

STP RESEARCH RESULTS

Student Transitions Project (STP):
Transitions of B.C. High School Graduates
into B.C. Public Post-Secondary Education

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Table of Contents

<i>Executive Summary</i>	4
<i>About this Research</i>	4
<i>Quick Facts</i>	4
<i>Introduction</i>	10
● <i>Overview</i>	10
● <i>Context</i>	10
<i>Research Results</i>	12
<i>Part 1: Student Transitions into Post-Secondary Education</i>	12
<i>Part 2: Did the pandemic affect student transitions and enrolments in B.C.?</i>	29
<i>Part 3: What are the trends in student academic performance in B.C.'s education systems?</i>	44

Executive Summary

About this Research

This newsletter provides highlights of the latest research from the Student Transitions Project (STP), with a focus on the first transitions of B.C. grade 12 graduates into B.C. public post-secondary education.

The study was conducted by the Student Transitions Project (STP), a collaborative research partnership involving B.C.'s education and advanced education ministries and post-secondary institutions.

This report presents a series of research questions and answers, beginning here with brief responses to each question, followed by a more detailed explanation and visual analysis in the Research Results section of the report, beginning on [page 12](#).

Quick Facts

[Part 1: Student Transitions into Post-Secondary Education](#)

◆ [What are the transition rates of B.C. high school graduates into B.C. public post-secondary education?](#) The immediate entry transition rate of 2019/2020 grade 12 graduates is currently 50.8%, but this rate has been declining since 2008/09 (53.9%). [\[Page 13\]](#)

☑ [What does the student transitions matrix reveal about student transitions of different graduation cohorts?](#) The immediate entry, delayed entry, no transition and cumulative transition rates for grade 12 graduation cohorts from each of the last ten years are provided. [\[Page 14\]](#)

☑ [Which institution types do high school graduates enrol in, by time of entry?](#) Immediate entry students were nearly twice as likely to enrol in RIUs* (45%) than TIUs (24%) or colleges (25%), while delayed entry students are more inclined to enrol in colleges (41%) and TIUs (29%) than RIUs (17%). The share of students entering institutes after a delay of one, two or three years (13%) was more than double the share who enrolled immediately (6%). [\[Page 15\]](#) *See institution type abbreviations in text box on page 5.

About the STP

The Student Transitions Project is British Columbia's collaborative research project that measures student success from the K-12 to post-secondary systems.

This effective system-wide partnership, involving B.C.'s education and advanced education ministries and public post-secondary institutions, is tracking student success by reporting on student transition rates to post-secondary education, student mobility among post-secondary institutions, and post-secondary completion and retention rates.

STP is managed by a steering committee with representation from the two education ministries, public institutions and the B.C. Council on Admissions and Transfer (BCCAT).

Research Results Legend

The following symbols used throughout this newsletter indicate the significance of each of the research findings.

- ☑ Recurring Consistent Trend
- ◆ Significant Change
- Context or Information

Special Thanks

The STP would like to thank the Ministry of Education and Child Care, the Ministry of Advanced Education and Skills Training and the B.C. public post-secondary institutions for collaborating in this research effort. Without their co-operation and data contributions, this research could not have been accomplished.

The following B.C. public post-secondary institutions are included in this study and grouped by institution designation in 2019/20:

Community Colleges (COL) – Camosun College, Coast Mountain College, College of New Caledonia, College of the Rockies, Douglas College, Langara College, North Island College, Northern Lights College, Okanagan College, Selkirk College, Vancouver Community College.

Institutes (INS) – British Columbia Institute of Technology, Justice Institute of British Columbia, Nicola Valley Institute of Technology.

** Colleges and Institutes (CIN) are frequently grouped together.*

Teaching-Intensive Universities (TIUs) – Capilano University, Emily Carr University of Art + Design, Kwantlen Polytechnic University, Royal Roads University, Thompson Rivers University, Vancouver Island University, University of the Fraser Valley.

Research-Intensive Universities (RIUs) – Simon Fraser University, University of British Columbia (including University of British Columbia, Okanagan), University of Northern British Columbia, University of Victoria.

☑ Which programs do high school graduates enrol in, by academic qualifications? A comparison of the post-secondary program destinations of high school high achievers versus moderate achievers reveals numerous differences. For example, high achievers are nearly three times more likely than moderate achievers to enrol in Engineering, whereas moderate achievers are four times more likely to enrol in Trades programs. Academic qualifications for entry to some programs may influence student program destinations. [Page 16]

☑ How does academic performance affect entry destinations, by institution type, time of entry and program entered? The average iGPA scores of students entering each institution type are two to three percentage points higher for immediate entrants than the average for delayed entry students. These differences also persist by varying magnitudes at the program level. [Page 17]

◆ Is socio-economic status a factor for students entering post-secondary education within one year of high school graduation? Based on a data linkage of student postal codes in the STP to 2016 Census data, immediate entry students generally come from postal areas with higher socio-economic status (SES) than students who did not transition to B.C. public post-secondary education. [Page 18]

◆ Are students from a lower socio-economic status enrolling in programs that will potentially raise their economic status? A preliminary look at the SES index of immediate entry students by program entered revealed some intuitive findings. For example, students entering Business and Engineering tend to come from higher socio economic backgrounds than students entering Trades programs. Much more detailed analysis is required to fully understand this topic. [Page 19]

☑ How do immediate entry transition rates vary by region, school type and school district in B.C.? Immediate entry transition rates vary by region of high school graduation, school type (public or independent) and school district. In addition, 86% of post-secondary entrants, immediately after high school graduation, registered in institutions within the same college region as their high school, but this also varies by school district of graduation. [Page 21-23]

✔ **What are the differences in student transition rates by student demographic characteristics?** Every year, the STP provides a summary of transition rates for different student sub-populations of high school graduates in B.C., including gender, age, Indigenous status, non-resident status, academic qualifications, etc. The table provides immediate entry rates, cumulative transition rates after five and ten years, transition rates into Bachelor's degree programs, and the number of grade 12 graduates within each sub-population. [\[Page 24-25\]](#)

◆ **Transition rates over the decade are declining. Is this trend widespread or concentrated within selected student populations?** Immediate entry transition rates declined by 1.7 and 2.5 percentage points over the last five and ten year periods respectively. Among the more sizeable student groups, the transition rate declines over the last decade are evident among various student groups, some of which include: males (-3.8 percentage points), Indigenous students (-4.6), students with special needs (-4.0), non-resident students (-3.8), and students with moderate iGPA scores (-7.2). [\[Page 26\]](#)

◆ **What are some possible reasons why immediate entry transition rates are declining over the last decade?** A number of different factors may be contributing to declining immediate entry transition rates, with these factors affecting diverse student sub-populations differently. For example, males in some regions of B.C. may be more attracted to the immediate financial returns of entering the workforce. In addition, the pandemic may have compounded the effects of declining transition rates among some student groups, such as Indigenous students and students with special needs. [\[Page 27\]](#)

◆ **How are transition rates of non-resident students affecting overall transition rates in B.C.?** Non-resident students have consistently maintained lower immediate entry transition rates to B.C. public post-secondary education than B.C. residents (currently 29.5% and 52.9% respectively). A growing share of non-resident graduates in B.C., along with their declining transition rates, are effectively pulling down the overall immediate entry transition rates for the province. Non-residents may choose to enrol in B.C. private institutions, non-B.C. institutions and other post-secondary options around the world. [\[Page 28\]](#)

STP Data and Methodology

Each year, for the purpose of tracking student transitions, student mobility and student success, the Student Transitions Project (STP) gathers post-secondary enrollment and credential completion data from the twenty-five B.C. public post-secondary institutions and links this data to secondary school enrollment information via encrypted personal education numbers (PENs).

The STP has continued to collect and combine this data from B.C.'s education systems every Fall since the project's inception in 2003, while ensuring the protection of student anonymity and privacy.

With each annual data submission, the STP dataset expands by one additional year, but with the benefit of each submission fully replacing and refreshing the previous multi-year submission with the most current and accurate information available.

The most recent STP data collection took place in the Fall of 2021, such that the STP now contains nineteen academic years* of data, including nineteen years of K-12 enrollment records (2001/2002 to 2019/2020) and nineteen full years of post-secondary data and (2002/2003 to 2020/2021), in addition to the most recent post-secondary enrollment term (Fall 2021).

** An academic year is September to August, including Fall, Spring and Summer terms, in that order.*



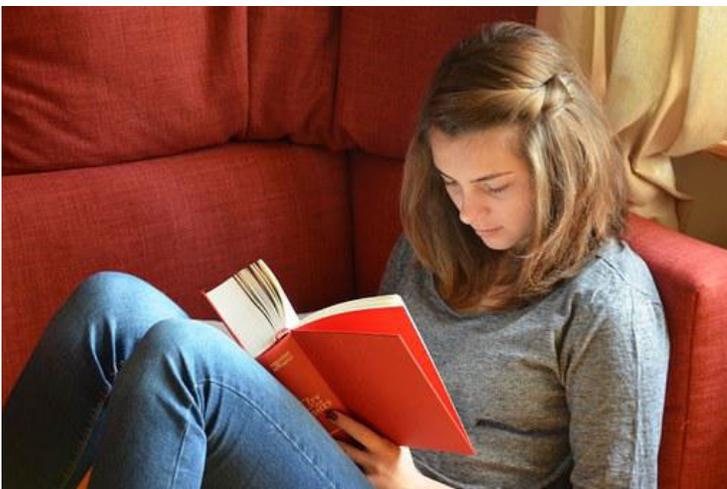
Part 2: Did the pandemic affect student transitions and enrolments in B.C.?

◆ Did the COVID-19 pandemic affect the immediate entry transition rates of recent pandemic graduates? The annual immediate entry transition rate (50.8%) for the first pandemic cohort of graduates in 2019/2020 remained relatively unchanged from the previous year (51.2%). The transition rates of the subsequent cohort of 2020/2021 pandemic graduates, with relatively low transition rates this Fall, will likely attain a comparably lower transition rate (48.5%), once the full year rate is calculated from final data after next year's STP data collection. [Page 30]

◆ How did the COVID-19 pandemic affect the immediate entry transition rates of selected sub-populations of 2019/2020 grade 12 graduates? Based on transition rates of 2019/2020 grade 12 graduates, a widening gap is appearing between numerous groups of students, relative to their counterparts. Larger declines in immediate entry transition rates are evident among selected student populations, including: males, moderate achievers, Indigenous students, Indigenous males, Indigenous moderate achievers, resident grade 12 graduates with moderate GPAs, non-resident high achievers, students with special needs, and graduates from outside the Lower Mainland. [Page 31-36]

☑ How do immediate entry transition rates compare for 2018/2019 and 2019/2020 graduates, by median family income? Through a student postal code data linkage from the STP to 2016 Census data, the STP was able to compare the median family income of grade 12 graduates who enrolled in post-secondary education in 2018/2019 (pre-pandemic) versus 2019/2020 (pandemic graduates). In general, transition rates of each graduation cohort are similar across family income ranges, gradually increasing over the income ranges of \$30,000 to \$119,000, from 46% to 56%. [Page 37]

☑ How do the median family income distributions compare for transitioners and non-transitioners, 2018/2019 and 2019/2020? The median family income distributions of immediate entry students and non-transitioners are very similar, suggesting that family income may not be a



significant factor in post-secondary attendance; however, other evidence in this report suggests that family income might influence the type of institution students attend.

[Page 38]

◆ **How do the median family income distributions compare across immediate entry students, by institution type first entered?** Immediate entry students who enter RIUs generally come from families with higher incomes than students who enter other institution types in B.C. A larger share of high-income families from the 2019/2020 graduation cohort, with median family incomes of \$100,000 or more, entered RIUs (55%), compared to TIUs (21%), colleges (18%) and institutes (5%). [Page 39]

◆ **How did the COVID-19 pandemic affect total new student enrolment trends in the B.C. public post-secondary system?** The B.C. public post-secondary system has seen a 13% drop in total new students in 2019/2020, compared to the previous year. A further drop of 3% occurred in the 2020/2021 academic year. Research-intensive universities in B.C. maintained a relatively stable number of new students, changing by 0% and -1% in each of the last two years. By comparison, B.C. colleges experienced the largest decline in new students in each of the last two years with changes of -20% and -7%, while TIUs experienced declines of -11% and -5%. Institutes saw a significant decline in new students (-17%) in 2019/2020, but appear to be recovering in 2020/2021 with a +1% change over the previous year. [Page 40-41]

◆ **How did the COVID-19 pandemic affect international and domestic student enrolments in the B.C. post-secondary system?** Total post-secondary enrolment has declined from a high of more than 450,000 unique headcount students in 2018/2019 to roughly 419,000 in 2020/2021. This represents a shift of -7% over two years, with most of this decline (-6%) occurring in academic year 2019/2020. Despite the pandemic, international students have increased their contribution to total enrolment in B.C. by two percentage points over the last two years, while domestic students reduced their contribution to the total by two percentage points. This shift is not attributed to international enrolment growth (+1% over two years), but instead it is due to domestic enrolment declines (-9% over two years). [Page 42-43]

STP Steering Committee Members

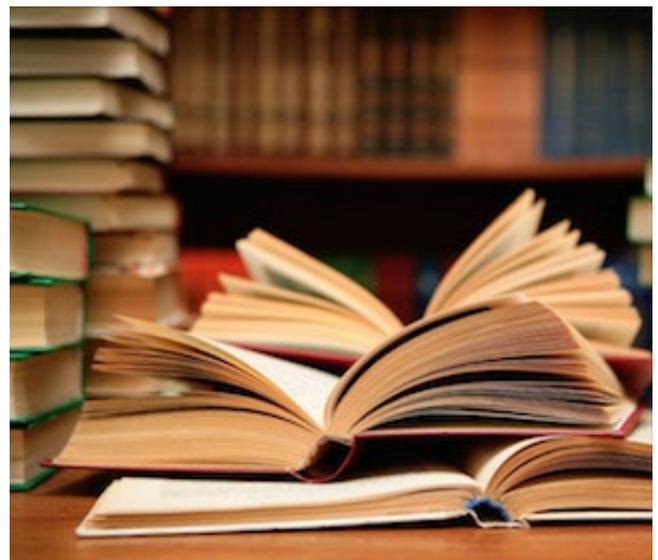
Mahi Boozarjomehri, Director, Outreach, Analytics and Reporting, Ministry of Education and Child Care.

Tony Eder, Executive Director, Academic Resource Planning, University of Victoria.

Leila Hazemi, Director, Research and Analytics, Ministry of Advanced Education and Skills Training.

Gord Stickney, Director, Enrolment Systems and Institutional Research, Camosun College.

Anna Tikina, Chair, STP Steering Committee and Director, Research and Admissions, BCCAT.





Part 3: What are the trends in student academic performance in B.C.'s education systems?

◆ What are the trends in student academic performance of B.C. high school graduates? What might be affecting these trends? Over the last decade, the average iGPA scores of B.C. high school graduates have increased by nearly five percentage points, from 77% to 80%, with an additional increase of one percentage point for the most recent 2020/2021 high school graduates. It is too soon to tell whether these minor iGPA shifts are attributed entirely to the pandemic or to curriculum changes, but the STP will continue to monitor these trends over the coming years. [Page 45]

◆ What are the trends in student academic performance of B.C. post-secondary registrants? What might be affecting these trends? The cumulative GPAs (CGPAs) of all undergraduate students in academic courses in B.C. public post-secondary institutions was 76.9% in the 2020/2021 academic year, following a decade of slightly lower CGPAs between 75% and 76%. This recent increase of nearly one full percentage point from the preceding CGPA trend is likely due to grading

accommodations granted to students, in response to the pandemic. [Page 46]

◆ Is the recent upward shift in post-secondary GPAs evident in all institution types and programs? The average increase in term GPAs ranged from +1.3 percentage points in colleges to +1.7 percentage points in RIUs. Similarly, across all institutions and by program, the average increase in term GPAs ranged from +1.0 percentage points in Visual and Performing Arts programs to +2.0 percentage points in Arts and Sciences and Health programs. [Page 47]

◆ What is the relationship between high school academic performance and first term post-secondary performance? Scatter plots of high school iGPAs versus post-secondary first term GPAs are provided for immediate entry students of 2019/2020. The correlation between the two measures of academic performance is weakest among entrants to institutes ($R^2=0.09$), but stronger among entrants to colleges ($R^2=0.14$), RIUs ($R^2=0.16$) and TIUs ($R^2=0.17$). [Page 48]

◆ Do high school graduates experience entry shock in their first term in post-secondary education in B.C.? Entry shock is the drop in GPA that students experience when they first enrol in post-secondary education, relative to the iGPA they attained upon high school graduation. High achieving high school graduates of 2019/2020 experienced a larger entry shock (-11.6 percentage points) than moderate achieving high school graduates (-9.9 percentage points). [Page 49]

◆ What is the magnitude of the entry shock experienced by immediate entry students, by post-secondary program entered? The magnitude of the entry shock, for immediate entry students of 2020/2021 who graduated in 2019/2020, ranges from a large shock of -12.7 percentage points for Engineering & Applied Sciences entrants to a smaller shock of -3.5 percentage points for Visual and Performing Arts students. Trades students, on average, do not experience entry shock, but instead improve their academic performance by +5.1 percentage points in their first post-secondary term, relative to high school graduation. [Page 50]

◆ How does credit load impact post-secondary academic performance of new and continuing students? In general, the fewer the number of credits students attempt in a term, the higher their term GPA, suggesting that a reduced credit load may contribute to academic success; however, students enrolled in 13 or more credits in the term attained relatively higher GPAs than students enrolled in fewer credits. [Page 51]

Introduction

Overview

This report provides highlights of the latest research from the Student Transitions Project (STP), with a focus on the first transitions of B.C. grade 12 graduates into B.C. public post-secondary education. This newsletter is also available to the public on the [STP website](#).¹



Context

For more than two years, the world has been disrupted by a pandemic, but B.C.'s K-12 and post-secondary education systems adapted and managed to continue educating students, enrolling new learners, graduating grade 12's and conferring post-secondary credentials. Throughout these tumultuous times, students were affected in many ways. The data provided by the STP may help us understand some of the impact, although the data alone cannot tell the full story. The following review of the pandemic timelines in B.C. is intended to provide some context for the STP information and analysis provided in this report.

On March 11, 2020, the World Health Organization (WHO) declared the COVID-19 pandemic, and within the span of a few days, B.C. public post-secondary institutions moved to online instruction and B.C. K-12 education began delivering remote instruction to their students after spring break. Schools remained open for vulnerable students and children of essential service workers. In June of 2020, B.C. K-12 schools reopened for in-class instruction for the remainder of the 2019/2020 academic year, with voluntary in-person attendance and strict COVID-19 protocols implemented to ensure safety of students and staff.

The summer of 2020 looked promising, as the number of new COVID-19 cases dropped to single-digit numbers, but the second wave of the pandemic was well underway by the Fall of 2020. Social gathering restrictions were implemented and masks were mandated for use in indoor public spaces. B.C. K-12 schools operated with enhanced safety measures when students returning to in-class instruction in the Fall of 2020. Students were organized into learning groups to reduce the number of people each student or staff member came into contact with, thus reducing the risk of transmission and facilitating faster contact tracing. B.C. public post-secondary institutions continued instruction primarily through online and remote learning.

By late November of 2020, COVID case counts were approaching nearly 1,000 new cases per day as B.C. reached the peak of the second wave of the pandemic. Additional social gathering restrictions and health orders were implemented for the holiday season, but the approval of vaccines provided a glimmer of hope. Vaccinating citizens would slow the spread of the virus.

¹ Public STP website is located here: <http://www2.gov.bc.ca/gov/content/education-training/post-secondary-education/data-research/student-transitions-project>

Throughout 2021, many B.C. residents responded to the opportunity to receive a vaccine for protection from COVID-19. Residents were vaccinated according to a priority, based on risk factors and age. By early September of 2021, 78% of eligible (age 12+) British Columbians were fully vaccinated with two doses of vaccine; and an overall sense of optimism was developing, at least until Omicron posed a new threat.

In the late Fall of 2021 and throughout the first quarter of 2022, the Omicron variant of the coronavirus disease disrupted efforts to return to normal, raising the level of pandemic fatigue and frustration. Many residents of B.C. became infected, testing capacity was overwhelmed, and the ability of health authorities to quantify active cases in B.C. was severely constrained testing capacity limits.

By March of 2022, with 86% of the eligible B.C. population (age 5+) fully vaccinated with at least two doses of vaccine, the indoor mask mandate was repealed and numerous restrictions on social gatherings were lifted. When B.C. K-12 students returned to school after spring break 2022, they were no longer required to wear masks, although many students continue to wear masks for their own comfort and risk mitigation.

By the time of writing this report in May of 2022, B.C. is arguably riding its sixth wave of the pandemic and more than 3,300 citizens of B.C. have died, pale in comparison to the six million people worldwide whose lives were lost to the disease. The public health restrictions in B.C. and around the world are becoming more relaxed, as increasing shares of the population are becoming vaccinated to protect themselves and others from the virus. By mid-May of 2022, nearly 60% of the global population is fully vaccinated, but the Omicron variant and sub-variants continue to pose a threat to vaccinated and unvaccinated people, causing a milder illness and lower risk of death than the original strains from two years ago.

Summarizing the pandemic timelines in one or two pages does not reveal the hardship, pain and tragedy of the last two years, but is intended to remind readers that the traditional learning environment and distractions of the world around us are likely to have a profound impact on students.

The STP provided a preliminary evaluation of the impact of the pandemic on student transition rates and post-secondary enrolments in B.C. in last year's (June 2021) report, based on STP2020 data collected in the Fall of 2020. In those early days of the pandemic, the STP data collection timelines only allowed for limited analysis. In this year's newsletter, with one more year of data collected, the STP is able to provide more information on the impact of the pandemic on student transitions from high school to post-secondary, as well as overall post-secondary enrolment trends. The STP is able to assess the pandemic effects on the recent grade 12 graduation cohort of 2019/2020 and all post-secondary registrants of 2019/2020 and 2020/2021. This report reveals continued declines in student transition rates and post-secondary enrolments in B.C., although these trends vary across the B.C. system.

Research Results

Part 1:

Student Transitions into Post-Secondary Education

◆ What are the transition rates of B.C. high school graduates into B.C. public post-secondary education?

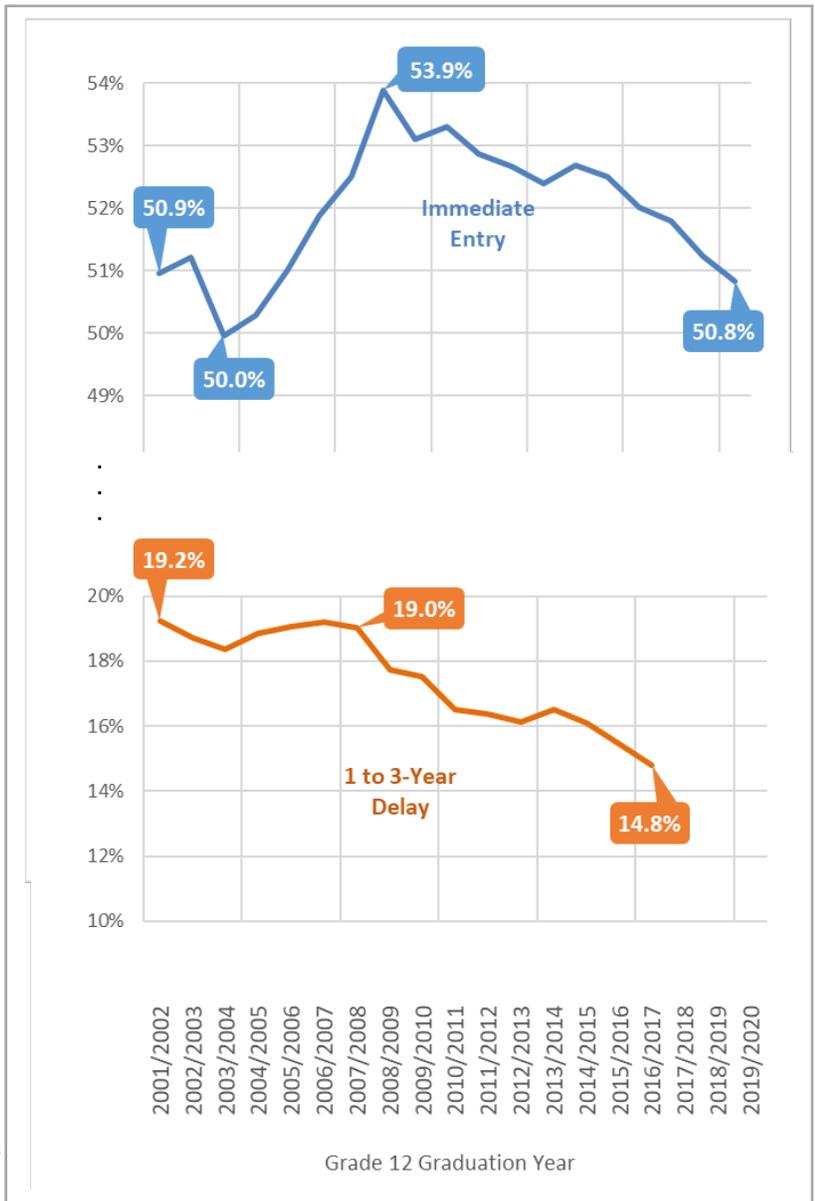
The Student Transitions Project measures the proportion of grade 12 graduates who enrolled in B.C. public post-secondary education after grade 12 graduation. Immediate entry transition rates measure the share of a grade 12 graduation cohort who enrolled in post-secondary education within one year of grade 12 graduation, whereas delayed-entry rates measure the proportion who enrolled after more than a year.

Immediate entry: The immediate entry transition rate of 2019/2020 grade 12 graduates is currently 50.8%. See [Figure 1](#). Looking back at STP’s first graduation cohort of 2001/2002, through to the most recent cohort of 2019/2020, it is evident that immediate entry transition rates have been declining since 2008/09. Despite this declining trend, these rates have remained consistently above 50%, ranging from a low of 50.0% for the 2003/2004 grade 12 graduation cohort to a high of 53.9% for the 2008/2009 graduation cohort.

Delayed Entry: The proportion of 2016/2017 grade 12 graduates who delayed their transition into B.C. public post-secondary education for one, two or three years is 14.8%. This is significantly lower than the equivalent rate of 19.2% for the 2001/2002 graduation cohort from fifteen years earlier.

Declining Transition Rate Trends: Over the last decade, the immediate and delayed entry transition rates have declined each year over the preceding graduation cohort, with the exception of small and intermittent recoveries over the period. The immediate and delayed entry transition rates are now more than four percentage points lower than the relatively high rates achieved earlier in the decade. The declining transition rates may be attributed to a number of different factors, especially since these declining rates are not consistent across all sub-populations of high school graduates.

FIGURE 1: TRENDS IN IMMEDIATE ENTRY AND DELAYED ENTRY TRANSITION RATES OF B.C. GRADE 12 GRADUATES, 2001/2002 TO 2019/2020



What does the student transitions matrix reveal about student transitions of different graduation cohorts?

The STP provides a student transitions matrix for different sub-populations of students and these are available on the public STP website¹, in addition to the STP SharePoint site for authorized users. The matrix at the provincial level (see [Figure 2](#)) shows the number of grade 12 graduates in each of the last ten graduation cohorts and their time of first entry into the B.C. public post-secondary education system. A number of indicators and patterns are evident in the matrix:

- The figures in the main diagonal of the matrix show the relatively consistent and gradually declining **immediate entry** transition rate over the last decade.
- The additional diagonal cells to the right of the main diagonal show the **delayed entry** transition rates in subsequent years. The delayed entry rates are increasingly smaller as the number of years since graduation increases; and these rates are generally declining with each successive graduation cohort.
- The number and proportion of each graduation cohort that has not yet entered post-secondary education in B.C. is provided in the “**No Transition Yet**” column of the matrix.
- The **cumulative transition rate** provides the sum of all students from each cohort who have enrolled in post-secondary education up until present time.
- As the number of years since graduation increases, for any given graduation cohort, the proportion of students who enroll in post-secondary education increases, while the proportion who have not yet transitioned to post-secondary education decreases.

FIGURE 2: STUDENT TRANSITION MATRIX – NUMBER OF STUDENT TRANSITIONS FROM GRADE 12 GRADUATION TO B.C. PUBLIC POST-SECONDARY EDUCATION IN EACH ACADEMIC YEAR

Grade 12 Grad Year		Post-Secondary School Year										No Transition Yet	Grand Total Gr12 Grads	Cumulative Transition Rate
		2011/2012	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021			
2010/2011	# of HS Grads	24,289	4,656	1,801	1,073	848	581	443	371	262	242	10,996	45,562	(10 years)
	% of HS Grad Class	53.3%	10.2%	4.0%	2.4%	1.9%	1.3%	1.0%	0.8%	0.6%	0.5%	24.1%	100.0%	75.9%
2011/2012	Count of HS Grads		24,482	4,533	1,884	1,161	898	617	469	344	275	11,644	46,307	(9 years)
	% of HS Grad Class		52.9%	9.8%	4.1%	2.5%	1.9%	1.3%	1.0%	0.7%	0.6%	25.1%	100.0%	74.9%
2012/2013	Count of HS Grads			24,139	4,429	1,870	1,088	836	614	456	365	12,032	45,829	(8 years)
	% of HS Grad Class			52.7%	9.7%	4.1%	2.4%	1.8%	1.3%	1.0%	0.8%	26.3%	100.0%	73.7%
2013/2014	Count of HS Grads				23,422	4,539	1,799	1,047	772	552	454	12,120	44,705	(7 years)
	% of HS Grad Class				52.4%	10.2%	4.0%	2.3%	1.7%	1.2%	1.0%	27.1%	100.0%	72.9%
2014/2015	Count of HS Grads					23,131	4,273	1,736	1,051	689	558	12,467	43,905	(6 years)
	% of HS Grad Class					52.7%	9.7%	4.0%	2.4%	1.6%	1.3%	28.4%	100.0%	71.6%
2015/2016	Count of HS Grads						22,831	4,118	1,725	887	712	13,212	43,485	(5 years)
	% of HS Grad Class						52.5%	9.5%	4.0%	2.0%	1.6%	30.4%	100.0%	69.6%
2016/2017	Count of HS Grads							22,700	3,993	1,568	894	14,489	43,644	(4 years)
	% of HS Grad Class							52.0%	9.1%	3.6%	2.0%	33.2%	100.0%	66.8%
2017/2018	Count of HS Grads								23,066	3,892	1,526	16,054	44,538	(3 years)
	% of HS Grad Class								51.8%	8.7%	3.4%	36.0%	100.0%	64.0%
2018/2019	Count of HS Grads									22,710	3,623	17,992	44,325	(2 years)
	% of HS Grad Class									51.2%	8.2%	40.6%	100.0%	59.4%
2019/2020	Count of HS Grads										22,596	21,862	44,458	(1 year)
	% of HS Grad Class										50.8%	49.2%	100.0%	50.8%

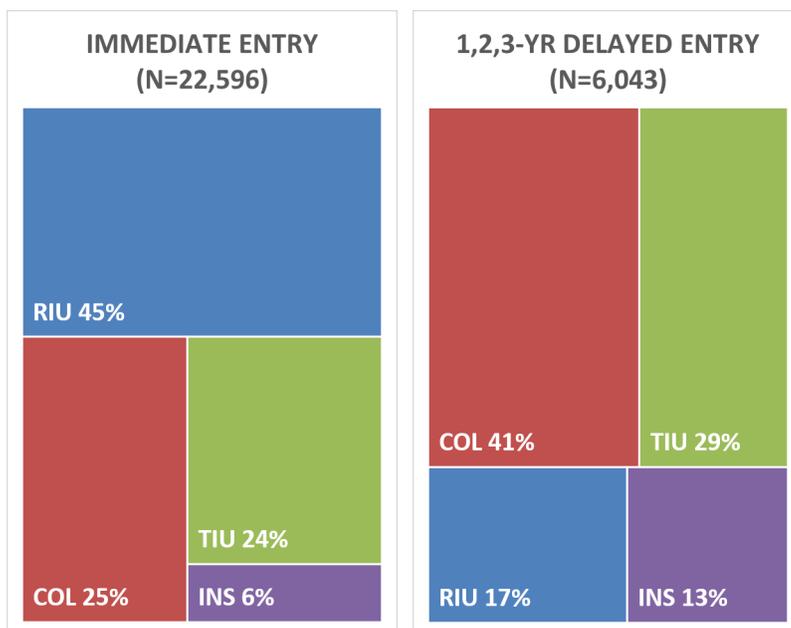
◆ Which institution types do high school graduates enrol in, by time of entry?

Looking at the 28,639 first-time entrants to B.C. public post-secondary institutions in 2020/2021, among those who graduated from B.C. high schools over the last four years, it is evident that 79% took the immediate entry route, whereas 21% delayed their 2020/2021 post-secondary entry by up to three years. **Figure 3** compares the types of post-secondary institution destinations for these immediate versus delayed entry students.

- Immediate entry students were nearly twice as likely to enrol in RIUs (45%) than TIUs (24%) or colleges (25%). Institutes represented 6% of the immediate entry student destinations.
- Delayed entry students are much more likely to enrol in colleges (41%) and TIUs (29%) than RIUs (17%).
- The share of students entering institutes after a delay of one, two or three years (13%) was more than double the share who enrolled immediately (6%).

Differences in academic qualifications of students upon graduation from high school may largely explain the differences in immediate and delayed entry destinations. See [page 17](#).

FIGURE 3: DESTINATIONS OF IMMEDIATE AND DELAYED ENTRY STUDENTS WHO FIRST ENROLLED IN B.C. PUBLIC POST-SECONDARY EDUCATION IN 2020/2021 (N=28,639), AMONG GR12 GRADUATES OF 2016/2017 TO 2019/2020



◆ Which programs do high school graduates enrol in, by academic qualifications?

The post-secondary program destinations of 28,639 first-time entrants to B.C. public post-secondary institutions in 2020/2021, among those who graduated in 2016/2017 to 2019/2020, is provided in [Figure 4](#). This includes 22,596 immediate entry students, as well as 6,043 students who delayed their post-secondary entry by up to three years. In roughly similar proportions, the breakdown of these students by high school academic performance includes 22,134 (or 77%) high achievers, with an average iGPA score of 85.6 and 6,505 (or 23%) moderate achievers, with an average iGPA score of 69.4.²

- Given that Arts and Sciences is the largest program area, it is not surprising that the majority of high achievers (52%) and moderate achievers (35%) enrol in these programs.
- More than three-quarters (78%) of the high achievers entered the three most popular programs, including Arts and Sciences (52%), Business and Management (12%) and Engineering and Applied Sciences (13%).
- By comparison, the vast majority (79%) of the moderate achievers entered a different set of the four most popular programs for this group, including Arts and Sciences (35%), Trades (21%), Business and Management (14%) and Developmental programs (8%).
- The differences in program destinations may be explained by differences in academic qualifications of high school graduates and this impacts time of entry (immediate or delayed). See [page 17](#).

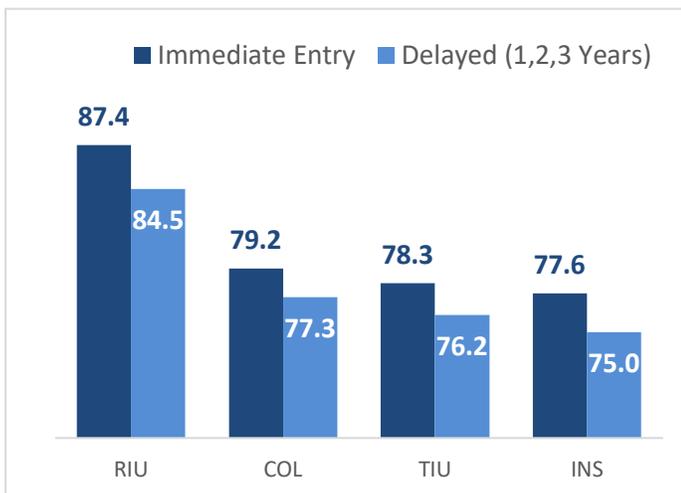
BC CIP Cluster	High Achiever	Moderate Achiever	Grand Total
Arts and Sciences	52.1%	35.4%	48.3%
Business and Management	12.1%	13.8%	12.5%
Engineering and Applied Sciences	13.1%	4.8%	11.2%
Trades	4.7%	20.8%	8.3%
Human and Social Services	5.2%	7.2%	5.6%
Health	5.8%	4.5%	5.5%
Visual and Performing Arts	3.9%	3.3%	3.7%
Developmental	1.9%	8.3%	3.4%
Education	0.8%	1.0%	0.8%
Personal Improvement and Leisure	0.3%	0.9%	0.5%
Other	0.1%	0.0%	0.1%
Grand Total	100.0%	100.0%	100.0%

FIGURE 4: PERCENTAGE DISTRIBUTION OF HIGH ACHIEVERS AND MODERATE ACHIEVERS BY PROGRAM ENTERED (2020/2021)

² High achievers attained an iGPA score of 75% and above, whereas moderate achievers attained iGPA scores between 50% to 75% in high school.

◆ How does academic performance affect entry destinations, by institution type, time of entry and program entered?

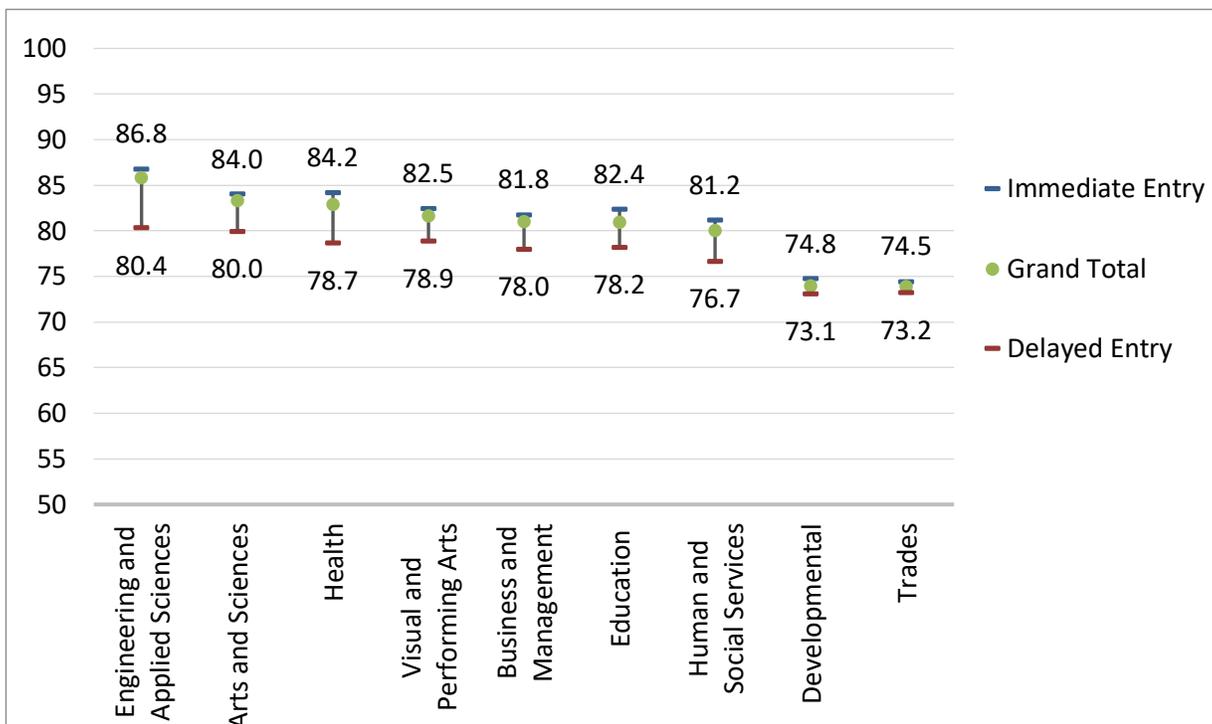
FIGURE 5: AVERAGE iGPA SCORES OF IMMEDIATE AND DELAYED ENTRY STUDENTS, BY PSI TYPE ENTERED IN 2020/2021



Differences in the destinations of students by institution type, time of entry and program area (as shown on the [preceding two pages](#)), can largely be explained by differences in academic qualifications, as follows:

- The average iGPA scores of students entering each institution type are two to three percentage points higher for immediate entrants than the average for delayed entry students. See [Figure 5](#).
- Similarly, the iGPA gap between immediate entry and delayed entry students ranges from 6.5 percentage points for Engineering and Applied Science entrants to 1.2 percentage points for Trades entrants. See [Figure 6](#).
- More information about *Measures of Secondary School Academic Performance* is provided on the [next page](#).

FIGURE 6: AVERAGE iGPA SCORES OF 2020/2021 POST-SECONDARY ENTRANTS FROM B.C. GRADE 12 GRADUATION, BY PROGRAM ENTERED AND TIME OF ENTRY



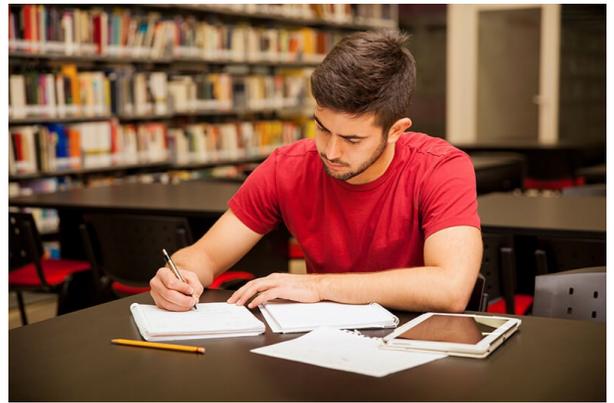
Measures of Secondary School Academic Performance

The STP uses two different academic performance measures in complementary ways to evaluate student academic performance achieved in high school and the impact this performance has on student transition rates and post-secondary academic performance: Academic GPA (AGPA) and the Inclusive GPA (iGPA).

Academic GPA (AGPA) – This measure is typically used as an indicator of university eligibility. The AGPA is the average of four course grades, English 12 and the student’s best three other academic grade 12 subjects. More than half of the students who completed grade 12 do not complete the necessary set of courses or achieve insufficient grades in order to calculate an AGPA. Thus the utility of the AGPA is limited to a subset of academically qualified students in the STP.

Inclusive GPA (iGPA) – This is a more broadly defined measure than the AGPA and it allows the STP to measure the academic performance of both grade 12 graduates and non-graduates. The iGPA is calculated from the average of twelve course grades selected from each of twelve subject areas for grade 10, 11 and 12 courses required for graduation. The best grade from each of the twelve subject areas is included in the iGPA calculation. In those cases where a student has not yet completed the requirements for all twelve subject areas, the iGPA is calculated on as many courses as are available for that student, from a minimum of one to a maximum of twelve courses per student. The twelve subject areas are based on the current grade 12 graduation requirements:

1) Planning 10	7) Skills and Fine Arts 10, 11, 12
2) Language Arts 10	8) Social Studies 10
3) Language Arts 11	9) Social Studies 11 or 12
4) Language Arts 12	10) Science 10
5) Math 10	11) Science 11 or 12
6) Math 11 or 12	12) Physical Education 10

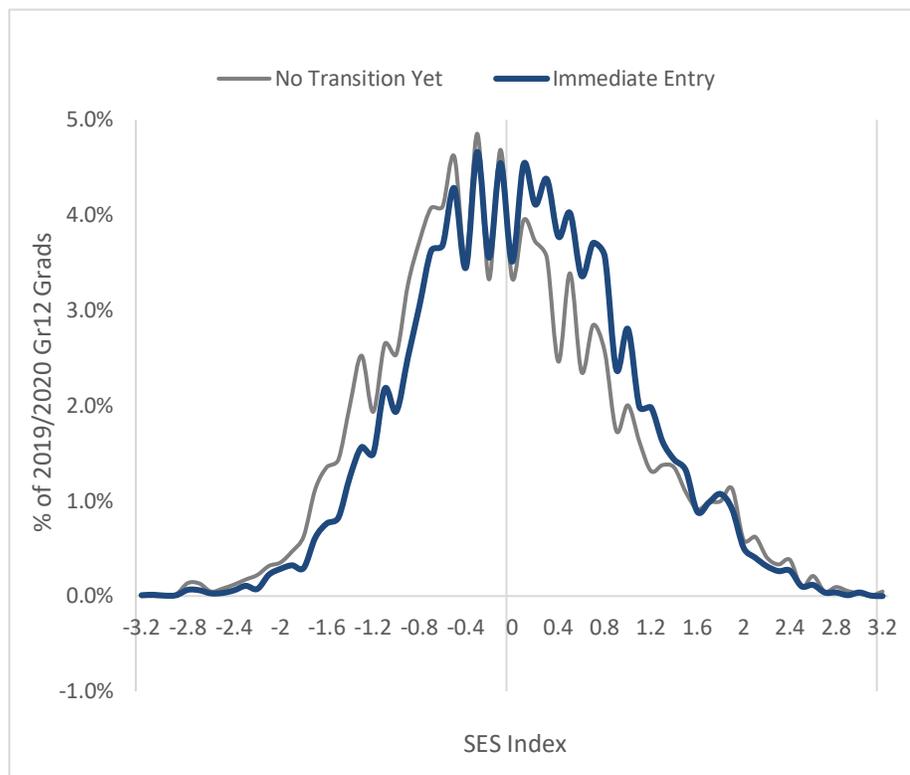


◆ Is socio-economic status a factor for students entering post-secondary education within one year of high school graduation?

The STP is able to link student postal codes of grade 12 graduates to 2016 Census data³ to obtain the socio-economic status (SES) of families in each postal area where students were living at the time of high school graduation. The socio-economic status is a composite standardized index with a mean of 0 and standard deviation of 1, incorporating five other indices (education level, occupation, economic, family and community). A larger index value implies a higher socio-economic status and a lower index value implies a lower socio-economic status.

The two socio-economic distribution curves in [Figure 7](#) show the proportion of 2019/2020 grade 12 graduates who enrolled in B.C. public post-secondary education within one year of high school graduation, compared to those who did not enrol yet. The SES distribution curve of immediate entry students is shifted further to the right (or higher on the SES scale) than non-transitioners, implying that immediate entry students generally come from a higher socio-economic status than non-transitioners. One visible exception is for students from families with a SES index above 2.0, who seem to have lower transition rates than expected. Families in this SES range likely have the financial resources to send their grade 12 graduate to a post-secondary institution outside of B.C. or anywhere in the world, and such transitions to institutions outside of the B.C. public system are not quantified here.

FIGURE 7: COMPARISON OF SOCIO-ECONOMIC INDEX DISTRIBUTION CURVES - IMMEDIATE ENTRY VERSUS NON-TRANSITIONING 2019/2020 GRADE 12 GRADES



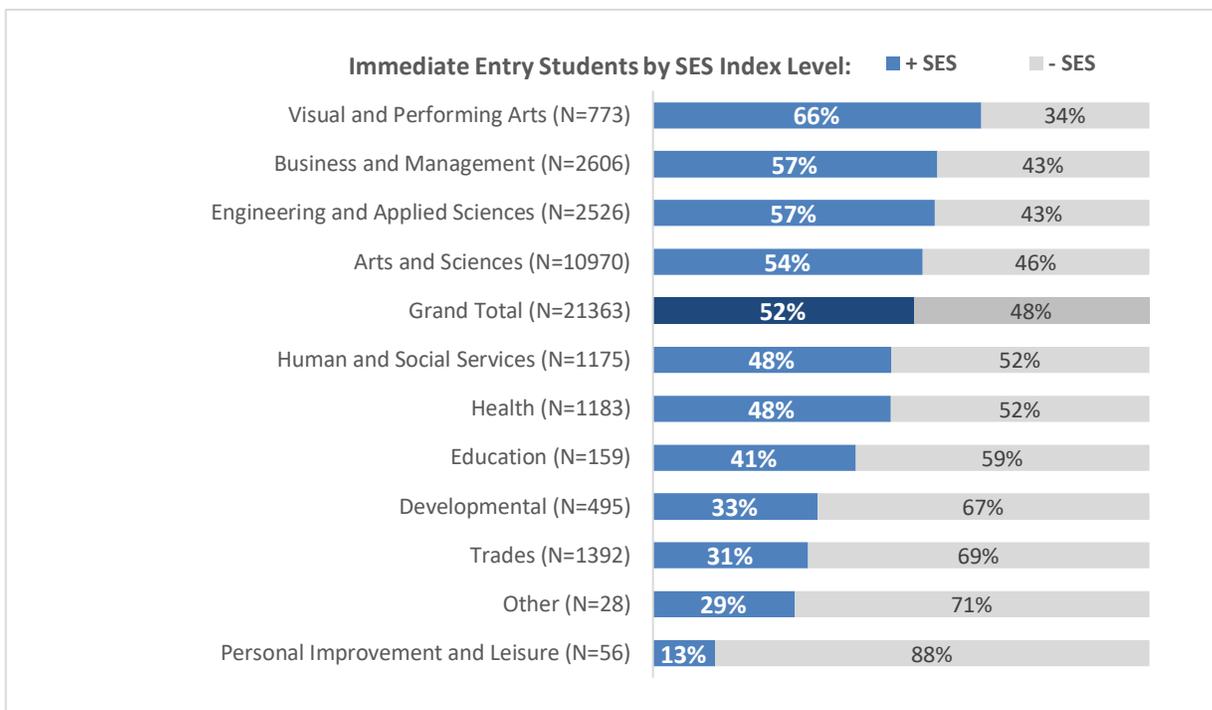
³ Ministry of Education and Child Care, Education Analytics Office Neighbourhood Socioeconomic Index: Derived from Statistics Canada Census public use microdata files for Census years 2001-2016.

◆ Are students from a lower socio-economic status enrolling in programs that will potentially raise their economic status?

As presented on the [previous page](#), the socio-economic index of immediate entry students from the 2019/2020 grade 12 graduation cohort indicated that the socio-economic status of immediate entrants was generally higher than non-transitioners to post-secondary education. The same SES index is used to investigate whether students from a lower SES are enrolling in programs that have the potential to raise their economic status.

There a number of ways one might assess whether entering and completing a particular post-secondary program has the potential to raise one's socio-economic status, especially since many post-secondary programs lead to a multitude of different jobs or careers, with each program offering different earnings potential. The [WorkBC](#) website provides career profiles for numerous jobs and occupations, including earnings, job openings and projected employment growth. In this first-time superficial analysis, the STP will leave it to readers to make their own assumptions about the earnings potential of different programs; however, the information shown in [Figure 8](#) below does provide some insight. The major program destinations of immediate entry students are provided; and the proportion of students entering each program from postal areas with a lower than average socio-economic status (negative SES) are distinguished from students from higher SES postal areas (positive SES). Intuitively, some high income potential program areas, such as Business or Engineering, attract students from a higher socio-economic status, but the granularity of the data presented here is not sufficient to determine if lower SES students have the potential to raise their SES status through their program choices. More analysis is required.

FIGURE 8: SOCIO-ECONOMIC LEVEL OF IMMEDIATE ENTRY STUDENTS FROM THE 2019/2020 GRADUATION COHORT, BY PROGRAM ENTERED



◆ How do immediate entry transition rates vary by region, school type and school district in B.C.?

Figure 9 provides immediate entry transition rates by region of graduation, school type (public or independent) and school district. The right-most column indicates the proportion of 2019/2020 grade 12 grade graduates from each school district who enrolled in an institution within the same college region as their high school (86%, on average, but varies by school district).

FIGURE 9: IMMEDIATE ENTRY STUDENT TRANSITION RATES BY REGION OF GRADUATION, SCHOOL TYPE AND SCHOOL DISTRICT: GRADE 12 GRADUATES OF 2015/2016 TO 2019/2020

Region of Grade 12 Graduation				Immed-Entry Trans. Rate by Gr12 Grad Year					5-Yr Change~			# Grads in 2019/2020	% of Immed Entry to PSI Within Region	
College Region of Gr12 Graduation	School Type	School District	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	Trans % Trend	Trans %	#Trans.	# Grads			
Camosun	BC Public	061	Greater Victoria	48%	46%	49%	47%	50%	~	+11%	+79	+96	1,443	88%
		062	Sooke	48%	40%	38%	39%	39%	~	+8%	+21	+163	683	93%
		063	Saanich	48%	48%	47%	49%	52%	~	+1%	+3	-45	598	86%
		064	Gulf Islands^	41%	37%	29%	27%	31%	~	-3%	-1	+26	116	67%
	All BC Public Schools in Region			48%	45%	45%	45%	47%	~	+7%	+94	+237	2,859	88%
	All BC Independent Schools in Region			48%	39%	45%	40%	48%	~	+11%	+28	+57	514	65%
All BC Public & Independent Schools in Region				48%	44%	45%	44%	47%	~	+8%	+122	+294	3,373	84%
Capilano	BC Public	044	North Vancouver	54%	56%	52%	57%	55%	~	+2%	+11	+7	1,180	88%
		045	West Vancouver	43%	44%	42%	51%	46%	~	+3%	+9	-23	653	76%
		046	Sunshine Coast	43%	34%	36%	33%	39%	~	-19%	-14	-15	193	82%
		048	Sea to Sky	37%	43%	40%	33%	38%	~	+1%	+1	-5	316	55%
	064	Gulf Islands^	40%	43%		40%		~		-2	-5			58%
	All BC Public Schools in Region			48%	49%	46%	50%	49%	~	+1%	+7	-39	2,353	74%
All BC Independent Schools in Region			37%	31%	33%	35%	35%	~	+15%	+33	+122	614	77%	
All BC Public & Independent Schools in Region				46%	46%	44%	47%	46%	~	+3%	+40	+83	2,967	74%
Coast Mountain	BC Public	050	Haida Gwaii	54%	73%	58%	57%	45%	~	-43%	-6	-6	31	
		052	Prince Rupert	50%	54%	49%	53%	47%	~	-22%	-10	-16	97	50%
		054	Bulkley Valley	41%	29%	26%	34%	38%	~	-20%	-9	-13	119	58%
		082	Coast Mountains	45%	52%	49%	51%	40%	~	-21%	-25	-19	295	68%
	092	Nisga'a	43%	100%	79%	40%	39%	~	+57%	+4	+11	18	86%	
	All BC Public Schools in Region			46%	48%	45%	47%	41%	~	-20%	-46	-43	560	59%
All BC Independent Schools in Region			35%	32%	25%	30%	23%	~			+22	62	50%	
All BC Public & Independent Schools in Region				45%	47%	43%	46%	39%	~	-19%	-46	-21	622	58%
Douglas	BC Public	040	New Westminster	56%	56%	52%	56%	60%	~	+17%	+46	+50	460	96%
		041	Burnaby	66%	64%	61%	61%	62%	~	-3%	-37	+56	1,929	96%
		042	Maple Ridge-Pitt Meadows	41%	43%	46%	47%	45%	~	+14%	+66	+74	1,030	84%
		043	Coquitlam	56%	56%	56%	56%	58%	~	+9%	+129	+160	2,629	91%
	All BC Public Schools in Region			57%	56%	56%	56%	57%	~	+6%	+208	+353	6,077	92%
	All BC Independent Schools in Region			65%	60%	60%	59%	58%	~	-9%	-26	+10	490	88%
All BC Public & Independent Schools in Region				57%	56%	56%	56%	57%	~	+5%	+182	+363	6,567	92%
Fraser Valley	BC Public	033	Chilliwack	38%	40%	47%	43%	44%	~	+13%	+43	-6	771	85%
		034	Abbotsford	54%	50%	52%	55%	54%	~	-5%	-33	-39	1,335	86%
		075	Mission	39%	44%	45%	49%	38%	~	+14%	+19	+59	367	84%
		078	Fraser-Cascade	51%	43%	50%	37%	30%	~	-74%	-20	-4	89	74%
	All BC Public Schools in Region			47%	45%	49%	50%	48%	~	+1%	+9	+10	2,562	85%
	All BC Independent Schools in Region			46%	45%	45%	44%	39%	~	-16%	-26	+4	425	83%
All BC Public & Independent Schools in Region				47%	45%	49%	49%	46%	~	-1%	-17	+14	2,987	85%
Kwantlen	BC Public	035	Langley	43%	45%	45%	44%	47%	~	+17%	+121	+138	1,531	90%
		036	Surrey	63%	62%	61%	61%	61%	~	-1%	-37	+37	5,102	92%
		037	Delta	60%	60%	60%	58%	57%	~	-6%	-45	-11	1,345	89%
		038	Richmond	71%	67%	68%	68%	66%	~	-19%	-196	-162	1,597	93%
	All BC Public Schools in Region			61%	60%	59%	59%	59%	~	-3%	-161	+9	9,617	91%
	All BC Independent Schools in Region			56%	61%	55%	53%	57%	~	+20%	+121	+213	1,056	89%
All BC Public & Independent Schools in Region				61%	60%	59%	59%	59%	~	-1%	-40	+222	10,673	91%
New Caledonia	BC Public	028	Quesnel	44%	48%	43%	41%	37%	~	-54%	-33	-50	166	59%
		057	Prince George	50%	48%	47%	47%	48%	~	-5%	-19	-11	750	86%
		091	Nechako Lakes	45%	38%	40%	38%	38%	~	-53%	-52	-78	259	49%
		All BC Public Schools in Region			47%	46%	45%	44%	44%	~	-21%	-107	-142	1,178
	All BC Independent Schools in Region			38%	47%	39%	40%	39%	~	-36%	-8	-23	57	73%
	All BC Public & Independent Schools in Region				47%	46%	45%	44%	44%	~	-21%	-115	-165	1,235

See footnotes on page 21.

FIGURE 9, CONT.: IMMEDIATE ENTRY STUDENT TRANSITION RATES BY REGION OF GRADUATION, SCHOOL TYPE AND SCHOOL DISTRICT: GRADE 12 GRADUATES OF 2015/2016 TO 2019/2020

Region of Grade 12 Graduation				Immed-Entry Trans. Rate by Gr12 Grad Year					5-Yr Change~			# Grads in	% of Immed			
College Region of Gr12 Graduation	School Type	School District		2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	Trend	Trans %	# Trans.	# Grads	2019/2020	Entry to PSI in Region		
North Island	BC Public	049	Central Coast	63%	50%	71%	60%	38%	↘	-67%	-2	8	67%			
		070	Pacific Rim	54%	51%	48%	46%	45%	↘	-4%	-4	+27	220	81%		
		071	Comox Valley	47%	45%	42%	43%	47%	↘	-18%	-43	-87	511	80%		
		072	Campbell River	44%	44%	46%	52%	47%	↘	+7%	+11	+4	339	89%		
		084	Vancouver Island West	50%	55%	60%	54%	42%	↘	+30%	+3	+10	24	70%		
		085	Vancouver Island North	38%	43%	49%	49%	41%	↘	+14%	+4	+5	71	90%		
	All BC Public Schools in Region				47%	46%	45%	47%	46%	↘	-6%	-32	-42	1,181	83%	
	All BC Independent Schools in Region				38%	35%	30%	35%	39%	↘	+21%	+4	+10	49	63%	
	All BC Public & Independent Schools in Region				47%	46%	45%	46%	46%	↘	-5%	-28	-32	1,230	83%	
	Northern Lights	BC Public	059	Peace River South	33%	26%	29%	34%	24%	↘	-35%	-19	+2	223	74%	
060			Peace River North	29%	30%	33%	31%	29%	↘	-1%	-1	-8	325	73%		
081			Fort Nelson	33%	29%	43%	34%	26%	↘	-67%	-6	-11	34	44%		
087			Stikine	67%	63%	71%		100%	↘	-100%	-1	-2	1			
All BC Public Schools in Region				31%	29%	33%	32%	27%	↘	-17%	-27	-19	583	71%		
All BC Independent Schools in Region				29%	33%	22%	23%	27%	↘			+1	22	83%		
All BC Public & Independent Schools in Region				31%	29%	32%	32%	27%	↘	-16%	-27	-18	605	72%		
Okanagan	BC Public	019	Revelstoke	54%	29%	44%	37%	45%	↘	-52%	-13	-15	55	84%		
		022	Vernon	49%	46%	45%	43%	40%	↘	-27%	-62	-24	571	85%		
		023	Central Okanagan	49%	49%	51%	49%	48%	↘	+3%	+22	+73	1,644	80%		
		053	Okanagan Similkameen	46%	47%	54%	47%	51%	↘	+8%	+7	-4	164	71%		
		058	Nicola-Similkameen ^	35%	38%	35%	23%	17%	↘	-200%	-8	-10	24	75%		
		067	Okanagan Skaha	44%	51%	48%	47%	43%	↘	-7%	-13	-18	461	66%		
		083	North Okanagan-Shuswap	39%	42%	47%	42%	39%	↘	-10%	-14	-30	355	84%		
		All BC Public Schools in Region				47%	48%	49%	46%	45%	↘	-6%	-81	-24	3,294	79%
	All BC Independent Schools in Region				45%	54%	43%	44%	42%	↘	+9%	+12	+45	330	76%	
	All BC Public & Independent Schools in Region				47%	48%	49%	46%	44%	↘	-4%	-69	+21	3,624	79%	
Rockies	BC Public	005	Southeast Kootenay	31%	39%	38%	41%	36%	↘	+18%	+23	+17	350	85%		
		006	Rocky Mountain	30%	31%	29%	26%	29%	↘	-11%	-6	-11	199	84%		
		008	Kootenay Lake ^		33%	23%	10%	50%	↘	+100%	+1	+2	2	100%		
	All BC Public Schools in Region				30%	36%	34%	36%	33%	↘	+10%	+18	+8	551	85%	
	All BC Independent Schools in Region				45%	31%	36%	13%	41%	↘	+29%	+2	+6	17	71%	
All BC Public & Independent Schools in Region				47%	47%	41%	43%	44%	↘	-3%	-8	+14	568	84%		
Selkirk	BC Public	008	Kootenay Lake ^	45%	50%	44%	41%	41%	↘	-3%	-4	+18	327	83%		
		010	Arrow Lakes	45%	46%	45%	45%	45%	↘	-40%	-4	-9	22	100%		
		020	Kootenay-Columbia	58%	57%	51%	57%	50%	↘	-31%	-37	-33	235	81%		
		051	Boundary	44%	45%	47%	38%	41%	↘	-8%	-3	-1	88	86%		
	All BC Public Schools in Region				50%	52%	47%	47%	44%	↘	-15%	-46	-22	675	82%	
All BC Independent Schools in Region				50%		38%	100%	100%	↘			-1	1			
All BC Public & Independent Schools in Region				50%	52%	47%	47%	45%	↘	-15%	-46	-23	676	82%		
Thompson Rivers	BC Public	027	Cariboo-Chilcotin	40%	37%	42%	37%	32%	↘	-52%	-44	-55	264	58%		
		058	Nicola-Similkameen ^	35%	41%	57%	50%	48%	↘	+42%	+25	+28	124	86%		
		073	Kamloops/Thompson	46%	45%	49%	46%	43%	↘	-5%	-24	+16	1,066	86%		
		074	Gold Trail	40%	49%	52%	30%	47%	↘	+17%	+5	+2	64	77%		
	All BC Public Schools in Region				44%	44%	48%	43%	42%	↘	-6%	-38	-9	1,518	82%	
All BC Independent Schools in Region				42%	41%	39%	38%	37%	↘			+14	112	56%		
All BC Public & Independent Schools in Region				44%	43%	48%	43%	41%	↘	-6%	-38	+5	1,630	80%		
Vancouver/Langara	BC Public	039	Vancouver	63%	62%	61%	60%	60%	↘	-7%	-161	-33	3,886	92%		
		All BC Public Schools in Region				63%	62%	61%	60%	59%	↘	-8%	-177	-35	3,932	92%
		All BC Independent Schools in Region				48%	48%	45%	41%	44%	↘	+20%	+145	+433	1,679	87%
All BC Public & Independent Schools in Region				60%	59%	57%	54%	55%	↘	-1%	-32	+398	5,611	91%		
Vancouver Island	BC Public	047	Powell River	45%	43%	53%	50%	41%	↘	+3%	+2	+19	173	80%		
		068	Nanaimo-Ladysmith	47%	50%	51%	50%	45%	↘	-11%	-41	-55	822	83%		
		069	Qualicum	43%	39%	38%	50%	36%	↘	-51%	-50	-68	273	83%		
		079	Cowichan Valley	48%	47%	52%	46%	43%	↘	-29%	-55	-68	447	90%		
	All BC Public Schools in Region				46%	47%	50%	49%	43%	↘	-19%	-138	-168	1,726	84%	
All BC Independent Schools in Region				34%	33%	38%	35%	35%	↘	-2%	-3	-14	364	66%		
All BC Public & Independent Schools in Region				44%	44%	47%	46%	41%	↘	-16%	-141	-182	2,090	82%		
Vanc. Island Total				53%	53%	53%	52%	52%	↘	-3%	-517	+74	+38,666	87%		
All BC Public Schools in All Regions				60%	56%	67%	48%	43%	↘	-22%	-18	+24	+192	77%		
Conseil Scolaire Francophone*				48%	47%	46%	44%	45%	↘	+11%	+282	+899	+5,792	82%		
All BC Independent Schools in All Regions				48%	47%	46%	44%	45%	↘							
Grand Total, Province of B.C.				53%	52%	52%	51%	51%	↘	-1%	-235	+973	+44,458	86%		

See footnotes on page 23.

Figure 9 Footnotes:

~ 5-Year Change is from grad year 2015/16 to 2019/20. These columns show Trans % (percent change in number of immediate-entry students); # Trans (+/- change in number of immediate-entry students); # Grads (+/- change in number of grade 12 graduates).

* Due to the small number of students in Conseil Scolaire Francophone (school district 093), the transition rates are not reported separately within each college region, but are included in college region subtotals and shown separately in the provincial total.

^ The following three school districts span two college regions. The schools in these districts are reported in their respective college regions:

- 008 - Kootenay Lake school district (in Rockies and Selkirk college regions);
- 058 - Nicola Similkameen (in Okanagan and Thompson Rivers college regions); and
- 064 - Gulf Islands school district (in Camosun and Capilano college regions).

Four Post-Secondary Regions of B.C.



B.C. Public Post-Secondary Institutions by Region

B.C. public post-secondary institutions are located in urban and rural regions of the province. For the purpose of tracking the mobility of students around the province, the STP has assigned each of the post-secondary institutions to one of the following four geographic regions.

Cariboo-North Region (CNO) – College of New Caledonia, Northern Lights College, Coast Mountain College, University of Northern British Columbia.

Mainland-Southwest Region (MSW) – British Columbia Institute of Technology, Capilano University, Douglas College, Emily Carr University of Art + Design, Justice Institute of B.C., Kwantlen Polytechnic University, Langara College, Simon Fraser University, University of British Columbia, University of the Fraser Valley, Vancouver Community College.

Thompson-Okanagan-Kootenay Region (TOK) – College of the Rockies, Nicola Valley Institute of Technology, Okanagan College, Thompson Rivers University, Selkirk College, University of British Columbia (Okanagan).

Vancouver Island Region (VIS) – Camosun College, North Island College, Royal Roads University, University of Victoria, Vancouver Island University.

What are the differences in student transition rates by student demographic characteristics?

Each year, the STP provides information on student transition rates for a number of different student groups. Immediate entry rates, cumulative transition rates after five and ten years, transition rates into Bachelor’s degree programs, and the number of grade 12 graduates within each sub-population are provided. See [Figure 10](#).

FIGURE 10: STUDENT TRANSITION RATES, BY STUDENT DEMOGRAPHIC CHARACTERISTICS FOR SELECTED B.C. HIGH SCHOOL GRADUATION COHORTS

Demographic Characteristic While in Secondary School	Immediate-Entry Transition Rate					5-Yr Cumulative Transition Rate					Cum. Trans Rates Over Time (2010/11 Grads)			2019/20 Immed Trans Rate to		2019/20 Gr12 Grads Distrib.	
	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016*	Immed Entry	5-Yr Cum	10-Yr Cum	Bach Deg^	Other	Count	% of Total
Gender:																	
* Female	54.4%	54.2%	53.8%	53.6%	54.1%	71.8%	72.3%	71.7%	71.5%	70.7%	55.2%	72.8%	77.1%	31.6%	22.5%	22,008	49.5%
Male	50.5%	49.8%	49.8%	48.9%	47.7%	70.6%	69.1%	69.5%	69.1%	68.5%	51.5%	70.6%	74.8%	24.3%	23.4%	22,450	50.5%
Age at Graduation:																	
* 17 and younger	55.0%	54.4%	54.2%	53.9%	53.6%	73.7%	73.2%	73.3%	72.8%	72.2%	56.3%	74.7%	78.8%	30.2%	23.4%	24,348	54.8%
18	51.2%	50.7%	50.7%	49.8%	48.5%	70.1%	69.5%	69.3%	69.0%	68.3%	51.9%	70.8%	74.9%	26.5%	22.0%	18,406	41.4%
19 and older	37.9%	37.3%	35.2%	33.4%	35.7%	55.2%	54.4%	53.0%	56.1%	53.0%	37.7%	53.8%	58.3%	11.2%	24.5%	1,702	3.8%
Overall Aboriginal Status[†]:																	
Aboriginal Student	39.1%	40.2%	40.9%	41.0%	37.4%	64.3%	62.8%	63.2%	62.2%	62.1%	42.0%	64.0%	70.4%	15.7%	21.7%	3,724	8.4%
* Non-Aboriginal Student	53.7%	53.1%	52.8%	52.1%	52.1%	71.7%	71.3%	71.4%	71.0%	70.2%	54.2%	72.3%	76.3%	29.1%	23.0%	40,734	91.6%
Language Programs (in Grad Year):																	
ESL in Grad Year	48.3%	50.6%	49.4%	45.7%	46.4%	69.3%	69.0%	66.5%	67.2%	64.9%	54.8%	71.5%	73.1%	14.6%	31.8%	855	1.9%
* French Immersion	61.9%	64.1%	62.3%	64.9%	63.0%	81.5%	77.4%	78.4%	80.0%	78.8%	60.6%	79.6%	84.2%	42.1%	20.9%	2,735	6.2%
Special Needs:																	
* Gifted	69.9%	63.0%	65.5%	64.9%	66.3%	82.5%	80.8%	79.9%	80.0%	80.6%	68.9%	80.7%	84.0%	57.1%	9.2%	567	1.3%
Other Special Needs	39.9%	38.9%	39.4%	39.1%	36.4%	60.0%	59.1%	60.0%	59.6%	60.0%	40.4%	62.6%	67.4%	10.5%	25.9%	39,983	89.9%
No Special Needs	53.3%	53.0%	52.7%	52.2%	52.0%	71.5%	71.1%	71.2%	71.0%	70.2%	53.7%	72.0%	76.2%	29.2%	22.8%	3,908	8.8%
All Graduates, by Primary Language Spoken at Home:																	
English	48.4%	48.7%	48.6%	48.6%	48.0%	69.6%	68.9%	68.6%	68.7%	68.3%	49.3%	70.1%	75.0%	26.1%	23.0%	30,117	67.7%
Non-English:	63.2%	60.6%	58.7%	57.0%	56.8%	76.5%	75.7%	76.2%	74.7%	73.1%	67.5%	77.4%	79.1%	31.8%	33.6%	14,341	32.3%
French	49.1%	54.6%	51.2%	46.1%	47.4%	67.3%	70.8%	74.8%	73.2%	63.5%	47.0%	68.3%	73.1%	27.1%	20.3%	251	0.6%
Chinese, Mandarin, Cantonese	58.4%	53.8%	51.4%	48.5%	50.3%	75.4%	72.9%	72.6%	68.5%	65.3%	70.2%	76.9%	78.3%	32.4%	17.9%	5,031	11.3%
Korean	48.1%	48.4%	49.2%	49.7%	47.0%	53.3%	52.1%	54.3%	58.2%	57.7%	45.9%	53.9%	56.0%	33.4%	13.6%	2,299	5.2%
* Punjabi	84.0%	81.7%	83.2%	82.0%	80.0%	91.5%	90.7%	91.9%	91.5%	92.0%	83.4%	91.8%	92.9%	32.8%	47.2%	924	2.1%
Tagalog (Philippino)	61.1%	59.3%	57.7%	54.5%	53.9%	81.6%	84.0%	82.7%	81.0%	79.8%	63.3%	82.2%	84.4%	15.3%	38.6%	978	2.2%
Other Lang. (not listed above)	61.6%	61.4%	58.9%	57.1%	55.5%	77.5%	76.9%	77.1%	75.9%	74.6%	65.6%	79.9%	82.1%	26.3%	29.2%	4,858	10.9%
B.C. Resident Status at Time of Gr12 Graduation ~ :																	
* Resident of B.C.	53.9%	53.8%	53.9%	53.4%	52.9%	72.4%	72.0%	72.1%	71.9%	71.6%	54.1%	72.8%	77.1%	29.2%	23.7%	40,478	91.0%
Non-Resident of B.C.	33.2%	31.0%	30.0%	30.5%	29.5%	41.3%	40.3%	40.3%	42.3%	41.0%	33.3%	40.3%	41.3%	15.8%	13.7%	3,978	8.9%
Non-Resident of B.C. at Time of Gr12 Graduation, by Primary Language Spoken at Home:																	
English	31.5%	29.5%	25.9%	30.1%	24.2%	41.8%	37.7%	36.2%	39.0%	37.3%	30.7%	38.2%	39.5%	13.2%	11.0%	697	1.6%
Non-English:	34.1%	31.6%	31.3%	30.6%	30.6%	41.0%	42.2%	42.7%	44.1%	43.1%	34.6%	41.5%	42.5%	16.4%	14.2%	3,281	7.4%
* Chinese, Mandarin, Cantonese	37.3%	34.3%	32.9%	30.7%	31.4%	52.3%	52.5%	50.4%	50.4%	46.8%	46.4%	55.3%	56.1%	21.1%	10.3%	1,786	4.0%
Korean	30.8%	24.1%	28.4%	27.9%	21.9%	27.2%	25.7%	23.5%	30.7%	38.0%	25.8%	31.1%	32.2%	12.5%	9.4%	343	0.8%
Japanese	18.5%	17.7%	17.6%	18.4%	15.9%	27.1%	30.0%	25.3%	20.7%	26.5%	19.4%	23.6%	23.6%	4.3%	11.6%	208	0.5%
Other Lang. (not listed above)	29.3%	30.3%	32.4%	34.2%	35.5%	39.8%	37.1%	40.8%	40.7%	37.1%	31.1%	36.8%	37.6%	11.5%	24.0%	946	2.1%
Total Non-Residents of B.C.	33.2%	31.0%	30.0%	30.5%	29.5%	41.3%	40.3%	40.3%	42.3%	41.0%	33.3%	40.3%	41.3%	15.8%	13.7%	3,978	8.9%
Secondary School Type:																	
* BC Public School	53.1%	52.6%	52.6%	52.3%	51.6%	71.7%	71.5%	71.5%	71.4%	70.5%	53.9%	72.5%	76.7%	27.6%	24.0%	38,666	87.0%
BC Independent School	47.9%	47.3%	45.7%	43.7%	45.3%	65.1%	62.6%	63.1%	61.7%	62.8%	47.8%	64.9%	69.5%	30.7%	14.6%	5,792	13.0%
Grand Total for All BC12 Graduates	52.5%	52.0%	51.8%	51.2%	50.8%	71.2%	70.7%	70.6%	70.4%	69.6%	53.3%	71.8%	76.0%	28.0%	22.8%	44,458	100.0%
Total Number of BC12 Graduates	43,485	43,644	44,538	44,325	44,458	46,307	45,829	44,705	43,905	43,485	45,562	45,562	45,562	44,458	44,319	44,458	44,458

Figure 10 continues on the next page.

FIGURE 10, CONT.: STUDENT TRANSITION RATES, BY STUDENT DEMOGRAPHIC CHARACTERISTICS FOR SELECTED B.C. HIGH SCHOOL GRADUATION COHORTS

Demographic Characteristic	Immediate-Entry Transition Rate					5-Yr Cumulative Transition Rate					Cum. Trans Rates Over Time (2010/11 Grads)			2019/20 Immed Trans Rate to		2019/20 Gr12 Grads Distrib.	
	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016*	Immed Entry	5-Yr Cum	10-Yr Cum	Bach Deg^	Other	Count	% of Total
College Region of Secondary School																	
Camosun	47.7%	44.3%	45.2%	43.9%	47.2%	69.9%	69.1%	69.9%	68.1%	68.6%	46.1%	68.7%	73.9%	26.6%	20.6%	3,373	7.6%
Capilano	45.9%	45.5%	43.7%	46.7%	45.9%	67.8%	64.7%	66.4%	64.2%	62.6%	50.7%	67.5%	72.4%	32.3%	13.6%	2,967	6.7%
Coast Mountain	44.9%	46.7%	43.1%	45.8%	39.1%	73.2%	73.9%	71.7%	71.9%	67.9%	52.0%	73.3%	78.1%	15.8%	23.3%	622	1.4%
Douglas	57.4%	56.4%	56.0%	56.5%	57.0%	74.2%	73.9%	74.2%	73.4%	72.6%	59.9%	76.6%	79.3%	32.9%	24.1%	6,567	14.8%
Fraser Valley	47.1%	45.4%	48.8%	49.1%	46.3%	62.7%	64.0%	63.3%	64.7%	65.5%	43.0%	63.6%	68.0%	26.5%	19.8%	2,987	6.7%
* Kwantlen	60.5%	60.4%	59.0%	58.6%	58.9%	75.7%	75.1%	74.1%	75.4%	75.1%	59.9%	76.1%	79.4%	29.9%	29.0%	10,673	24.0%
New Caledonia	46.9%	45.7%	44.8%	44.3%	43.8%	70.1%	68.3%	66.5%	68.2%	68.2%	49.8%	68.5%	73.7%	22.2%	21.6%	1,235	2.8%
North Island	46.8%	45.7%	44.8%	46.2%	45.7%	68.8%	70.9%	73.6%	69.0%	69.9%	51.5%	73.4%	78.4%	16.9%	28.8%	1,230	2.8%
Northern Lights	30.8%	29.4%	32.3%	32.1%	27.3%	57.4%	56.2%	52.5%	57.0%	52.0%	37.2%	60.1%	66.6%	6.6%	20.7%	605	1.4%
Okanagan	46.6%	48.1%	48.5%	46.1%	44.4%	67.1%	68.1%	67.8%	68.4%	66.9%	46.3%	67.8%	73.2%	23.5%	20.9%	3,624	8.2%
Rockies	30.7%	35.8%	34.0%	34.9%	33.5%	58.8%	58.3%	58.1%	59.9%	56.2%	36.0%	59.9%	67.4%	7.4%	26.1%	568	1.3%
Selkirk	49.6%	51.7%	46.8%	47.0%	44.5%	72.3%	75.1%	72.1%	74.1%	74.2%	53.0%	75.7%	80.9%	10.4%	34.1%	676	1.5%
Thompson Rivers	43.9%	43.4%	47.8%	43.1%	41.5%	66.8%	62.3%	65.4%	65.3%	65.0%	44.3%	65.5%	70.9%	27.4%	14.1%	1,630	3.7%
Vancouver/Langara	59.6%	58.6%	56.7%	54.2%	54.8%	76.7%	74.4%	75.7%	73.0%	71.3%	62.6%	76.4%	79.8%	33.8%	21.0%	5,611	12.6%
Vancouver Island	44.2%	44.2%	47.4%	46.1%	41.3%	65.7%	66.6%	65.7%	65.8%	63.6%	44.7%	66.0%	71.0%	24.2%	17.1%	2,090	4.7%
Secondary School Academic GPA:																	
No Academic GPA	40.9%	40.4%	41.0%	39.6%	38.6%	64.3%	63.3%	62.9%	63.3%	62.4%	42.3%	64.9%	70.1%	12.7%	25.9%	21,289	47.9%
50.0% - 64.9%	49.4%	48.6%	47.3%	44.4%	40.5%	76.6%	71.4%	72.7%	75.1%	71.5%	55.3%	76.0%	79.8%	5.6%	34.9%	576	1.3%
65.0% - 74.9%	60.3%	60.4%	58.6%	57.3%	54.4%	83.2%	81.4%	80.5%	80.2%	79.3%	63.2%	82.4%	85.8%	14.4%	40.0%	2,575	5.8%
Moderate Achievers (GPA < 75%)	58.4%	58.2%	56.5%	54.9%	51.8%	81.8%	79.6%	79.0%	79.3%	78.0%	61.7%	81.2%	84.6%	12.8%	39.0%	3,151	7.1%
* 75.0% - 79.9%	64.9%	65.1%	62.8%	60.9%	58.8%	82.6%	82.4%	83.6%	82.4%	81.6%	68.8%	84.7%	86.5%	24.7%	34.1%	2,750	6.2%
80.0% - 84.9%	65.8%	65.7%	63.9%	64.3%	64.3%	81.9%	80.8%	81.4%	80.5%	78.4%	70.0%	82.2%	84.6%	37.8%	26.5%	3,960	8.9%
85.0% - 89.9%	66.0%	65.7%	65.3%	63.5%	65.1%	78.1%	78.0%	78.2%	77.9%	75.7%	69.3%	79.2%	81.9%	49.0%	16.1%	5,223	11.7%
90.0% - 94.9%	66.3%	63.7%	62.8%	64.2%	64.9%	76.1%	73.8%	74.6%	72.4%	73.6%	66.5%	74.6%	77.6%	56.2%	8.7%	5,576	12.5%
95.0% - 100.0%	63.8%	62.7%	59.1%	62.0%	62.4%	71.9%	71.3%	74.7%	70.3%	71.9%	67.8%	74.4%	78.0%	57.8%	4.6%	2,509	5.6%
High Achievers (GPA 75 - 100%)	65.7%	64.9%	63.4%	63.3%	63.7%	79.2%	78.4%	79.1%	77.6%	76.8%	68.7%	79.9%	82.4%	46.6%	17.1%	20,018	45.0%
Secondary School Inclusive GPA:																	
50.0% - 64.9%	23.1%	23.7%	25.5%	23.2%	20.4%	49.9%	48.3%	47.0%	47.4%	45.2%	26.7%	50.5%	57.4%	1.5%	18.9%	2,866	6.4%
65.0% - 74.9%	38.8%	37.7%	38.7%	36.8%	35.0%	65.9%	64.3%	63.1%	62.4%	61.2%	43.0%	66.3%	71.4%	6.3%	28.7%	10,321	23.2%
Moderate iGPA (iGPA < 75%)	35.8%	35.1%	36.1%	34.0%	31.8%	62.1%	60.6%	59.7%	59.5%	58.1%	39.0%	62.3%	67.9%	5.3%	26.5%	13,187	29.7%
* 75.0% - 79.9%	53.0%	51.9%	51.0%	49.6%	49.3%	76.2%	76.0%	75.9%	74.2%	73.3%	57.8%	77.6%	81.2%	17.4%	31.9%	6,937	15.6%
80.0% - 84.9%	60.8%	60.3%	58.2%	57.6%	56.6%	79.0%	78.1%	78.4%	76.4%	76.7%	64.0%	79.8%	82.8%	29.5%	27.1%	7,630	17.2%
85.0% - 89.9%	64.8%	64.0%	62.8%	62.6%	62.7%	78.6%	78.4%	77.8%	78.3%	76.5%	68.0%	79.5%	82.2%	43.7%	19.0%	8,461	19.0%
90.0% - 94.9%	65.7%	65.0%	64.0%	64.3%	65.3%	76.1%	75.2%	75.7%	75.7%	74.8%	67.2%	76.3%	79.9%	55.1%	10.2%	6,678	15.0%
95.0% - 100.0%	64.2%	62.5%	60.4%	63.4%	63.9%	73.8%	69.8%	74.2%	72.2%	73.1%	64.5%	73.3%	77.5%	57.4%	6.5%	1,564	3.5%
High iGPA (iGPA 75 - 100%)	60.8%	60.0%	58.8%	58.7%	58.8%	77.7%	77.1%	77.0%	76.1%	75.4%	63.6%	78.3%	81.4%	37.5%	21.3%	31,270	70.3%
Grand Total for All BC12 Graduates	52.5%	52.0%	51.8%	51.2%	50.8%	71.2%	70.7%	70.6%	70.4%	69.6%	53.3%	71.8%	76.0%	28.0%	22.8%	44,458	100.0%
Total Number of BC12 Graduates	43,485	43,644	44,538	44,325	44,458	46,307	45,829	44,705	43,905	43,485	45,562	45,562	45,562	44,458	44,319	44,458	44,458

Figure 10 Footnotes:

+ Overall Aboriginal Status is obtained from K-12 and Post-Secondary records. If either source indicates Aboriginal status, the student is classified as an Aboriginal student by STP.

* Relative to other demographic groups in each set, the group with the highest 5-year transition for the 2015/16 high school graduation cohort is identified with *.

^ Immed Trans Rate to Bach Deg is the % of high school graduates of 2019/20 who enrolled immediately in a Bachelor's Degree program in a B.C. public post-secondary institution. ^ Immed Trans Rate to Bach Deg is the % of high school graduates of 2019/20 who enrolled immediately in a Bachelor's Degree program in a B.C. public post-secondary institution.

~Non-residents of B.C. may be residents from out of province (i.e. Alberta, Ontario, etc.) or residents from out of country (China, Hong Kong, Korea, etc.). The non-residents of B.C. are used as a proxy for identifying "international" grade 12 graduates, regardless of language spoken at home, thus residents from other Canadian provinces are included in this proxy.

◆ Transition rates over the decade are declining. Is this trend widespread or concentrated within selected student populations?

Student transition rates have been generally declining over the last decade, so the STP would like to identify whether selected student sub-populations are contributing to these trends, with a goal of gaining a better understanding of why these transition rates are declining. It is important to note that students who enrol in B.C. private or non-B.C. institutions are not included in the transition rates to B.C. public post-secondary institutions, estimated to be at least 5% of the graduation cohort each year⁴. While the summary table of student transition rates by demographic characteristics in [Figure 10](#) reveals student sub-populations with significant shifts in transition rates over the last five years (-1.7 percentage points), longer-range historical data held by the STP allows for a comparison over the last ten years.

Immediate entry transition rates declined by 1.7 and 2.5 percentage points over the last five and ten year periods respectively. Compared to the overall ten-year decline of 2.5 percentage points for all high school graduates combined, the following sizeable groups of high school graduates showed relatively large declines in immediate entry transition rates over the last decade (expressed as a percentage point drop)⁵:

- Male students (-3.8 percentage points).
- Indigenous students (-4.6)⁶.
- Students with special needs (-4.0).
- Students whose primary language spoken at home is *not* English (-10.7 percentage points), especially among those who primarily speak Chinese, Mandarin or Cantonese (-8.1).
- Non-resident students (-3.8), especially among those who primarily speak Chinese/Mandarin/Cantonese (-19.9).
- Students with moderate Academic GPA (AGPA) scores below 75% at graduation (-9.9).
- Students with moderate Inclusive GPA (iGPA) scores below 75% at graduation (-7.2).
- Graduates from high schools in the following college regions: Coast Mountain (-12.9), Northern Lights (-9.9), Selkirk (-8.5), Vancouver/Langara (-7.8), New Caledonia (-6.0), and North Island (-5.8). All other college regions showed smaller declines in immediate entry transition rates over the last five years, with the exception of increases in the Camosun region (+1.1) and Fraser Valley (+3.3). Also see [Figure 11](#).

Why are immediate entry transition rates declining for these sub-populations? See the [next page](#) for some possible reasons.

Note that the above shifts in transition rates were measured over the past decade, so it is important to consider that immediate entry transitions rates may have been significantly impacted more recently by the COVID-19 pandemic⁷. The pandemic has inflicted a shock on the recent pattern of immediate entry transition rates, with some groups more greatly affected than others. The effects of the pandemic are examined more closely later in this report, beginning on [page 29](#).

⁴ [STP Research Results: Student Transitions into B.C. Public, B.C. Private and Non-B.C. Institutions](#), May 7, 2020.

⁵ This list is limited to sub-populations of at least 500 grade 12 graduates with transition rate declines of more than double the 1.7 percentage point decline for the province overall, that is declines of at least 3.4 percentage points.

⁶ Indigenous self-identification information in the public post-secondary system is collected based on learners self-identifying as an Aboriginal person (i.e. First Nations, Métis, or Inuit) at a B.C. public post-secondary institution, or as a person with Aboriginal ancestry in the B.C. K-12 system.

⁷ Although the STP holds data for two grade 12 graduation cohorts since the start of the COVID-19 pandemic (2019/2020 and 2020/2021), the STP does not yet have a full academic year of post-secondary data for the 2020/2021 graduation cohort. Therefore, annual immediate-entry transition rates can be quantified for the 2019/2020 grade 12 graduation cohort, with estimates for the 2020/2021 cohort from Fall 2021 transition rates.

◆ What are some possible reasons why immediate entry transition rates are declining over the last decade?

As shown on the [previous page](#), student transition rates have been declining over the last decade, with some student sub-populations more greatly affected than others. The possible reasons for these declines may vary, depending on the group of students affected.

Male students: Males have consistently maintained lower immediate entry transition rates than females in the province of B.C., at least as long as the STP has been measuring these rates (since the 2001/2002 grade 12 graduation cohort). Currently, the immediate entry transition rate gap between males and females is 6.4 percentage points. This phenomenon is not unique to B.C. and may be attributed to the greater earnings potential for educated females and the higher immediate financial returns for males who directly enter the work force.

Indigenous students: Non-Indigenous students have consistently maintained higher immediate entry transition rates than Indigenous students, but given more time for delayed-entry transitions to post-secondary education, the gap between the two groups tends to narrow.

Students with moderate iGPA or AGPA scores: Students whose academic achievement is below 75% in high school may be transitioning to post-secondary education at lower

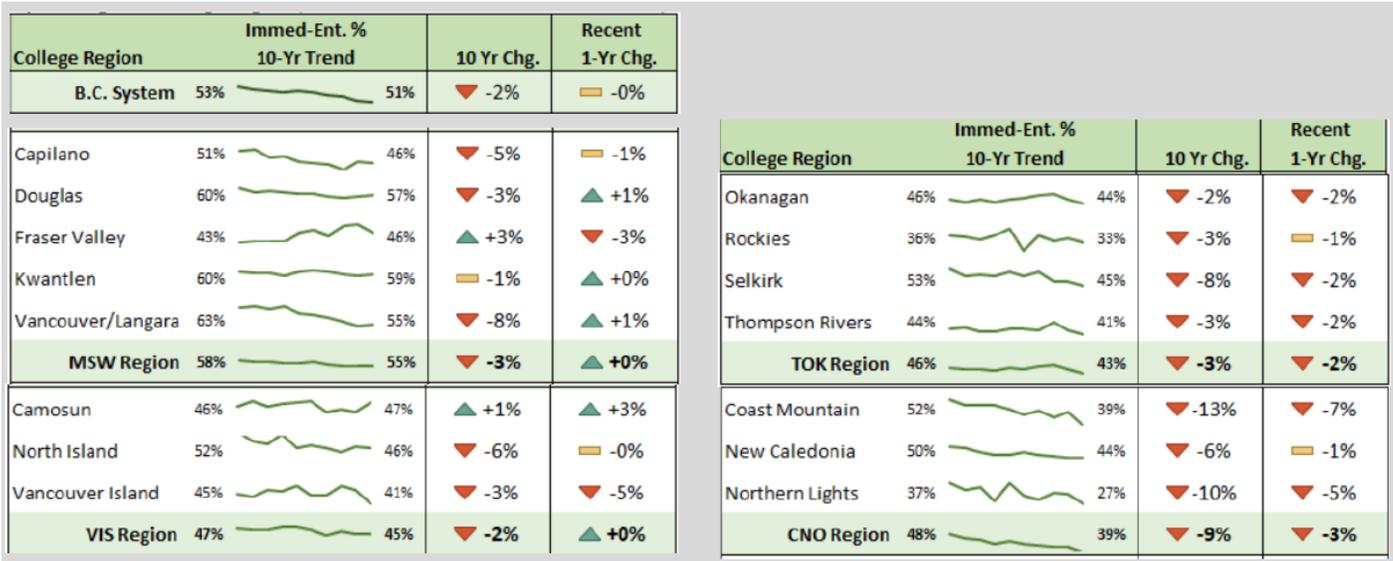
rates because their grades are not high enough for admission to post-secondary, or they may have chosen not to apply, on the assumption that they would not qualify for admission.

Students with special needs: The transition rate decline for special needs students primarily occurred among the most recent graduation cohort of 2019/2020, suggesting that these students may have been adversely affected by the pandemic. More information is provided later in this report (see [Page 36](#)).

Students in selected college regions: Regional variations in the local economy, especially employment opportunities, generally has an impact on the transition rates of high school graduates in different regions of B.C. (see [Figure 11](#)).

Non-resident graduates: See [next page](#) for more information.

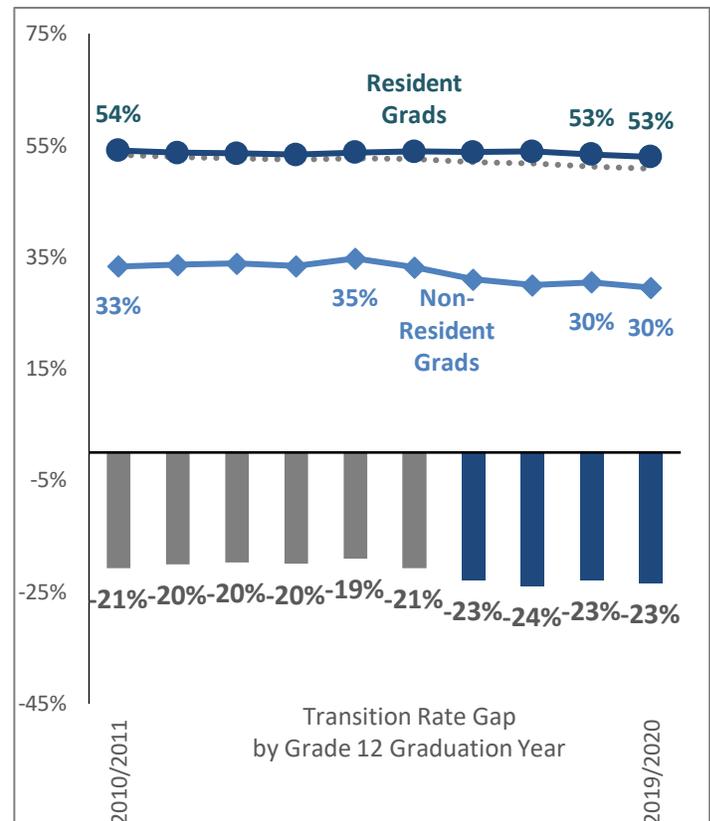
FIGURE 11: IMMEDIATE ENTRY TRANSITION RATES, BY COLLEGE REGION OF GRADE 12 GRADUATES OF 2010/2011 TO 2019/2020



◆ How are transition rates of non-resident students affecting overall transition rates in B.C.?

A detailed exploration of the transitions of resident and non-resident (international) grade 12 graduates was provided in the June 2021 STP Research Results publication. The analysis revealed that non-resident students have consistently maintained lower immediate entry transition rates to B.C. public post-secondary education than B.C. residents (currently 29.5% and 52.9% respectively). These students may choose to return to their home country for post-secondary education, or they may have sufficient financial resources to attend any post-secondary institution in the world, but outside of the B.C.

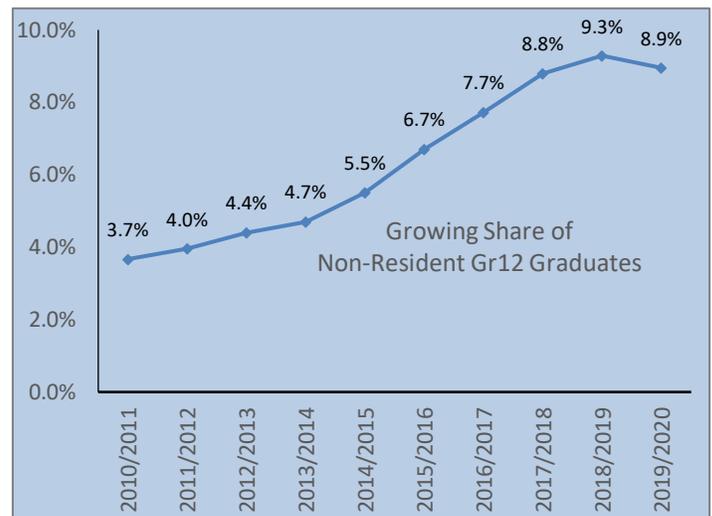
FIGURE 12: IMMEDIATE ENTRY TRANSITION RATES OF RESIDENT AND NON-RESIDENT GRADE 12 GRADUATES



public post-secondary system⁸. The non-residents may be enrolling in B.C. private institutions, non-B.C. institutions and other post-secondary options around the world. Similarly, students who primarily do not speak English at home, including residents and non-residents, may be choosing education destinations outside of the B.C. public post-secondary system.

The effect of the widening transition rate gap between resident and non-resident students is compounded by the growth in the number of non-resident grade 12 graduates in B.C., increasing by more than 2,300 students (or 138%) over the last ten years. B.C. is seeing a growing share of non-resident grade 12 graduates over the decade, increasing from 3.7% to 8.9% of the total. The growing share of non-residents, along with their declining transition rates, are effectively pulling down the overall immediate entry transition rates for the province. The transition rates of non-resident graduates are showing steeper declines over the decade than the rates among resident graduates (-3.8 versus -1.2 percentage points). See [Figure 12](#).

Declines in the transition rates among other student sub-populations have had no substantial influence on the overall transition rate for the province because no other groups experienced any substantial shift in their contribution to the total population of graduates like the 138% growth rate in non-resident students over the last ten years.



Part 2:

Did the pandemic affect student transitions and enrolments in B.C.?

⁸ B.C. private, non-B.C., and other post-secondary options around the world are excluded from the immediate-entry transition rates reported here.

◆ Did the COVID-19 pandemic affect the immediate entry transition rates of recent pandemic graduates?

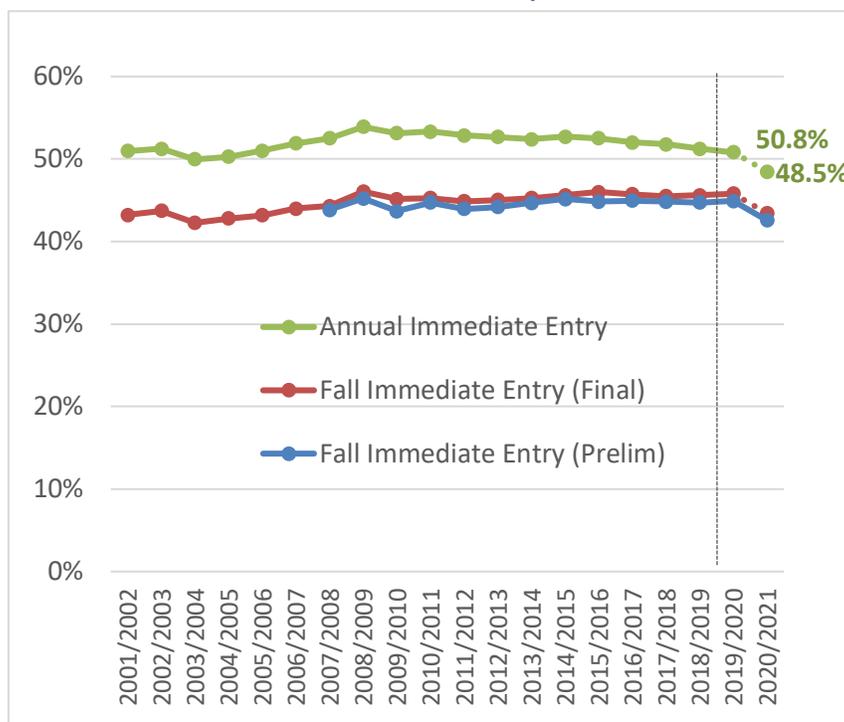
The World Health Organization declared the COVID-19 pandemic on March 11, 2020, so B.C. K-12 schools responded by switching to online delivery of education for the balance of the school year. As a result, students from the grade 12 graduation cohort of 2019/2020 primarily completed their high school education in June of 2020 through online delivery, rather than traditional classroom-based instruction. Although schools were open for vulnerable students and children of essential service workers, the majority of grade 12 graduates of the 2019/2020 academic year completed the remaining three months of the school year through online education. Given the persistence of the pandemic, the grade 12 graduates in the following academic year of 2020/2021 were also affected, as many B.C. schools offered a modified semester structure, limited classroom cohorts and reduced in-person contact, with some online learning. Did these modifications to the traditional learning environment affect student transition rates for the 2019/2020 and 2020/2021 graduation cohorts?

Annual immediate entry transition rates are calculated over the full academic year to include students who first entered post-secondary education after grade 12 graduation in the Fall, Spring or Summer term. Therefore, due to the timing of the STP data collection cycle, annual transition rates are available for the 2019/2020 graduates, but cannot be calculated for the 2021/2021 cohort until next year; however, annual immediate entry rates the 2020/2021 graduates can be estimated from preliminary data from the Fall term.⁹ See [Figure 13](#).

While the annual immediate entry transition rate of 50.8% for the first pandemic cohort of graduates in 2019/2020 remained relatively unchanged from the previous year (at 51.2%), the transition rates of the subsequent cohort of 2020/2021 pandemic graduates have lower transition rates this Fall, which will likely result in lower transition rates for the full year.

The projected Fall transition rate of 43.4% for the 2020/2021 graduates, is down from 45.8% for the previous graduation cohort. As a result, given the two percentage point drop in the Fall transition rate, the annual immediate entry transition rate for the 2020/2021 graduates is expected to similarly reveal a two percentage point drop to 48.5% once STP has a full year of data to calculate this rate next year.

FIGURE 13: TRENDS IN FALL AND ANNUAL IMMEDIATE ENTRY TRANSITION RATES, WITH PREDICTED ANNUAL TRANSITION RATE OF 2020/2021 GRADUATES



⁹ The Fall immediate-entry transition rate for 2020/2021 graduates is currently 42.6%, but is expected to reach 43.4% after late Fall 2021 enrolments and new students without PENs are captured in next year’s STP2022 submission.

◆ How did the COVID-19 pandemic affect the immediate entry transition rates of selected sub-populations of 2019/2020 grade 12 graduates?

In light of the growing decline in overall immediate entry transition rates, the STP attempted to examine the extent to which the pandemic has attributed to this decline, by examining the trend in Fall immediate entry transition rates for the two most recent pandemic cohorts of grade 12 graduates. Unfortunately, a significant proportion of new students in several post-secondary student information systems are lacking a Personal Education Number (PEN), and this exaggerates the decline in the Fall 2021 immediate entry transition rates of student sub-populations.¹⁰ Therefore, this pandemic analysis will focus exclusively on the transitions of 2019/2020 grade 12 graduates, the first graduation cohort affected by the COVID-19 pandemic.

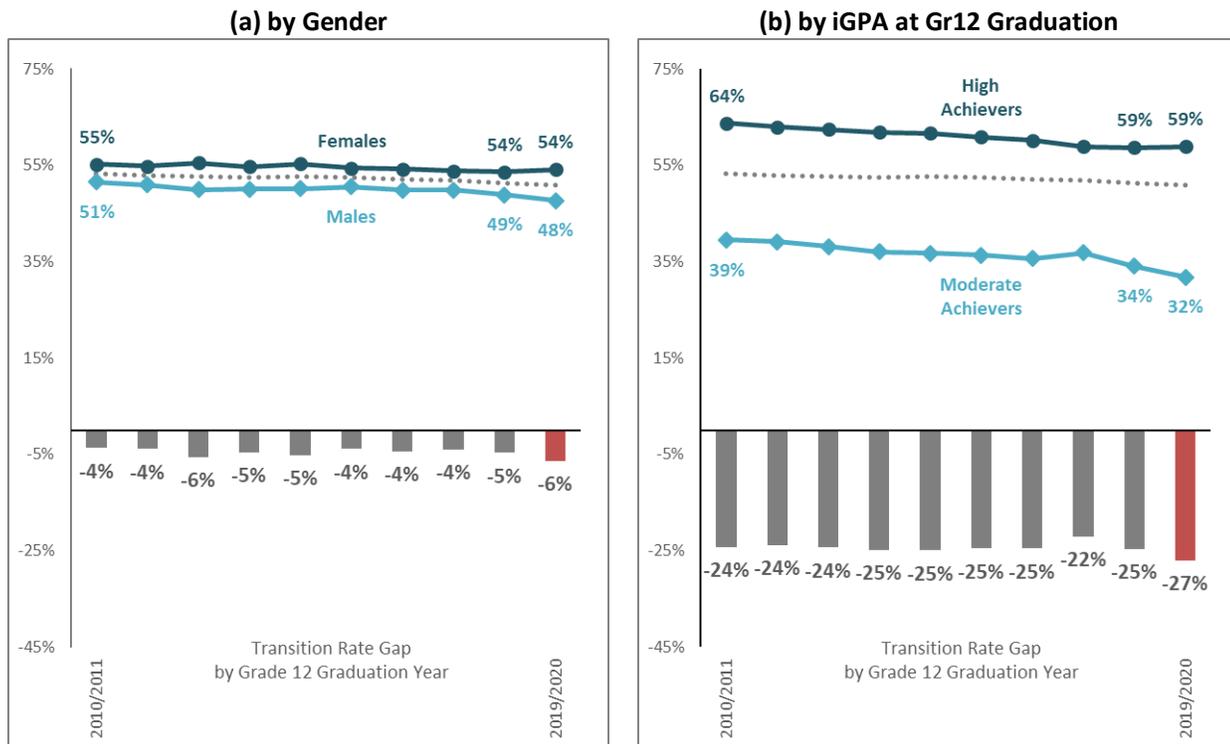
Beginning on the following page, a closer look at the trend in immediate entry transition rates for various student groups is provided. The trend lines for each sub-population and the widening gap between them reveals the effect the pandemic may have had on transition rates for the different groups of students. Sub-group comparisons are provided by:

- a) gender
- b) iGPA upon graduation
- c) Indigenous status
- d) gender of Indigenous graduates
- e) iGPA of Indigenous graduates
- f) iGPA of B.C. resident graduates
- g) iGPA of non-resident graduates
- h) high school type
- i) iGPA of independent school graduates
- j) special needs status
- k) graduation in the Lower Mainland

A growing transition rate gap between groups is evident among the recent 2019/2020 pandemic cohort of grade 12 graduates in each of the sub-populations presented in [Figures 14a to 14k](#) on the following pages. Despite the growing gaps between selected groups, one exception was revealed as a narrowing gap between independent and public school graduates. Graduates from independent schools frequently attend post-secondary institutions outside of the B.C. public post-secondary system, so they likely chose to stay closer to home during the pandemic by enrolling in B.C. instead. This was especially evident among the high-achieving graduates from independent schools.

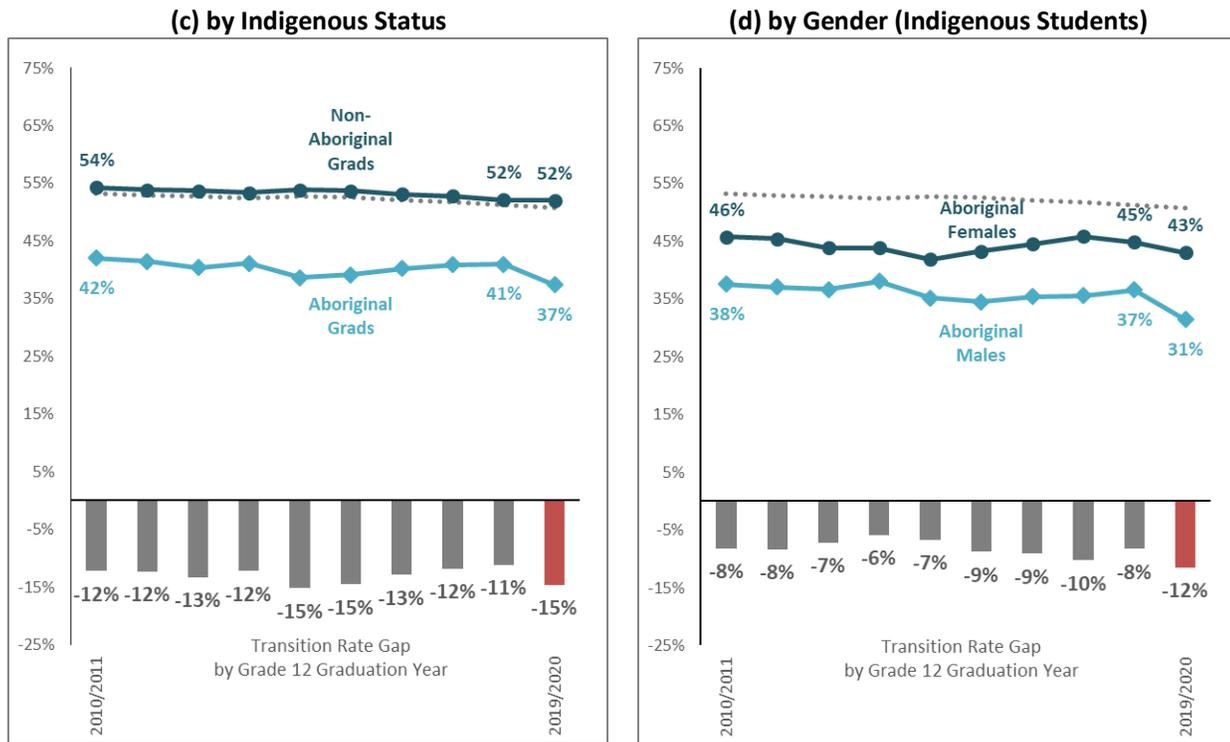
¹⁰ The PEN is a key to the STP research. Recent B.C. high school graduates who lack a PEN in post-secondary information systems cannot be traced back through the B.C. K-12 system to determine if they are grade 12 graduates, immediate-entry students or delayed-entry students. UnPENned students in the STP appear erroneously as high school graduates who did not transition to B.C. public post-secondary institutions. The STP is optimistic the student transitions of these students will be accurately captured in next year's STP submission, after the missing PENs are updated in the post-secondary student systems and transmitted to the STP.

FIGURE 14A-B: TRENDS IN IMMEDIATE ENTRY TRANSITION RATES OF SELECTED GROUPS OF B.C. HIGH SCHOOL GRADUATES, BY GRADUATION YEAR

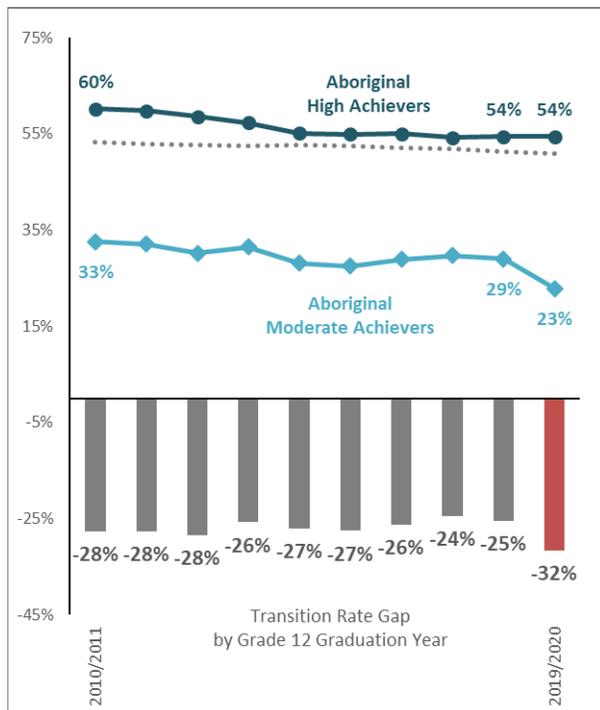


- Gender:** Females have traditionally maintained higher immediate entry transition rates than males. The gap in this rate between males and females widened in the first year of the pandemic, due to a slight increase in females entering post-secondary education and a decrease among males. See [Figure 14a](#).
- iGPA:** In general, the higher one’s academic qualifications from high school, the more likely they are to enrol in B.C. public post-secondary education. As a result, the average transition rate of moderate achievers is lower than it is for high achievers. The gap between moderate and high achievers widened by three percentage points, relative to pre-pandemic levels because moderate achievers transitioned to post-secondary education at lower rates than they did pre-pandemic. Transition rates of high achievers overall were not affected. See [Figure 14b](#).

FIGURE 14C-E: TRENDS IN IMMEDIATE ENTRY TRANSITION RATES OF SELECTED GROUPS OF B.C. HIGH SCHOOL GRADUATES, BY GRAD YEAR

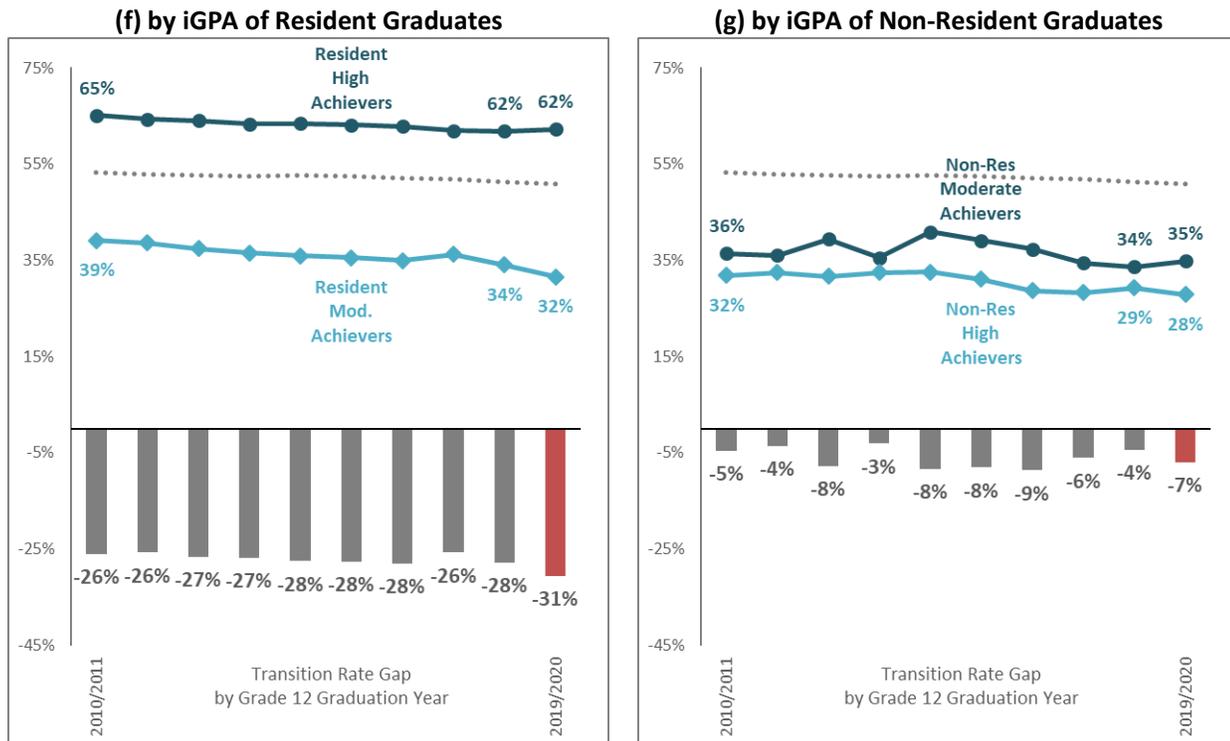


(e) by iGPA (Indigenous Students)



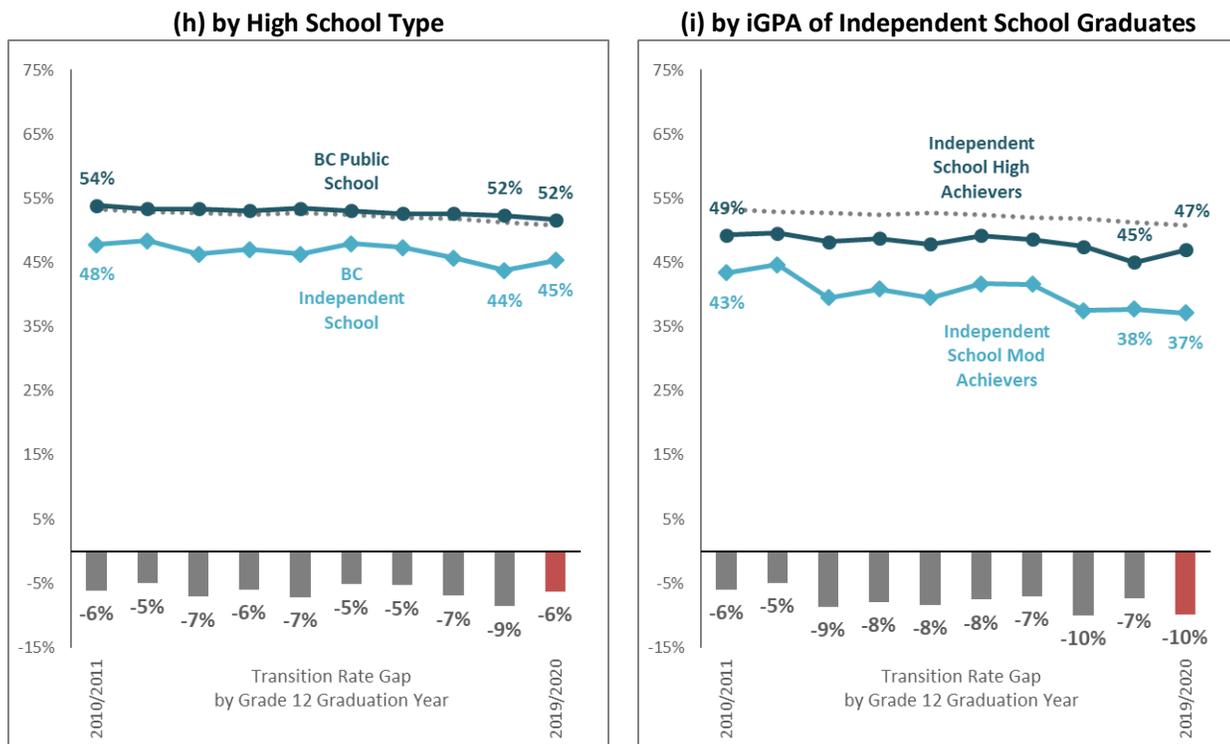
- Indigenous Status:** Indigenous students have traditionally maintained lower immediate entry transition rates than non-Indigenous students, and the transition rate gap between these two groups widened by roughly four percentage points for 2019/2020 graduates, relative to the cohort from the year earlier. See [Figure 14c](#).
- The drop in the Indigenous transition rates is primarily attributed to a growing share of male and moderate achieving Indigenous students who did not transition to post-secondary education during the pandemic.
- Gender (Indigenous Students):** Although female Indigenous students had transition rates two percentage points lower than pre-pandemic levels, the drop was greater for Indigenous male students, declining by six percentage points. See [Figure 14d](#).
- iGPA (Indigenous Students):** Indigenous high achievers maintained their transition rate in the pandemic ([Figure 14e](#)), but this was mainly attributed to female high achievers who increased their transition rate by two percentage points, offsetting a decline of the same amount by male Indigenous students. Indigenous moderate achievers saw a six percentage point drop in their transition rate ([Figure 14e](#)), with both male (-7 percentage points or ppts) and female (-5 ppts) Indigenous students affected similarly.

FIGURE 14F-G: TRENDS IN IMMEDIATE ENTRY TRANSITION RATES OF SELECTED GROUPS OF B.C. HIGH SCHOOL GRADUATES, BY GRAD YEAR



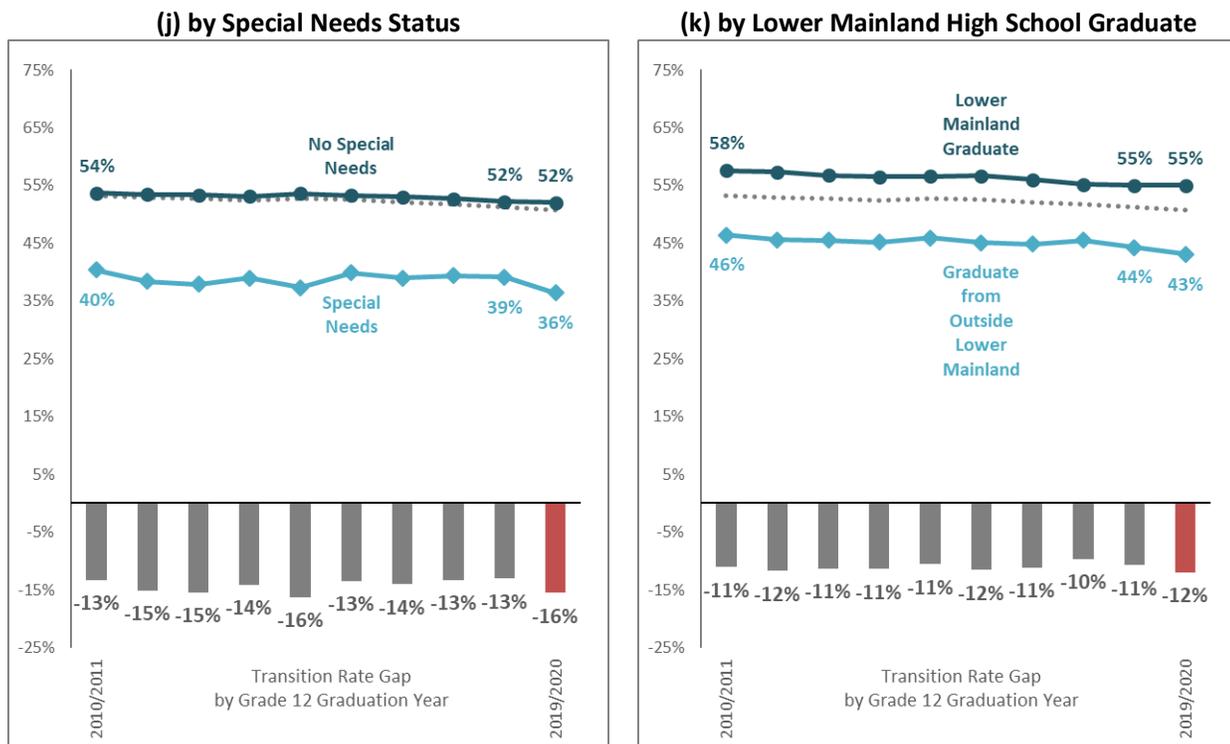
- **Resident Status:** As previously shown in [Figure 12](#) on [page 26](#), B.C. resident grade 12 graduates have higher transition rates than non-residents.
 - **B.C. Residents:** Resident B.C. grade 12 graduates of 2019/2020 with moderate iGPAs showed a two percentage point drop in their transition rates relative to the pre-pandemic year, whereas resident students with high iGPA scores maintained their pre-pandemic transition rates. See [Figure 14f](#).
 - **Non-Residents:** It is noteworthy that the transition rates of non-resident high achievers consistently remain lower than transition rates for resident moderate achievers. This is opposite to the transition rate trends of B.C. residents, by iGPA level. The STP presumes that many of the high-achieving non-resident graduates have the academic qualifications and financial resources to enrol in post-secondary education anywhere in the world, or they return to their home country for post-secondary education, and thus their transition rates to B.C. institutions is lower than it is for moderate achieving non-residents.
 - The gap between non-resident high achievers and non-resident moderate achievers widened by three percentage points for the 2019/2020 grade 12 pandemic graduates. The transition rates of these two groups diverged as high-achieving non-residents showed a drop in transition rates and moderate-achieving non-residents showing an increase in transition rates. See [Figure 14g](#).

FIGURE 14H-I: TRENDS IN IMMEDIATE ENTRY TRANSITION RATES OF SELECTED GROUPS OF B.C. HIGH SCHOOL GRADUATES, BY GRAD YEAR



- High School Type:** B.C. grade 12 graduates from independent schools typically show lower immediate entry transition rates to B.C. public post-secondary education, presumably because many of the independent school graduates have the financial resources to enrol in post-secondary institutions anywhere in the world. In light of the pandemic, the independent school graduates showed a greater propensity to enrol in B.C., as shown by the slight increase in their transition rates; there was no change for public school graduates. See [Figure 14h](#).
- iGPA of Independent School Graduates:** Previous research by the STP shows that many of the high achievers from independent high schools enrol in post-secondary education outside of B.C., but it appears that staying close to home in B.C. was a more popular destination for these pandemic graduates of 2019/2020, as their transition rate increased by two percentage points. The gap between high and moderate achieving independent school graduates widened as the moderate achievers additionally showed a slight drop in their transition to post-secondary education. See [Figure 14i](#).

FIGURE 14J-K: TRENDS IN IMMEDIATE ENTRY TRANSITION RATES OF SELECTED GROUPS OF B.C. HIGH SCHOOL GRADUATES, BY GRAD YEAR



- Special Needs:** While 2019/2020 grade 12 graduates without special needs maintained their transition rates, students with special needs showed a three percentage point decline in their immediate entry transition rates to B.C. public post-secondary education, thus widening the gap in transition rates between students with special needs and those without. See [Figure 14j](#).
- Lower Mainland High School Graduates:** The immediate entry transition rates of Lower Mainland high school graduates are traditionally higher than transition rates of graduates from outside the Lower Mainland, likely due to the numerous post-secondary options available to Lower Mainland graduates in their home region. For the graduation cohort of 2019/2020, Lower Mainland high school graduates maintained their immediate entry transition rate at the same level as the previous year, but graduates from other regions showed a decline in transition rates. See [Figure 14k](#).
- Three regions of B.C. were combined to comprise the area outside of the Lower Mainland, with only two of those regions showing a decline in immediate entry transition rates. Graduates from the Thompson-Okanagan-Kootenays and Cariboo-North show two and three percentage point drops in transition rates respectively, while Vancouver Island graduates maintained their transition rates at the same level as the previous year.
- College Region:** See [Figure 11](#) on [page 27](#) for a more detailed look at the immediate entry trends for high school graduates in each of the fifteen college regions and aggregated into the four larger B.C. regions. Four of the fifteen college regions in B.C. saw increases in transition rates for the 2019/2020 graduation cohort (Douglas, Kwantlen, Vancouver/Langara and Camosun). North Island showed no change in transition rates, while graduates from every other college region showed a recent decrease in immediate entry transition rates. B.C. regions with good employment opportunities sometimes attract students to enter the work force, rather than enrolling in post-secondary education.

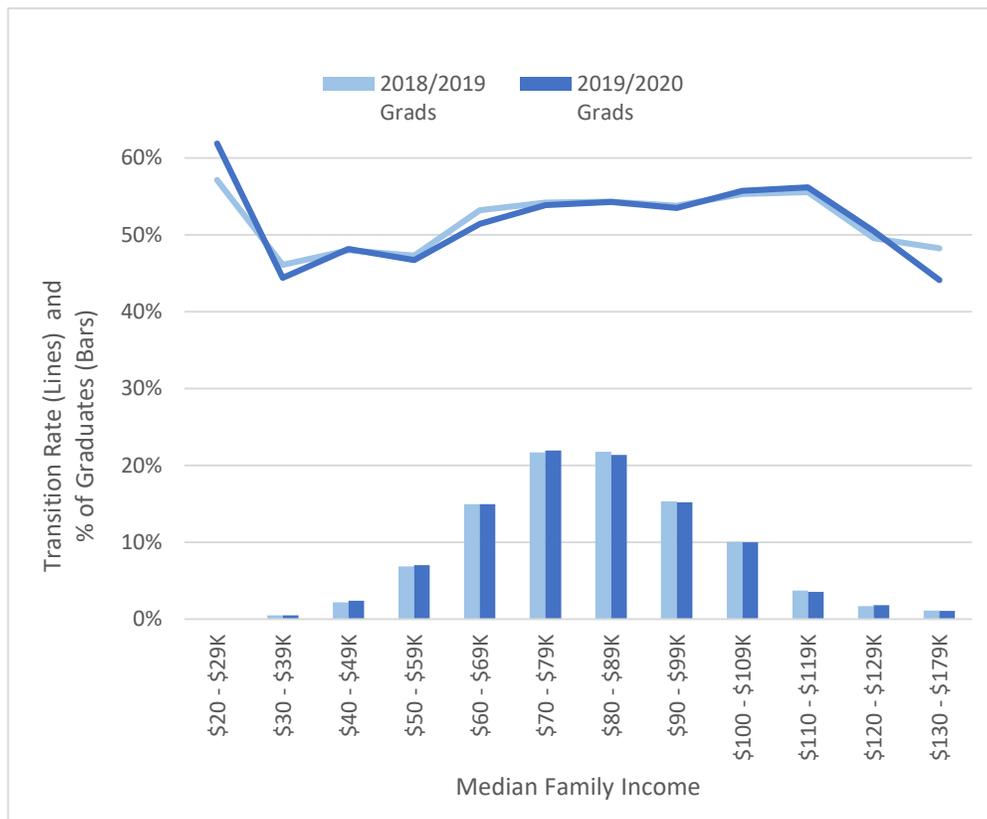
✓ How do immediate entry transition rates compare for 2018/2019 and 2019/2020 graduates, by median family income?

Through a student postal code data linkage from the STP to 2016 Census data, the STP was able to obtain the median family income of the neighbourhoods where grade 12 graduates lived at the time of graduation. This allows the STP to compare the transition rates of B.C. resident grade 12 graduates across family income brackets for different graduation cohorts, specifically the 2018/2019 pre-pandemic graduates and 2019/2020 pandemic graduates.

The results shown in **Figure 15** indicate that transition rates of these two graduation cohorts are similar across family income ranges, with transition rates gradually increasing from 46% to 56% over the income ranges of \$30,000 to \$119,000. Transition rates into B.C. public post-secondary education typically decline among the highest income families of \$120,000 or more. These families may have sufficient financial resources to send their high school graduate to a post-secondary institution outside of B.C. or anywhere in the world which is not captured in the transition rates reported here.

A review of the transition rate trend lines for five recent grade 12 graduation cohorts (not shown) reveals similar transition rate patterns over median family income ranges, suggesting that the transition rates measured for the pandemic graduates of 2019/2020 are similar to pre-pandemic trends.

FIGURE 15: IMMEDIATE ENTRY TRANSITION RATES BY MEDIAN FAMILY INCOME (2018/2019 VS 2019/2020 GRADUATES)



✓ How do the median family income distributions compare for transitioners and non-transitioners, 2018/2019 and 2019/2020?

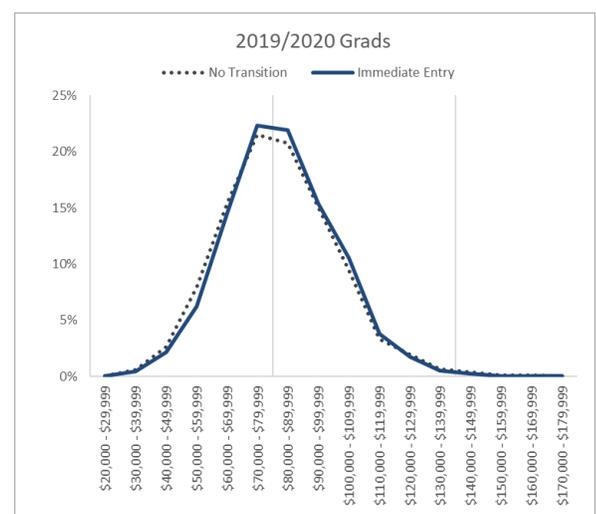
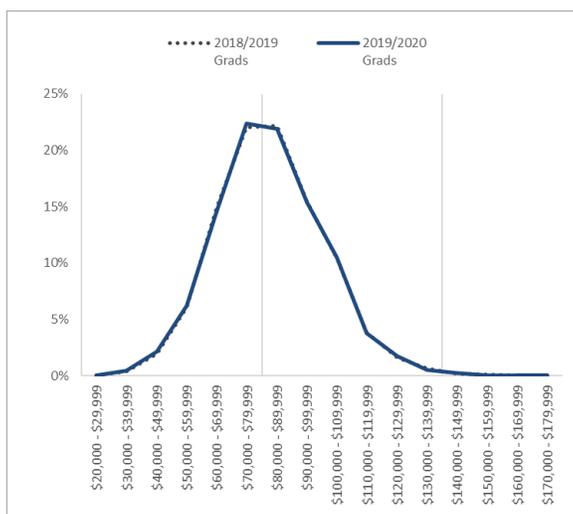
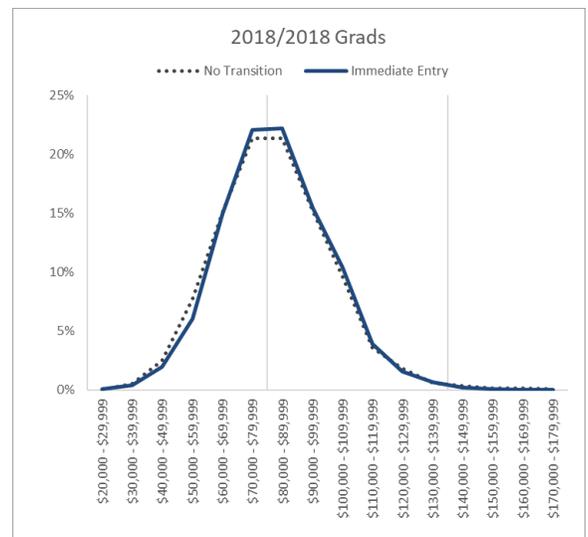
By using the median family income data from the 2016 Census linked to the STP, it is possible to compare the income distributions of immediate entry students to students who did not transition to B.C. public post-secondary education.

As shown in **Figure 16** below, the median income distribution of immediate entry students from each the two graduation cohorts, 2018/2019 (pre-pandemic) and 2019/2020 (pandemic graduates) are virtually identical, suggesting that family income was not a significant factor during the pandemic for post-secondary enrolment decisions.

Figure 17 on the right compares the median income distributions of the two graduation cohorts, 2018/2019 and 2019/2020, among students who transitioned to post-secondary and those who did not. The distribution curves are similar from one graduation cohort to the next, with similar proportions of immediate entry and non-transitioning graduates at each income range. This suggests that family income may not be a significant factor in direct entry post-secondary attendance; however, the income distribution curves by type of institution entered reveal greater differences in income among immediate entry students (see [next page](#)).

FIGURE 17: MEDIAN FAMILY INCOME DISTRIBUTIONS OF IMMEDIATE ENTRY VS NON-TRANSITIONERS (2018/2019 vs 2019/2020 GRADUATES)

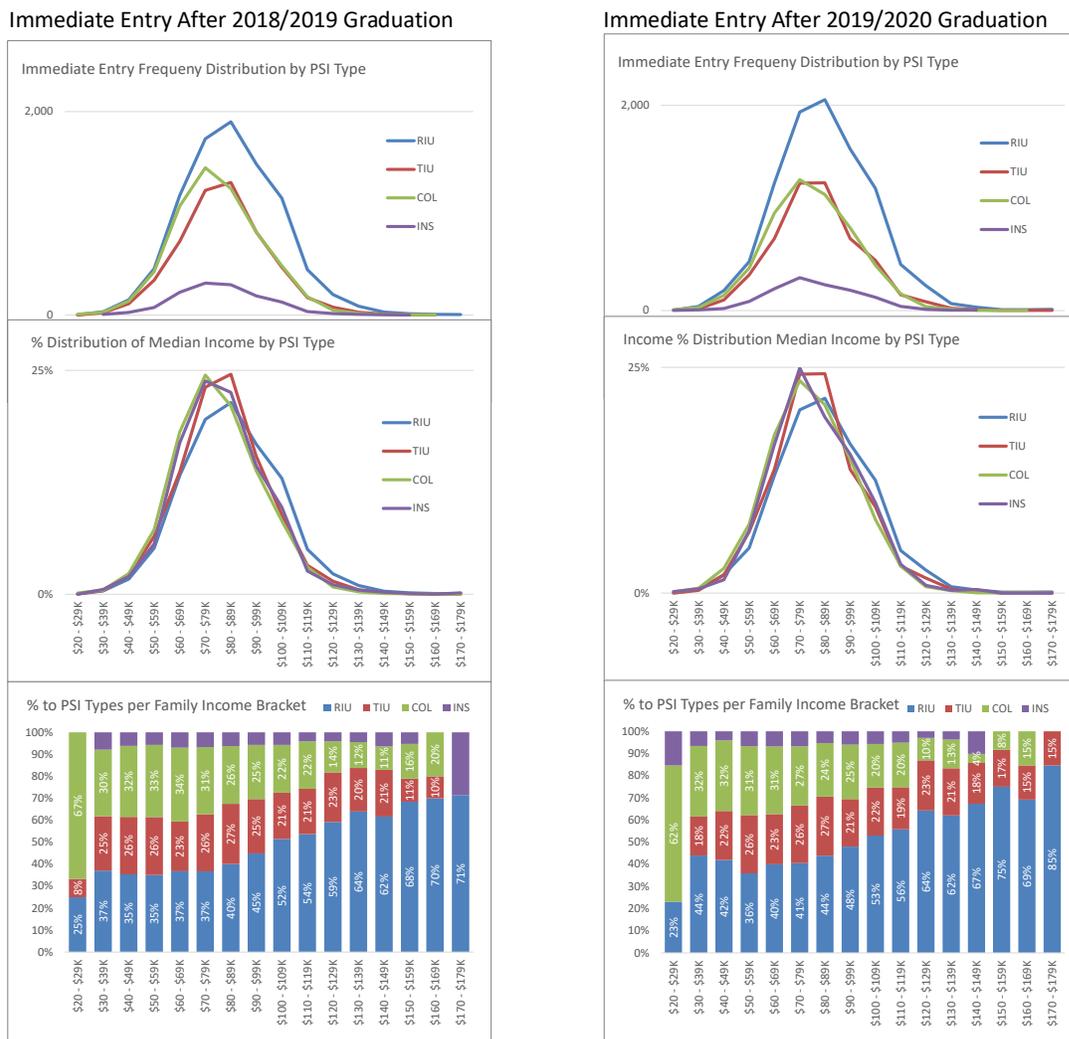
FIGURE 16: COMPARISON OF MEDIAN FAMILY INCOME DISTRIBUTION OF IMMEDIATE ENTRY STUDENTS – 2018/2019 vs 2019/2020 GRADUATES



◆ How do median family income distributions compare across immediate entry students, by institution type first entered?

The family income distribution curves for immediate entry students, by type of institution first entered, are provided in **Figure 18**. It is evident that students who enter RIUs generally come from families with higher incomes than students who enter other institution types in B.C. A larger share of high-income families from the 2019/2020 graduation cohort, with median family incomes of \$100,000 or more, entered RIUs (55%), compared to TIUs (21%), colleges (18%) and institutes (5%). A larger share of high-income families from the 2019/2020 graduation cohort entered RIUs (55% versus 54%), and a smaller share entered colleges (18% versus 20%), compared to the 2018/2019 graduation cohort. This small shift in student destinations might suggest that families from higher incomes were better able to send their recent graduate to a B.C. research-intensive university during the pandemic; or with additional spaces available in RIUs, potential college students were diverted to enter RIUs. Many of the high-income families might have had the financial resources to send their recent graduate to an institution outside of B.C., but the pandemic may have influenced their decision to remain in the province and enrol in an RIU.

FIGURE 18: MEDIAN FAMILY INCOME DISTRIBUTIONS OF IMMEDIATE ENTRY STUDENTS (2018/2019 VS 2019/2020 GRADUATES)



◆ How did the COVID-19 pandemic affect total new student enrolment trends in the B.C. public post-secondary system?

The pandemic appears to have had an effect on the immediate entry transition rates of the 2019/2020 cohort of grade 12 graduates; however, high school students entering B.C. public post-secondary institutions represent just 15%¹¹ of the total new students in the B.C. public post-secondary system. Therefore, it is important to consider the trends in all new students to post-secondary institutions to assess the impact of the pandemic.

FIGURE 19: TOTAL NEW STUDENTS ENTERING B.C. PUBLIC POST-SECONDARY INSTITUTIONS, BY STUDENT SOURCE AND YEAR, 2011/2012 TO 2020/2021

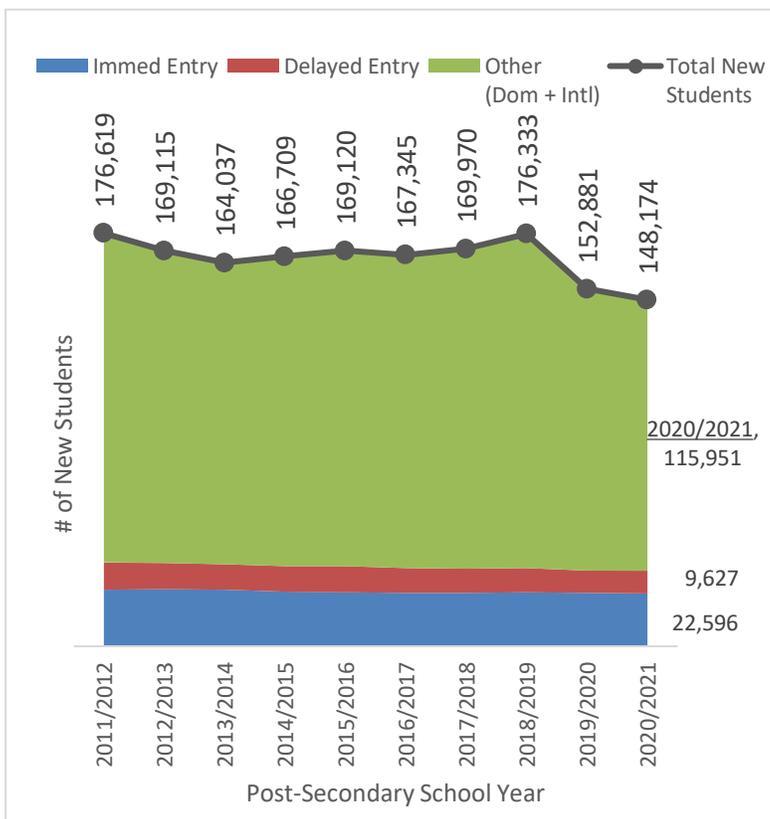


Figure 19 shows a declining trend in total new students entering the B.C. public post-secondary system, beginning in the same year as the onset of the pandemic, with a 13% drop in total new students in 2019/2020. A closer look at the trends by term, indicates that new student numbers were relatively stable in the Fall of 2019/2020 (-1.5%), but after the onset of the pandemic enrolment declines were more significant in the Spring (-17%) and Summer (-39%) terms.

The new student enrolment decline continued in the 2020/2021 academic year with a further 3% drop or a cumulative drop of 16% to 148,174, from the high of 176,333 new students two years earlier, in 2018/2019.

It is evident that new students entering B.C. public post-secondary institutions, as immediate or delayed entry students from B.C. high schools, did not contribute to the total new student enrolment decline as much as domestic and international students from all other admission categories (i.e. non-B.C. high schools, international, mature, college transfers, etc.).

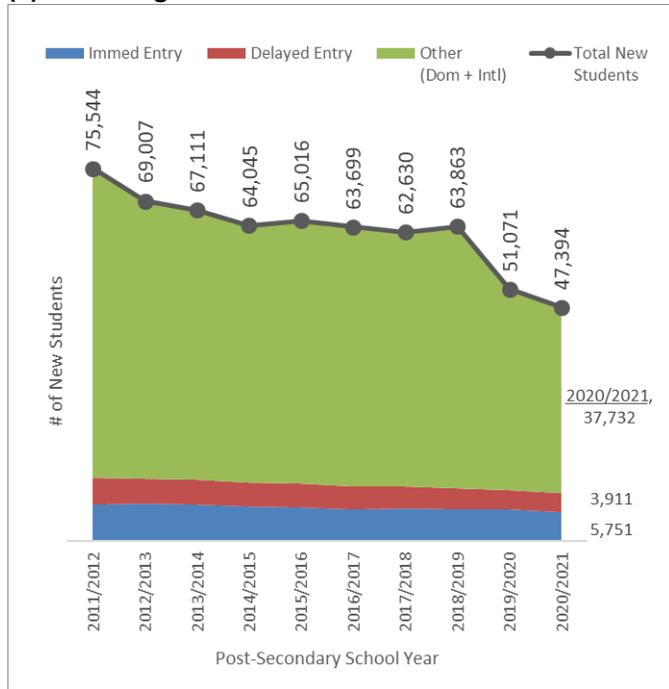
The new student enrolment trends vary across the four institution types, as shown in Figure 20 on the following page.

Research-intensive universities in B.C. maintained a relatively stable number of new students, changing by 0% and -1% in each of the last two years. By comparison, B.C. colleges experienced the largest decline in new students in each of the last two years with changes of -20% and -7%, while TIUs experienced declines of -11% and -5%. Institutes saw a significant decline in new students (-17%) in 2019/2020, but appear to be recovering in 2020/2021 with a +1% change over the previous year.

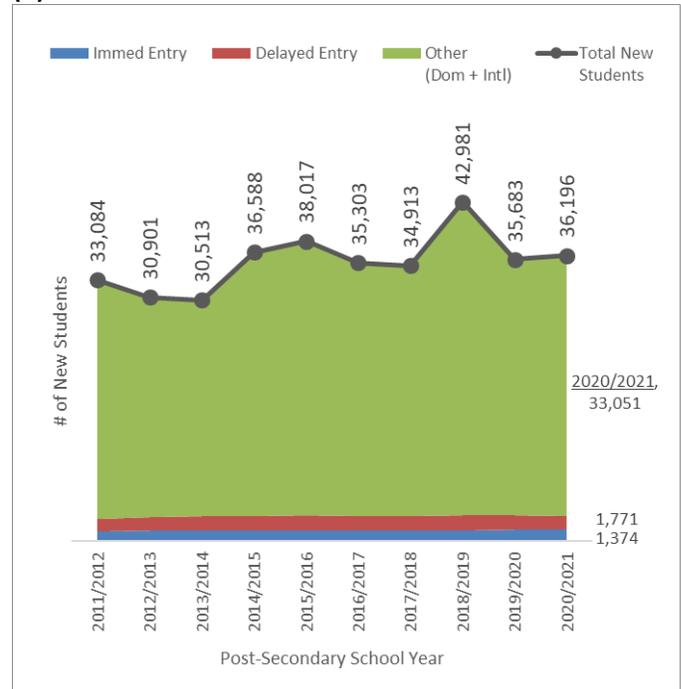
¹¹ The contribution of immediate entry students to the total annual new student intake in the B.C. system varies by institution type. The share of new students entering RIUs directly from high schools (30%) is much higher than the proportion entering TIUs (16%), colleges (12%) and institutes (4%).

FIGURE 20: TOTAL NEW STUDENTS ENTERING B.C. PUBLIC POST-SECONDARY INSTITUTIONS, BY STUDENT SOURCE, DESTINATION INSTITUTION TYPE AND YEAR, 2011/2012 TO 2020/2021

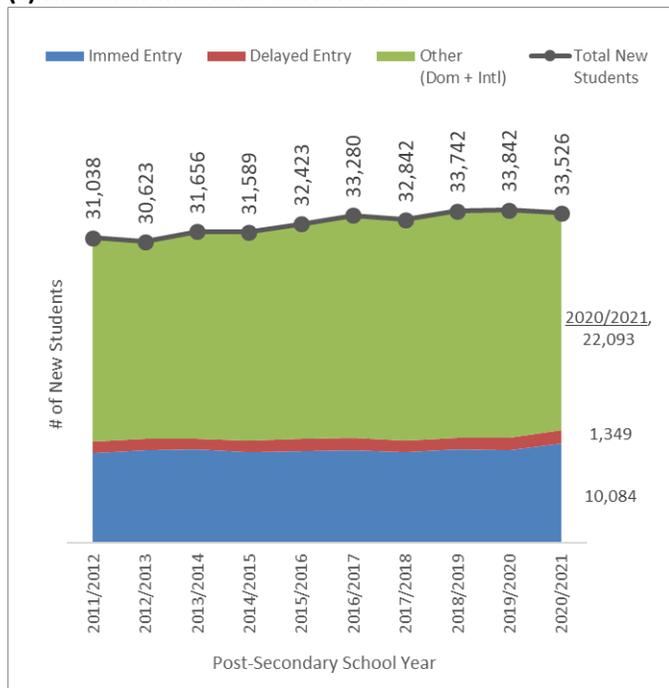
(a) B.C. Colleges



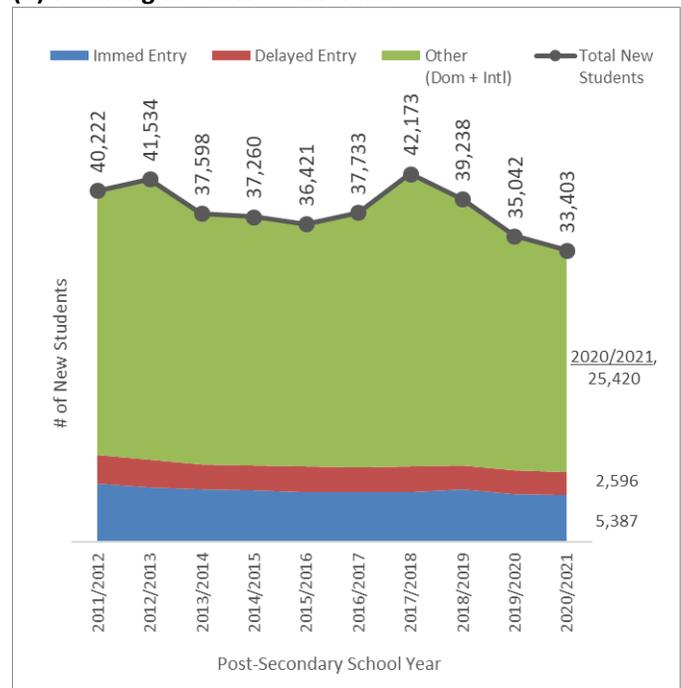
(b) Institutes



(c) Research-Intensive Universities



(d) Teaching-Intensive Universities

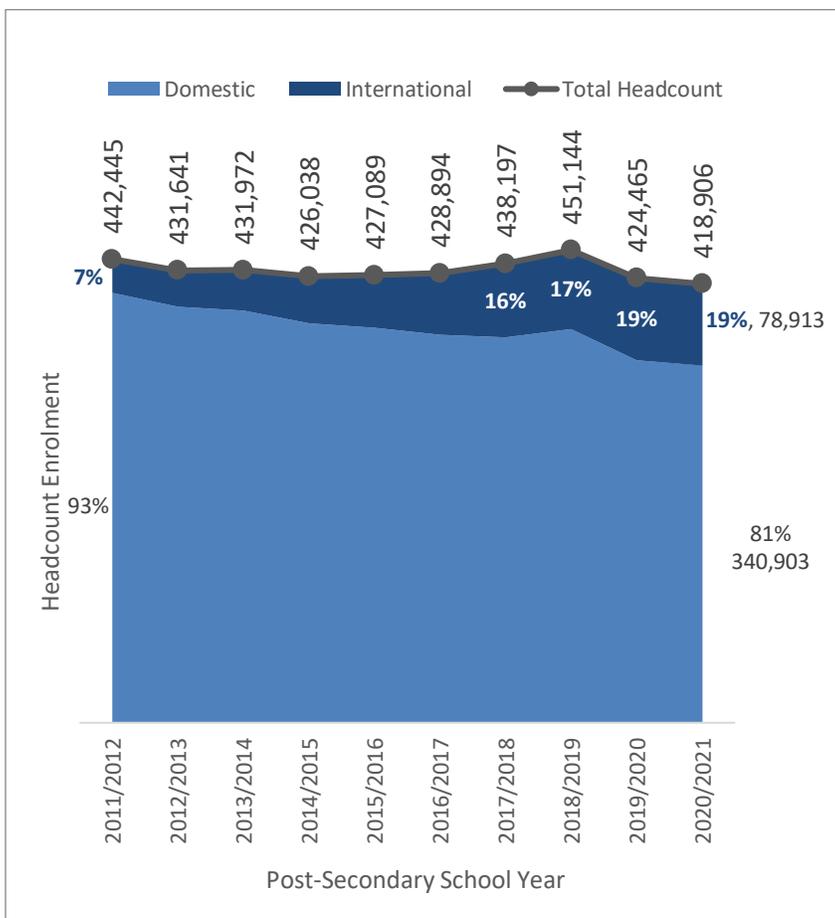


◆ How did the COVID-19 pandemic affect international and domestic student enrolments in the B.C. post-secondary system?

Total post-secondary enrolment has declined from a high of more than 450,000 unique headcount students in 2018/2019 to roughly 419,000 in 2020/2021. This represents a shift of -7% over two years, with most of this decline (-6%) occurring in academic year 2019/2020.

Over the past decade, international enrolment has increased its contribution to total enrolment in the B.C. public post-secondary system from 7% to 19%. Over the last two years, despite the pandemic, international students have increased their contribution to total enrolment in B.C. by two percentage points while domestic students reduced their contribution to the total by two percentage points. This is not attributed to international enrolment growth (+1% over two years), but instead it is due to domestic enrolment declines (-9% over two years). See **Figure 21** below.

FIGURE 21: TOTAL ENROLMENT IN B.C. PUBLIC POST-SECONDARY INSTITUTIONS, DOMESTIC AND INTERNATIONAL, 2011/2012 TO 2020/2021

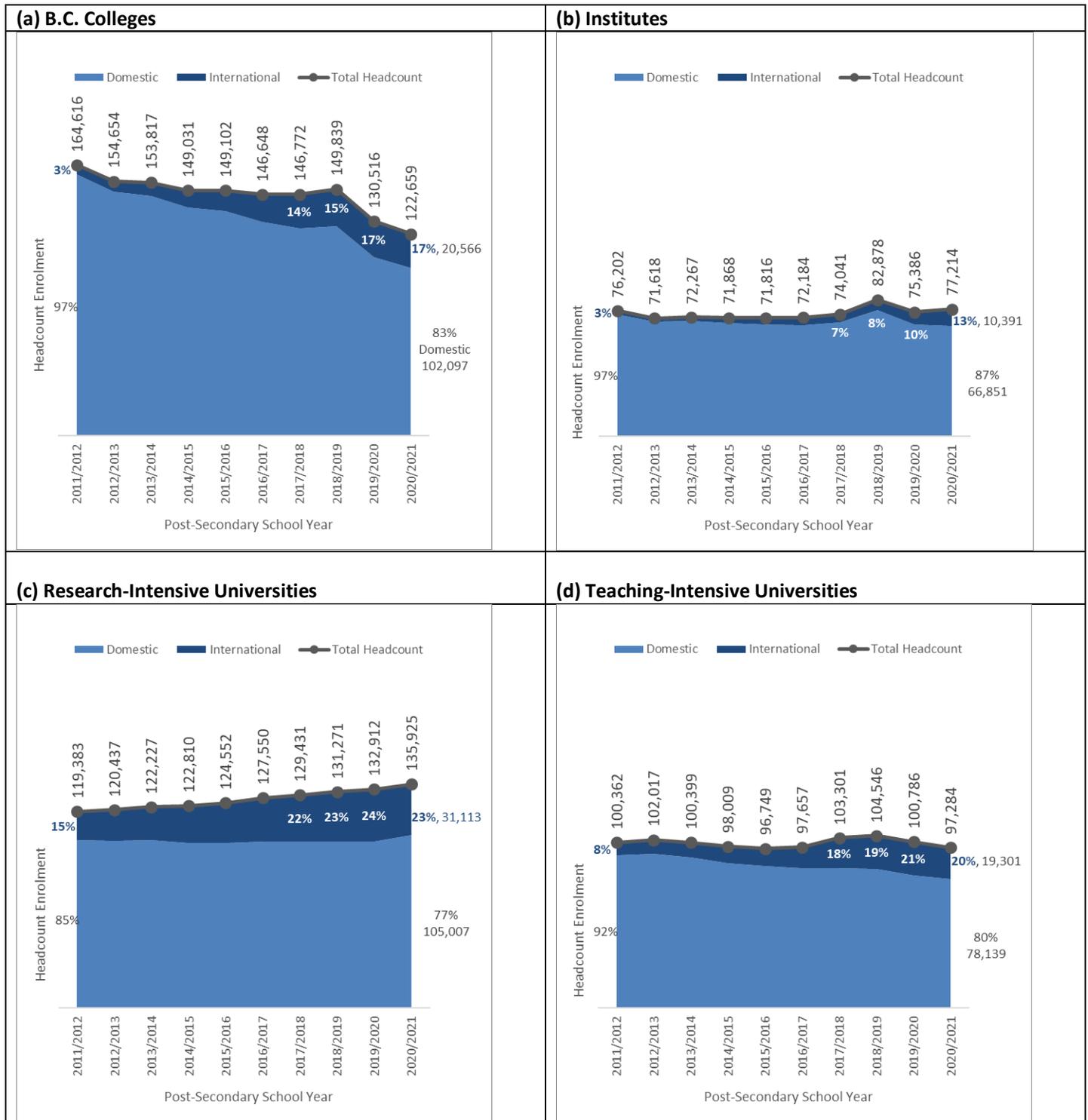


See **Figure 22** on the following page to view the total headcount enrolment trends in each of the four institution types and the changing shares of domestic and international students.

- Total headcount enrolment in B.C. public post-secondary institutions remain strong in **RIUs** (+4% over two years), but other institution types in B.C. have seen total headcount enrolment declines ranging from -7% in Institutes, -7% in TIUs and -18% in colleges.
- **B.C. colleges** have experienced domestic enrolment declines over the last two years at more than twice the rate of international enrolment declines (-20% and -9% respectively).
- **Institutes** have had sustained international enrolment growth over the decade, increasing their share of international students from 3% to 13% over the decade; and with recent international enrolment increases of 17% and 39% respectively in each of the last two years. Domestic enrolments declined in each of the last two years, cumulatively -13% over the two years.
- **TIUs** have experienced enrolment declines in each of the last two years, equivalent to -7% domestic and -5% international over the two years.

FIGURE 22: TOTAL HEADCOUNT ENROLMENT IN B.C. PUBLIC POST-SECONDARY INSTITUTIONS,

BY INTERNATIONAL STUDENT STATUS, INSTITUTION TYPE AND YEAR, 2011/2012 TO 2020/2021



Part 3:

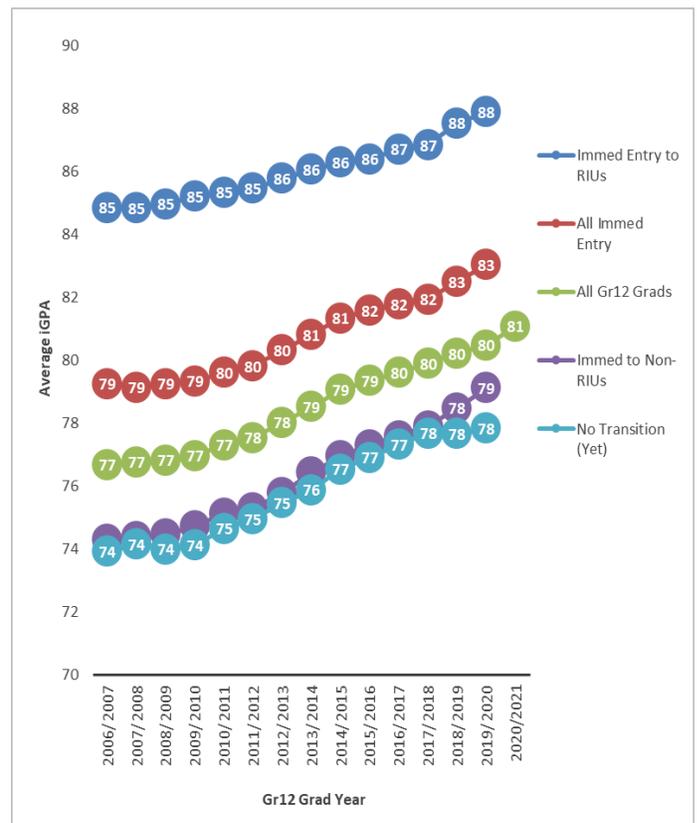
What are the trends in student academic performance in B.C.'s education systems?

◆ What are the trends in student academic performance of B.C. high school graduates? What might be affecting these trends?

The B.C. K-12 curriculum has undergone numerous changes¹² recently, as the 2004 graduation program was replaced with the 2018 graduation program¹³. Beginning in September of 2016, a new curriculum rolled out for grade 9, followed by grade 10 (September 2018), and finally grade 11 and 12 (September 2019). Given these new curriculum implementation timelines, many of the students graduating in 2019/2020 would have been exposed to some of the new curriculum in grades 9 to 11; and students graduating in 2020/2021 would have received their grade 9 to 12 education under the new curriculum. Coincident with these curriculum changes, the COVID-19 pandemic impacted the lives of these students in various ways, including interruptions or adjustments to the traditional methods of in-class instruction. Did these changes affect the average academic performance of B.C. high school graduates?

- Over the last decade, the average iGPA scores of **B.C. high school graduates** have increased by nearly five percentage points, from 77% to 80%, with an additional increase of one percentage point for the most recent 2020/2021 high school graduates.
- Over the same decade, the average iGPA scores of **immediate entry** students grew at a similar rate (+5 pts). On average, immediate entry students have iGPA scores two percentage points higher than the average for all B.C. grade 12 graduates; however, more recently, the iGPA advantage over all grade 12 graduates grew to three pts for immediate entry students of the 2019/2020 graduation cohort.
- In general, as shown in **Figure 23**, the trend line of iGPA scores of all grade 12 graduates is parallel to the iGPA trend lines for immediate entrants to non-RIUs or all other PSIs combined; however, the iGPA trend lines diverge upward for entrants to RIUs and downward for non-transitioners. This is likely attributed to the pandemic because many of the high iGPA students of 2019/2020, well qualified for admission to RIUs, chose to enrol in B.C., rather than enrolling out of province (and appearing as non-transitioners). This reaction to the pandemic by high achieving graduates of 2019/2020 emerges as higher average iGPAs for RIU entrants and lower average iGPAs for “non-transitioners”.
- It is too soon to tell whether these minor iGPA shifts are attributed entirely to the pandemic or to curriculum changes, but the STP will continue to monitor these trends over the coming years.

FIGURE 23: AVERAGE IGPA SCORES OF B.C. GRADE 12 GRADUATES AND IMMEDIATE ENTRY STUDENTS, 2006/2007 AND 2010/2011



¹² See B.C. K-12 New Curriculum: Roll Out Timeline prepared by Liesel Knaack, Director, Centre for Innovation and Excellence in Learning, Vancouver Island University: <https://wordpress.viu.ca/ciel/files/2017/12/timeline-of-roll-out.png> and B.C.

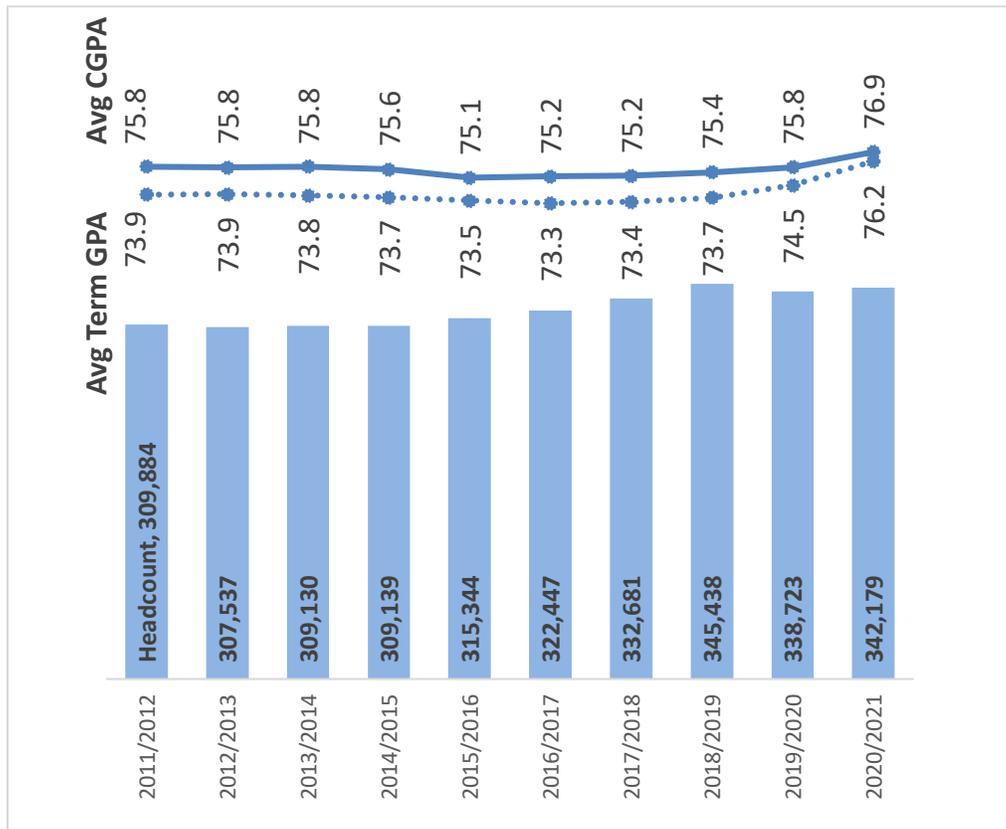
¹³ *Grad Planner 2018/2019* at https://www2.gov.bc.ca/assets/gov/education/kindergarten-to-grade-12/support/grad_planner.pdf

◆ What are the trends in student academic performance of B.C. post-secondary registrants? What might be affecting these trends?

The STP began collecting data on the academic performance and progress of post-secondary students, and is now able to begin reporting on some of these new measures (term GPA, cumulative GPA, credits attempted and credits awarded). With this new data in hand, the STP is able to show trends in term GPAs and cumulative GPAs of undergraduate students enrolled in academic credits, as provided by the institutions and converted to a common 100-point percentage GPA scale across the system.

As shown in **Figure 24**, the **cumulative GPAs** (CGPAs) of all undergraduate students in academic courses in B.C. public post-secondary institutions was 76.9% in the 2020/2021 academic year, following a decade of slightly lower CGPAs between 75% and 76%. This recent increase of nearly one full percentage point from the preceding CGPA trend is likely due to grading accommodations granted to students, in response to the pandemic.

FIGURE 24: AVERAGE GPAs OF UNDERGRADUATE STUDENTS ENROLLED IN ACADEMIC COURSES IN THE B.C. PUBLIC POST-SECONDARY SYSTEM, 2011/2012 TO 2020/2021



Unlike the CGPA, a cumulative performance measure that incorporates historical and current academic performance for each student, the STP also collects **term GPAs**, derived exclusively from student academic performance in the current registration term(s) in the academic year, and converted to a common 100-point percentage scale.

Consistent with the rising cumulative GPAs, the average term GPA has consistently remained below 74% over the decade; however, the average term GPA rose above this level to 74.5 in academic year 2019/2020, and increased by an additional 1.7 percentage points in 2020/2021 to 76.2. The escalating term GPAs significantly contributes to the rising trend in cumulative GPAs.

◆ Is the recent upward shift in post-secondary GPAs evident in all institution types and programs?

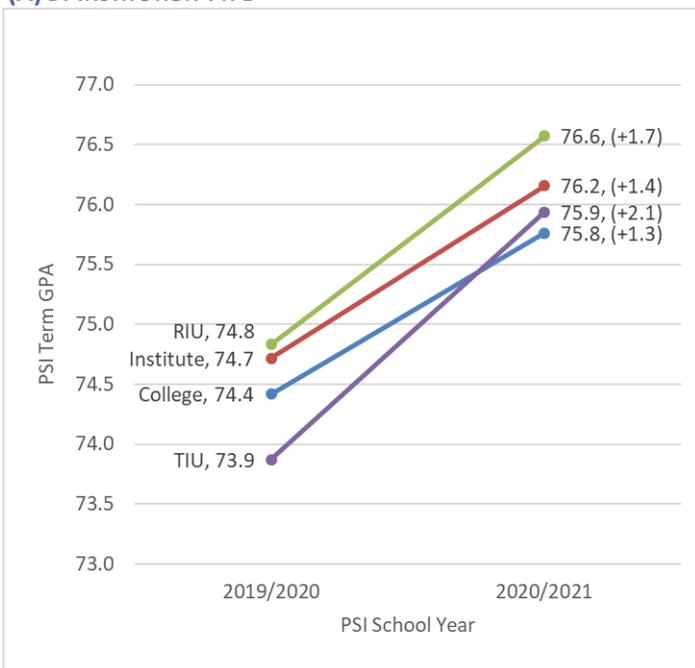
As previously shown, the average CGPAs and term GPAs attained by B.C. public post-secondary registrants increased by one to two percentage points from 2019/2020 to 2020/2021, during the pandemic. Any upward shift in term GPAs is reflected in cumulative GPAs, thus **Figure 25** focuses exclusively on the recent increase in term GPAs, by institution type and program.

The average increase in term GPAs ranged from +1.3 percentage points in colleges to +1.7 percentage points in RIUs. Similarly, across all institutions and by program, the average increase in term GPAs ranged from +1.0 percentage points in Visual and Performing Arts programs to +2.0 percentage points in Arts and Sciences and Health programs.

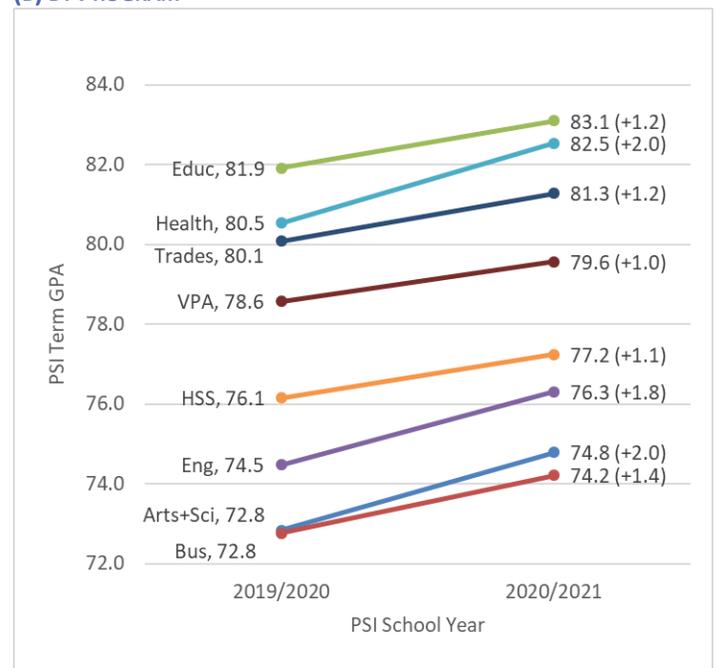
In any of the pre-pandemic years over the preceding decade, term GPAs have typically fluctuated by +/- 0.1 to 0.2 percentage points, thus suggesting that the recent large increases in term GPAs awarded to students in 2020/2021 are not consistent with typical grading trends.

FIGURE 25: CHANGE IN AVERAGE TERM GPAs OF UNDERGRADUATE STUDENTS ENROLLED IN ACADEMIC COURSES IN THE B.C. PUBLIC POST-SECONDARY SYSTEM, 2019/2020 vs 2020/2021

(A) BY INSTITUTION TYPE



(B) BY PROGRAM



Excludes Personal Improvement and Leisure and "Other" programs. To improve readability, note that vertical axis scale in chart (A) is different from chart (B).

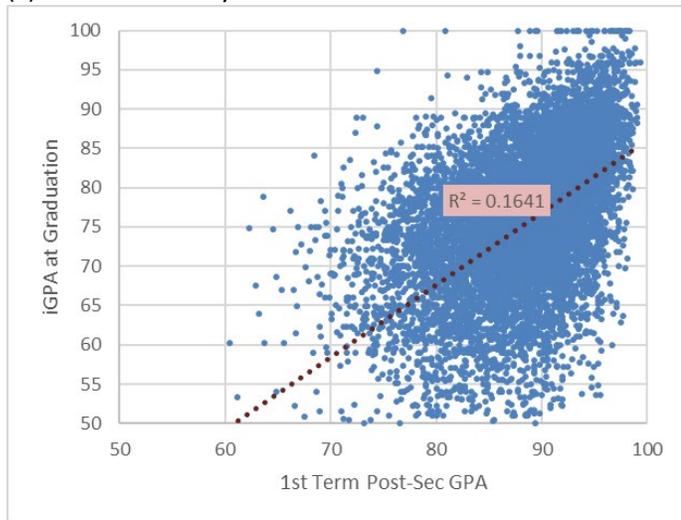
Arts+Sci=Arts and Sciences, Bus=Business & Management, Educ=Education, Eng=Engineering and Applied Sciences, Health=Health, HSS=Human and Social Services, Trades=Trades, VPA=Visual and Performing Arts.

◆ What is the relationship between high school academic performance and first term post-secondary performance?

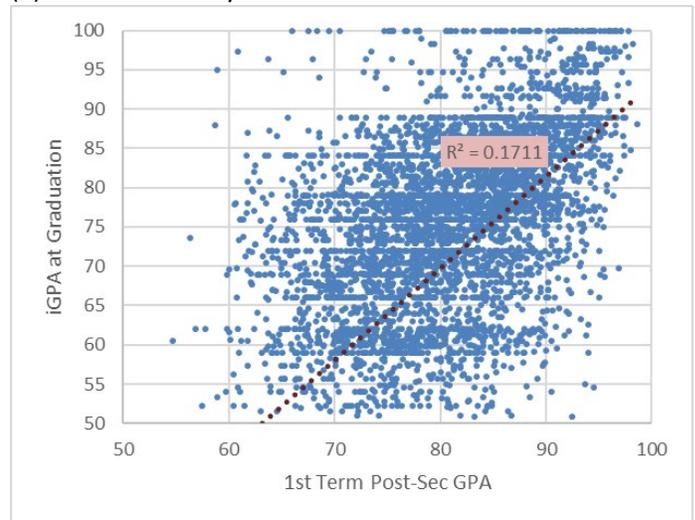
After reviewing separately the upward trends in high school iGPA scores and post-secondary GPAs, this analysis now looks at the relationship between these two measures of academic performance. To what extent is a student’s high school GPA related to their first term performance in B.C. public post-secondary institutions? As shown in **Figure 26**, the correlation between these two measures of academic performance is weakest among entrants to institutes ($R^2=0.09$), but stronger among entrants to colleges ($R^2=0.14$), RIUs ($R^2=0.16$) and TIUs ($R^2=0.17$).

FIGURE 26: SCATTER PLOTS OF HIGH SCHOOL IGPA VS FIRST TERM GPA IN POST-SECONDARY, 2019/2020 GRADE 12 GRADUATES WHO ENROLLED IMMEDIATELY IN B.C. PUBLIC POST-SECONDARY EDUCATION IN 2020/2021

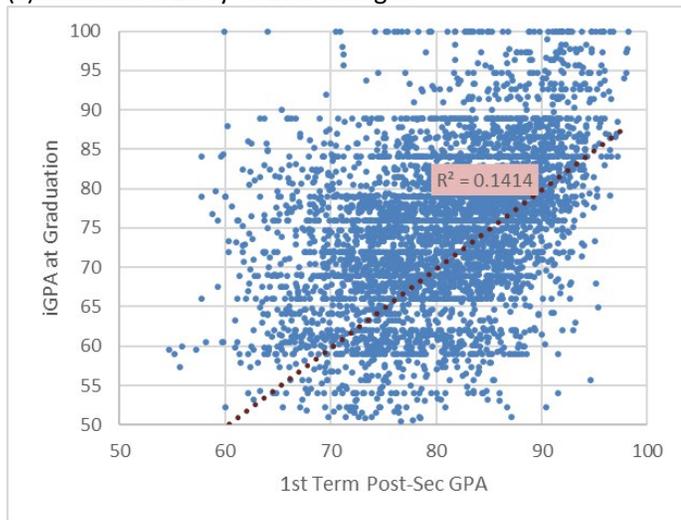
(a) Immediate Entry to RIUs



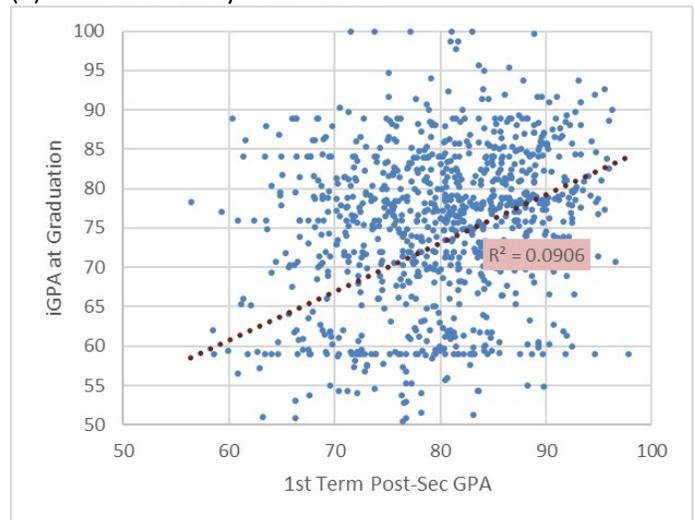
(b) Immediate Entry to TIUs



(c) Immediate Entry to B.C. Colleges



(d) Immediate Entry to Institutes



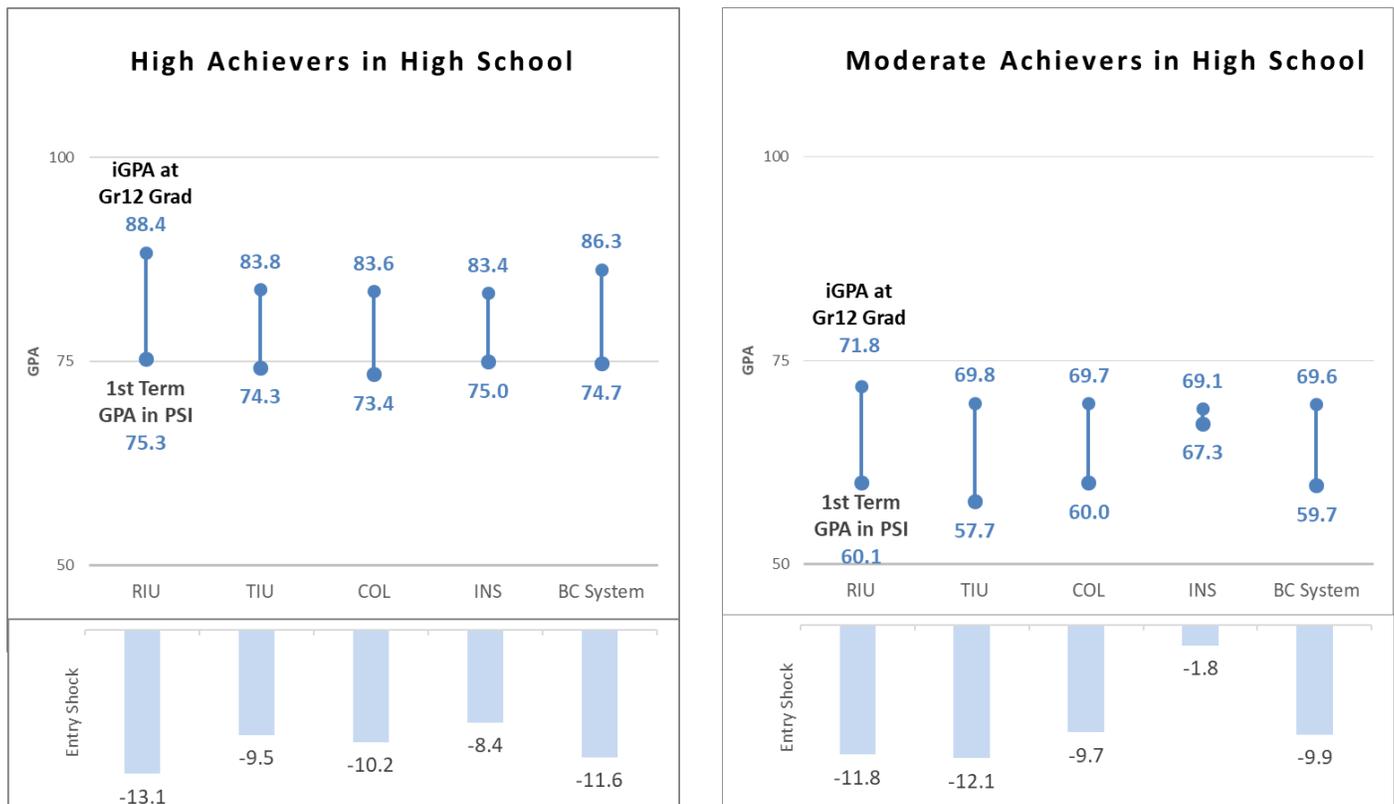
◆ Do high school graduates experience entry shock in their first term in post-secondary education in B.C.?

An academic performance measure that incorporates high school iGPAs and post-secondary GPAs is “entry shock”. This is the drop in GPA that students experience when they first enrol in post-secondary education, relative to the iGPA¹⁴ they attained upon high school graduation. The average entry shock for all B.C. grade 12 graduates of 2019/2020 who first enrolled in post-secondary education in 2020/2021 is -11.2 percentage points.

High achieving high school graduates of 2019/2020 experienced a larger entry shock (-11.6 percentage points) than moderate achieving high school graduates (-9.9 percentage points). Despite earning higher grades in high school and in their first post-secondary term, high achievers suffered a larger entry shock than moderate achievers. The size of the entry shock varies by type of post-secondary institution students first enrolled in (see [Figure 27](#)), and by program entered (see [Figure 28](#)).

In terms of trends, the size of the entry shock for these pandemic graduates of 2019/2020 (-11.2) is not as large as the average entry shock measured over the last five graduation cohorts (-11.6 percentage points) for students entering any B.C. public post-secondary institution type. The reduction in the entry shock for 2019/2020 graduates was primarily attributed to a larger than typical entry shock for moderate achievers, as well as a smaller than typical entry shock for high achievers and entrants to RIUs.

FIGURE 27: POST-SECONDARY ENTRY SHOCK OF 2019/2020 GRADE 12 GRADUATES, BY HIGH SCHOOL iGPA LEVEL AND FIRST PSI TYPE ENTERED IN 2020/2021



¹⁴ The iGPA will likely differ from the admission GPA assigned to students upon entry to their respective post-secondary institution.

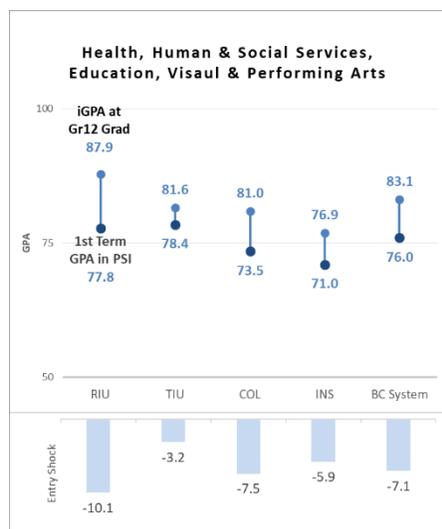
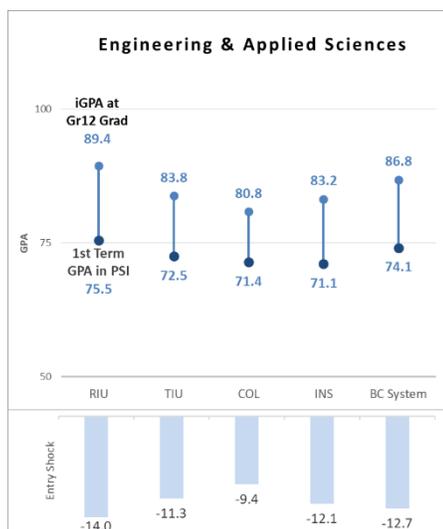
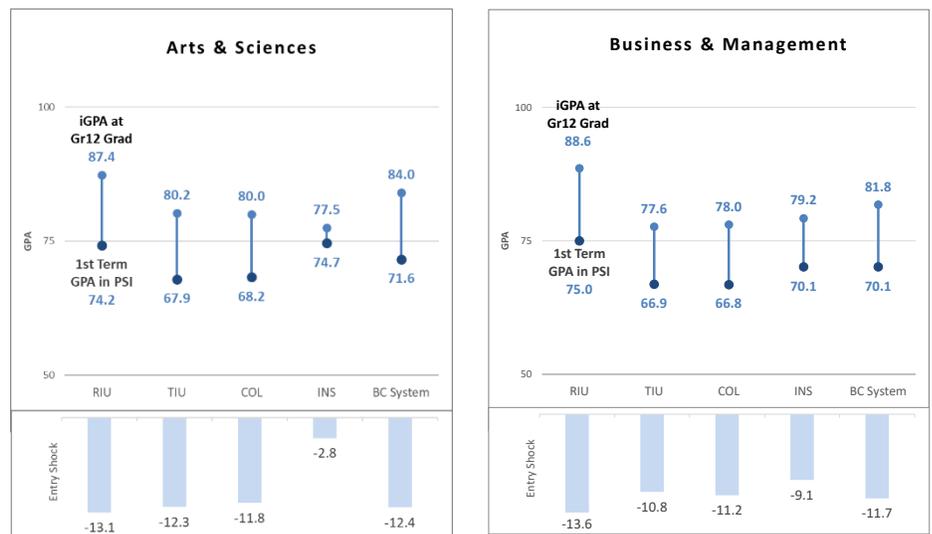
◆ What is the magnitude of the entry shock experienced by immediate entry students, by post-secondary program entered?

The magnitude of the entry shock for immediate entry students of 2020/2021 who graduated in 2019/2020 is similar across the larger program areas, including Arts & Sciences, Business & Management, and Engineering & Applied Sciences. The entry shock is smaller for students who entered the smaller program areas, combined in **Figure 28**. This includes Health (-8.9), Human & Social Services (-6.7), Education (-7.3) and Visual & Performing Arts (-3.5). A more detailed analysis would be required to determine the possible reasons for these differences.

Students who entered trades programs did not experience any entry shock, on average. In fact, when comparing the academic performance of these students in high school, to their first term in a trades program, these students improved their academic performance by an average of five percentage points. Perhaps the academic rigor of high school was challenging for these students, but they have achieved greater success in a Trades program, compared to their high school experience.

These findings for Trades students prompted another look at the entry shock in **Figure 27** for all students by PSI type, but with the Trades students omitted. Results showed a larger entry shock for high achievers entering TIUs (-9.6), COLs (-10.3), and INS (-9.7); and a larger entry shock for moderate achievers entering TIUs (-13.1), colleges (-11.4) and institutes (-5.5).

FIGURE 28: POST-SECONDARY ENTRY SHOCK OF 2019/2020 GRADE 12 GRADUATES, BY HIGH SCHOOL IGPA LEVEL AND FIRST PSI PROGRAM ENTERED IN 2020/2021



◆ How does credit load impact post-secondary academic performance of new and continuing students?

In light of the recent rising trends in post-secondary GPAs, the STP has taken a first look at the impact of student credit load on student academic performance for new versus continuing students. Among undergraduate students registered in academic credit courses in the Fall 2022 term, a comparison between new and continuing student term GPA distributions is provided in **Figure 29**, by credits attempted in the term. The following patterns are evident in this first look at the data:

- The average term GPA of new students is 1.4 percentage points lower than continuing students, suggesting that the adjustment to a new post-secondary institution may affect student academic performance.
- In general, the fewer the number of credits students attempt in a term, the higher their term GPA, suggesting that a reduced credit load may contribute to academic success; however, students enrolled in 13 or more credits in the term attained relatively higher GPAs than students enrolled in fewer credits. Alternatively, the lower academic performance of students enrolled in relatively few credits may be attributed to these students working part-time, an additional burden that may affect academic performance.
- The difference in GPA between new and continuing students registered in fewer than nine credits is negligible (roughly 0.2 percentage points), compared to the gap of nearly 2 percentage points between new and continuing students enrolled in nine or more credits. Nine credits is the typical minimum credit load for a full-time student.

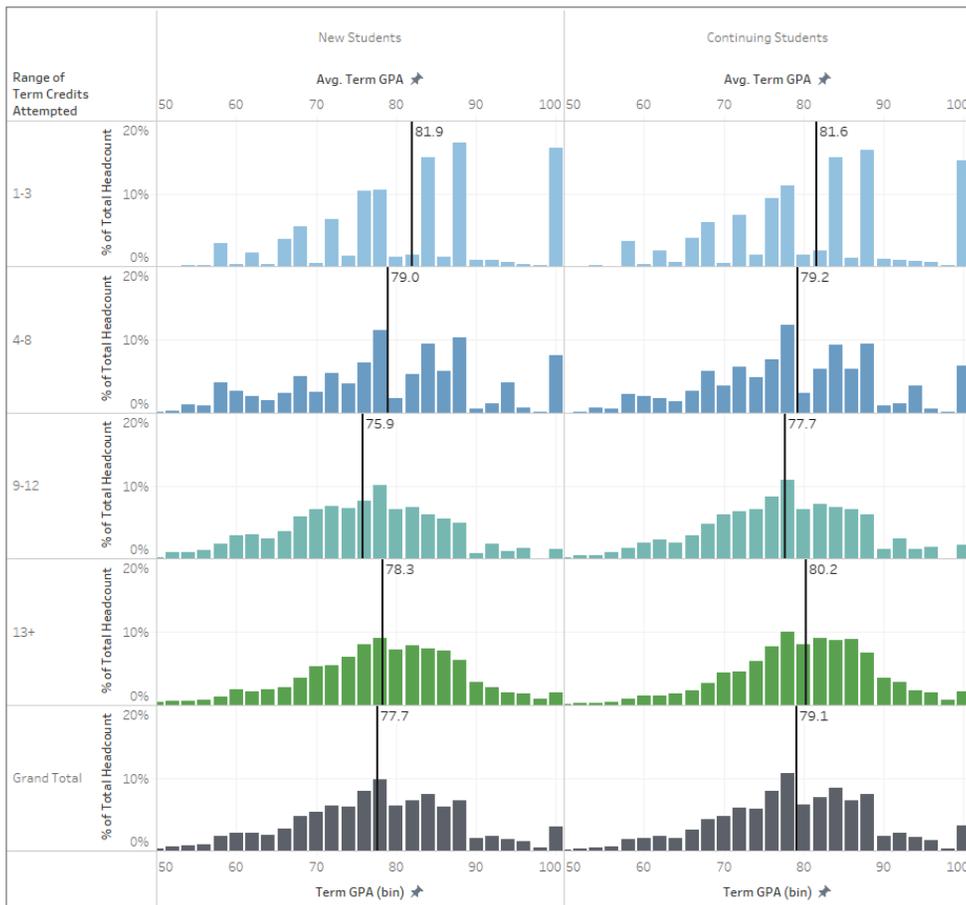


FIGURE 29: TERM GPA DISTRIBUTION BY CREDITS ATTEMPTED IN FALL 2020, BY NEW VS. CONTINUING STUDENTS (LEFT)

FIGURE 30: DISTRIBUTION BY CREDITS ATTEMPTED IN FALL 2020 (BELOW)

	Continuing Students	New Students
1-3	9.8%	10.1%
4-8	12.6%	9.5%
9-12	43.6%	38.1%
13+	34.0%	42.2%
Grand Total	100.0%	100.0%

Conclusion

This report has highlighted the ongoing success of B.C.'s high school graduates in B.C. public post-secondary education and highlights some of the enrolment challenges that post-secondary institutions are facing as institutions and students adapt, adjust and recover from the COVID-19 pandemic.

This edition of Research Results provided a summary of student transitions of B.C.'s high school graduates entering B.C. public post-secondary institutions, including some of the factors that influence student transition rates. The global pandemic has also contributed to many of these trends and affected both student transition rates and overall post-secondary enrolment trends. This report also presented some new findings on socio-economic status, academic performance and entry shock.

As the STP continues to expand in width and breadth, with each additional year of data and each additional new variable, the STP Research Results becomes longer and potentially richer. There is no end to the number of topics this data set allows for analysis, and the STP will continue to address new topics and dive deeper into others. We welcome your input and suggestions.

Need More Information?

Additional information in various formats is available to post-secondary institutions seeking more detailed information on international students studying in B.C.

STP Highlights newsletters and reports are available on the public Student Transitions Project [web site](#) at:

<https://www2.gov.bc.ca/gov/content/education-training/post-secondary-education/data-research/student-transitions-project>

