4% of transfer courses marked as coming from a CDW institution; see Figure 19) to the original enrolment data, much fewer than we expected. In addition to the BCTG issues noted above, in some cases the transfer credits were for courses taken prior to the 1999 introduction of the CDW, and there were no enrolment records in our extract to connect to. Finally, not every course is articulated in the BCTG, and thus cannot be definitively matched.

An important note is that transfer courses do not necessarily transfer one-to-one, so our 1,104 transfer courses actually generate 1,652 matches. For example, some transfer articulations take two sending courses and transfer to two receiving courses. In cases like this, we generated four match records, one for each combination of sending and receiving course.

Due to the difficulties in matching courses one-to-one, we also matched enrolments and transfer courses at the aggregate institution level: for example, matching a student's four courses from a host institution with four transfer courses for which credit was received at the home institution. While this method did not provide 100% matching, it did provide substantially better matching than the one-to-one course method.

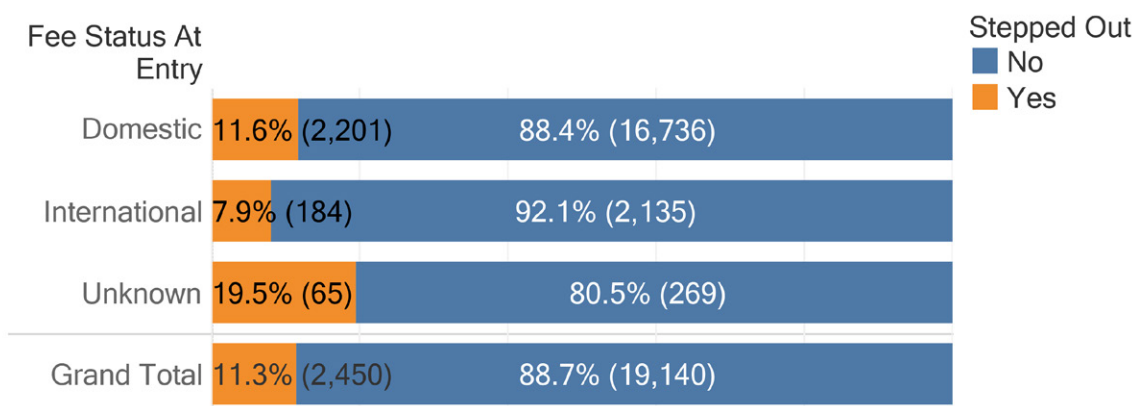
## Results

### *Students*

The student cohort contained records for a total of 21,590 students. Of these, 19,140 (88.7%) students took courses at a single CDW institution between the time they registered at their first CDW institution and the time they graduated from that institution. The remaining 2,450 (11.3%) took courses at more than one institution (i.e., at home institution and 1+ host institutions) and comprised our group of students who stepped out.

Domestic students were more likely than international students to step out, with 2,201 (11.6%) of 18,937 domestic students stepping out and 184 (7.9%) of 2,319 international students stepping out. (There were an additional 334 students for which no immigration status was provided.) As noted above, we may be under-representing international stepping out, as private institutions, some of which cater specifically to international students, do not report to the CDW.

**FIGURE 1: Domestic/International status of students who stepped out vs. those who did not**



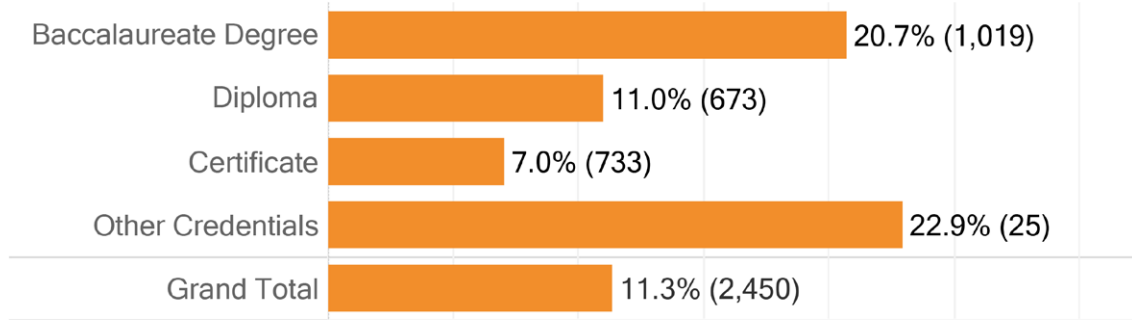
Within the 2,450 students who stepped out, the vast majority (roughly 90%; 2,201 students) were Domestic at their time of entry to the CDW, 7.5% (184 students) were International, while 2.7% (65 students) did not have a known fee status.

Students who stepped out had a slightly younger average age at 22.5 years - calculated at the time they entered their identified home institution - than students who do not, who had an average age of 23.1 years. The modal age at entry for both students who stepped out and those who did not was 18 years. While the average ages seem fairly high compared to the most common post-secondary entrance age of 18, this is an effect of a “long-tail” distribution of ages – students rarely start post-secondary study earlier than age 14, but can start at any point beyond that; the two oldest students in our dataset were 76 years old at the time they entered the CDW. Additionally, as the CDW does not capture data on enrolments prior to 1999, we may not always be capturing the student’s first entry into post-secondary. For example, our 76-year-olds, born in the 1930s, may have initially entered post-secondary in the 1950s and simply been returning for further schooling.

Females were more likely to step out than are males, with 1,490 (13.5%) of 11,049 of females stepping out and 960 (9.1%) of 10,539 males stepping out. A number of students reported as unknown gender were excluded as this group was too small for reporting.

Students who were pursuing “other” credentials – seven different credential types which were not baccalaureate degrees, diplomas, and certificates, such as advanced diplomas and certificates, post-baccalaureate certificates, and developmental credentials - were the most likely to step out (22.9%). This group was only a tiny fraction (1.0%) of the total students in our dataset. Of the more numerous credential categories, those pursuing a baccalaureate degree (20.7%) were most likely to step out, followed by those pursuing a diploma (11.0%), and a certificate (7.0%). Students pursuing baccalaureate degrees were the largest group to step out (1,019), followed by certificates (733), diplomas (673), and the other credential categories (25).

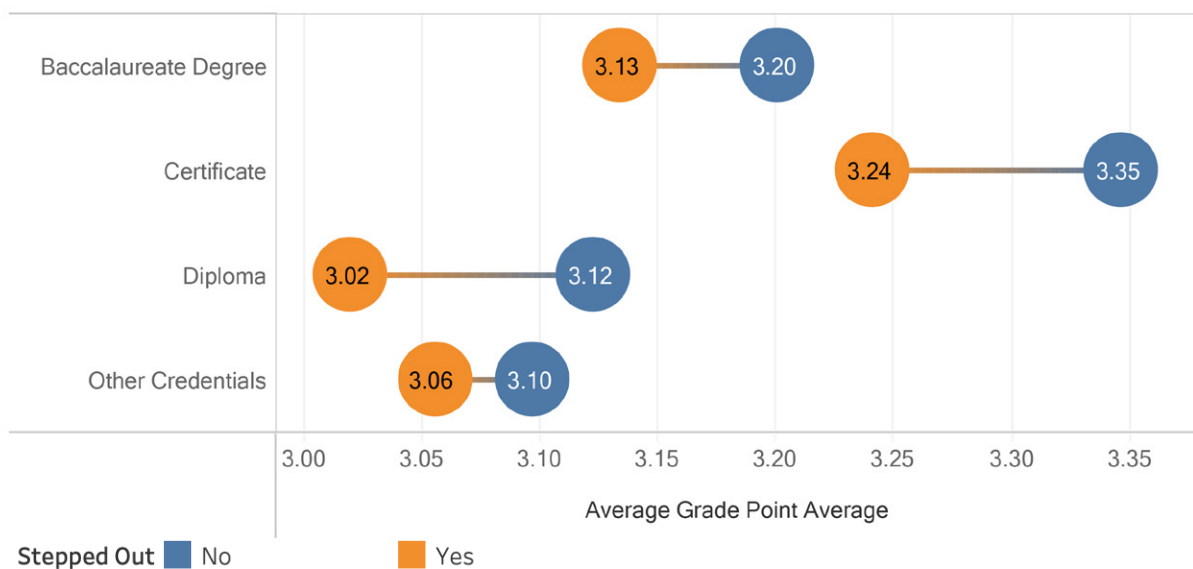
**FIGURE 2: The number and proportion of stepping out students by credential type**



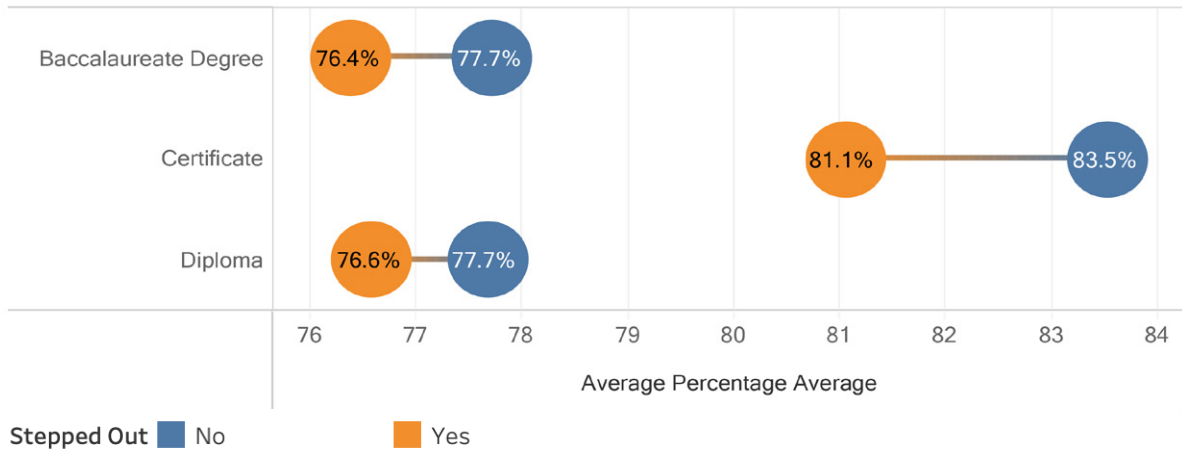
Students who stepped out had, on average, lower grade point averages (GPA) than students who did not step out, across all types of credentials. At institutions that use letter grades the average GPA for students who stepped out in baccalaureate programs is 3.13 compared to non-step-outs at 3.20, a difference of 0.07 (Figure 3). The grades in certificate programs showed a difference of 0.11, in diplomas the difference was 0.10, and for other credentials the difference was 0.04. For institutions where grades were expressed as percentages, baccalaureate degree students who stepped out had an average GPA of 76.4%, while non-stepping out students averaged 77.7%, a difference of 1.3% (Figure 4). The differences for certificate students were 2.4% and for diploma students 1.1%.

It is not clear why certificate students have a larger grade differential between those who stepped out and those who did not. As certificates are shorter in duration and often more industry-focused, there may be a larger impact of stepping out in terms of time to completion, and students avoid stepping out where possible. This may additionally explain why students in certificate programs were less likely to step out (Figure 2) than students enrolled in other credentials.

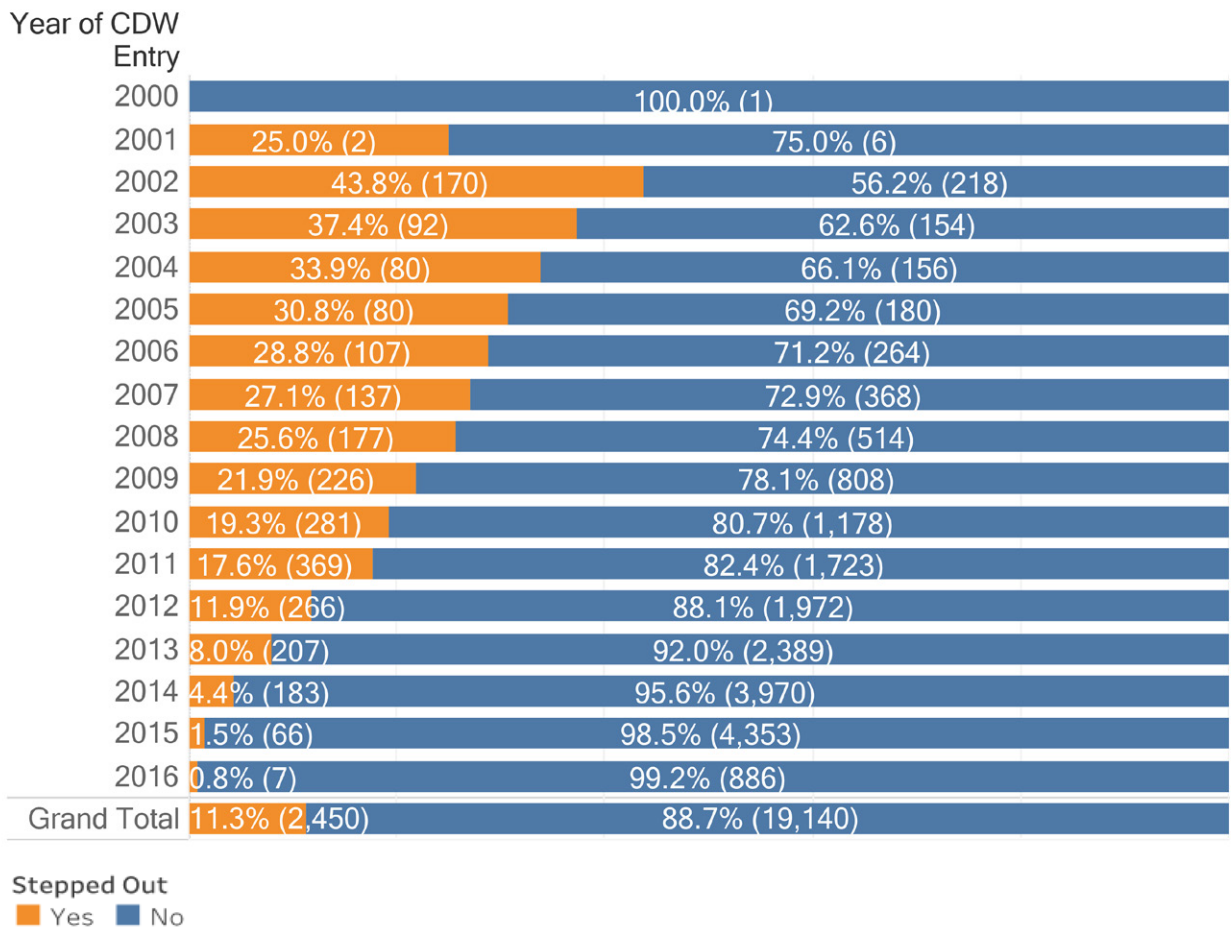
**FIGURE 3: Average letter-grade point average of students who stepped out vs. those who did not, by credential pursued at time of entry**



**FIGURE 4: Average percentage average of students who stepped out vs. those who did not, by credential pursued at time of entry**



**FIGURE 5: The number of students who stepped out, by year of first entry into a CDW institution**

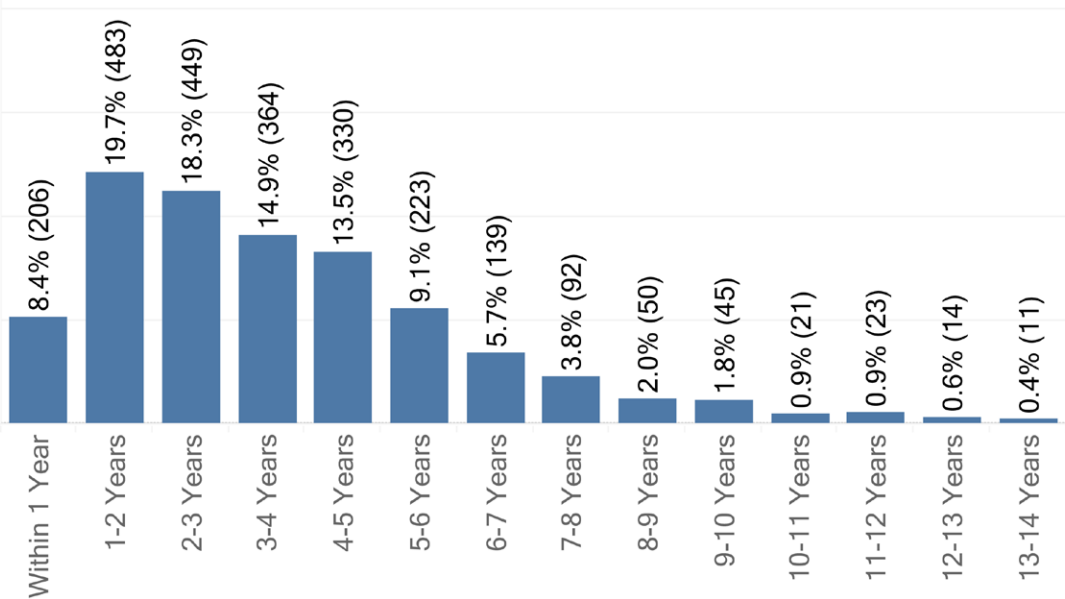




Students were more likely to step out if they had been in the post-secondary system longer. Of the 458 students who began in their first CDW institution in 2002 and received a credential from that same institution by 2015/2016, 170 (43.8%) had taken courses at other institutions. Of the students whose enrollment began in 2013, 92 (37.4%) of 246 stepped out; of students starting in 2004, 90 (30.8%) of 260 stepped out. More recently, of the students that started in 2010, 281 (19.8%) of 1,459 stepped out; of students starting in 2011, 369 (17.5%) of 2,092 stepped out, and of students starting in 2012, 266 (11.9%) of 2,238. We note that students who enrolled more recently may not have had the opportunity to step out, given their relatively short time in the system. **Figure 5** shows the numbers for each year, but overall the pattern is a decreasing proportion of stepping out students if the students had been in the system for a shorter time.

As shown in **Figure 6**, many students stepped out very quickly within their post-secondary pathway, with 206 students (8.4% of stepping out students) stepping out before completing a full calendar year at their home institution. A further 483 (19.7%) students stepped out between one and two calendar years after starting, 1,832 (74.8%) students who have stepped out have done so at least once before completing five years of study. However, the distribution also showed a long tail, with some students only beginning to step out at 13 years from starting in the CDW. As 13 years represented a near-maximum within our dataset (with only 9 students having start dates before 2002), we can also assume that some students would begin stepping out even past the 13-year mark.

**FIGURE 6: The number of years of enrollment before the student's first stepping out experience**



Of the students who stepped out, the majority (2,114 students) attended two institutions (9.8% of the cohort; 86.3% of those who stepped out). A further 287 (1.3% of the cohort; 11.7% of those who stepped out) attended three institutions, and a few students attended four, five, or six institutions (less than 1% of the cohort; less than 2% of those who stepped out).

All CDW institutions saw some amount of stepping out. The numbers ranged from 20.7% at Douglas College (262 of 1,265 students whose home institution was Douglas College), to 4.4% at Okanagan College (63 of 1,424 students whose home institution was Okanagan College) (Figure 7). Stepping out was particularly common among South Coast institutions, where seven of the eight institutions with the largest proportion of stepping out were located. The only South Coast institutions not represented in the top eight were specialized institutions, such as the British Columbia Institute of Technology (BCIT) and Emily Carr University of Art and Design (ECUAD).

**FIGURE 7: The number and proportion of students who stepped out, by home institution**

Douglas College	20.7% (262)
Coast Mountain College	20.2% (22)
Langara College	18.3% (127)
Justice Institute of British Columbia	15.8% (67)
Capilano University	15.2% (150)
University of the Fraser Valley	15.1% (266)
Kwantlen Polytechnic University	13.6% (309)
Selkirk College	12.0% (39)
Vancouver Island University	11.9% (191)
Nicola Valley Institute of Technology	11.3% (11)
North Island College	10.4% (44)
Thompson Rivers University	10.1% (134)
Vancouver Community College	10.0% (145)
British Columbia Institute of Technology	9.5% (363)
College of New Caledonia	9.0% (50)
Northern Lights College	7.6% (27)
Camosun College	7.2% (132)
Emily Carr University of Art and Design	5.6% (15)
Royal Roads University	5.4% (11)
College of the Rockies	5.3% (22)
Okanagan College	4.4% (63)
Grand Total	11.3% (2,450)

Coast Mountain College (CMNT) is the only non-South Coast institution to appear in the top eight, with 22 (20.2%) of the students stepping out. In contrast with the relative proximity of the South Coast institutions, the nearest institution to CMNT is the College of New Caledonia (CNC), located more than 400 km away. Of those who stepped out at CMNT, about a third studied at Thompson Rivers University (TRU). The rest stepped out to a variety of institutions, and neither geographic nor CIP analysis suggested an obvious pattern. In total, these 22 CMNT students stepped out to 12 different institutions, and five students stepped out to two institutions each.

All of the students within the cohort received at least one credential from their home institution. However, some received more than one credential from their home institution, and others received credentials from their host institutions, as well.

Of the 2,450 stepping out students, the majority (71.1%, 1,741 students) did not receive a credential from their home institution before they began stepping out and did not receive a credential from a host institution (Figure 8). A further 453 students (18.5% of the stepping out students) received a credential from their home institution before stepping out, then returned to the home institution to complete further credentials. This totals 2,194 students (89.6%) within our study period who did not receive a credential away from their home institution.

The remaining 256 (10.4%) stepping out students received a credential from a host institution. This includes 214 (8.7%) who did not receive a credential from their home institution before stepping out and received a credential but subsequently returned to their home institution for another credential. Finally, 42 students (1.7%) received a credential from the home institution, received a credential from a host institution, and then returned to the home institution for another credential.

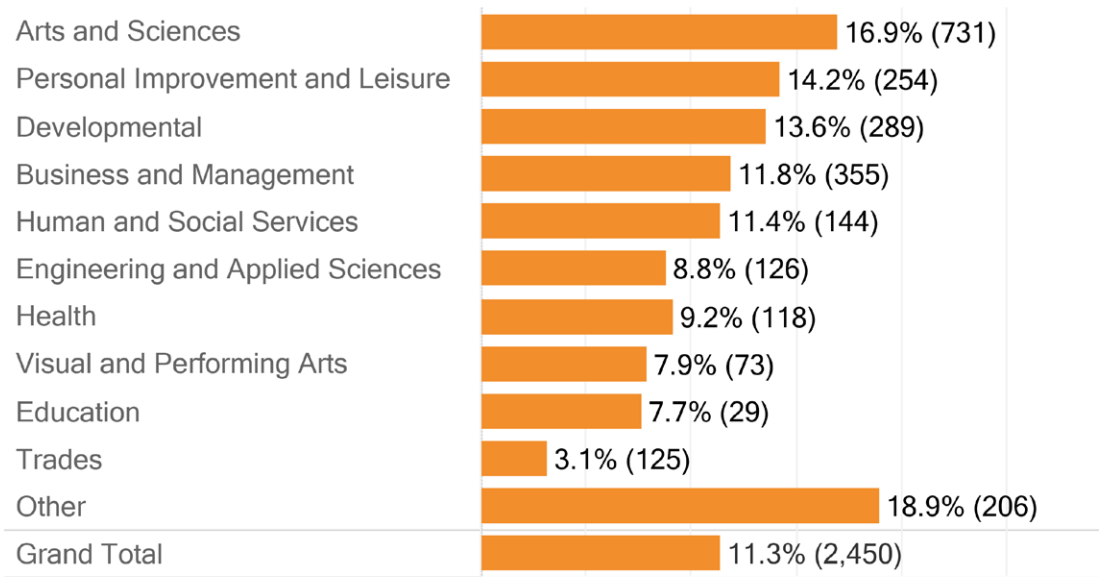
**FIGURE 8: Credential patterns of stepping out students**

Received a Stepped Out Credential?	Received a Home Institution Credential Before Stepping Out?					
	No		Yes		Grand Total	
	% of Stepped Out Students	Number of Students	% of Stepped Out Students	Number of Students	% of Stepped Out Students	Number of Students
No	71.1%	1,741	18.5%	453	89.6%	2,194
Yes	8.7%	214	1.7%	42	10.4%	256
Grand Total	79.8%	1,955	20.2%	495	100.0%	2,450

This section of the analysis reviews stepping out activity by the academic credential type and by the disciplines and sub-disciplines of the Classification of Instructional Programs (CIP) (Statistics Canada, 2011).

Using the CIP cluster of the program the student initially entered in the CDW, stepping out was most common in Arts and Sciences (17%), Personal Improvement and Leisure (14%), Developmental (14%), Business and Management (11%), and Engineering and Applied Sciences (8.8%) programs. Programs classified as “Other disciplines” made up the largest group at 19% (Figure 9). The smallest group of students who stepped out were enrolled in Trades programs. We note, however, that the notion of stepping out is different in Trades programs, where it is common to finish a level at one institution and complete the next level at another institution.

**FIGURE 9: The number and proportion of stepping out students, by CIP cluster of the student's program at time of entry**



Breaking these figures down further into individual disciplines shows differences within each cluster. Within Arts and Sciences, 25% of Physical Science students stepped out, versus 20% in the Biological and Biomedical Sciences, and 18% in Liberal Arts and Sciences, General Studies, and the Humanities. Within the Trades cluster, stepping out was more common (35%) for transportation and materials moving, but around 3% for the other areas. Most of the other clusters showed similar patterns for all included disciplines.

**FIGURE 10: Stepping out rates, by CIP2 code for student's program at time of entry**

CIP Cluster	CIP2 Description	Stepping Out Rate (%)	Count
Arts and Sciences	Physical sciences	25.1%	(42)
	Biological and biomedical sciences	19.7%	(12)
	Liberal arts and sciences, general studies and humanities	18.3%	(531)
	Social sciences	17.5%	(61)
	Multidisciplinary/interdisciplinary studies	17.1%	(48)
	History	16.7%	(4)
	Area, ethnic, cultural, gender, and group studies	16.7%	(2)
	Psychology	14.9%	(17)
	Mathematics and statistics	14.3%	(1)
	English language and literature/letters	12.8%	(5)
	Aboriginal and foreign languages, literatures and linguistics	9.5%	(2)
	Communications technologies/technicians and support services	1.9%	(4)
	Communication, journalism and related programs	1.7%	(2)
	<b>Total</b>	<b>16.9%</b>	<b>(731)</b>
Personal Improvement and Leisure	Continuing or Community programs	14.3%	(252)
	Health-related knowledge and skills (not for credit)	9.1%	(2)
	<b>Total</b>	<b>14.2%</b>	<b>(254)</b>
Developmental	High school/secondary diploma and certificate programs	15.3%	(152)
	Basic skills (not for credit)	12.1%	(137)
	<b>Total</b>	<b>13.6%</b>	<b>(289)</b>
Business and Management	Business, management, marketing and related support services	11.8%	(355)
	<b>Total</b>	<b>11.8%</b>	<b>(355)</b>
Human and Social Services	Parks, recreation, leisure and fitness studies	13.7%	(47)
	Work and family studies	12.4%	(23)
	Security and protective services	12.4%	(45)
	Human services, general	10.6%	(23)
	Legal studies, general	3.8%	(6)
	<b>Total</b>	<b>11.4%</b>	<b>(144)</b>
Engineering and Applied Sciences	Natural resources and conservation	15.7%	(24)
	Computer and information sciences and support services	14.2%	(41)
	Engineering technology, general	6.9%	(49)
	Agriculture, general	6.8%	(8)
	Engineering	3.6%	(4)
	<b>Total</b>	<b>8.8%</b>	<b>(126)</b>
Health	Health services/allied health/health sciences, general	9.2%	(118)
	<b>Total</b>	<b>9.2%</b>	<b>(118)</b>
Visual and Performing Arts	Visual and performing arts	7.9%	(73)
	<b>Total</b>	<b>7.9%</b>	<b>(73)</b>
Education	Education	8.1%	(28)
	Library science	3.1%	(1)
	<b>Total</b>	<b>7.7%</b>	<b>(29)</b>
Trades	Transportation and materials moving	34.8%	(24)
	Personal and culinary services	3.2%	(17)
	Mechanics and repairers, general	2.7%	(30)
	Precision production trades, general	2.6%	(22)
	Construction trades, general	2.2%	(32)
	<b>Total</b>	<b>3.1%</b>	<b>(125)</b>
Other	Undeclared activity	18.9%	(206)
	<b>Total</b>	<b>18.9%</b>	<b>(206)</b>

## *Home vs. Host Institutions for Stepping Out Students*

We also considered the pathways of students who stepped out. The dataset for this analysis consisted of courses taken at host institutions by 2,450 unique students who had records at both a home institution and at one or more host institution(s). On average, each student in this dataset attended 1.16 host institutions.

**Figure 11** illustrates the movement of students who stepped out. Each square represents more the number of students from that home institution (in rows) stepping out to that host institution (in columns). Darker squares indicate a higher proportion of students stepping out from that home institution attended that host institution, and lighter squares indicate a lower proportion. A number of institutions had concentrations of students stepping out to specific host institutions. For example, 39% of Camosun College students stepped out to TRU; 40% of Douglas students stepped out to BCIT; 44% of University of the Fraser Valley (UFV) students stepped out to TRU; and 37% of VIU students stepped out to TRU. The stepping out destinations at other institutions were more widely distributed: BCIT did not have a single host institution that received over 19% of its students (the largest host institution being TRU at 19%), and TRU did not have one over 24% (the largest host institution being JIBC at 24%).

There is a definite geographic aspect to the patterns of stepping out. For most home institutions in Metro Vancouver the British Columbia Institute of Technology was the largest host of students who stepped out – 40% of Douglas College students, 39% of Langara College students, and 36% of Vancouver Community College students who stepped out went to BCIT. Once outside Metro Vancouver, however, TRU became the dominant destination for students stepping out. This delineation has some fuzziness, however, with some institutions within Metro Vancouver seeing more students going to TRU rather than BCIT; Kwantlen Polytechnic University saw 21% of stepping out students attending BCIT and 24% attending TRU and 45% of students stepping out from Capilano University headed to TRU.

In terms of those institutions that saw more students step in than step out, TRU was the largest net beneficiary, with +540 (154 stepped out, 694 stepped in), followed by JIBC (net +261, 76 stepped out, 337 stepped in) and BCIT (net +85, 423 stepped out, 508 stepped in). At the other end of the spectrum, the three institutions that saw substantially fewer students step in than out were UFV (net -273, 307 stepped out, 34 stepped in), KPU (net -237, 360 stepped out, 123 stepped in), and Capilano University (net -134, 191 stepped out, 57 stepped in).

## *Course Enrolments*

Our course enrolment dataset includes 562,146 courses in which students enrolled (**Figure 12**). Students who did not step out enrolled in 467,693 (83.2%) courses at their home institution, while students who stepped out enrolled in 82,895 (14.7%) courses at their home institution and 11,558 (12.2%) courses at host institutions. While not all of these courses used credits as their unit of measure, 9,288 (80.4% of 11,558) did, and the total number of credits attempted by stepped out students at host institutions was 25,486.



**FIGURE 11: Percentages of students stepping out by home and host institution**



**FIGURE 12: The number and proportion of course enrolments by stepping out status and course institution**

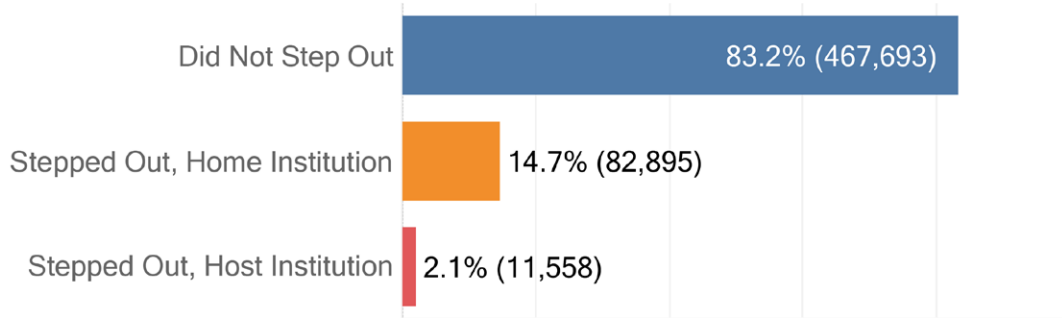
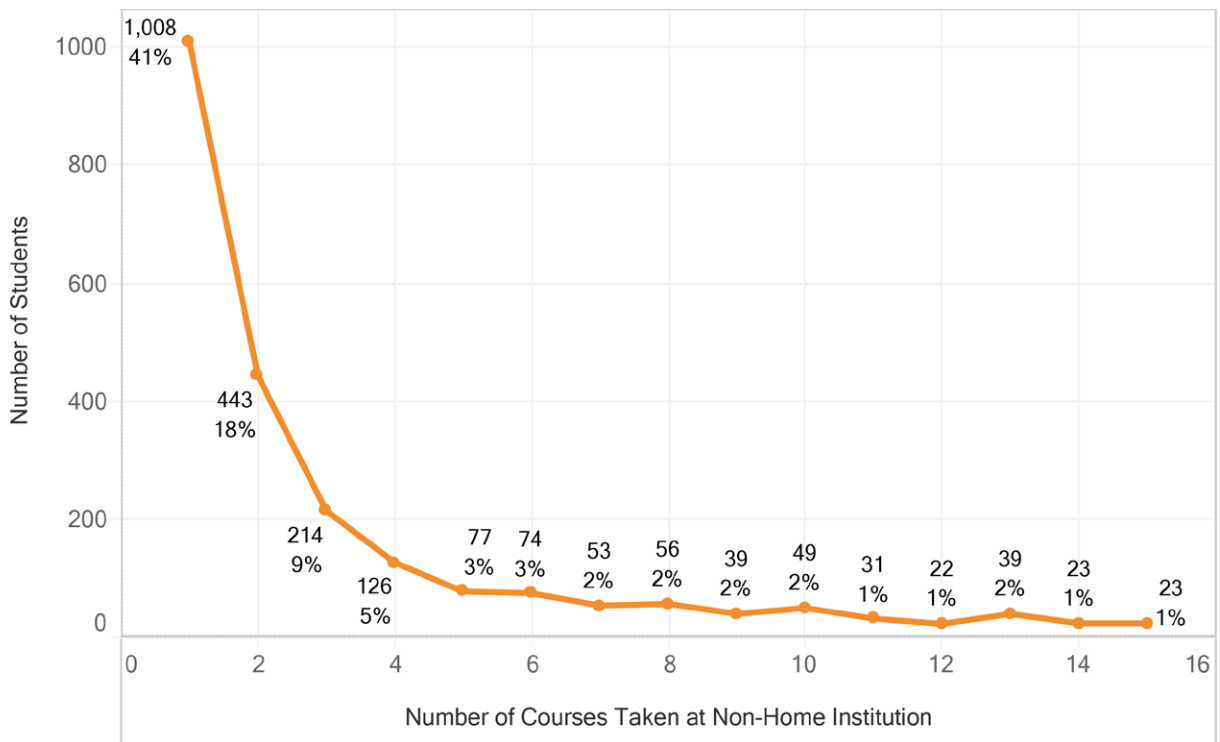


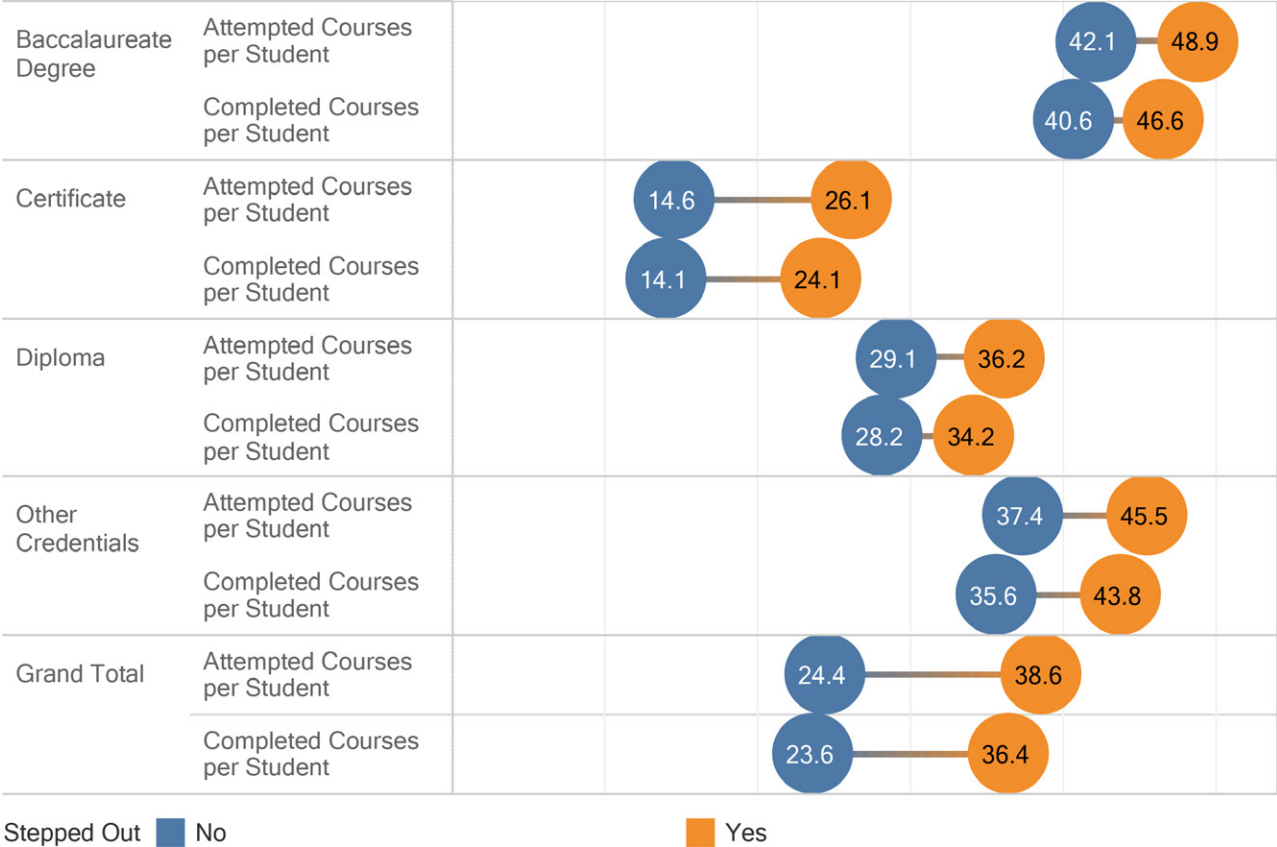
Figure 13 shows the relationship between the number of courses taken at the host institution (x axis) and the number of students who took them (y axis). By definition, this chart includes only students who stepped out. Most students who stepped out took one course (1,008, or 41% of the total), while 443 (18%) took two courses, and 214 (9%) took three. The numbers taper off from here, down to 5% taking four courses. Thus, almost three-fourths (73%) of stepping out students took no more than four courses while stepping out. There are 173 students (7.1%) who took more than 15 courses at a host institution; these are not shown on the chart. We were surprised to see the high number of courses shown here - for example, six students took 37 courses each through stepping out - but many of these students with high numbers of stepping out courses are also students who completed a credential at a host institution.

**FIGURE 13: The number of students by number of courses taken at host institution**



Stepping out students attempted more credits than non-stepping out students for all credential types (Figure 14), and also completed more courses. The baccalaureate degree students who stepped out averaged 1.05 courses per completed course, slightly higher than the non-step out group at 1.04. For diploma students the averages are 1.06 for step outs and 1.03 for non-step-outs, and for certificate students the averages are 1.08 for step outs and 1.04 for non-step-outs. This suggests either that students who step out are less likely to complete a course (e.g., by withdrawing), or that they are more likely to fail it.

**FIGURE 14: Average number of courses attempted and completed for stepping out students vs. those who did not step out at host institution**



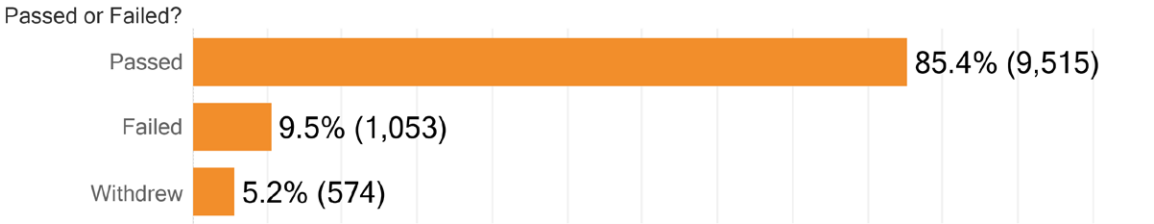
Students who stepped out attempted, on average, 4.7 courses and completed 4.5 courses at their host institution, to go along with 33.8 courses attempted and 32.1 courses completed at the home institution.

The largest group of stepping out students took what could be called a traditional visiting student approach – pursuing one or two courses at the host institution while still primarily connected and pursuing a credential at their home institution (Figure 13). We cannot infer the intentions of these students, but there are a couple of crucial pieces of information we can infer. First, students who stepped out both attempted and completed more courses than students who did not step out, they had a higher ratio of attempted to completed courses, and they had lower grades; these results showed across all types of credentials (Figure 14). This suggests that many students stepped out to complete courses they may not have completed successfully.

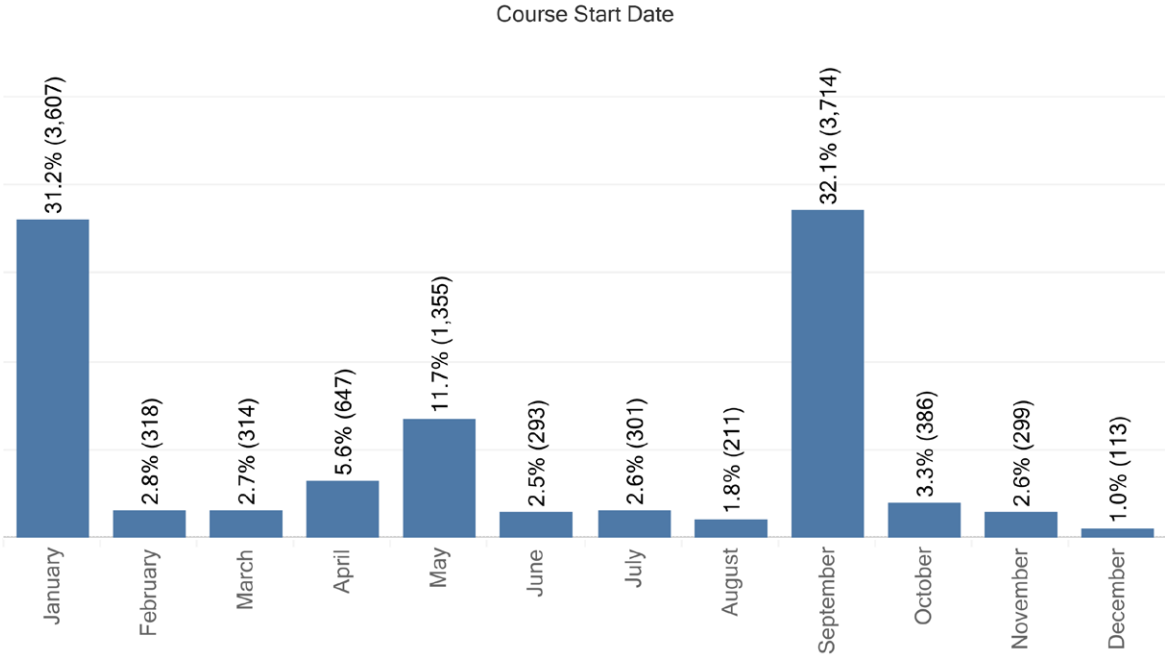
In the 11,558 courses taken by stepping out students at a host institution, students received a grade that could be classified as either a pass, fail, or withdrawal in 11,142 (96.4%) cases. The remainder could be classified as neither pass nor fail, cases where there was no evaluative component or the course still being in progress. Students passed 9,515 (85.4%) of these 11,142 courses, failed 1,053 (9.5%), and withdrew from 572 (5.2%) (Figure 15). The total number of credits passed at host institutions is 20,835.

Students taking courses at host institutions were most likely to begin in September (32.1%) or January (31.2%), with May (11.7%) and April (5.6%) trailing well behind (Figure 16). Summer was not the most popular time to enrol at a host institution, which indicated that stepping out students were typically taking their stepping out courses on a schedule similar to a standard academic calendar. However, students were more likely to take courses at a host institution at a time when they were not also taking courses at their home institution. Only 18.8% of host institution enrolments started in the same month that a student was starting a course at the home institution.

**FIGURE 15: The number and percent of host institution enrolments, by passed, failed, and withdrawn status**



**FIGURE 16: Number and proportion of enrolments, by start month of course**



Among host institutions, in our dataset, the Justice Institute of British Columbia has the most enrolments taken by students who are stepping out from another institution, at 11.2% (1,020 of 9,145 enrolments), while the University of the Fraser Valley has the smallest proportion at 0.3% (200 of 59,910 enrolments) (Figure 17). As institutions often have rules about enrolment priority for students stepping out from another institution in relation to their own students, it is difficult to draw any conclusions from this distribution. Some host institutions also require letters of permission and the need to provide such letters to enrol. This may be another factor why the stepping out enrolment was so low for some institutions. For example, Okanagan College, Camosun College and VIU all have such requirements for letters of permission as host institutions (I.S. Education Consulting, 2015).

**FIGURE 17: The number and proportion of all enrolments at a host institution taken by incoming stepping out students**

Justice Institute of British Columbia	11.2% (1,020)
Nicola Valley Institute of Technology	8.7% (138)
Coast Mountain College	7.1% (137)
Emily Carr University of Art and Design	4.4% (411)
Thompson Rivers University	4.3% (1,532)
Langara College	4.1% (974)
Vancouver Community College	3.3% (959)
Douglas College	3.1% (1,077)
North Island College	2.9% (246)
College of the Rockies	2.0% (166)
Capilano University	1.9% (573)
British Columbia Institute of Technology	1.8% (1,856)
Selkirk College	1.8% (173)
College of New Caledonia	1.8% (130)
Northern Lights College	1.6% (92)
Royal Roads University	1.5% (63)
Kwantlen Polytechnic University	1.2% (761)
Okanagan College	0.9% (296)
Camosun College	0.9% (344)
Vancouver Island University	0.9% (403)
University of the Fraser Valley	0.3% (200)
Grand Total	2.1% (11,551)

CMNT had the largest proportion of courses taken by its students at host institutions, with 166 (8.5% of total 1,955 course enrolments) course enrolments occurring elsewhere (Figure 18). This proportion was nearly double that of the next closest institution on the list. This suggests that while CMNT had a high proportion of students stepping out, those students were also taking, on average, more courses at host institutions than did students from other home institutions. CMNT students who stepped out took on average 7.5 courses while stepping out. Douglas College, which had the highest proportion of students who stepped out (Figure 7), had an average of 4.3 courses per stepping out student. This suggests there may be courses students were interested in that were not available at the home institution, or that the institution had a good process for ensuring students receive transfer credits from stepping out.

**FIGURE 18: The number and proportion of all home institution student enrolments taken at a host institution**

Coast Mountain College	8.5% (166)
Justice Institute of British Columbia	4.5% (385)
Nicola Valley Institute of Technology	4.4% (66)
Douglas College	3.2% (1,115)
North Island College	2.9% (248)
Northern Lights College	2.8% (164)
Vancouver Community College	2.7% (783)
Selkirk College	2.6% (257)
Langara College	2.5% (588)
Kwantlen Polytechnic University	2.4% (1,534)
College of New Caledonia	2.2% (162)
Capilano University	2.1% (630)
British Columbia Institute of Technology	2.1% (2,073)
Thompson Rivers University	1.7% (581)
University of the Fraser Valley	1.7% (1,002)
College of the Rockies	1.6% (135)
Vancouver Island University	1.5% (683)
Camosun College	1.4% (557)
Emily Carr University of Art and Design	1.2% (108)
Okanagan College	0.9% (286)
Royal Roads University	0.8% (35)
Grand Total	2.1% (11,558)



## Transfer Credits

Our transfer credit dataset has data on 12,498 transfer courses. Of these courses, 3,879 (31%) were transfers obtained by 1,070 stepping out students. This means that of the 2,450 students who stepped out (Figure 1), 43.7% of them received some amount of transfer credit. Of the 3,879 transfer courses, 1,989 (51.3%) were taken at a CDW institution, and almost all (99.8%; 1,986 of 1,989) of these courses transferred as credits (as opposed to transferring on the basis of credit hours, contact hours, or other methods of allocating credits). The total number of credits transferred was 7,004. This represented 27.5% of the 27,586 credits attempted while stepping out, and 33.6% of the 20,835 credits received for passing a course while stepping out.

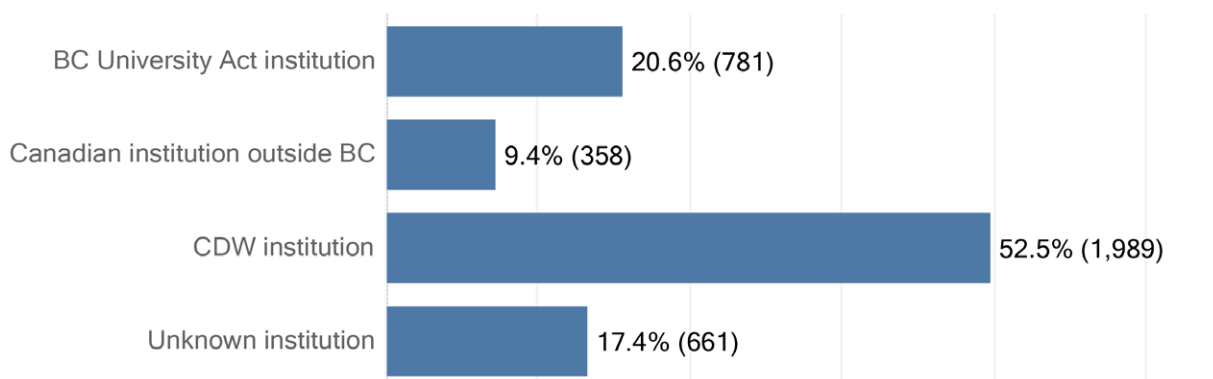
This discrepancy between courses taken and courses transferred suggests that for many students, returning the credits to their home institution was not their primary goal, or that the institutions themselves were reticent to provide the transfer credit. It is not clear from the data which of these factors may be the case, not least because we had access only to *granted* transfer credits and not *requested* transfer credits. Students may be requesting the credit but not receiving it, or they may simply not be requesting it.

The CDW has an indicator representing the institution where the student took the course; the codes available for this field cover all public and some private post-secondary institutions within Canada. The first, and largest, source is “unknown institution”. There are several options why the sending institution could be categorized as such:

- 1) the institution where the credit was earned was not a post-secondary institution (i.e. it may have been a secondary school and the student is receiving credit for Advanced Placement, International Baccalaureate, or other similar courses);
- 2) The sending institution was not in Canada;
- 3) The sending institution was a Canadian private institution that does not have a code assigned by Statistics Canada and used for reporting in the CDW; or
- 4) There could be an issue with the coding of the transfer credit in the institution’s student information system or in the upload to the CDW.

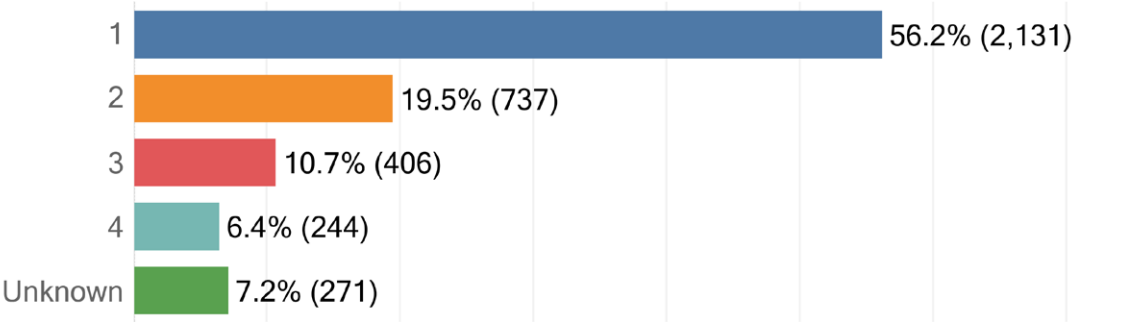
CDW institutions accounted for 1,989 (52.5%) of actual transfer courses received for students who stepped out. The next largest source of transfer credits was BC *University Act* institutions, with 781 (20.6%) courses, followed by unknown institutions (661, 17.4%) and finally Canadian institutions outside BC (358, 9.4%) (Figure 19).

**FIGURE 19: Number and proportion of total transfer credits by sending institution type**



Students who stepped out and received transfer credits obtained the majority of their transfer credits at the first year level (2,131, 56.2%) (Figure 20). Second year courses were the next most frequent (737, 19.5%) followed by third year courses (406, 10.7%), unknown year courses (271, 7.2%) and fourth year courses (244, 6.4%). The combined percent of courses at the third- and fourth-year levels may suggest that some students may be taking courses not available at their home institution.

**FIGURE 20: Proportion of received transfer courses at each course year level for students who stepped out**



With information from the BC Transfer Guide (BCTG), we connected many of the transfer courses with the enrolment records that originally generated them. While we could only definitively connect 49% of the transfer courses with enrolment records, this still allowed us to analyze the levels of sending and receiving courses. First-year-to-first-year transfers are 49.5% of the matches, 10.0% are second-to-second transfers, 11.3% are third-to-third transfers, and 2.7% are fourth-to-fourth transfers, totaling 73.5% of the matches. However, there were some cases where courses were transferred to a different year level, most often a single year level off but in some cases two years different (Figure 21).

**FIGURE 21: Comparison of sending and receiving course year level for matched stepping out transfer credits**

Receiving Course Level	Sending Course Level					Grand Total
	1	2	3	4	7	
1	49.5%	4.5%	1.1%		0.2%	55.2%
2	4.8%	10.0%	3.6%	0.5%	0.1%	19.1%
3	0.4%	1.2%	11.3%	1.5%	0.1%	14.5%
4			2.5%	2.7%	5.9%	11.1%
Grand Total	54.7%	15.7%	18.6%	4.7%	6.4%	100.0%

Note: The sending course level of "7" represents some BCIT specialty nursing courses.

Using our aggregate match dataset, we identified the total number of credits students passed while stepping out and compared this to the number of transfer credits granted by the home institution. The largest cluster of students was those who passed courses worth a total of three credits while stepping out and received three transfer credits at their home institution (**Figure 22**). Another large cluster was among students who passed 0 or 3 credits while stepping out and received 0 transfer credits at their home institution. An expected outcome, given that only 43.7% of stepping out students receive transfer credit, is the large number of students at 0 on the x-axis representing no transfer credits granted. Finally, we see a trend line where a number of students who took 6, 9, 12, 15, or 18 credits – representing two to six courses taken via stepping out – were granted the same number of transfer credits.

**FIGURE 22: Comparison of stepped out credits passed to stepped out transfer credits granted; the size of the circles represent the number of students with that number of step out credits passed and transfer credits granted**



## Disciplines

Students who stepped out took a variety of courses in different disciplines, with the highest numbers being in business, management, marketing, and related support services (16.2%), followed by health services (12.6%), visual and performing arts (7.3%), security and protective services (6.6%), and English language and literature/letters (5.6%). The list in **Figure 23** contains the data for the top 20 CIP2 codes for courses taken while stepping out.

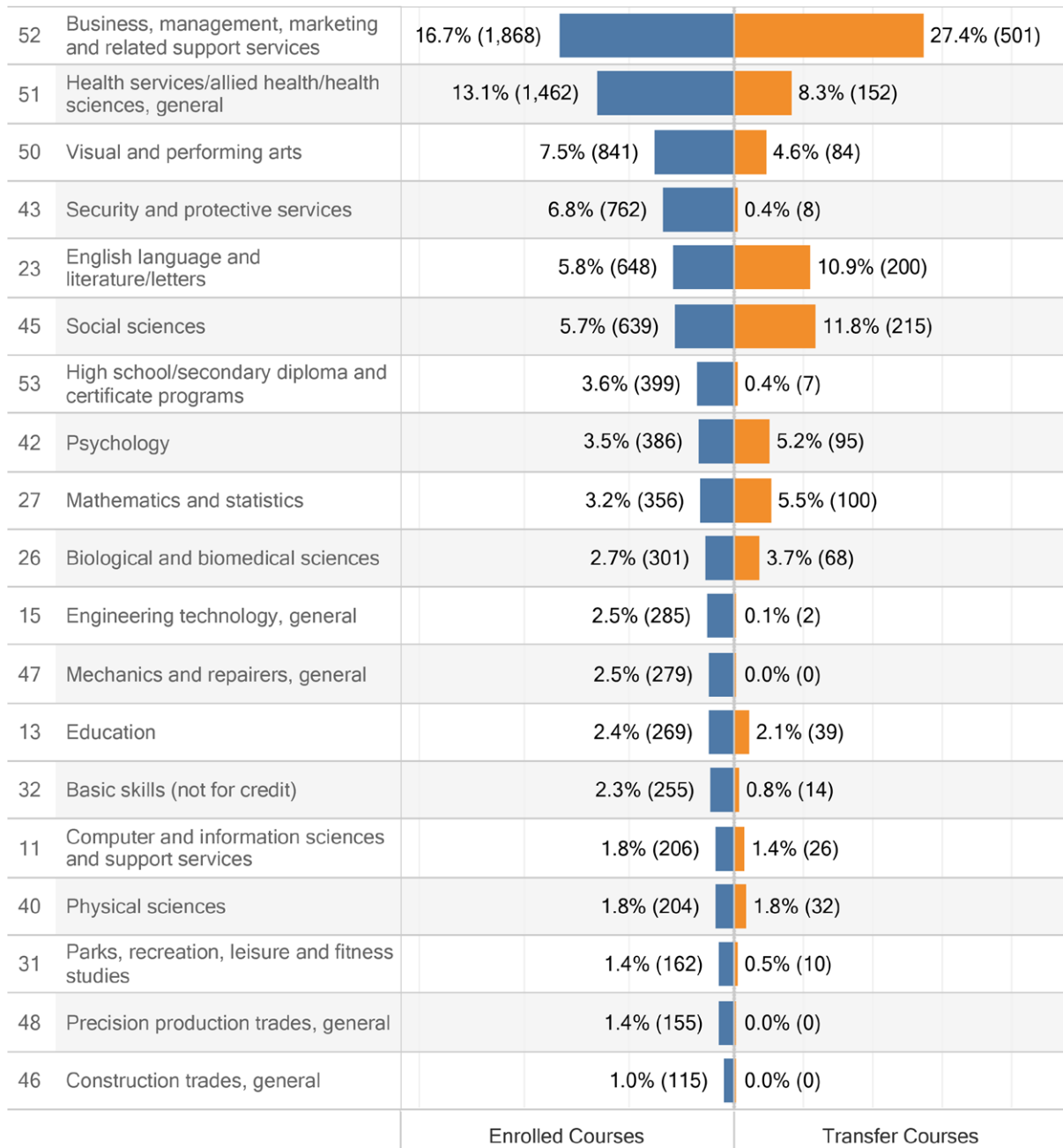
When we assess the courses stepping out students received credit for – bearing in mind that only 43.7% of students who stepped out received any transfer credit – business, management, marketing, and related support services had the highest percent of all transferred courses at 27.4% (**Figure 23**). This 27.4% of all transferred courses is higher than the 16.7% of enrolled courses that business, management, marketing, and related support services accounted for. Social sciences had the 6th most enrolments at 5.7% and the 2nd most transferred courses at 11.8%, and English language and literature/letters, which had the 5th most enrollments and the 3rd most transfer courses.

For individual courses, we looked at the ratio of transfer credits gained via stepping out at a host institution to the number of enrolments in that course at the home institution, limiting our analysis to courses with at least 30 enrolments at a home institution. For four courses (of 26,756 courses with at least one enrolment, and 4,323 with at least 30 enrolments) the proportion of credits gained via stepping out exceeded 10%. All four courses were in business, management, marketing and related support services (CIP code 52) and had stepping out proportions of 23.1%, 18.4%, 14.9%, and 11.6% along with total enrolments (at home institutions and via stepping out) of between 38 and 86. A further 31 courses had stepping out proportions between 5% and 10% with total enrolments between 35 and 290 – 12 courses in CIP 52, four each in mathematics and statistics (CIP 27) and psychology (CIP 42), two each in Aboriginal and foreign languages, literatures and linguistics (CIP 16), biological and biomedical sciences (CIP 26), health services/allied health/health sciences, general (CIP 51), and French language and literature/letters (CIP 55), and one each in English language and literature/letters (CIP 23), social sciences (CIP 45), and visual and performing arts (CIP 50). Of 119 courses that have at least 300 total enrolments, one has a stepping out proportion of 4.5% and the remainder all have proportions of 2.1% or less.

Based on the above analysis of individual courses, students do not appear to be avoiding particular “high volume” or “gatekeeper” courses by stepping out to other institutions. Courses with high stepping out proportions have fairly low student volume, while courses with high volumes of students have fairly low stepping out proportions.

Finally, we compared the student program and the course CIP codes. To minimize the number of codes, we used CIP clusters rather than CIP2 codes, with clusters representing groups of similar CIP codes. The majority of transfer credits granted were to arts and sciences students for arts and sciences courses (**Figure 24**). Business and management students were the second largest group, and they brought back similar amounts of transfer credits in arts and sciences courses and in business and management courses. Health students took a large number of health credits, as did arts and sciences students taking health classes, but arts and sciences courses together provided the largest source of transfer credit courses into all types of student programs.

**FIGURE 23: The proportion of enrolled courses at host institutions and transferred courses for students who stepped out, classified by the top 20 CIP2 codes**



**FIGURE 24: Number of students by CIP cluster of the student's program at time of entry and the CIP cluster of courses taken at the host institution while stepping out**

Course's CIP Cluster	Student's CIP Cluster											Grand Total
	Arts and Sciences	Business and Management	Developmental	Education	Engineering and Applied Sciences	Health	Human and Social Services	Other	Personal Improvement and Leisure	Trades	Visual and Performing Arts	
Unknown	394	19	19		30	48	76		175		93	854
Arts and Sciences	1,215	637	195	15	130	88	196	132	246	33	186	3,073
Business and Management	506	643	202		57	25	30	43	75	0	18	1,598
Developmental	23		42		3						12	80
Education	25	3	18	39					26	9		120
Engineering and Applied Sciences	62	18	9		9	15		3	16	10	6	148
Health	236	65	18			191	12	3	55		3	582
Human and Social Services	80	45	18	31		3	18	3	32		6	235
Personal Improvement and Leisure	6		3									9
Visual and Performing Arts	107	15	3				3		141	9	27	305
Grand Total	2,652	1,444	527	85	229	370	335	184	766	61	351	7,004



# Conclusion

Among all students who entered a Central Data Warehouse institution, 11.3% ended up taking courses at more than one institution *en route* to obtaining a credential in the 2015-16 academic year. However, there is a lot of nuance in stepping out.

The data suggest that students took different paths as they stepped out. The largest group took what could be called a traditional visiting student approach – pursuing one or two courses at the host institution while still primarily connected and pursuing a credential at their home institution. We cannot infer, from the data we have, the intentions of these students, but there are a couple of crucial pieces of information we can infer. First, students who stepped out both attempted and completed more courses than students who did not step out. They had a higher ratio of attempted to completed courses, and they had lower grades; these results were consistent across all types of credentials. This suggests that many students were stepping out to complete courses they may not have completed successfully at the home institution. The fact that they completed more courses, coupled with the fact that many step-out transfer credits came through as unassigned credit, suggests that stepping out may not be the best way to accomplish that goal.

A subgroup within this larger group appears to be pursuing higher-level courses through stepping out, with a significant proportion of credits returning as third- or fourth-year credits. This suggests students may be taking courses not available at their home institution, either a course in a discipline not offered or a specialty course.

Another group of step-out students pursued a larger number of credits, with some ultimately completing a full credential at a host institution before returning to their home institution. This more complicated pathway suggests students may be pursuing multiple options or different layers within a single discipline as they prepare for a future career.

Many students who step out do not transfer those courses to their home institution. Only 43.7% of stepping out students received any transfer credit, and only 33.6% of passed stepping out courses were granted transfer credit. This suggests that for many students, returning the credits to their home institution was not their primary goal or that the institutions themselves were reticent to provide the transfer credit. It is not clear from the data which of these factors may be the case, not least because we had access only to *granted* transfer credits and not *requested* transfer credits. Students may be requesting the credit but not receiving it, or they may simply not be requesting it. Regardless, this discrepancy between courses taken and courses successfully transferred bears further investigation.

There is a geographic aspect to the patterns of stepping out. Thompson Rivers University, with its Open Learning program providing substantial online options through the province, was the largest receiver of stepping out students (the CDW data provided does not distinguish between TRU and TRU-Open Learning). However, for most home institutions

*The data suggest that students took different paths as they stepped out. The largest group took what could be called a traditional visiting student approach — pursuing one or two courses at the host institution while still primarily connected and pursuing a credential at their home institution.*

*Stepping out occurred in all disciplines but was largest in business and management programs. Arts and sciences saw the most stepping out as a cluster, but once programs were broken out into more specific disciplines, business overtook any particular arts and sciences subject area in stepping out activity.*

in Metro Vancouver the British Columbia Institute of Technology was the largest receiver of students who stepped out – 40% of Douglas College students, 39% of Langara College students, and 36% of Vancouver Community College students who stepped out did so to BCIT. Once outside Metro Vancouver, however, TRU became the dominant destination for students stepping out. This delineation has some fuzziness, however, with some institutions within Metro Vancouver seeing more students going to TRU rather than BCIT; Kwantlen Polytechnic University saw 21% of stepping out students attending BCIT and 24% attending TRU and 45% of students stepping out from Capilano University headed to TRU.

One element missing from this investigation is the setting in which students take their stepping out courses. Some of the large host institutions of stepping out students – Thompson Rivers University and the British Columbia Institute of Technology in particular – have substantial online course offerings that may draw in students who are stepping out. Additionally, this analysis is limited by the institutions that submit information to the CDW – it is possible that students are stepping out to non-CDW institutions. We believe both avenues are worth pursuing in future research.

All institutions had some volume of stepping out, both as home institution and as host institution, with rates varying between 20% and 4% of students stepping out and between 11.3% and 0.3% of enrolments. The spread, particularly among enrolments at host institutions, suggests policy differences may affect when and how much stepping out activity takes place. That connection between policy and what's actually occurring is outside the scope of this study and may be an avenue for further research.

Stepping out occurred in all disciplines but was largest in business and management programs. Arts and sciences saw the most stepping out as a cluster, but once programs were broken out into more specific disciplines, business overtook any particular arts and sciences subject area in stepping out activity. Within arts and sciences, we identified English and social sciences (encompassing subject areas such as economics, political science, anthropology, and geography) as the largest subject areas for stepping out, with mathematics and statistics following behind. Some subject areas had very low rates of enrolments transitioning to transfer credits, such as visual and performing arts, health services, and security and protective services.

This study used a cohort from the 2015/2016 academic year to look at graduates and their behavior with regards to “stepping out” – taking courses at an institution that is not their primary institution. Stepping out is an avenue that a proportion of British Columbia post-secondary students pursue at some point in their academic career. However, stepping out doesn't appear to always provide the student their intended outcome because of the low rates of conversion from enrolments to transfer credits at home institutions. This suggests further investigation, such as looking at student intentions and how the system can best support students in their goals.

# References

- I.S. Educational Consulting (2015). *Visiting students: A survey of institutional policies and practices in British Columbia post-secondary education*. Retrieved from [bccat.ca/pubs/VisitingStudents\\_report.pdf](http://bccat.ca/pubs/VisitingStudents_report.pdf)
- Government of British Columbia. (n.d.). *Post-secondary central data warehouse*. Retrieved from [www2.gov.bc.ca/gov/content/education-training/post-secondary-education/data-research/post-secondary-central-data-warehouse](http://www2.gov.bc.ca/gov/content/education-training/post-secondary-education/data-research/post-secondary-central-data-warehouse)
- Simon Fraser University. (n.d.). *Letter of permission*. Retrieved from [www.sfu.ca/students/records/permission.html](http://www.sfu.ca/students/records/permission.html)
- Statistics Canada. (2011). *Classification of Instructional Programs (CIP) Canada* (Catalogue No. No. 12-590-X). Retrieved from [www150.statcan.gc.ca/n1/pub/12-590-x/12-590-x2012001-eng.pdf](http://www150.statcan.gc.ca/n1/pub/12-590-x/12-590-x2012001-eng.pdf)
- University Act, Revised Statutes of British Columbia (1996, c. 468). Retrieved from [www.bclaws.ca/EPLibraries/bclaws\\_new/document/ID/freeside/00\\_96468\\_01](http://www.bclaws.ca/EPLibraries/bclaws_new/document/ID/freeside/00_96468_01)
- University of Victoria. (n.d.). *Request for letter of permission to take courses elsewhere*. Retrieved from [www.uvic.ca/services/advising/assets/docs/forms/ADVA\\_LetterOfPermission.pdf](http://www.uvic.ca/services/advising/assets/docs/forms/ADVA_LetterOfPermission.pdf)



**BCCAT**

*Your guide through post-secondary education.*