

Pan-Canadian Consortium on Admissions and Transfer
(PCCAT)

Research Study

A Profile of Out-of-Province Transfer Students Admitted to
Four Universities: the University of Alberta, the University of
British Columbia, the University of Saskatchewan, and
York University

2004/05 to 2008/09

Prepared by:

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Executive Summary

Profile of Out-of-Province Transfer Students

Selected Canadian universities were invited to prepare similar reports on the characteristics and performance of transfer students who entered undergraduate programs from other Canadian provinces in the period 2004/05 to 2008/09.

Four universities participated:

University of Alberta

University of Saskatchewan

University of British Columbia

York University

The four reports were blended to the extent possible to give a broad view of the state of inter-provincial transfer to these major Canadian universities during this period. General enrollment statistics were gathered so that the out-of-province transfer intake could be placed in proper context.

The topics covered in this report are:

- students' demographics - gender, age, originating province, immigration status;
- the programs they enter and course loads they take, whether full or part-time;
- the recognition received by students for their previous studies, in terms of year level placement, transfer credit granted, and the amount of credit they complete after they transferred; and
- the performance of transfer students measured by their admission averages, initial year averages and, for those who graduate, final year averages, time to complete their degrees and the amount of credit completed after transferring.

In spite of the difficulties inherent in making comparisons across jurisdictions, a number of conclusions can be drawn:

- These universities readily admit and grant significant transfer credit to transfer students from other provinces.
- Transfer credit is closely related to year level placement.
- Transfer credit quantities and year level placement are higher for transfer students who had attended universities rather than colleges.
- The credit granted is effective in shortening the time to degree completion for transfer students.
- The performance of transfer students from other provinces does not vary much by source province.
- Many more transfers are from other universities rather than from colleges.
- Out-of-province transfer students represent a small proportion (about 3%) of the annual intake of the universities in the study, which is not very significant in their overall enrolment plans.

There does not appear to be sufficient reason to perform similar research in the near future on inter-provincial transfers, especially as the task is more challenging than intra-provincial research due to differences in definitions and business processes.

Introduction

Previous research in Canada on the characteristics of transfer students who move from one postsecondary institution to another to pursue a first undergraduate degree or similar credential has mostly focused on those who remain in the same province, usually their home province. Since higher education is the responsibility of each province this is not surprising, but the broader picture is often hinted at in these studies, that of the students who transfer between institutions in different provinces.

This report sets out to examine some aspects of the demographics, performance and success of students who transferred from postsecondary institutions in other provinces to undergraduate programs at four prominent Canadian universities, each located in a different province.

The universities in this study are:

The University of Alberta	Edmonton, Alberta
The University of British Columbia	Vancouver and Kelowna, British Columbia
The University of Saskatchewan	Saskatoon, Saskatchewan
York University	Toronto, Ontario

The study period consists of the 2004/05 to 2008/09 academic years with the exception of the University of Saskatchewan whose data are for four years beginning in 2005/06.

The following student types are excluded from the study:

- Students who are not admitted to a degree/diploma program (i.e. visiting students, exchange students, unclassified students, etc.);
- Students who immediately enter a professional program (e.g. medicine, dentistry, architecture and others that normally require a first degree for entry); and
- Graduate (or post-graduate) students.

Students may have transferred from any type of postsecondary institution and may have received some transfer credit or none. They may have entered any of the first four or five years (year levels) of a program at their new university. Although the definition of postsecondary institutions is limited to public bodies, it is known that one university's data includes data relating to private postsecondary institutions. This is an example of some of the data inconsistencies in the study.

The institution they attended previously could have been another degree-granting institution such as a university or university college or could have been a college that did not grant degrees or a technical or fine arts institution. The term "college" used in this report can indicate any college, university college or non-university institution from which a student transferred to one of the four universities.

There are few postsecondary institutions in Yukon, Nunavut and Northwest Territories and these jurisdictions have relatively small populations. Consequently, there are few transfer students from any of the Canadian territories. Data are shown only if at least 10 students

have transferred from that jurisdiction. If no data from one of these jurisdictions appear in a table, the entire row is suppressed. This is done to give better statistical reliability and to protect privacy. There is no intent to diminish the postsecondary education institutions in the three Canadian territories. The same caveat applies also to some of the smaller provinces, notably Prince Edward Island.

Some institutions from which students transferred might have changed their status during the period of this study. The four universities that analyzed their admission data are aware of these changes. They have attempted to reflect the institution name and type at the time of transfer, where feasible. The current name of the institution is also provided, parenthetically, in each case.

Method

The Research Subcommittee of PCCAT identified the need for a study of the cross-provincial transfer of students within Canada. Hitherto, all transfer studies had been confined to single provinces. The reasons for this relate to the difficulty of making comparisons across often somewhat different educational systems, the responsibilities of provinces rather than the federal government for directly funding higher education and, with the exception of Statistics Canada's sustained effort, some shortfall in common data definitions among universities across different regions. A study based on a number of receiving institutions, each one a major university, was designed. The specifications of the study were drawn up to cover aspects of flows of students, transferability of courses from colleges and from other universities and the relative performance achievements of transfer students.

A number of universities, representing all regions of Canada, were first identified as potential participants. A feasibility check was then conducted with the assistance of the various potential participating universities to determine what data were available that matched the needs of the study (see Appendix 1, Table 38). Although not all of the responding universities could provide all of the data in Table 38, the conclusion was drawn by the Research Subcommittee that sufficient data were available to make a study of out-of-province transfers practical. Contracts were prepared for the participating universities to submit similar but separate reports.

Originally, six universities were considered as potential participants, but the final number that submitted reports was four, namely the University of Alberta, the University of British Columbia, the University of Saskatchewan and York University.

Each participant undertook to submit a report by the end of 2009 that examined, in a consistent fashion, out-of-province transfers to that university during the five-year period from 2004/05 to 2008/09 (or the four year period for the University of Saskatchewan because of system changes introduced in 2004/05). The first to submit a draft report was the University of British Columbia, whose report was shared and used as a template, where feasible, by the other universities.

A caveat about the data is necessary. Some students transferred after attending more than one other postsecondary institution. For example, a student might have first attended a college in Alberta, then attended a British Columbia university, such as the University of Victoria, before transferring to York University. To simplify data collection and analysis, the student is assumed to have transferred only from the last institution attended: (i.e. the University of Victoria) and all transfer credit granted by York University for that student will be attributed to the University of Victoria. This methodology is believed to be consistent with numerous internal transfer student reports commissioned by the respective Councils on Admissions and Transfer in the Provinces of Alberta and British Columbia. One drawback of this simplification is that, if many students attend multiple institutions before

transferring, in Canada or elsewhere, the data become misleading. For example, it might appear that a receiving institution was giving inadequate recognition in the form of transfer credit to students who transferred from college A, but large numbers of transfer students at college A had also attended an institution in another country that had a very different educational system. In reality, the receiving institution might be fully justified in limiting transfer credit to these students, even though the appearance could be otherwise.

Some of the participating universities used the institution's title to determine whether it was a 'university' or 'college' while others also took into account whether or not the institution was degree granting at the time of transfer. It is not believed that any of the universities examined the level of the student's program to determine the institution's type – some institutions offer a very broad range of programs from academic degrees to vocational training and the institution's authority to grant degrees may not apply to all programs.

Although the original design had envisaged that the universities would convert performance data to a common four point grade scale, in fact each submitted average performance or grade data using their own scales. While there are advantages to reducing these different grading formats to a single four point scale to enable easier cross-institution comparisons, there is no generally agreed upon method of doing this. A method is offered here that converts all the averages to a four point scale, but it might be unacceptable to some. More about the grade conversion method used will follow in a later section. For these reasons, the performance data are given both in their original and in converted forms.

Most Canadian universities categorize admission applicants by Basis of Admission, enabling a separate set of rules to be applied to each type. The data on transfers at some universities was based on the Basis of Admission model, but at the University of Alberta it was determined by whether or not a student had previously attended a postsecondary institution and had been granted transfer credit. This has the effect of only reporting those students who received transfer credit and reporting none who might have indeed entered from another postsecondary institution, but received no transfer credit. It also brings into the picture another type of student who might not be considered to be a legitimate transfer student, namely a high school graduate who completes transferable course work while at high school and receives transfer credit for it when s/he attends a university. There are two main types: those who enrolled part-time at a postsecondary institution as a form of enrichment, often referred to as concurrent attendees; and those whose secondary school programs are granted postsecondary transfer credit at most Canadian universities. Frequently the latter are students in the International Baccalaureate or Advanced Placement programs. Although it was not intended to include these high school-based entrants in this study, they might have been categorized as transfer students at some of the institutions and therefore could be included in these totals.

The four reports of the universities were analyzed and compared to produce this document. The author had access only to these reports but to none of the underlying tables or student data. Where the data are missing or inconsistent, an attempt is made to explain the reasons.

Ultimately, it is hoped that the result gives a generally accurate, albeit limited picture of the flows of transfer students across provincial boundaries, at least to major Canadian universities. Limitations of the data are examined and suggestions for further research are offered.

Some transfer students had attended institutions located in Canadian territories rather than provinces. The terms “province” should be understood to include the territories of Nunavut, Northwest Territories and Yukon Territory. As stated earlier, no data are shown if fewer than 10 students have transferred from a jurisdiction, whether a province or a territory.

General enrollment and transfer intake totals at the four universities

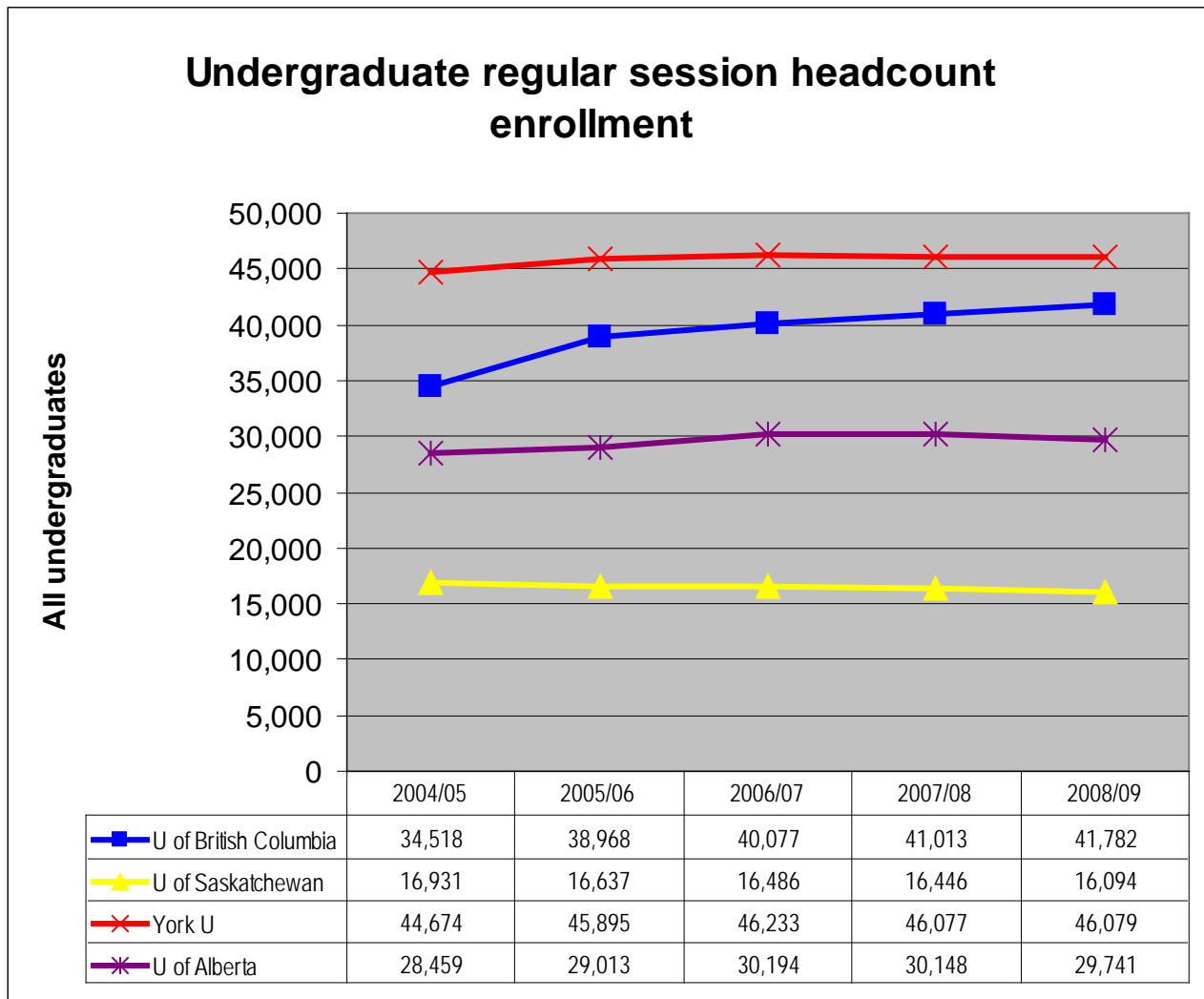
Purpose of this section

The data in this first section are not derived from the study itself but are provided for general context, so that readers will better understand the similarities and differences between the institutions and judge the relative importance of transfer students in general and transfer students from other provinces to the overall enrollment of the university.

Headcount enrollment at the receiving universities

Overall enrollment is shown for general comparison purposes in Figure 1 below. The overall undergraduate headcount enrollment in regular session may include students who enrolled in programs that are excluded from this study, such as Law. However, these numbers are thought to be very small.

Figure 1: Undergraduate regular session headcount enrollment at the four universities studied



As shown in the above figure, these are large institutions, but the University of Saskatchewan is only about half the size of the other three. The trends in enrollment are mixed: the Universities of British Columbia and Alberta and York University have stable or rising enrollments. The University of Saskatchewan’s enrollment is slowly declining.

Undergraduate transfer student intake from all sources at the receiving universities

While each of the four universities accepts transfer students, they comprise different proportions of the annual intake at each institution. However, these data might not be directly comparable because the definitions used in each case might be different, or data could be lacking on the public web sites of the universities. For example, Table 1 shows the following definitions:

Table 1: Data available on overall transfers and definitions

U of Alberta	First time registrants from another postsecondary institution who received some transfer credit
U of British Columbia	First time registrants from another postsecondary institution who received some transfer credit or had some postsecondary experience.
U of Saskatchewan	Definition unavailable
York U	Annual submission to Council of Ontario Universities (CUDO) table: Number of students who applied and enrolled as degree-seeking transfer students.

Sources

Data have been extracted from the enrolment histories displayed on the institutional web sites of the institutions, except as noted.

U of Alberta	Direct communication from P Dalton, Associate Registrar and Director Enrolment Management, Office of the Registrar and Student Awards, University of Alberta
U of British Columbia	Direct communication from. A. Lambert-Maberly, Senior Analyst, PAIR Office, University of British Columbia
U of Saskatchewan	Website: Information Strategy and Analytics: Summary Headcount Statistics - Undergraduate Regular Session Totals, in Table 2 – Head Count by Session and Education Level, All Full-Time, Part-Time, Maintenance of Status, Audit and 'On Leave' Students http://www.usask.ca/isa/isa-report.php?_service=default&_program=sb.sect2_summary.sas&_entry=unused&wsnapshot=Oct (and similar sources for each other year reported)
York U	Direct communication from. D Smith, Director, Management Information Office of Institutional Research and Analysis, York University Website: Office of Institutional Research and Analysis, Common University Data Ontario, Annual submissions to Council of Ontario Universities (CUDO) tables: Number of students who applied and enrolled as degree-seeking transfer students. et al (Data unavailable for 2004/05) http://www.yorku.ca/oira/reports/PDF/Common%20University%20Data%20Ontario%20-%20York%20-%202006.pdf

Figure 2: New transfer students from all sources

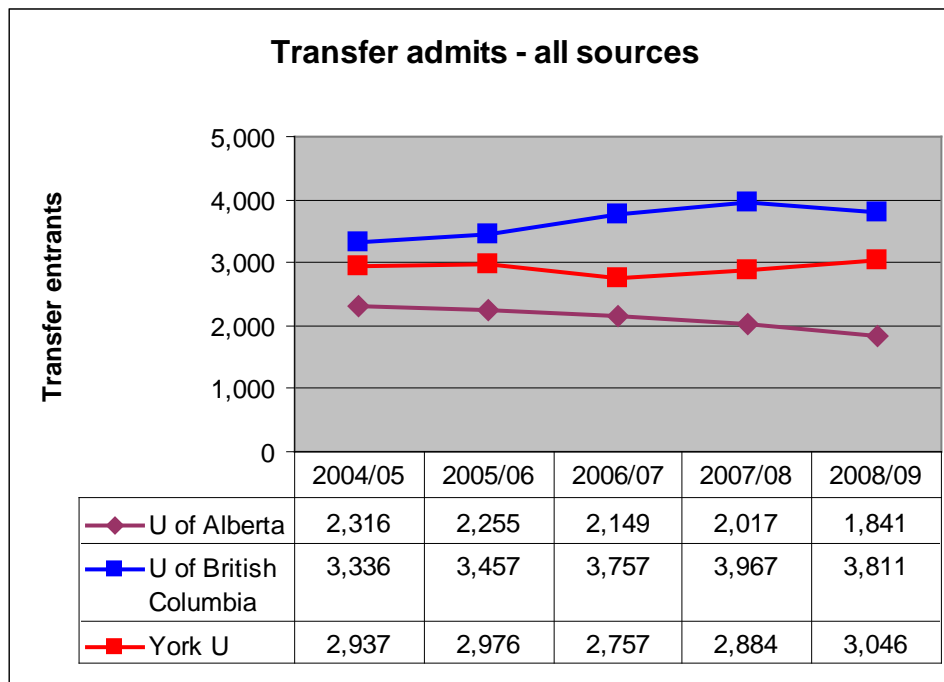
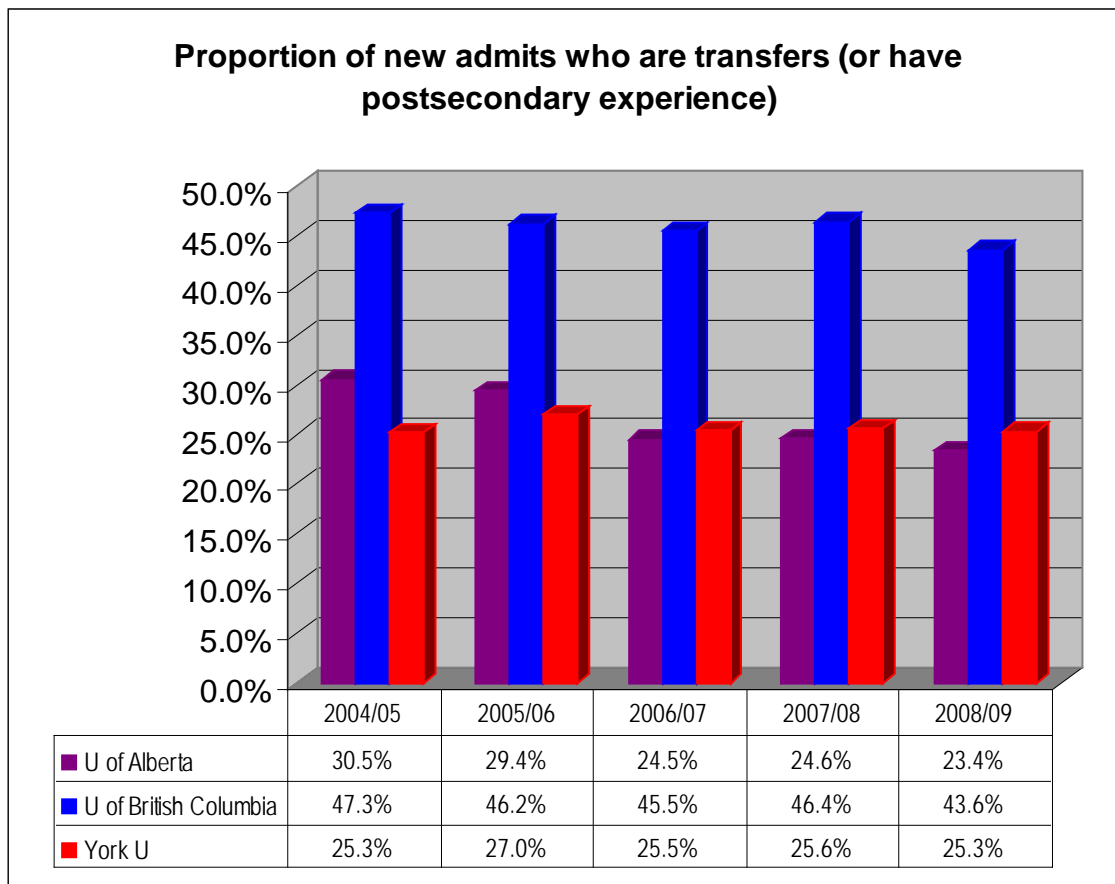


Figure 2 shows that transfers have a rising trend at York University and at the University of British Columbia but a falling trend at the University of Alberta. Data for the University of Saskatchewan are unavailable.

The data make more sense when related to the overall intake of the university. The following figure and table divide the number of transfer students (or more generally students with postsecondary experience) by the number of all admits for a given regular session intake to yield the proportion of new students who transferred in.

Figure 3: Proportion of new students who are transfers (or have postsecondary experience)

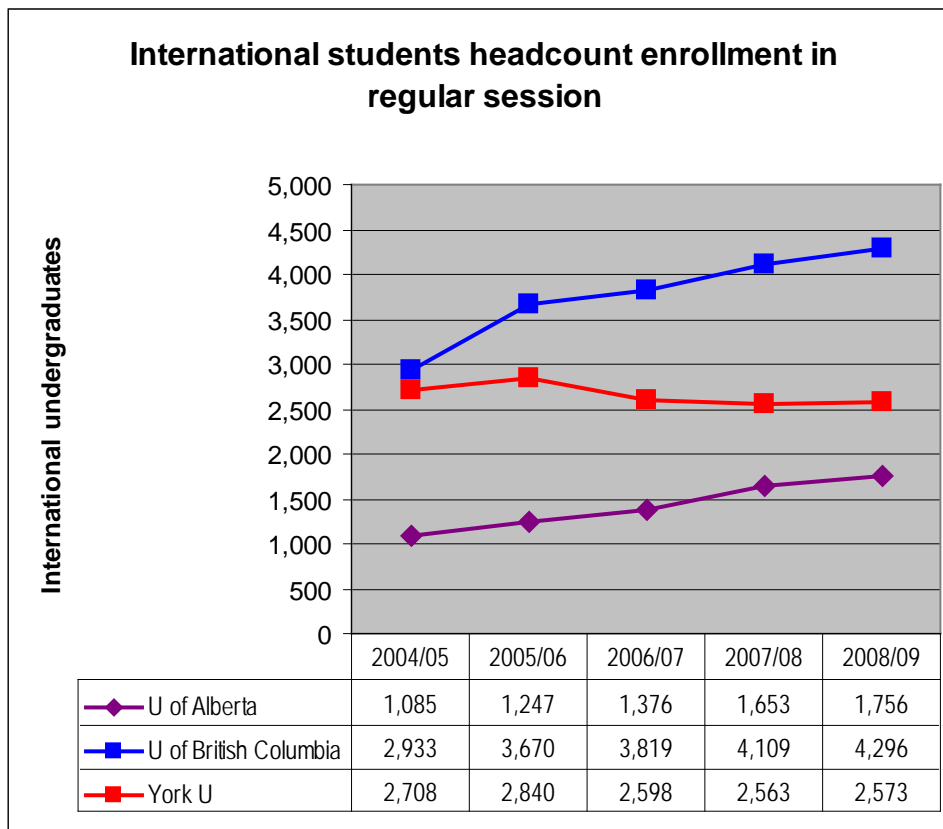


The University of British Columbia has the highest proportion of its intake that has postsecondary experience when they first enter. Although the proportion declined slightly over the study period, it makes up nearly half of the university's new undergraduates. At the University of Alberta, the proportion of entrants who are transfers is also declining. The proportion is very steady at York University.

International student headcount enrollment at the receiving universities

International students make up an important part of the undergraduate headcount. The following figure and table give the total of these during the study period. Data for the University of Saskatchewan are unavailable.

Figure 4: International undergraduate headcount enrollment



International students form a significant portion of the enrollment at each of the universities in the study. While many international students are also transfer students, they may come directly from institutions in other countries, from within the same province in Canada or from another province in Canada. Only this last group will be discussed in the report as these students are considered to be inter-provincial transfers.

Demographic Profile of Out-of-Province Transfer Students

The transfer students examined and described in the following sections are limited to those from other Canadian provinces who entered first degree programs that did not normally require a first degree to enter, which is a requirement for many professional first degree programs, such as Law. As will be shown, they comprise about 10% of the transfers from all sources and, based on Figure 3, an estimated 30% of all new undergraduate entries are transfers. Therefore, this group represents about 3% of undergraduate admissions to the universities in the study.

The genders, ages and immigration statuses of transfer students are readily available. Some comparisons are made between the universities they entered and between the source provinces from which they transferred.

A question of interest is how far transfer students are willing to travel to pursue their educational careers? Distances are not quantified in this study, but a proxy of relative distance might be the number of provinces across which transfer is made, although the provinces are so varied in size.

A transfer student need not be an individual who continuously pursues an undergraduate degree goal or who changes provinces for educational reasons. An unknown number of all transfer students, whether from within a province or from elsewhere, may resume otherwise discontinued studies many years later. The age profile of transfers shown in Figures 12 – 16 below gives a glimpse of this. At any age, student relocation may occur for other than educational reasons. In this study, there are no means of evaluating the reasons for relocation.

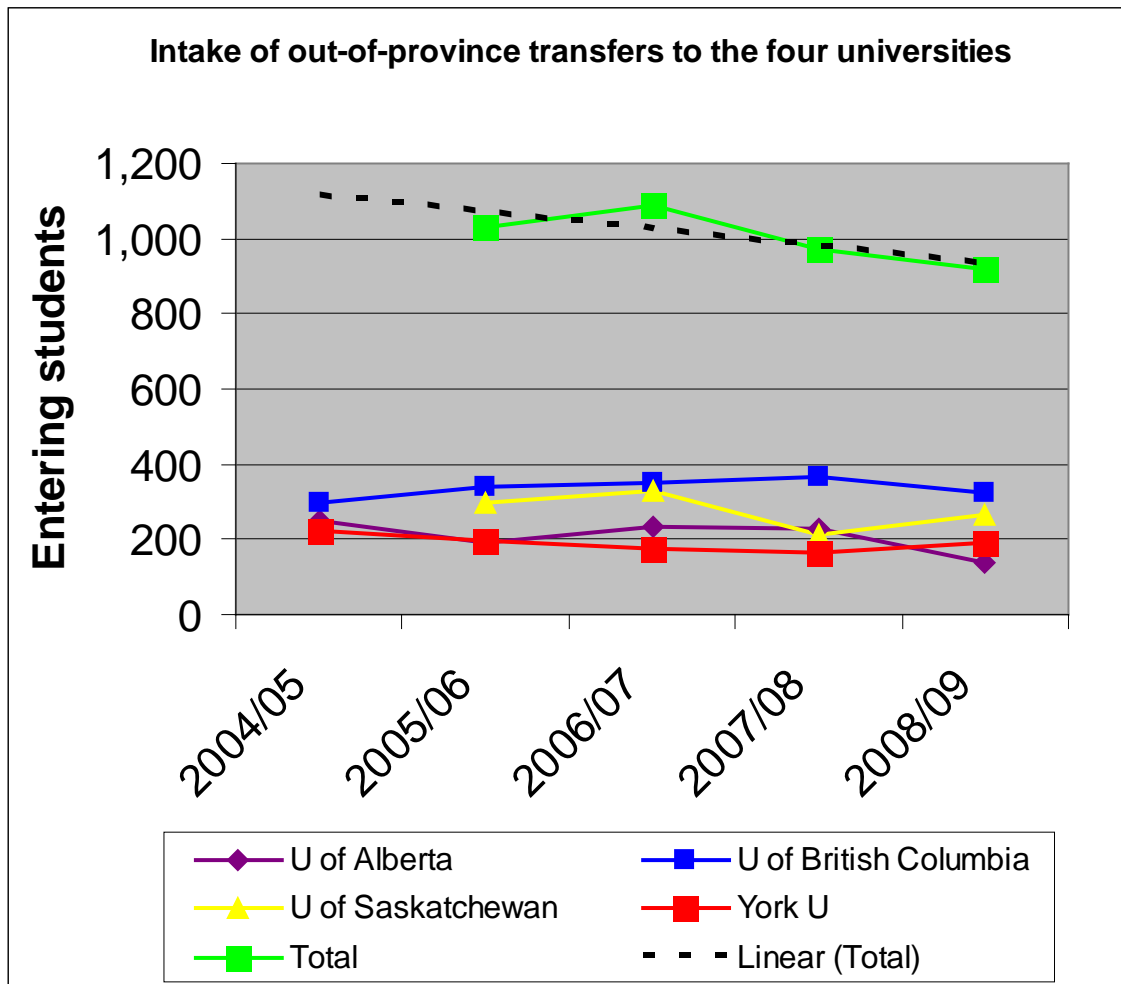
Out-of-province transfer student intake at the receiving universities

Each of the four universities admitted significant numbers of transfer students from other provinces, but Figure 5 confirms that out-of-province transfers make a fairly small (10%) contribution to the annual intake of new transfer students. Note that the populations are not defined consistently: the data in Figure 2 relate to all undergraduate programs whereas the data in Figure 5 are limited to programs that do not require a first degree for entry and exclude such programs as medicine and law.

Table 2: Intake of out-of-province transfers to the four universities

	2004/05	2005/06	2006/07	2007/08	2008/09	Total
U of Alberta	251	192	231	228	137	1,039
U of British Columbia	296	342	353	368	324	1,683
U of Saskatchewan		298	331	214	268	1,111
York U	225	197	176	163	190	951
Total		1,029	1,091	973	919	4,784

Figure 5: Intake of out-of-province transfers to the four universities



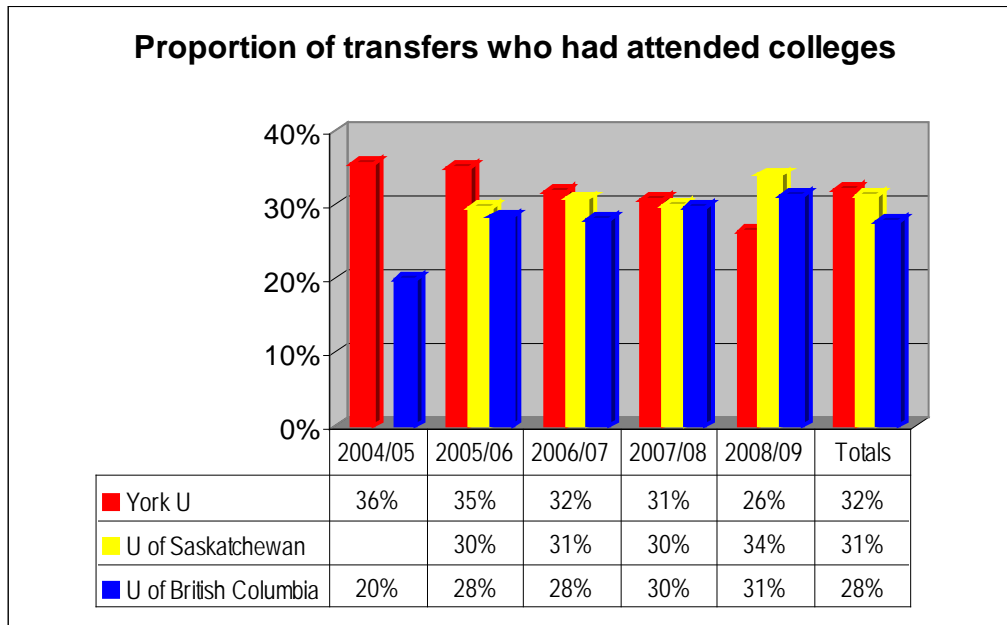
The dashed trend line shows a decline in the number of out-of-province transfers during the study period. The University of British Columbia opened a second campus, UBC Okanagan, in 2005/06, absorbing some students from another institution and creating a small increase in the numbers of its out-of-province transfers.

The declining number of out-of-province transfer admits at the University of Alberta is consistent with the declining trend of all transfers (see Figure 2). However for each of the four universities, the numbers are small and have only a minor impact on overall enrollment, being about 10% of transfers from all sources.

Sending institution type of out-of-province transfers

Each university, except the University of Alberta where data are not kept at that level, determined for itself whether a sending institution is a 'college' or a 'university'. Institutes, technical institutions and university colleges are typically counted as colleges, even if they might have degree granting status in the program from which transfer was made. Hence, this categorization by institution type is approximate.

Figure 6: Proportion of transfers from other provinces who had attended colleges

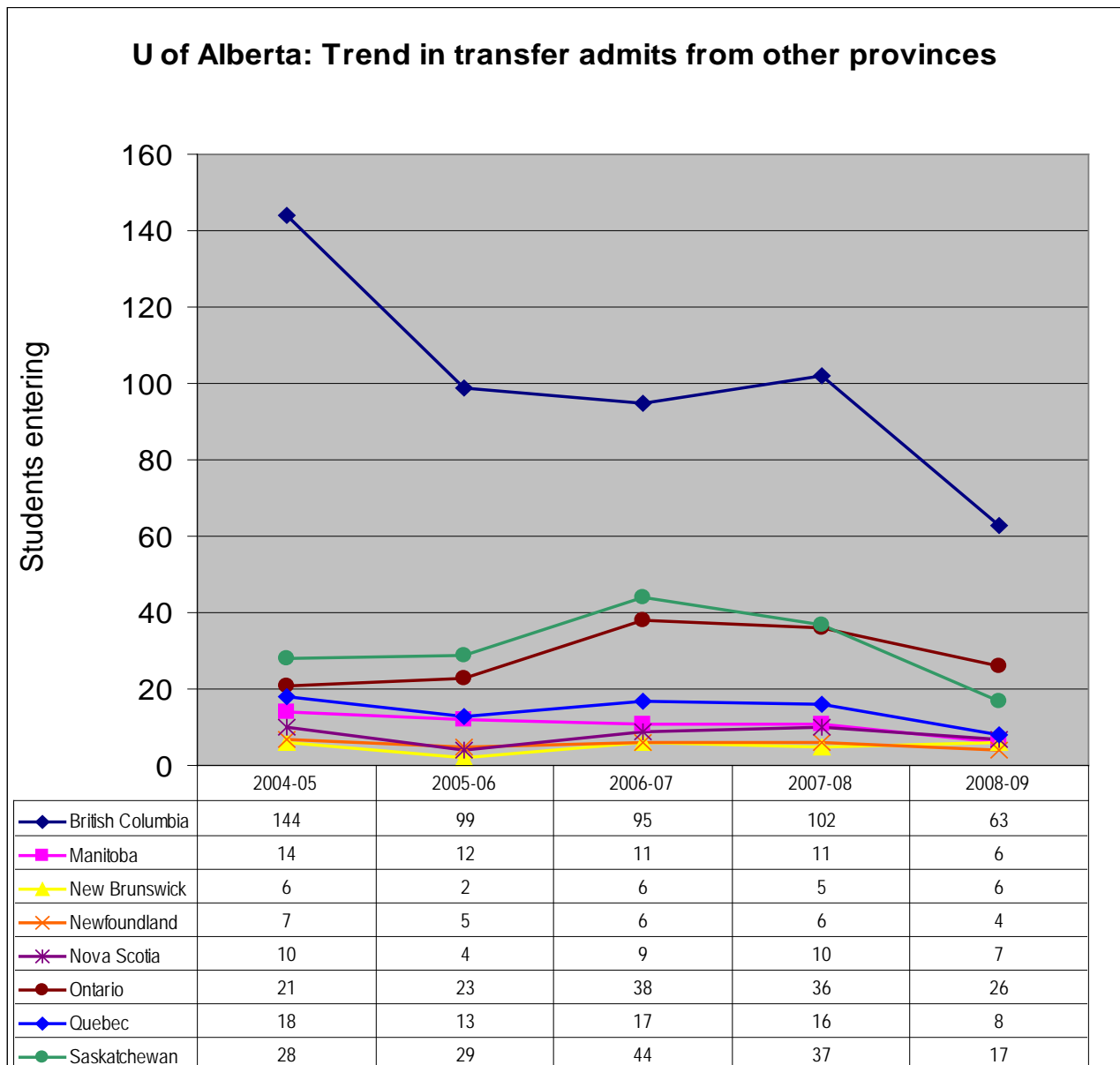


The proportion of transfers from colleges varies between 20% and 36% and that proportion appears to be increasing at the University of Saskatchewan and at the University of British Columbia, where creation in 2005 of the Okanagan campus added numerous transfers from colleges because all continuing students in some programs who were previously attending Okanagan (University) College, became students of the University of British Columbia, Okanagan Campus, when those programs moved *en masse* between the two institutions. The proportion is declining slightly at York University. University-to-university transfers therefore make up the bulk (64% to 80%) of out-of-province transfers. This figure is probably higher than the proportion of transfers between universities within each of the provinces in which the study university is located, suggesting different patterns of transfer for those going outside their own provinces.

Originating province of transfer students – totals and trends

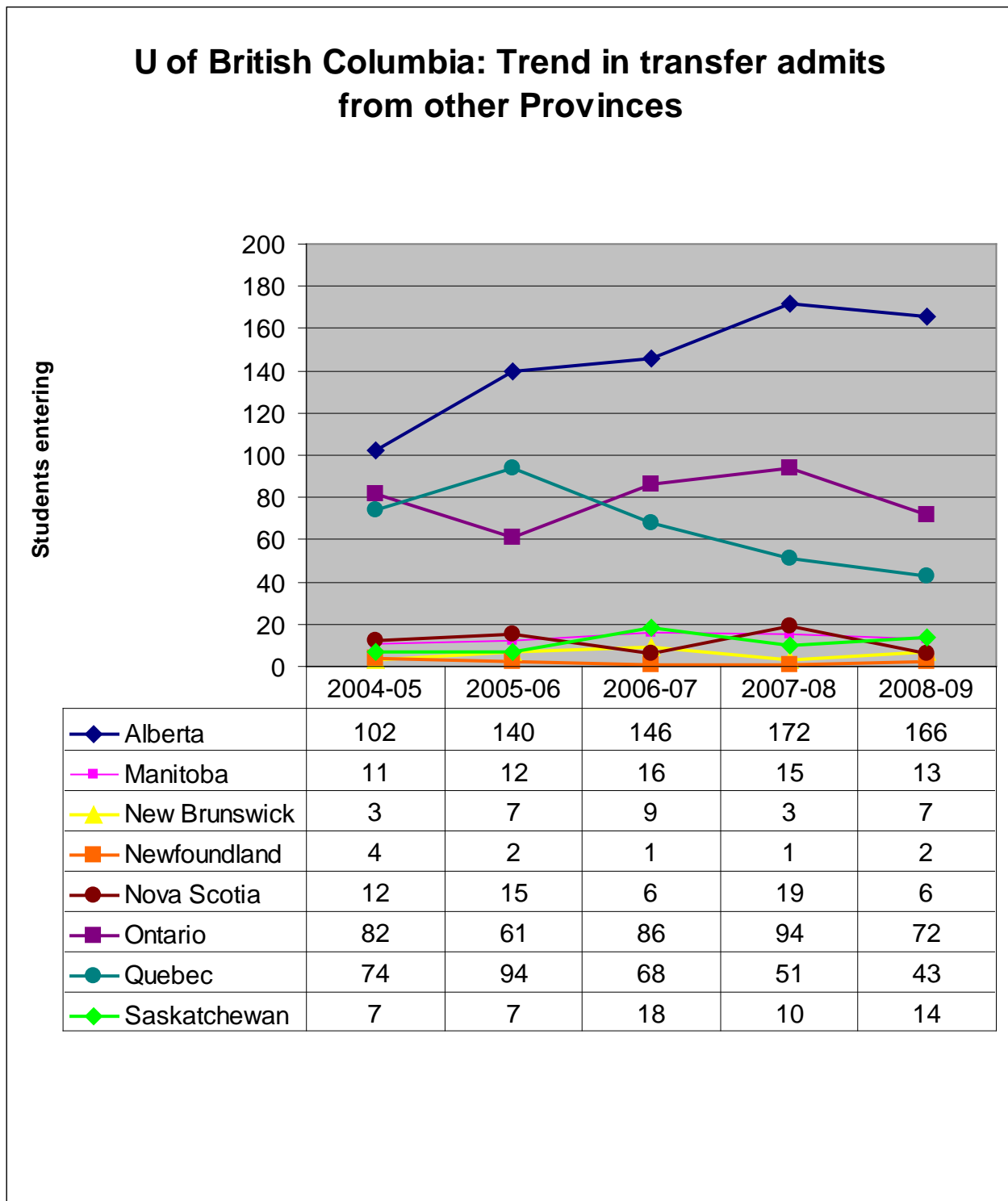
Each participating university was able to name the province of the sending institution of its out-of-province transfers. Data for provinces with fewer than 10 students admitted over the study period are not statistically significant and are not shown.

Figure 7: Trend in source of transfer students to the University of Alberta



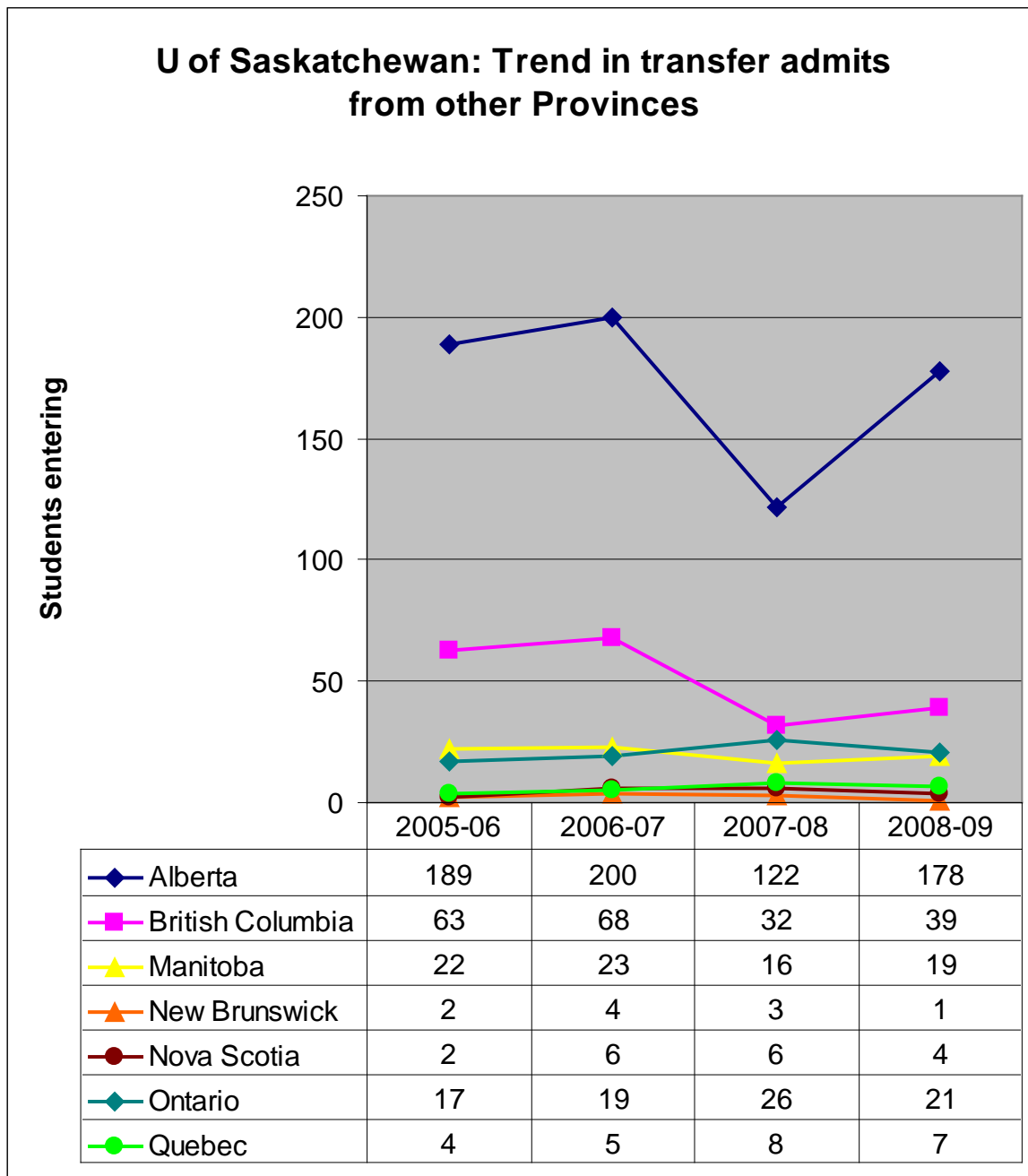
Transfers from PEI and Yukon are too few to report and are not displayed. All of the provinces with large populations contribute transfer students to the University of Alberta, but none to the extent that neighbouring British Columbia does. Relatively few transfers come from Quebec. Transfers from British Columbia declined sharply in the study period, but those from other provinces peaked in 2006/07 and eased subsequently.

Figure 8: Trend in source of transfer students to the University of British Columbia



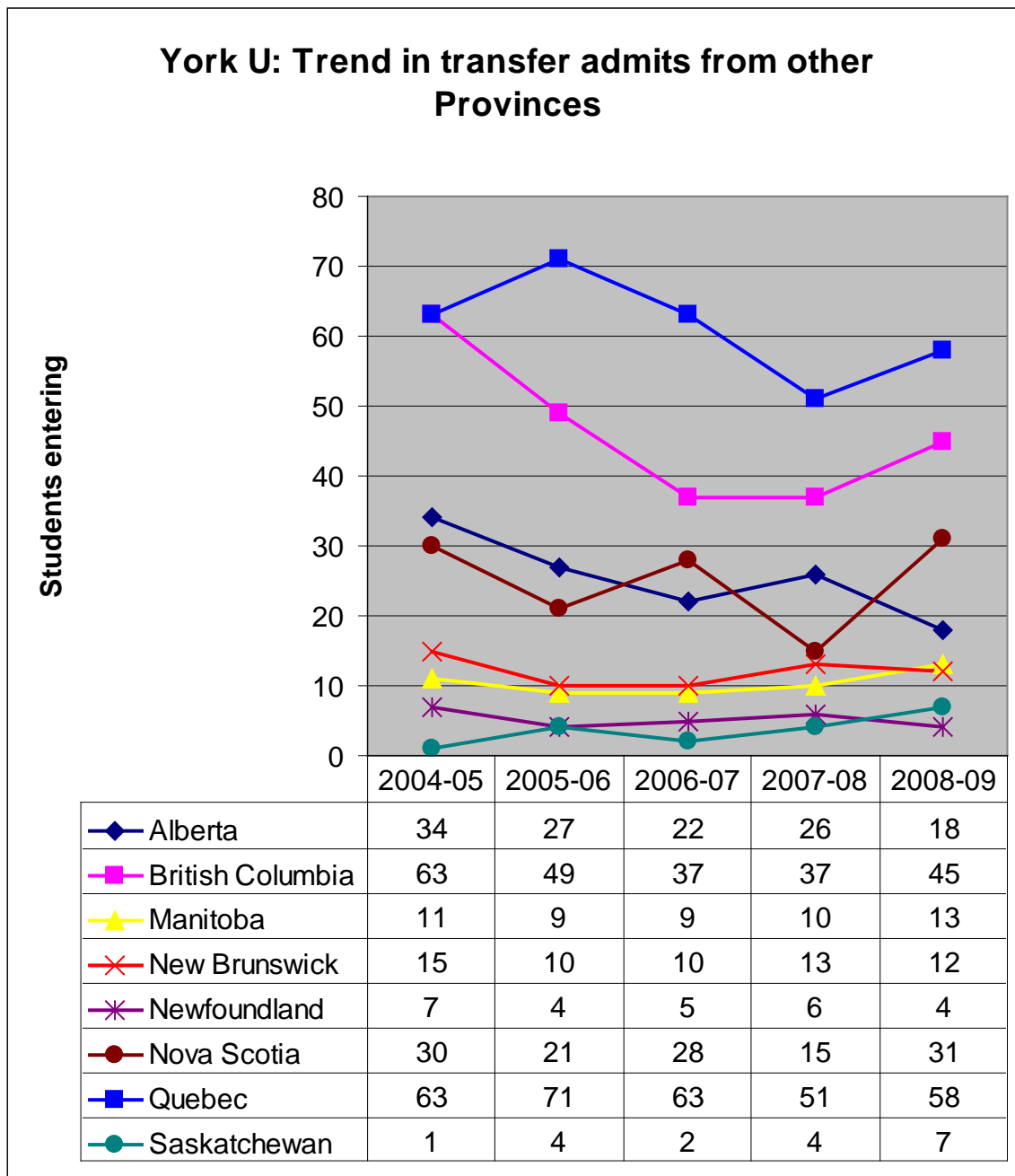
Data for Nunavut, PEI and Yukon are insignificant and are not displayed. Numbers of transfer students to the University of British Columbia are small except from Alberta (rising trend), Ontario (no obvious trend) and Quebec (falling trend).

Figure 9: Trend in source of transfer students to the University of Saskatchewan



Data for Newfoundland, PEI and Yukon are insignificant and are not displayed. The University of Saskatchewan attracts by far the majority of its out-of-province transfer students from Alberta, but these declined sharply in 2007/08, partially recovering in 2008/09. There are relatively few transfers from Quebec. Transfers from British Columbia declined sharply. The only clear increase is in transfers from Ontario, but the numbers are relatively small and declined in 2008/09.

Figure 10: Trend in source of transfer students to York University



At York, transfers from BC and Quebec are most numerous, but declined significantly during the study period. Geographic proximity must not be the reason for the high proportion of transfers from BC and Alberta. Data for PEI are insignificant and are not displayed.

The mix of transfer students for each of the four universities is different. Some of the trans-provincial flows appear to be regional, such as the large numbers of Alberta students who transfer to the U of Saskatchewan, but many of the largest transfer flows are from afar, suggesting other factors in play, such as unique program mix at a particular institution.

Frequency count of out-of-province sending institutions at each receiving university

A great many different institutions appear on a list of top sending institutions at each of the four universities. Each has listed its most frequent sources of out-of-province students in a top 25 list, given below.

Table 3: Top 25 Sending institutions for each of the four universities

University of Alberta			University of British Columbia			University of Saskatchewan			York University		
Sending Institution	Province	Students	Sending Institution	Province	Students	Sending Institution	Province	Students	Sending Institution	Province	Students
U of Saskatchewan	SK	94	U of Calgary	AB	172	Mount Royal College*	AB	181	Concordia U	QC	85
U of Victoria	BC	49	Mount Royal College*	AB	130	Lakeland College Lloydminster	AB	89	Dalhousie U	NS	57
College of New Caledonia	BC	40	U of Alberta	AB	115	U of Calgary	AB	86	McGill U	QC	42
U of Regina	SK	39	Athabasca U	AB	107	U of Alberta	AB	69	U of British Columbia	BC	32
Langara College	BC	37	McGill U	QC	62	Red Deer College	AB	36	U of Calgary	AB	30
U of British Columbia	BC	37	Grant MacEwan College*	AB	61	U of Manitoba	MB	33	U of New Brunswick	NB	30
U of Northern BC	BC	34	U of Western Ontario	ON	55	U of Lethbridge	AB	29	U of Alberta	AB	28
Thompson Rivers U	BC	29	U of Manitoba	MB	51	Medicine Hat College	AB	29	U of Victoria	BC	27
Memorial U of NF	NF	28	U of Quebec	QC	50	Grant MacEwan College*	AB	29	U of Manitoba	MB	25
Selkirk College	BC	27	U of Toronto	ON	47	Athabasca U	AB	28	Dawson College	QC	25
Okanagan U College*	BC	24	Concordia U	QC	46	Coquitlam College	BC	27	St Mary's U	NS	24
U of Manitoba	MB	23	Carleton U	ON	43	U of British Columbia	BC	26	Langara College	BC	23
Camosun College	BC	22	Queen's U	ON	42	Lethbridge Community College	AB	26	Memorial Univ of Newfoundland	NF	23
Capilano College*	BC	21	Dawson College	QC	35	Southern Alberta Institute of Technology	AB	16	Athabasca U	AB	22
U of Toronto	ON	21	John Abbott College	QC	34	Brandon U	MB	15	Simon Fraser U	BC	22

University of Alberta			University of British Columbia			University of Saskatchewan			York University		
Sending Institution	Province	# of Students	Sending Institution	Province	# of Students	Sending Institution	Province	# of Students	Sending Institution	Province	# of Students
Malaspina U College*	BC	19	U of Lethbridge	AB	34	Columbia College	BC	14	U of Winnipeg	MB	20
Simon Fraser U	BC	18	Dalhousie U	NS	30	U of Victoria	BC	13	Acadia U	NS	18
Carleton U	ON	16	Red Deer College	AB	30	Simon Fraser U	BC	12	Douglas College	BC	14
U of New Brunswick	NB	16	York U	ON	29	Kwantlen U College*	BC	12	U of Saskatchewan	SK	13
U of Ottawa	ON	16	U of Ottawa	ON	28	U of Western Ontario	ON	11	Kwantlen U College*	BC	13
Dalhousie U	NS	15	U of Saskatchewan	SK	27	U College of the Fraser Valley*	BC	10	John Abbott College	QC	13
Douglas College	BC	15	U of Waterloo	ON	27	Thompson Rivers U	BC	9	Laval U	QC	12
U of Winnipeg	MB	15	U of Guelph	ON	27	U of Winnipeg	MB	9	Capilano College*	BC	12
Kwantlen U College*	BC	14	Vanier College	QC	24	Camosun College	BC	9	Bishops U	QC	12
U College of the Fraser Valley*	BC	14	U of Regina	SK	23	U of Toronto	ON	8	Grant MacEwan College*	AB	11

Note: Several of the above institutions were subsequently re-named and might have been ascribed different institution types after the study period, becoming universities, namely:

Capilano College*	(Capilano University)
Grant MacEwan College*	(Grant MacEwan University)
Kwantlen University College*	(Kwantlen Polytechnic University)
Malaspina University College*	(Vancouver Island University)
Mount Royal College*	(Mount Royal University)
University College of the Fraser Valley*	(University of the Fraser Valley)

At least three main factors seem to affect the frequency of sending institution:

a) geographical proximity:

Given Canada's large size, distance appears to play a strong role in the choices of transfer students. At the University of Alberta, 17 out of 25 most frequent sending institutions are in the adjacent provinces.

b) type of institution:

Being a college rather than a university appears to affect the frequency. Colleges appear to be under-represented as sending institutions outside the borders of their respective provinces, although this would require verification by comparing enrollment at the institutions to remove the effect of institutional size, since a larger institution would be expected, all things being equal, to yield more transfer students.

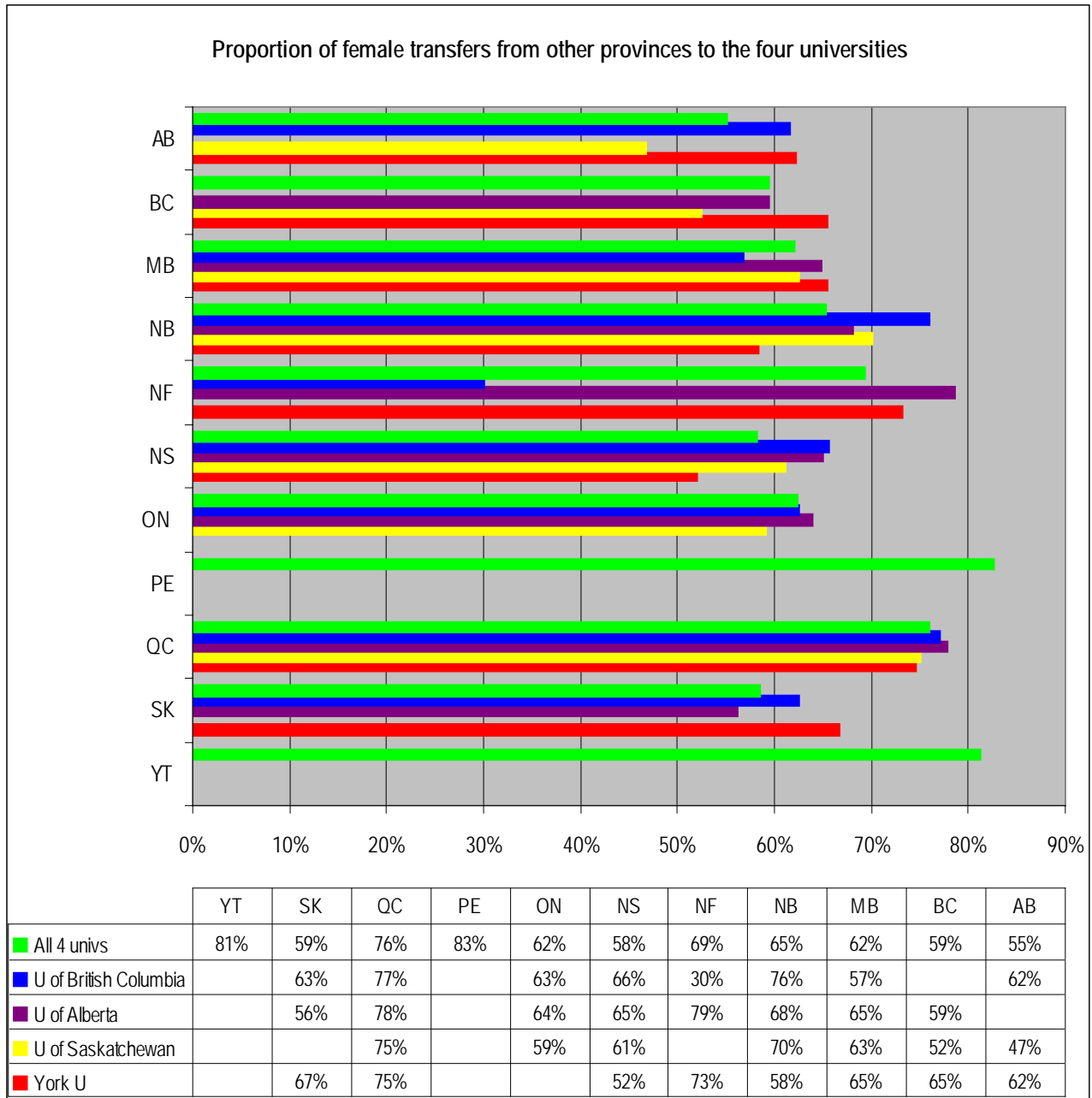
c) perceived attractiveness:

Some large universities seem to be under-represented as sending institutions, even though their sizes might suggest that they would be in the top 25 sending institutions of most of the four study universities. For instance, the University of Toronto appears in only one institution's list, and at the very bottom. Possibly this is connected with real student satisfaction (low desire to leave) or perhaps it is more connected with the public's perception of hierarchies of institutions, sometimes reinforced by elevated admission requirements at those institutions. Either way, the result is that some institutions retain greater proportions of their students than others and therefore are relatively infrequent senders.

Gender of transfer students

Each university was able to report the gender of its new transfer students. Proportions are not calculated for populations of fewer than 10 students over the study period.

Figure 11: Gender of transfers from other provinces



As expected, more females than males transferred across provincial boundaries to the four universities. This reflects the preponderance of female students in Canadian undergraduate postsecondary education, but some evidence suggests that the proportion of female out-of-province transfer students to the University of British Columbia (65% most

recently) greatly exceeds the overall proportion of female students at the university (54% most recently.) However, at York University, the 2008/09 undergraduate enrollment consisted of 62% female students, which is roughly consistent with the mix of transfer students admitted from the other provinces. Quebec, PEI and Yukon yield higher proportions of female transfers than might be expected.

Age of transfer students

Each of the four study universities placed new transfers from other provinces in one of ten age bands: 17-18, 19, 20, 21, 22, 23, 24, 25-29, 30-34 and 35+. Age was calculated at the time of first enrollment at the receiving university, using the student's date of birth. Data are not shown for provinces with totals of fewer than 10 students.

Figure 12: Cumulative age of transfer students on admission to the University of Alberta

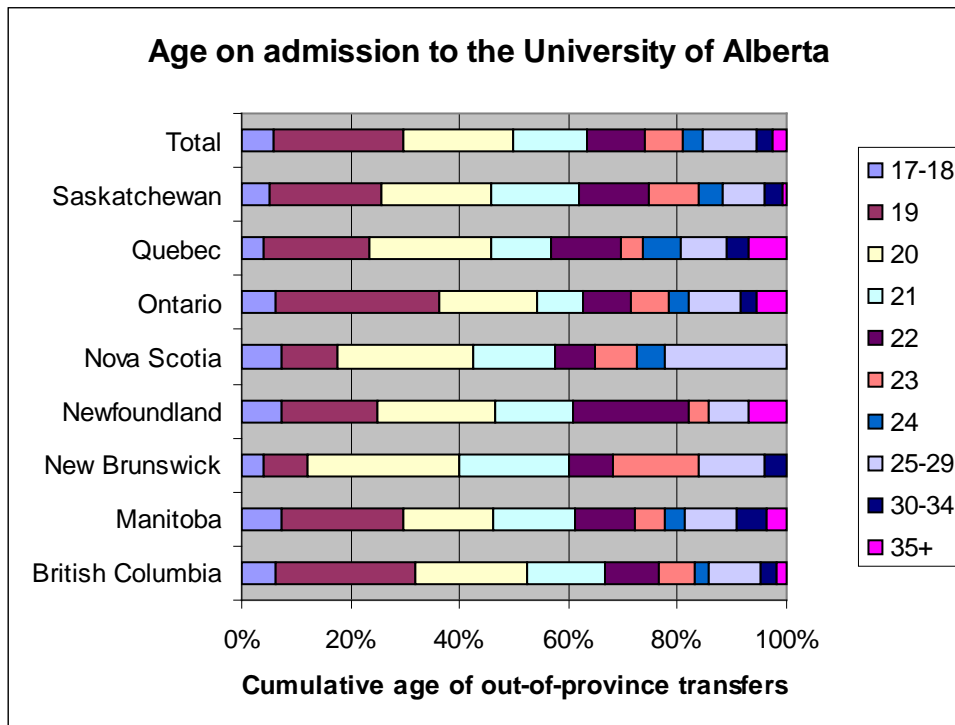


Table 4: Cumulative age of transfer students on admission to the University of Alberta

Age at admission	17-18	19	20	21	22	23	24	25-29	30-34	35+
British Columbia	6.2%	31.8%	52.3%	66.6%	76.7%	83.3%	85.9%	95.2%	98.0%	100.0%
Manitoba	7.4%	29.6%	46.3%	61.1%	72.2%	77.8%	81.5%	90.7%	96.3%	100.0%
New Brunswick	4.0%	12.0%	40.0%	60.0%	68.0%	84.0%	84.0%	96.0%	100.0%	100.0%
Newfoundland	7.1%	25.0%	46.4%	60.7%	82.1%	85.7%	85.7%	92.9%	92.9%	100.0%
Nova Scotia	7.5%	17.5%	42.5%	57.5%	65.0%	72.5%	77.5%	100.0%	100.0%	100.0%
Ontario	6.3%	36.1%	54.2%	62.5%	71.5%	78.5%	81.9%	91.7%	94.4%	100.0%
Quebec	4.2%	23.6%	45.8%	56.9%	69.4%	73.6%	80.6%	88.9%	93.1%	100.0%
Saskatchewan	5.2%	25.8%	45.8%	61.9%	74.8%	83.9%	88.4%	96.1%	99.4%	100.0%
All provinces	5.9%	29.5%	49.8%	63.5%	74.1%	81.0%	84.6%	94.4%	97.3%	100.0%

Figure 13: Cumulative age of transfer students on admission to the University of British Columbia

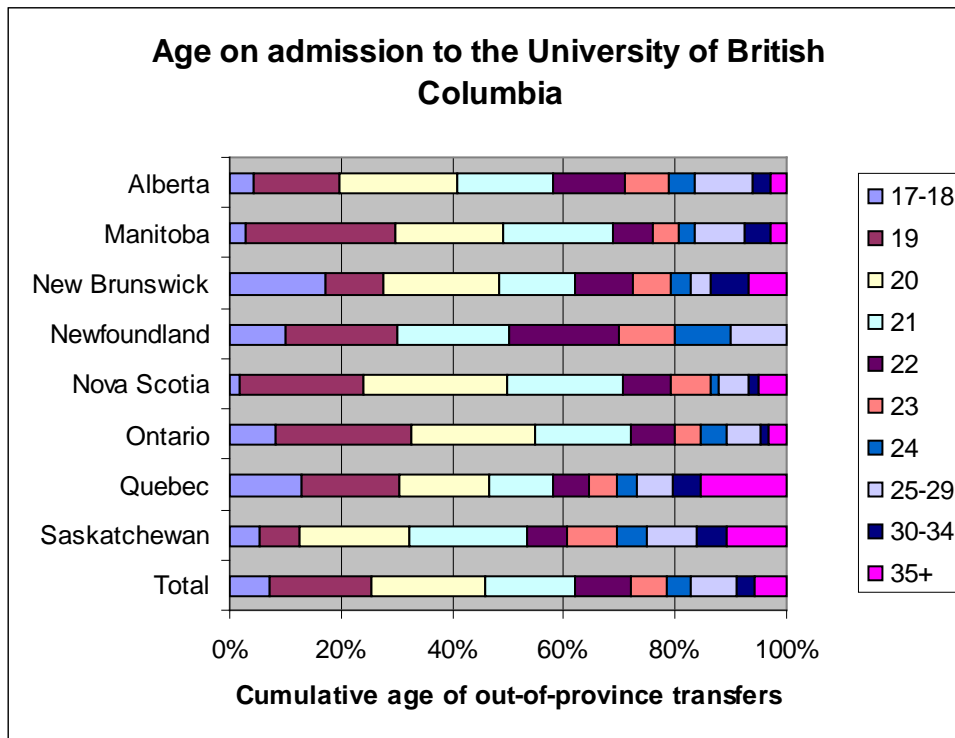


Table 5: Cumulative age of transfer students on admission to the University of British Columbia

Age at admission	17-18	19	20	21	22	23	24	25-29	30-34	35+
Alberta	4.1%	19.7%	40.9%	58.1%	70.9%	78.9%	83.6%	93.9%	97.1%	100.0%
Manitoba	3.0%	29.9%	49.3%	68.7%	76.1%	80.6%	83.6%	92.5%	97.0%	100.0%
New Brunswick	17.2%	27.6%	48.3%	62.1%	72.4%	79.3%	82.8%	86.2%	93.1%	100.0%
Newfoundland	10.0%	30.0%	30.0%	50.0%	70.0%	80.0%	90.0%	100.0%	100.0%	100.0%
Nova Scotia	1.7%	24.1%	50.0%	70.7%	79.3%	86.2%	87.9%	93.1%	94.8%	100.0%
Ontario	8.4%	32.7%	54.7%	71.9%	80.0%	84.6%	89.1%	95.2%	96.7%	100.0%
Quebec	13.0%	30.6%	46.7%	58.2%	64.5%	69.4%	73.0%	79.7%	84.5%	100.0%
Saskatchewan	5.4%	12.5%	32.1%	53.6%	60.7%	69.6%	75.0%	83.9%	89.3%	100.0%
All provinces	7.0%	25.5%	45.7%	62.0%	71.9%	78.4%	82.7%	91.0%	94.2%	100.0%

Figure 14: Cumulative age of transfer students on admission to the University of Saskatchewan

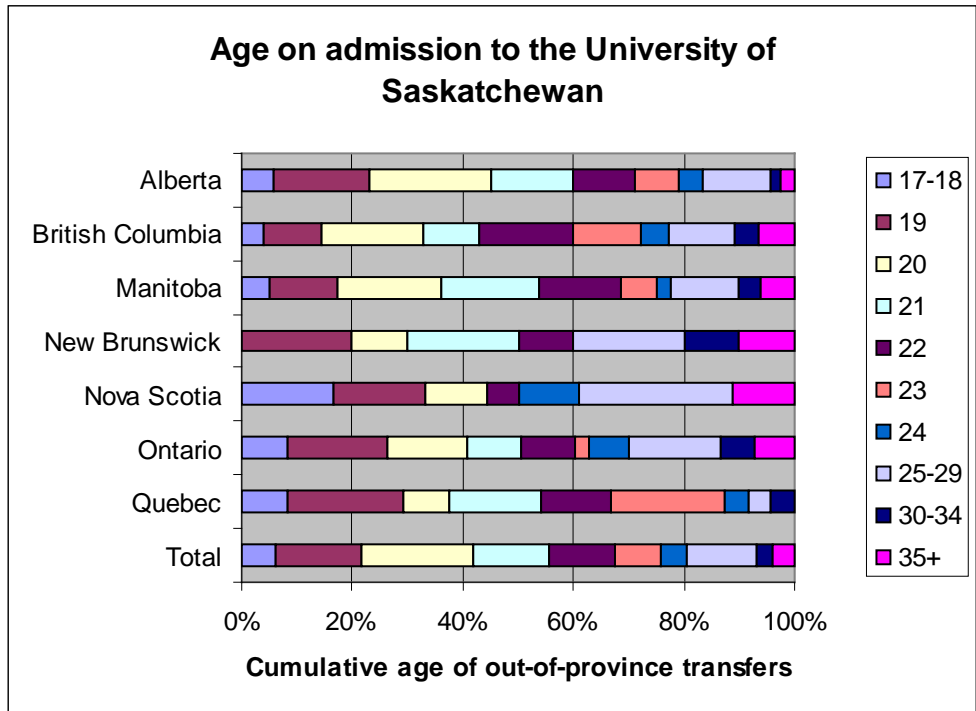


Table 6: Cumulative age of transfer students on admission to the University of Saskatchewan

Age at admission	17-18	19	20	21	22	23	24	25-29	30-34	35+
Alberta	6.0%	23.1%	45.3%	59.9%	71.1%	79.1%	83.3%	95.8%	97.5%	100.0%
British Columbia	4.0%	14.4%	32.7%	43.1%	59.9%	72.3%	77.2%	89.1%	93.6%	100.0%
Manitoba	5.0%	17.5%	36.3%	53.8%	68.8%	75.0%	77.5%	90.0%	93.8%	100.0%
New Brunswick	0.0%	20.0%	30.0%	50.0%	60.0%	60.0%	60.0%	80.0%	90.0%	100.0%
Nova Scotia	16.7%	33.3%	44.4%	44.4%	50.0%	50.0%	61.1%	88.9%	88.9%	100.0%
Ontario	8.4%	26.5%	41.0%	50.6%	60.2%	62.7%	69.9%	86.7%	92.8%	100.0%
Quebec	8.3%	29.2%	37.5%	54.2%	66.7%	87.5%	91.7%	95.8%	100.0%	100.0%
All provinces	6.0%	21.8%	41.9%	55.4%	67.7%	76.0%	80.5%	93.2%	96.0%	100.0%

Figure 15: Cumulative age of transfer students on admission to York University

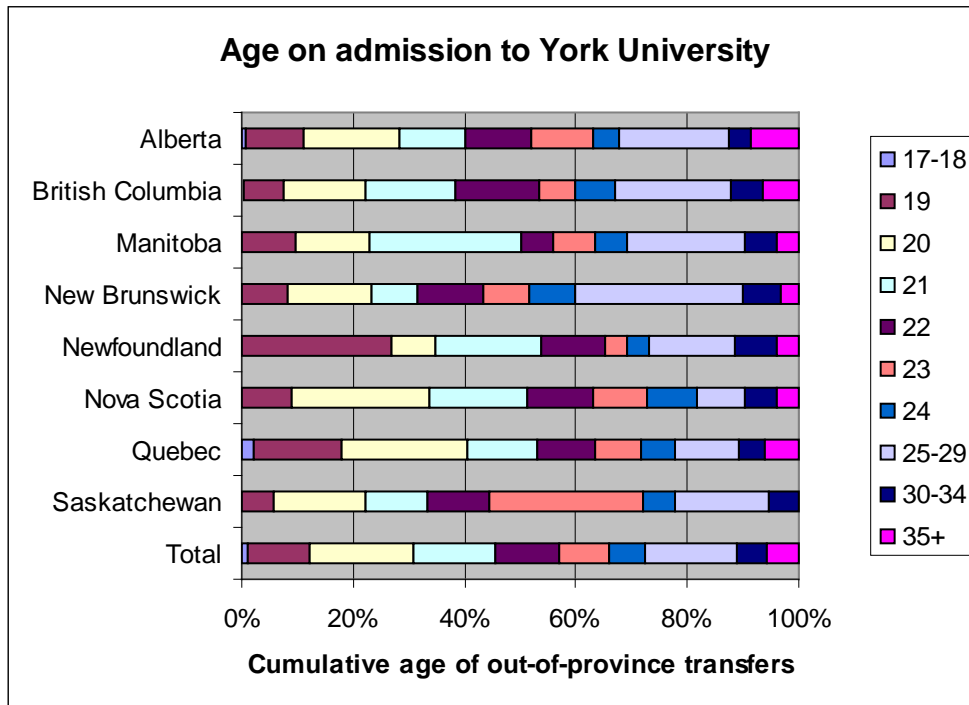
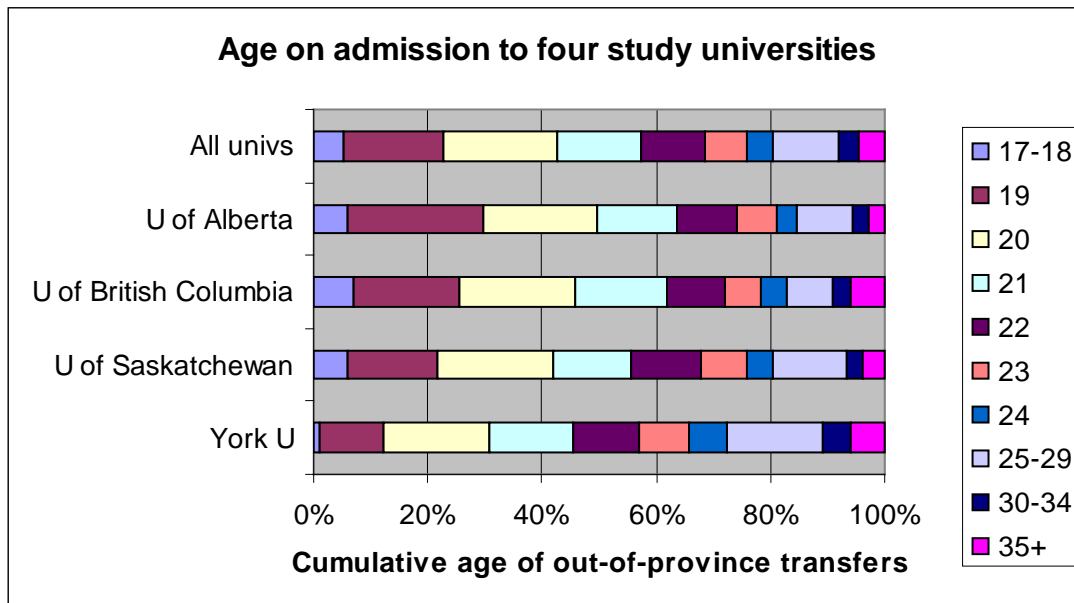


Table 7: Cumulative age of transfer students on admission to York University

Age at admission	17-18	19	20	21	22	23	24	25-29	30-34	35+
Alberta	0.8%	11.0%	28.3%	40.2%	52.0%	63.0%	67.7%	87.4%	91.3%	100.0%
British Columbia	0.4%	7.4%	22.1%	38.5%	53.2%	59.7%	67.1%	87.9%	93.5%	100.0%
Manitoba	0.0%	9.6%	23.1%	50.0%	55.8%	63.5%	69.2%	90.4%	96.2%	100.0%
New Brunswick	0.0%	8.3%	23.3%	31.7%	43.3%	51.7%	60.0%	90.0%	96.7%	100.0%
Newfoundland	0.0%	26.9%	34.6%	53.8%	65.4%	69.2%	73.1%	88.5%	96.2%	100.0%
Nova Scotia	0.0%	8.8%	33.6%	51.2%	63.2%	72.8%	81.6%	90.4%	96.0%	100.0%
Quebec	2.3%	18.0%	40.5%	52.9%	63.4%	71.6%	77.8%	89.2%	93.8%	100.0%
Saskatchewan	0.0%	5.6%	22.2%	33.3%	44.4%	72.2%	77.8%	94.4%	100.0%	100.0%
All provinces	0.9%	12.2%	30.8%	45.4%	57.1%	65.8%	72.5%	89.1%	94.2%	100.0%

Figure 16: Cumulative age of transfer students on admission to the study universities combined



The chief differences in the age profiles of new out-of-province transfer students among the four universities are a generally older intake at York University and a surprising proportion of transfer students who are 18 years old or younger entering the three universities in the western provinces, ranging from 5.9% to 7.0%. At York University, the proportion is much lower, at 0.9%. This must not be due to a longer Ontario secondary school system because by the mid-point of the study there was little difference in the ages at graduation between Ontario and the western provinces and, furthermore, the York University transfer intake students from out-of-province are unlikely to be Ontario school graduates. A possible explanation for the high numbers of younger entrants, is that students with transfer credit earned at secondary school in enriched high school programs, such as the Advanced Placement Program, might be categorized at some of the universities as transfer students and included in these totals. If this is so, it is not known how transfer credit from such a program is geographically attributed when the data are extracted. Another explanation might be that these younger students accumulated credit from a postsecondary institution through an outreach program while still attending high school in another province. It is also quite possible for such students to be under 19 years of age and have already completed high school and attended a postsecondary institution for a year before transferring.

The range of ages of new transfer students under 25 years has a low value of 72.5% at York University to a high value of 84.6% at the University of Alberta.

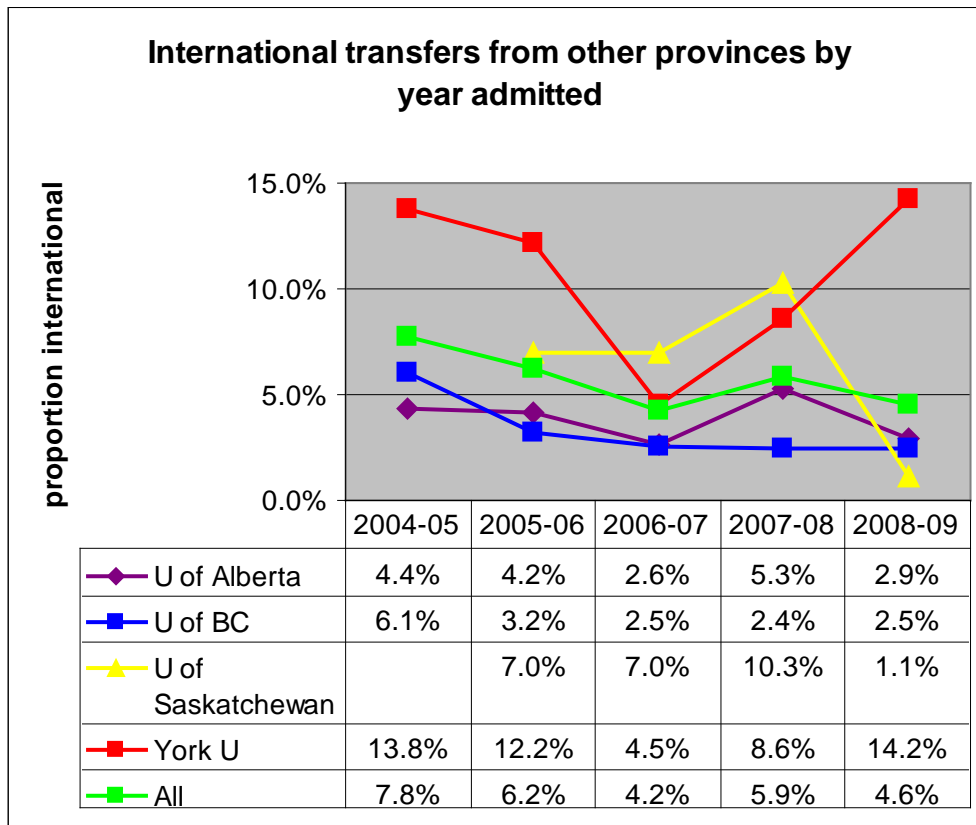
Some universities limit transfer credit by its age, often a maximum of ten years. It is not known if this is common practice at any of the four study universities. If so, this could affect the age distribution by either discouraging older students from attending or by re-categorizing them as non-transfers, such as mature students.

Transfer students from Quebec to the University of British Columbia have a profile that is skewed to both the younger and older ends of the scale. The reasons are not known. It is understood that each of the four universities may admit a Quebec student from a CEGEP (college) after one year of study, albeit with little or no transfer credit.

Immigration residency status of transfer students admitted from other provinces

Some of the transfer students admitted from other provinces are not residents of Canada but are international students who are in Canada specifically to pursue their education and have Study Permits to do so. Generally, recruitment of international students is competitive among institutions, as these students provide much-sought opportunities for revenue generation and internationalization. Many undergraduate international students at universities are likely direct entrants from secondary schools in Canada or abroad, but if they are transfer students from within Canada, they are more likely to transfer from within the same province. At the University of British Columbia, international students make up almost 12% of transfer admissions from within B.C. but only about 3% of transfer admissions from other provinces. Several institutions, mostly colleges, have programs that offer an international student a year or two of transferable credit and provide an entry conduit to the major Canadian universities.

Figure 17: International transfers from other provinces as a proportion of all transfers from other provinces



Large fluctuations in proportions by year are evident in individual institutions but the general trend seems to be a small decline in this period from about 8% of all out-of-province transfers to about 5%.

Course loads of transfers

Full-time and part-time status by year of admission

Each university reported its out-of-province transfer admissions by providing an annual total, broken into full- and part-time status, based on the course load taken in the student's first session after admission. The four universities used their own standard definitions of full-time status, as follows:

Table 8: Definitions of full time student status

U of Alberta	9 or more units of course weight in one term.
U of British Columbia	Full-time is enrollment in 24 or more credits in Winter Session. Enrollment in fewer than 24 credits is part-time.
U of Saskatchewan	Full-time in Regular Session if student registers for 18 or more credit units. (Student loan rules require enrollment in at least 9 credit units in each term of the regular session).
York U	A student taking a 60% load or higher is considered full-time

These definitions are mostly similar. Those used by the Universities of Alberta and Saskatchewan and by York University are consistent with the federal government financial assistance definition. The University of British Columbia uses an internal definition that is more stringent.

In each transfer student's first academic session at the receiving university, the student's course load results in a full-time or part-time status label. In subsequent terms or sessions, this status could change.

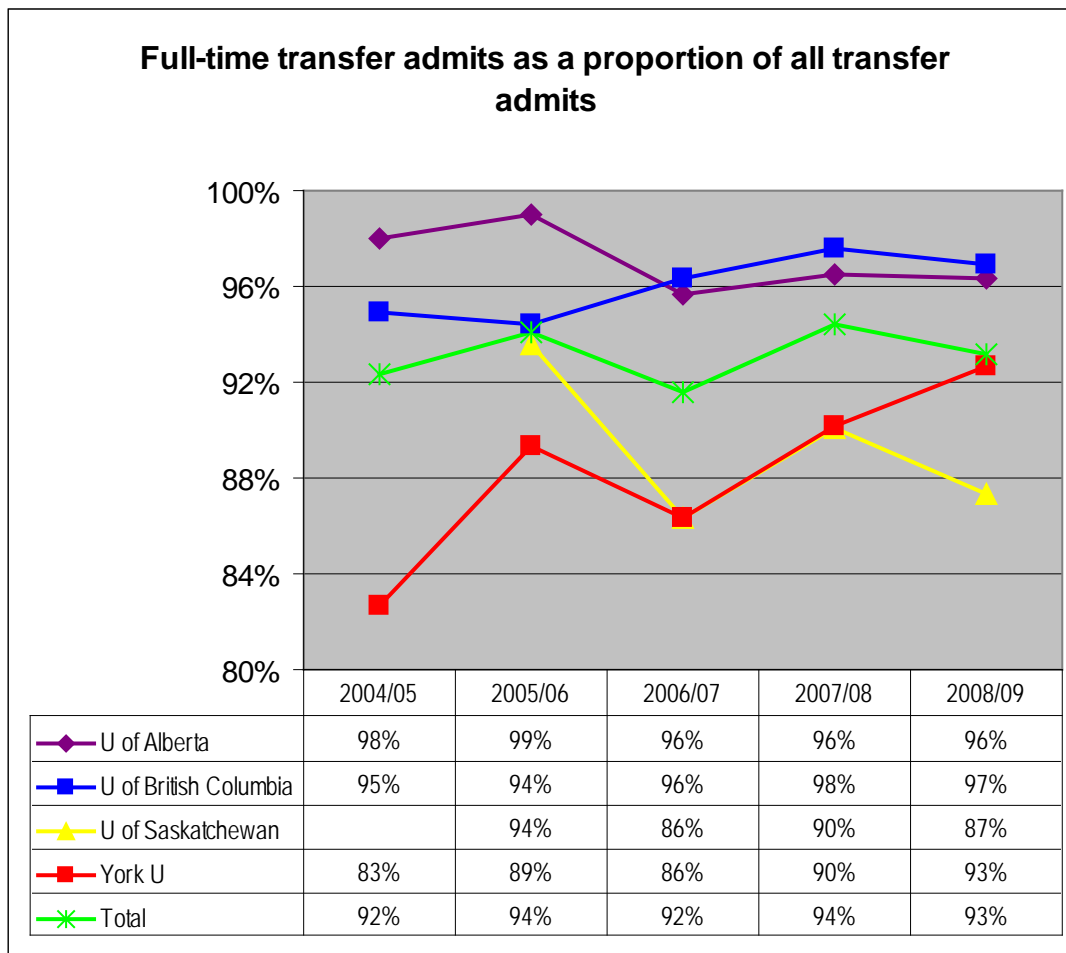
Table 9: First session course load status of transfer students

		2004/05	2005/06	2006/07	2007/08	2008/09	Totals
U of Alberta	full-time	246	190	221	220	132	1,009
	part-time	5	2	10	8	5	30
U of British Columbia	full-time	281	323	340	359	314	1,617
	part-time	15	19	13	9	10	66
U of Saskatchewan*	full-time		276	285	191	234	986
	part-time		19	45	21	34	119
York U	full-time	186	176	152	147	176	837
	part-time	39	21	24	16	14	114
Total	full-time	713	965	998	917	856	4,449
	part-time	59	61	92	54	63	329

* 6 students are unclassified and therefore omitted

Figure 18 below displays the proportions of full-time transfers at each university and overall as they evolved over the study period.

Figure 18: Full-time transfer admits as a proportion of all transfer admits



The full-time proportions at the Universities of Alberta and British Columbia are high and stable. The proportions at York University increased over the study period to match the average. The full-time proportions at the University of Saskatchewan are lower than the others and fell slightly during the study period.

Degree programs entered

Each of the four universities has a wide range of undergraduate programs. This study is not concerned with entry to professional programs that normally require a first bachelor's degree for entry such as law, medicine and dentistry.

There is no consistent naming convention for university programs. Some grouping of programs was conducted at the institution report level but further consolidation of program groupings have been made to more easily compare the choices made by transfer students. Most of the four universities assign a program to each new student. It is not known if there is a default program at any institution. The University of Saskatchewan permits some transfer students, presumably in the early year levels, to be 'undeclared'. Generally, a student may change programs after admission, so these distributions are not necessarily the same as the programs that each student pursued later, or in which s/he graduated.

To make comparisons easier, the following matrix is used to group approximately similar programs.

Table 10: Summary grouping of degree programs of the four universities

	U of Alberta	U of British Columbia	U of Saskatchewan	York U
Discipline	Degree program - Bachelor of...			
Agriculture	Science in Agriculture	Science in Agroecology	Agribusiness, Agriculture, Agronomy	
Arts	Arts, Arts in Native Studies	Arts	Arts	Arts
Commerce	Commerce	Commerce	Commerce	Administrative Studies
Design		Environmental Design		Design
Education	Education, Physical Education	Education		
Engineering	Science in Engineering	Applied Science	Science in Engineering	Applied Science
Conservation	Science in Environment & Conservation Sc	Science in Natural Resource Conservation, Science in Global Resource Systems	Science in Renewable Resources Management	Environmental Studies
Fine Arts	Fine Arts	Fine Arts	Fine Arts	Fine Arts
Forestry	Science in Forestry	Science in Forestry, Science in Forest Sciences		
Health	Science in Human Ecology	Arts in Health Studies		Health Studies
Kinesiology	Science in Kinesiology	Human Kinetics	Science in Kinesiology	
Management	Management	Management		Human Resources Mgmt
Music	Music	Music	Music	
Nursing	Science in Nursing, Science in Occupational Therapy	Science in Nursing, Midwifery, Science in Dental Science (not DDS)		Science in Nursing
Nutrition	Science in Nutrition and Food Sc	Science in Food and Nutrition		
Other		Wood Products Processing	undeclared, transition program,	
Pharmacy	Science in Pharmacy	Science in Pharmacy		
Recreation	Arts in Recreation, Sport and Tourism			
Science	Science	Science	Science	Science
Social Work		Social Work		Social Work

The frequency of the choices of main disciplines among out-of-province transfer students is as follows, broken down, where possible, by the type of sending institution (college or university).

Table 11: Frequency of choices of academic program by new transfer students

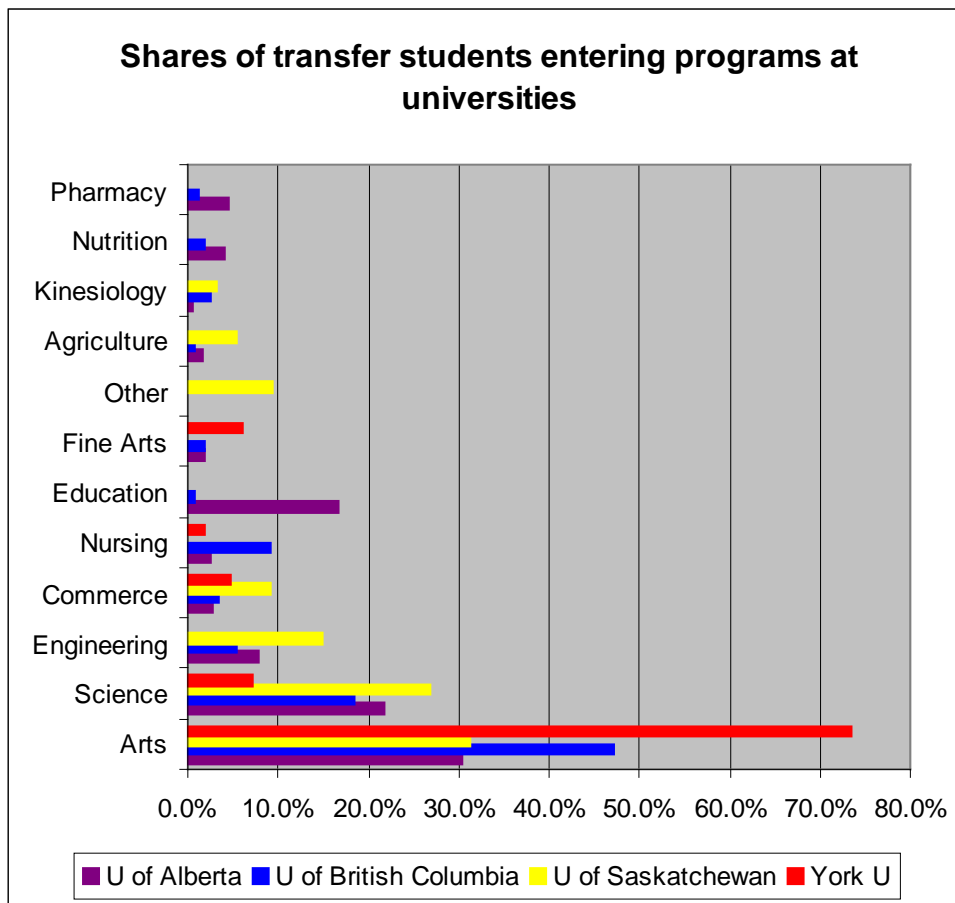
University Sending Institution type	U of Alberta	U of British Columbia		U of Saskatchewan		York U	
	both	college	university	college	university	college	university
Agriculture	16	4	9	38	21	0	0
Arts	314	185	608	177	170	229	469
Commerce	28	13	43	57	43	13	31
Design	0	0	5	0	0	4	7
Education	172	1	9	0	0	0	0
Engineering	81	19	72	120	45	0	2
Conservation	16	6	18	0	1	7	14
Fine Arts	19	7	23	1	0	25	32
Forestry	12	4	15	0	0	0	0
Health	11	0	1	0	0	0	2
Kinesiology	4	20	22	20	15	0	0
Management	6	17	28	0	0	5	10
Music	5	7	15	0	3	0	0
Nursing	25	91	61	0	0	2	14
Nutrition	42	4	25	0	0	0	0
Other	0	1	1	55	49	0	0
Pharmacy	45	0	17	0	0	0	0
Recreation	18	0	0	0	0	0	0
Science	225	70	239	141	155	19	49
Social Work	0	16	7	0	0	1	16
All programs	1,039	465	1,218	609	502	305	646

The following table gives, in descending order, the shares of total transfer students to the four universities from both colleges and universities who entered various programs.

Table 12: Shares of the program choices of new transfer students

Discipline entered	U of Alberta	U of British Columbia	U of Saskatchewan	York U	All four universities
Arts	30.2%	47.1%	31.2%	73.4%	45.0%
Science	21.7%	18.4%	26.6%	7.2%	18.8%
Engineering	7.8%	5.4%	14.9%	0.2%	7.1%
Commerce	2.7%	3.3%	9.0%	4.6%	4.8%
Nursing	2.4%	9.0%	0.0%	1.7%	4.0%
Education	16.6%	0.6%	0.0%	0.0%	3.8%
Fine Arts	1.8%	1.8%	0.1%	6.0%	2.2%
Other	0.0%	0.1%	9.4%	0.0%	2.2%
Agriculture	1.5%	0.8%	5.3%	0.0%	1.8%
Kinesiology	0.4%	2.5%	3.2%	0.0%	1.7%
Nutrition	4.0%	1.7%	0.0%	0.0%	1.5%
Management	0.6%	2.7%	0.0%	1.6%	1.4%
Pharmacy	4.3%	1.0%	0.0%	0.0%	1.3%
Conservation	1.5%	1.4%	0.1%	2.2%	1.3%
Social Work	0.0%	1.4%	0.0%	1.8%	0.8%
Forestry	1.2%	1.1%	0.0%	0.0%	0.6%
Music	0.5%	1.3%	0.3%	0.0%	0.6%
Recreation	1.7%	0.0%	0.0%	0.0%	0.4%
Health	1.1%	0.1%	0.0%	0.2%	0.3%
Design	0.0%	0.3%	0.0%	1.2%	0.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Figure 19: Shares of new transfer students by academic program



For clarity, shares are shown if the discipline's share is 3% or higher at any of the universities.

As shown in the above Table 12 and Figure 19, Bachelor of Arts programs are the most frequently entered programs by out-of-province transfers at all four universities (45.0% overall), followed by Bachelor of Science programs (18.8% overall). It is not known if these are typical program choices of transfer students except that, at the University of British Columbia, the pattern appears to be different from that of transfer students from within British Columbia, who show more diversity in their program election and are less likely to enter Science.

The patterns can be further examined by the institution type of the sending institution, except for transfers to the University of Alberta, where data are not available. Table 13 examines the proportions of transfers to each program from colleges rather than from universities.

Table 13: Shares of new out-of-province transfer students from colleges and universities entering undergraduate programs

Discipline	U of British Columbia		U of Saskatchewan		York U	
	College transfers	University transfers	College transfers	University transfers	College transfers	University transfers
Agriculture	30.8%	69.2%	64.4%	35.6%	n/a	n/a
Arts	23.3%	76.7%	51.0%	49.0%	32.8%	67.2%
Commerce	23.2%	76.8%	57.0%	43.0%	29.5%	70.5%
Design	n/a	n/a	n/a	n/a	36.4%	63.6%
Education	10.0%	90.0%	n/a	n/a	n/a	n/a
Engineering	20.9%	79.1%	72.7%	27.3%	n/a	n/a
Conservation	25.0%	75.0%	n/a	n/a	33.3%	66.7%
Fine Arts	23.3%	76.7%	n/a	n/a	43.9%	56.1%
Forestry	21.1%	78.9%	n/a	n/a	n/a	n/a
Health	n/a	n/a	n/a	n/a	n/a	n/a
Kinesiology	47.6%	52.4%	57.1%	42.9%	n/a	n/a
Management	37.8%	62.2%	n/a	n/a	33.3%	66.7%
Music	31.8%	68.2%	n/a	n/a	n/a	n/a
Nursing	59.9%	40.1%	n/a	n/a	12.5%	87.5%
Nutrition	13.8%	86.2%	n/a	n/a	n/a	n/a
Other	n/a	n/a	52.9%	47.1%	n/a	n/a
Pharmacy	0.0%	100.0%	n/a	n/a	n/a	n/a
Recreation	n/a	n/a	n/a	n/a	n/a	n/a
Science	22.7%	77.3%	47.6%	52.4%	27.9%	72.1%
Social Work	69.6%	30.4%	n/a	n/a	5.9%	94.1%
Total	27.6%	72.4%	54.8%	45.2%	32.1%	67.9%

Shares for programs with fewer than 10 admissions over the study period are not displayed.

The above table shows that the proportions of transfers from colleges rather than from other universities are relatively similar to the average values for all programs at that university, except as follows:

- Entry to Social Work and Nursing is more common among transfers from colleges at the University of British Columbia but less frequent at York University.
- Entry of college transfers to Engineering is more frequent at the University of Saskatchewan but less frequent at the University of British Columbia.
- Pharmacy at the University of British Columbia is the choice of program of at least 10 out-of-province transfer students in the study period but none is from a college, suggesting that the admission requirements might require courses that are unavailable at colleges.
- Education degrees are available to transfer students who enter the University of British Columbia where they are a popular program choice, but the Education degree at the other two universities is available only to Bachelor's degree holders, who are not classified in this study as transfer students.

These shares may be examined in a different fashion. The largest shares are shown in the following table.

Table 14: Top three program shares of college transfers at study universities

		U of British Columbia	U of Saskatchewan	York U
Highest share at all three universities	Arts	39.8%	29.1%	75.1%
	Science		23.2%	
Second highest share	Nursing	19.6%		
	Fine Arts			8.2%
Third highest share	Engineering		19.7%	
	Science	15.1%		6.2%

The table above indicates that among transfer students from colleges, a Bachelor of Arts program is the most popular at the three universities for which data are available. Three quarters of the college transfers students at York University chose this program. Science is second or third choice at all three universities. The remaining programs in the top three choices of college transfers are Nursing, Engineering or Fine Arts, depending on the university entered.

Table 15: Top three program shares of university transfers at study universities

		U of British Columbia	U of Saskatchewan	York U
Highest share at all three universities	Arts	49.9%	33.9%	72.6%
Second highest share at all three universities	Science	19.6%	30.9%	7.2%
Third highest share	Engineering	5.9%	9.0%	
	Fine Arts			5.0%

The above pair of tables show that the frequency ranking among the transfer students to a university is not much affected by the source institution type, whether college or university. Nursing might be seen as an exception to this observation, since it ranks second by popularity among transfer from colleges to the Universities of British Columbia and Saskatchewan, but does not rank in the first three by popularity among transfers from other universities.

By adding the University of Alberta data and combining the transfers from both colleges and universities to the other three universities, a combination table can be compiled as follows.

Table 16: Ranked discipline shares of all transfer students

	Discipline	U of Alberta	U of British Columbia	U of Saskatchewan	York U	All
1. Highest share at all four universities	Arts	30.2%	47.1%	31.2%	73.4%	45.0%
2. Second highest share at all four universities	Science	27.1%	18.4%	26.6%	7.2%	18.8%
3. Third highest shares	Engineering	7.8%	5.4%	14.9%	0.2%	7.1%
	Commerce	2.7%	3.3%	9.0%	4.6%	4.8%
	Nursing	2.4%	9.0%	0.0%	1.7%	4.0%
	Education	16.6%	0.6%	0.0%	0.0%	3.8%
	Fine Arts	1.8%	1.8%	0.1%	6.0%	2.2%

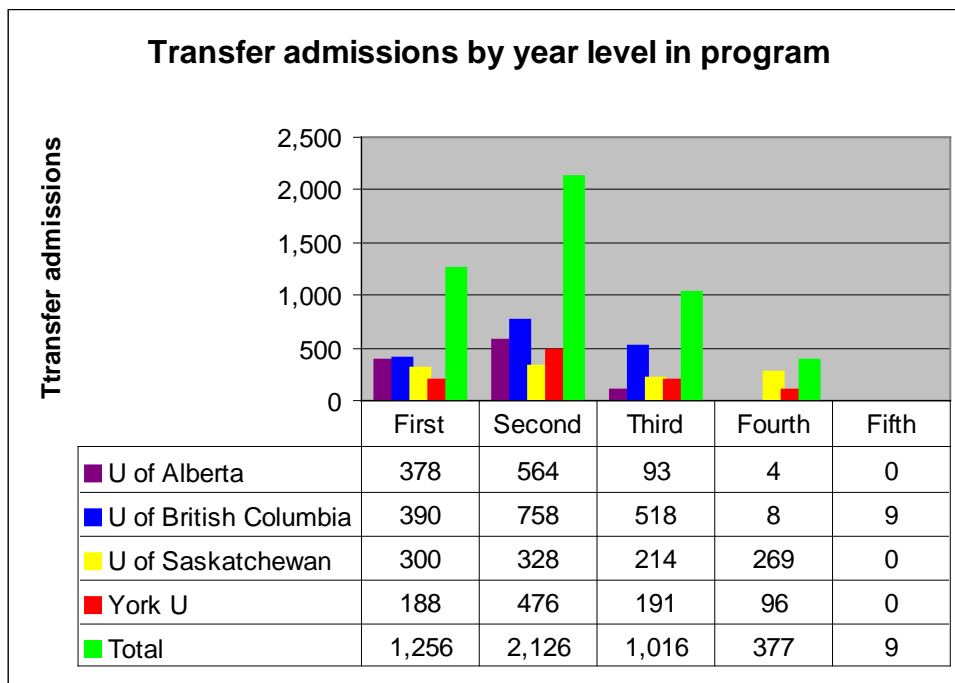
Overall, Bachelors degrees in Arts and Science dominate the choices of transfer students to all four universities. Obviously this is due in large part to the wide range of individual disciplines within these programs, encompassing, in the case of the Bachelor of Arts, most Social Sciences, Languages, the Humanities and other subjects. It is also likely that transfer students will either be placed in more general Arts and Science programs when they enter a university, even if their intention is to enter a narrower program type later. In addition, it is likely that transferability is easier and more efficient in the broader disciplines because of their inherent flexibility and, in the case of Science, because of the existence of an implicit common curriculum across the country, based on consensus.

Recognition of previous education

Admission by Program Year Level

Bachelor degree programs at the four universities are mostly four years in length, but some are five or three years long. At these universities, students do not choose the year level at which they enter the program. Instead, this is determined either by the quantity of transfer credit awarded or by the completion of specified requirements, or some combination of both. The significance of year level will vary according to the structure of the university. If enrollment priority and course selection is entirely based on the student's program and a course prerequisite structure, year level might be irrelevant to a student's progress. On the other hand, at some universities, enrollment in Year 3 courses requires that the student has third year level standing, so this can strongly affect progress towards degree completion.

Figure 20: Transfer admissions by year level in program



Transfer students are most often admitted to the second year level. Many are also admitted to first year level, if they are missing requirements or simply have not completed enough credits, or if their previous credits are not fully recognized. Third year level placement is not as common as one might suppose, except at the University of British Columbia, where it exceeds first year level placement. A few transfer students are admitted to years 4 or 5, but mostly under atypical circumstances. For instance the University of British Columbia can place a transfer student at the year 5 level, but that is also the equivalent of year one in a Bachelor of Education program which these students had actually entered and thus the data appear to be anomalous.

Institution Type by Program Year Level

Transferring from a university rather than from a college would be expected to result in admission to a higher year level, in general, because many colleges have fewer course offerings at more advanced levels.

Figure 21: Effect of institution type on program year level placement

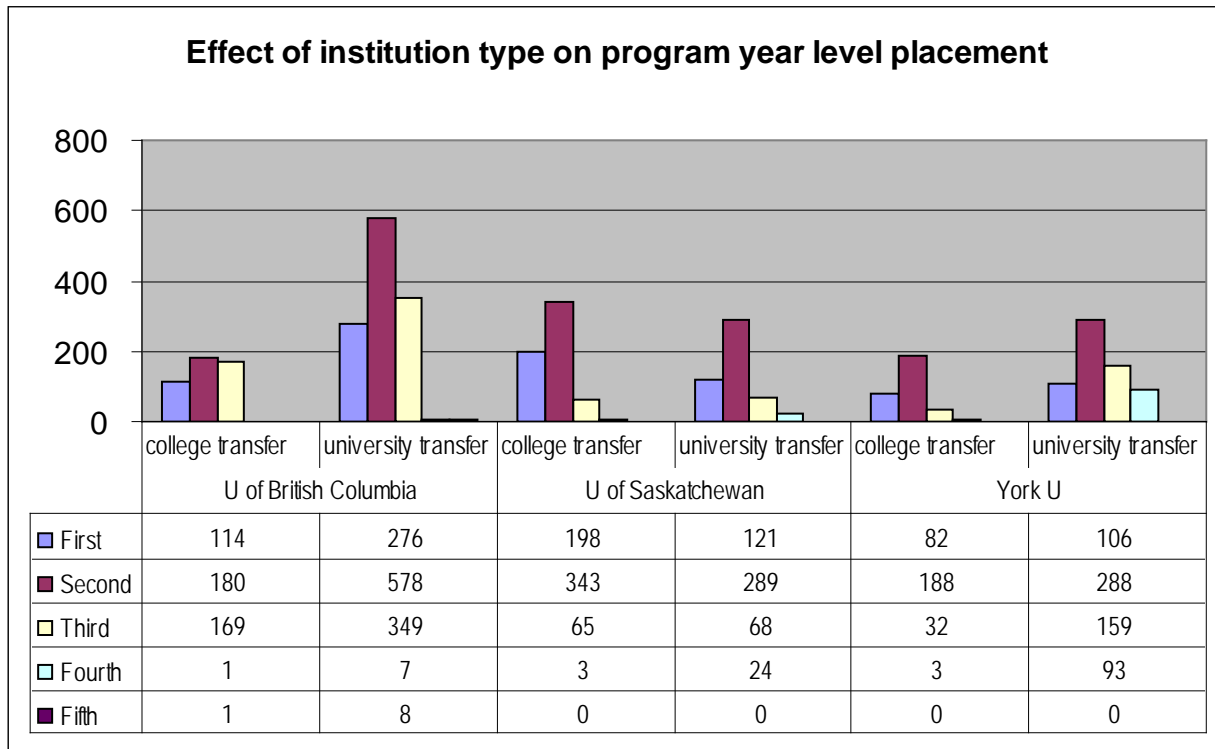


Figure 21 confirms that entry to the second and third year levels is strongly influenced by prior attendance at a university rather than at a college, (an exception being at the University of Saskatchewan), but otherwise the type of institution does not greatly influence the year level: many university transfers are placed at first year level, for example.

Quantity of credit completed before transfer

Average Credits completed at previous institution by province

Three of the four universities recorded and reported these data. The University of Alberta does not record credit completed at previous institutions, only transfer credit awarded by the University of Alberta.

It is assumed that the recording of prior educational credits completed is done with care at the three universities and that the credit recorded is not discounted in any way to match either the credit values for similar studies, if completed at the university, the program in which it was earned, or the relevance of the credit to the program entered at the university. For example, a student who took 60 credits of studies towards a land surveying diploma would be recorded as having completed 60 credits, even though none of these would be transferable to a degree program in music performance that the student subsequently entered. It is unclear how preparatory studies, such as basic English (whether as a first or further language) or developmental studies, are treated in recording prior credit completed.

In the following table, instances of fewer than 10 students entering from a province are not displayed.

Table 17: Average credit units completed before transfer to receiving university

Transfer from	U of British Columbia	U of Saskatchewan	York U
Alberta	45.1	43.0	41.9
British Columbia	n/a	39.9	43.0
Manitoba	40.8	53.8	47.1
New Brunswick	49.5	51.9	46.6
Newfoundland	42.2	--	40.4
Nova Scotia	47.0	33.0	44.3
Ontario	42.3	33.5	n/a
Quebec	32.6	37.0	36.4
Saskatchewan	56.6	n/a	48.7
Total	42.3	42.2	41.5

Transfer students have on average completed a substantial quantity of credit and those quantities are generally comparable across the three universities. All three universities report the least credit is completed by transfer students from Quebec. This probably reflects the different postsecondary educational structure in that province and the different quantification of credit there.

Saskatchewan students appear to have completed the most credits by the time they begin their studies at both the University of British Columbia and York University.

Total credits completed at previous institution by province

Those universities that record the credit completed at previous institutions are able to show the proportions of admitted transfer students from other provinces who completed certain quantities of credit, which have been roughly grouped into the equivalent of year levels. Generally, completion of fewer than 30 credits suggests that the student has not completed first year, fewer than 60 credits suggests that second year is not complete, and so on. These equivalencies need to be treated with caution because there is nothing to indicate that the credits completed can be related or credited to the program being pursued at the university the student entered. For example, a two-year program in horticulture or child care might carry little or no year-standing or transfer credit in a liberal arts degree program.

Figure 22: Distribution of total credit completed at previous institution

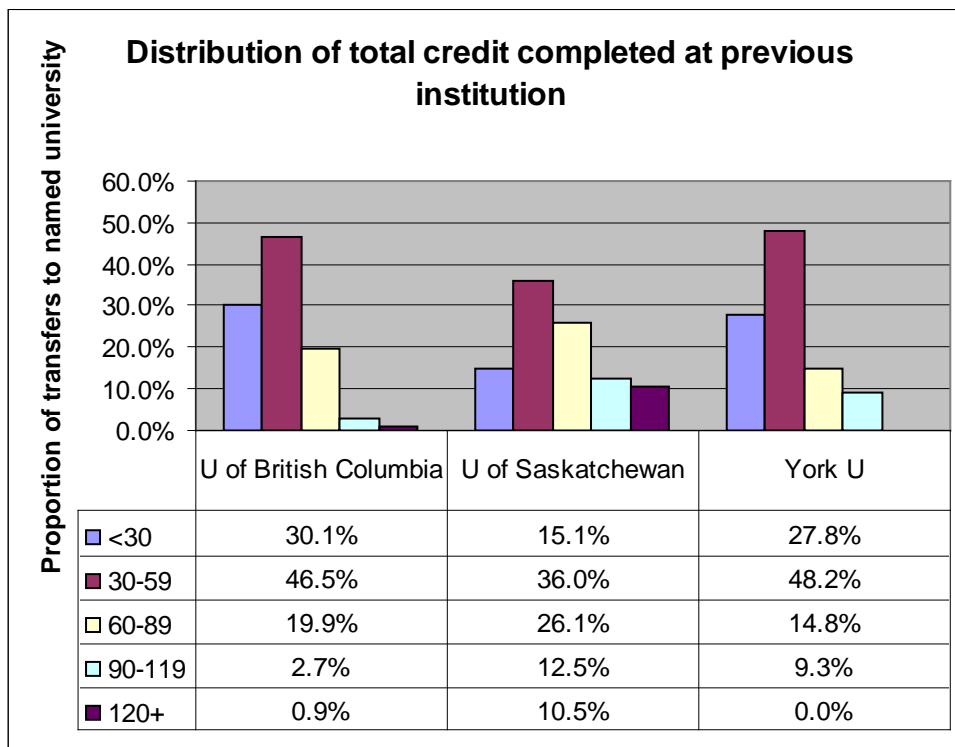


Figure 22 and Table 17 suggest that fewer than 30% of the students who transfer across provincial boundaries have completed less than a year of study before they transfer. Most have completed between one and two years. However, significant numbers have amassed 60 or more credits when they transfer to these universities. These students deserve special attention to analyze the extent to which they received full credit for the amount of studying completed prior to transferring.

Combining rows from the above figure gives:

Table 18: Distribution of quantity of credit completed before transfer

Total credits completed	0-59	60-119	120+
Entered U of British Columbia	76.6%	22.6%	0.9%
Entered U of Saskatchewan	51.1%	38.6%	10.5%
Entered York U	76.0%	24.1%	0.0%

The data for the University of Saskatchewan are different from the roughly similar proportions at the other two universities. There are significantly fewer entrants who have completed the expected 0 to 60 credits and a much higher proportion than expected who have completed more than 60 credits. No reason is known for this difference. It is not known how consistent or reliable is the recording of prior credit completed at the three universities where this is part of the admission record.

Transfer credit awarded

Effect of residency requirements

Each of the four study universities has a residency requirement that effectively limits the amount of transfer credit that a student may receive. This requirement usually mandates that the student completes at least half of the credit earned towards a degree at the institution that is granting the degree, but there might be additional restrictions on the year level of any transfer credit granted. The purpose of a residency requirement is to provide some quality control for a university's credential.

The simplest way to apply the residency requirement is to limit transfer credit at the time of admission. Although more complex to administer, some institutions instead allow any quantity of transfer credit to be awarded at admission but not all of the credit granted will apply to the student's program. Different programs might have different applicability rules, requiring regular audits of credit to show the student what is needed to complete the degree. Participation in a formal exchange program, in which a student takes a period of study at an approved partner institution, can modify these rules.

It is understood that at each of the study universities, a student who has completed transfer credit in excess of the residency requirement will have some transfer credit withheld that would have been granted, given other circumstances. Hence, even if a student had entered at a fourth year level with 90 or more credits already completed, these requirements might stipulate the need to complete a further 60 credits at that university and therefore limit the award of transfer credit to 60 credits.

Transfer Credits granted by Institution Type

Three of the four universities are able to distinguish between transfer students who had received some transfer credit and those who had received none, by previous institution type, i.e., college or university. At the University of Alberta, this is not possible because the institution type is not recorded. Also at the University of Alberta, students with no transfer credit would not have been selected for the study through their query of admission records.

Table 19: Proportions of students who transferred but received no transfer credit – by source institution type

	Transfer from a college	Transfer from a university	Total
U of British Columbia	2%	4%	3%
U of Saskatchewan	16%	3%	8%
York U	5%	3%	4%

Table 19 shows that no transfer credit at all is granted to some entering transfer students. It is assumed that this is a permanent rather than a temporary decision, although it is understood that, in some cases, it takes substantial time to determine transfer credit. Also some of the data extraction concluded at each university utilized a 'snapshot' record made shortly after the conclusion of admissions for that session. If credit is added later, as it might be if an adjudication of credit has taken some time, it is not known if the snapshot record is later amended, but this is unlikely. On the other hand, if the data are extracted from a student records database, one may assume that all such adjustments are incorporated in the record. (There is indication from the universities that data are taken from snapshot extracts created shortly after the start of the admission term. These data would not be subject to later revision.)

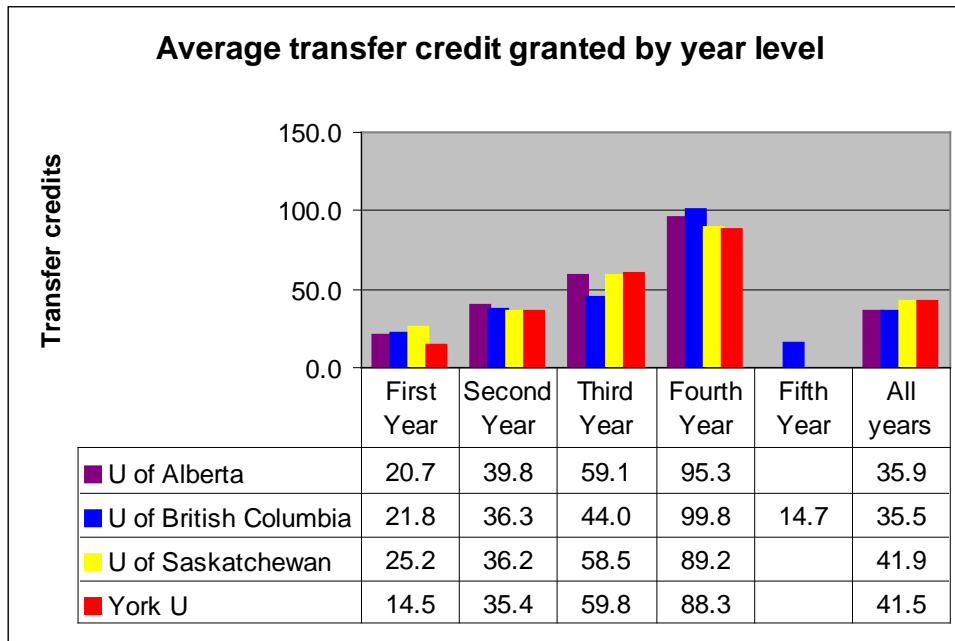
Very few transfer students received no credit at all at the University of British Columbia and at York University, whose proportions closely resemble each other's. The situation at the University of Saskatchewan is somewhat different, with significantly more students receiving no credit if they had previously attended a college rather than a university. No reasons are known for this difference between the institutions or between the two main types of sending institutions in the case of the University of Saskatchewan.

Admission to Nursing at the University of British Columbia requires two years of university-level preparation. Students enter with third year level standing but are granted no credit *per se* for the first two years. Hence, they appear in this study as receiving no transfer credit at admission, but this does not imply that their prior work is unrecognized.

Average transfer credits by year level

Figure 23 shows the average amount of transfer credit granted to transfer students who entered specific program year levels at the four universities and combined data for all of them. Placement in a year level is dependent, partly at least, on credit earned.

Figure 23: Average transfer credit granted by program year level



Average transfer credits by year level show a generally similar pattern across the four universities.

Figure 23 shows that The University of British Columbia's transfer credit average for third year placement is 44.0 credits: insufficient to warrant third year placement in most programs, which would normally require a minimum of 60 transfer credits. Most of these transfer students have 60 transfer credits, or nearly so. The low average of transfer credit may be explained by the practice of admitting transfer students to the Nursing program at year level 3, but not applying transfer credit they earned towards that program – in effect allowing that transfer credit to count towards the first two general years only. This type of adaptation of the universities' records system makes analysis of data more difficult.

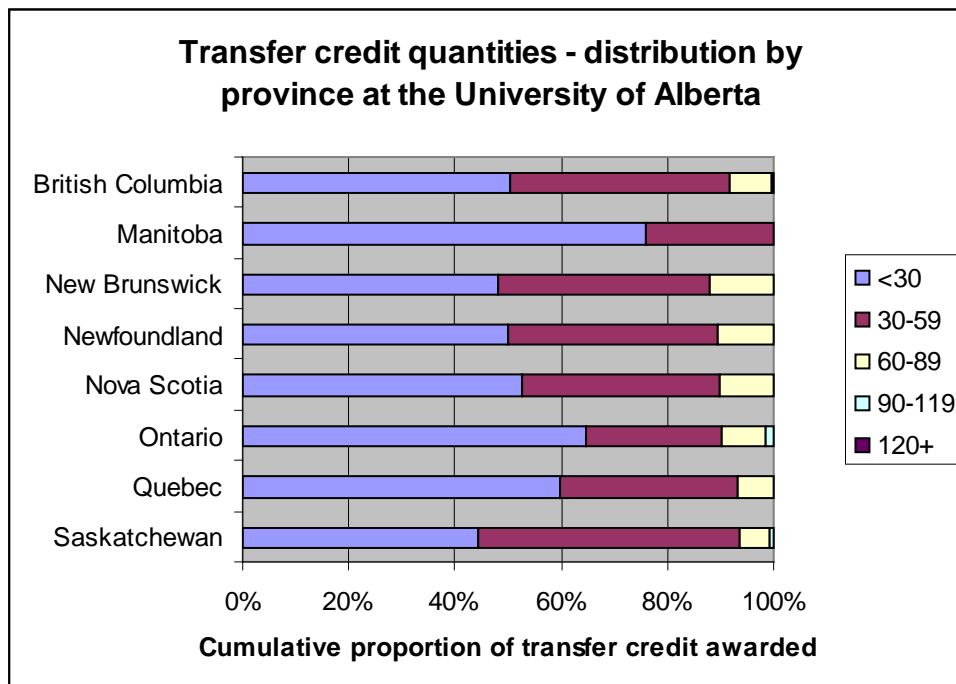
Quantity of transfer credits awarded by province

Only the University of Alberta provided data showing the distribution of transfer credit amounts by province.

Table 20: Quantity distribution of transfer credit awarded at the University of Alberta

Quantity of transfer credit awarded in credits	<30	30-59	60-89	90-119	120+	Total
British Columbia	50.3%	41.6%	8.0%	0.2%	0.0%	100.0%
Manitoba	75.9%	24.1%	0.0%	0.0%	0.0%	100.0%
New Brunswick	48.0%	40.0%	12.0%	0.0%	0.0%	100.0%
Newfoundland	50.0%	39.3%	10.7%	0.0%	0.0%	100.0%
Nova Scotia	52.5%	37.5%	10.0%	0.0%	0.0%	100.0%
Ontario	64.6%	25.7%	8.3%	1.4%	0.0%	100.0%
Quebec	59.7%	33.3%	6.9%	0.0%	0.0%	100.0%
Saskatchewan	44.5%	49.0%	5.8%	0.6%	0.0%	100.0%
Total	53.6%	38.6%	7.4%	0.4%	0.0%	100.0%

Figure 24: Transfer credit quantities – distribution within provincial totals at the University of Alberta



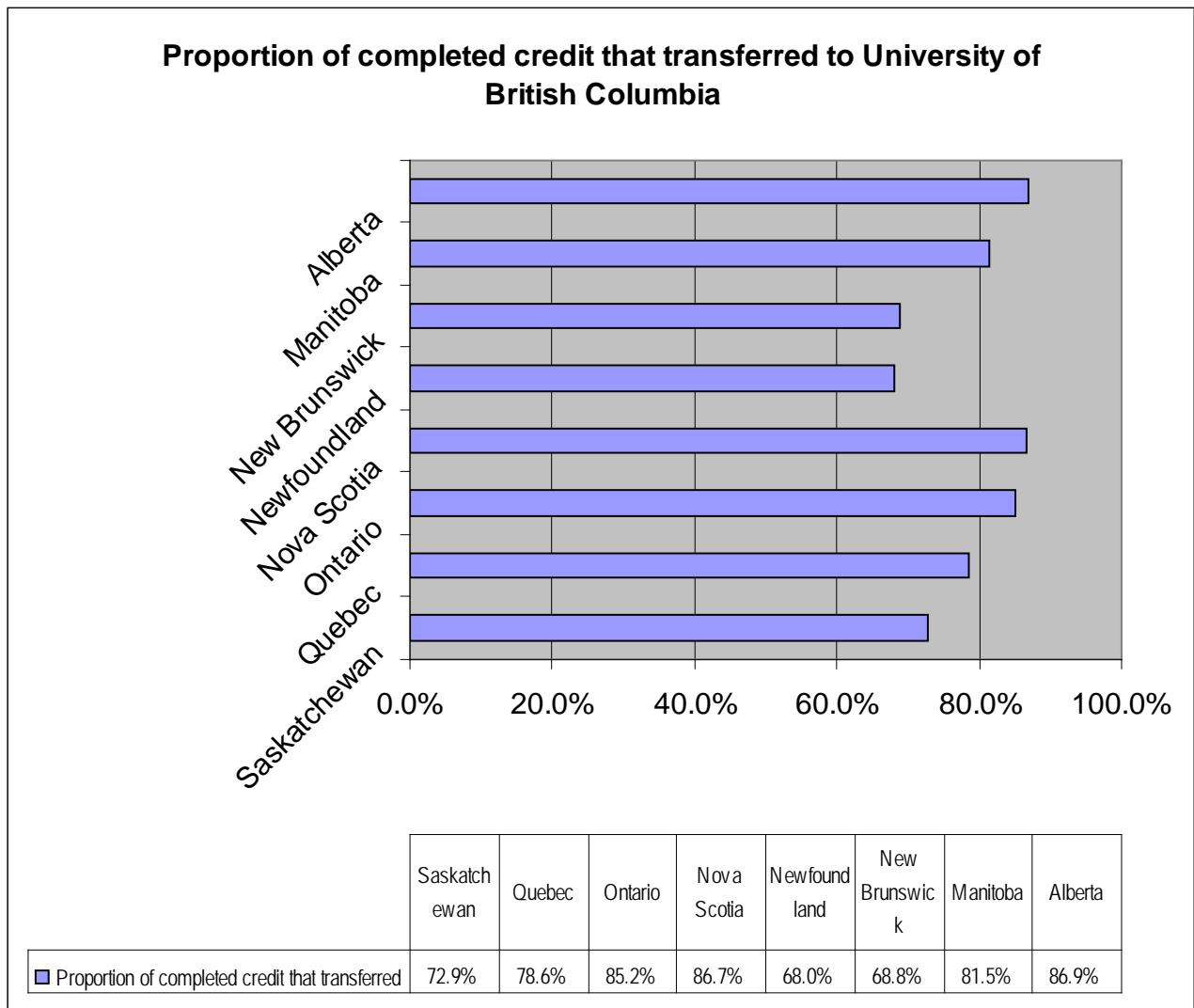
Very little credit is granted in excess of 90 units to transfer students from any province. Residency requirements are in effect for most programs. The maximum transfer credit allowed is 60 credits toward a 120 credit degree program. Manitoba students receive the highest proportion of credits below 30.

The lack of similar data from the other universities is notable and a more complete data set would be desirable for future studies, whether these are within provincial boundaries or beyond.

Transfer credits awarded compared with credit completed - by province

Only the University of British Columbia compared averages of the credit that transfer students completed at the source institutions, by province, with the average quantity of transfer credit granted by the University. This provides a measure of the efficiency of the transfer process for those students. Similar data are not available from the other three universities. Data are not displayed if fewer than 10 students transferred from a province.

Figure 25: Proportion of credit completed prior to transfer that received transfer credit at the University of British Columbia



On average, students at the University of British Columbia receive credit for 83.9% of previously earned credit. Students from Newfoundland and New Brunswick are awarded the lowest proportions (68.0% and 68.8%).

Summary of reasons why transfer credit might be not granted to a student entering from another post-secondary institution

Some reasons why previously earned credit might not be granted transfer credit are:

- course content is not within the discipline fields recognized by the receiving university or program
- program begins at an advanced year level so no credit is granted for prior years
- course level is insufficiently advanced - deemed to be not university-level material by receiving university
- course is too short in length, as judged by the receiving university
- course evaluation method is not approved by the receiving university
- institution offering courses is not recognized by the receiving university (lacks 'accreditation' or assured program quality)
- credit value of course is judged to exceed the value of an equivalent course at the receiving university
- student achieves a bare passing level of performance in a course where the receiving university has set a higher minimum performance threshold for transfer credit
- course content is effectively duplicated, perhaps at different institutions, but both duplicates are counted in the credit completed total
- course content is subsequently duplicated at the receiving university, negating the transfer credit after it is awarded
- pan Canadian protocol on transfer credit does not apply to the institution or program
- residency requirements of the receiving university limit the quantity of transfer credit awarded.

Since there are many possible reasons for transfer credit not to match completed credit, it is unwise to draw conclusions without further examination of specific cases.

Credit completed after transfer by program completers (graduates)

This represents, to an extent, the inverse of the amount of transfer credit granted. If a transfer student is able to complete a degree after completion of, say, 45 further credits and if that degree required a minimum of 120 credits to complete, (more or less the standard quantity for a four-year degree program) the student in effect had received the equivalent of 75 transfer credits, whether or not the transfer credit was recorded entirely. However, some programs have different minimum credit quantities, so this must be treated with caution. On the other hand, among the four universities in the study, only the University of Saskatchewan appears to offer any significant number of 3 year or 90 credit degrees. As well, some degrees at all of the universities require more than 120 credits to complete.

Table 21: Credits completed by transfer students who graduate with degrees, by entry year level

University entered	Entry year	<=30	31 to 60	61 to 90	91 to 120	121+	Total
U of Alberta	1	0	1	8	71	16	96
	2	0	7	198	40	16	261
	3	0	36	20	0	0	56
	4	3	0	1	0	0	4
	5	0	0	0	0	0	0
	All	3	44	227	111	32	417
U of British Columbia	1	0	1	10	44	27	82
	2	0	7	123	83	18	231
	3	9	108	132	8	2	259
	4	5	1	1	0	0	7
	5	0	6	0	0	0	6
	All	14	123	266	135	47	585
U of Saskatchewan	1	1	3	20	24	17	65
	2	0	20	73	44	11	148
	3	0	10	31	3	0	44
	4	0	0	6	0	0	6
	All	1	33	130	71	28	263
York U	1	3	1	11	22	1	38
	2	3	38	91	38	2	172
	3	9	47	38	2	1	97
	4	7	19	6	1	1	34
	All	22	105	146	63	5	341

Figure 26: Credits completed by graduates who entered at year level 1

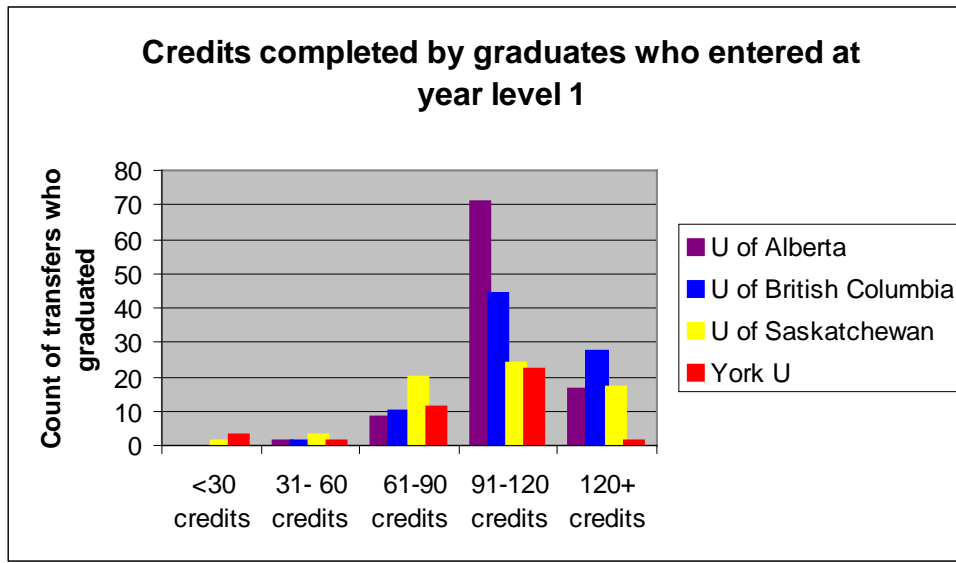


Figure 27: Credits completed by graduates who entered at year level 2

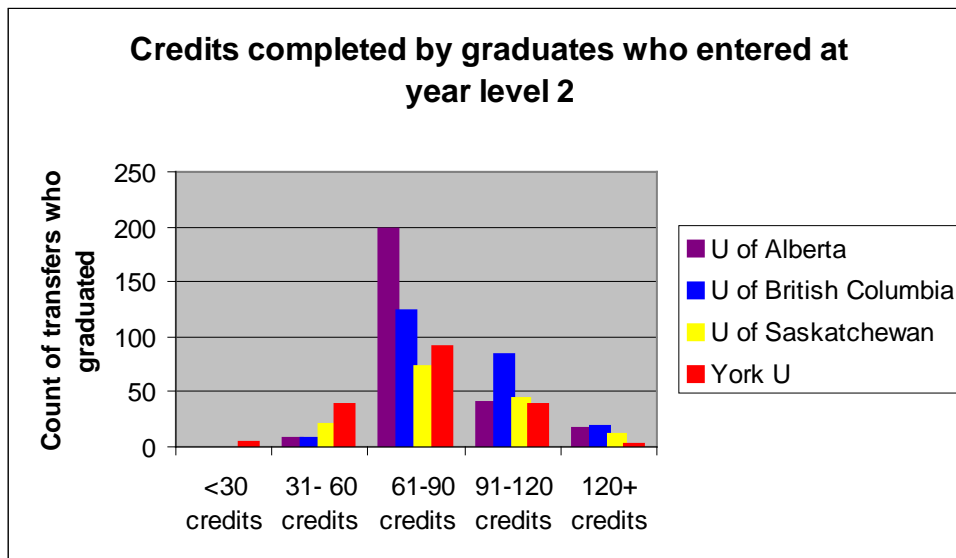


Figure 28: Credits completed by graduates who entered at year level 3

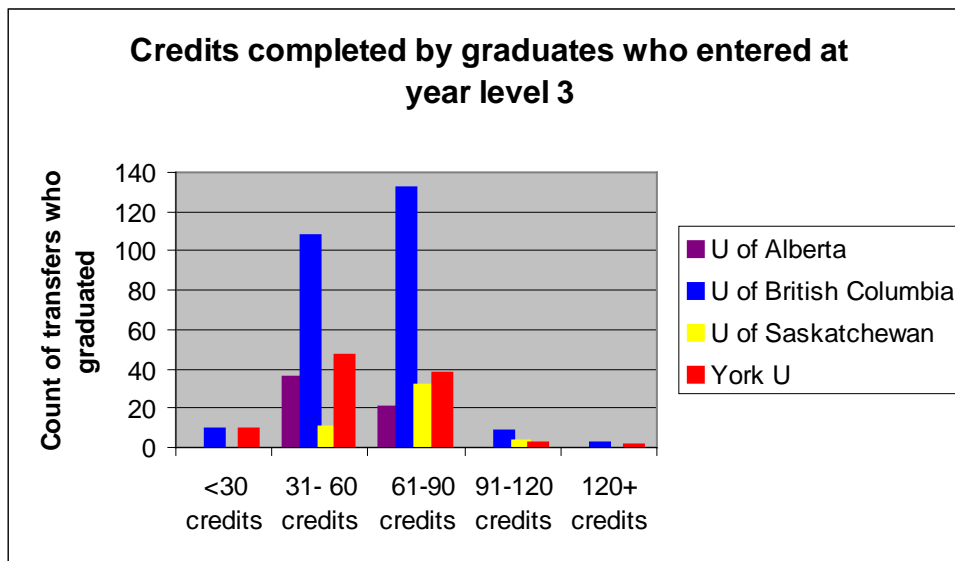
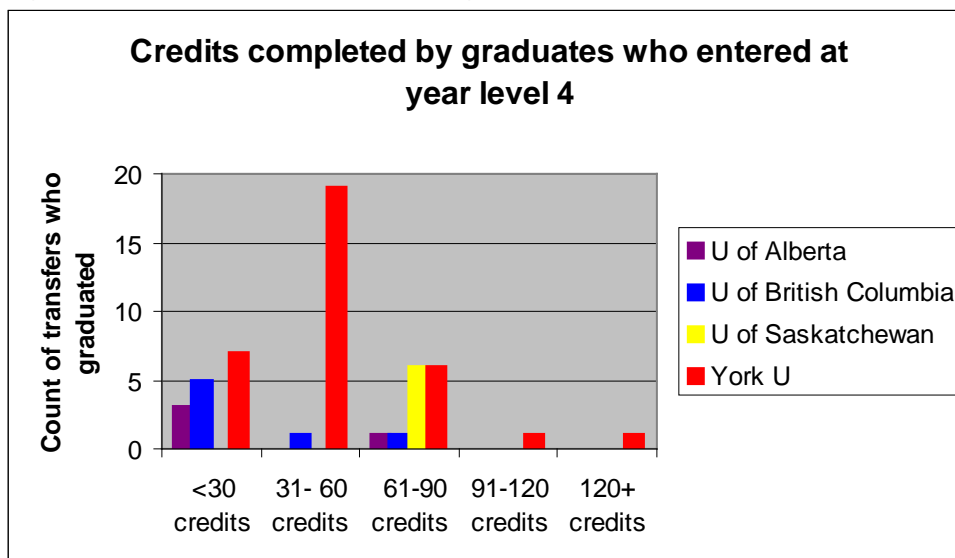


Figure 29: Credits completed by graduates who entered at year level 4



Not surprisingly, Table 21 and Figures 26 - 29 show again the strong inverse relationship between year level placement and credits required to complete a degree, although there might be no specific limit on students taking credits, beyond the minima established for any particular degree.

The data are also impacted by 'residency requirements' of the degrees granted, as noted above.

The fifth year level entries to the University of British Columbia appear to be a small number of Education candidates at the Okanagan campus, and the data appear to be anomalous. These data are not charted.

Figure 30: Credits completed by graduates who entered as transfer students at all entry year levels combined

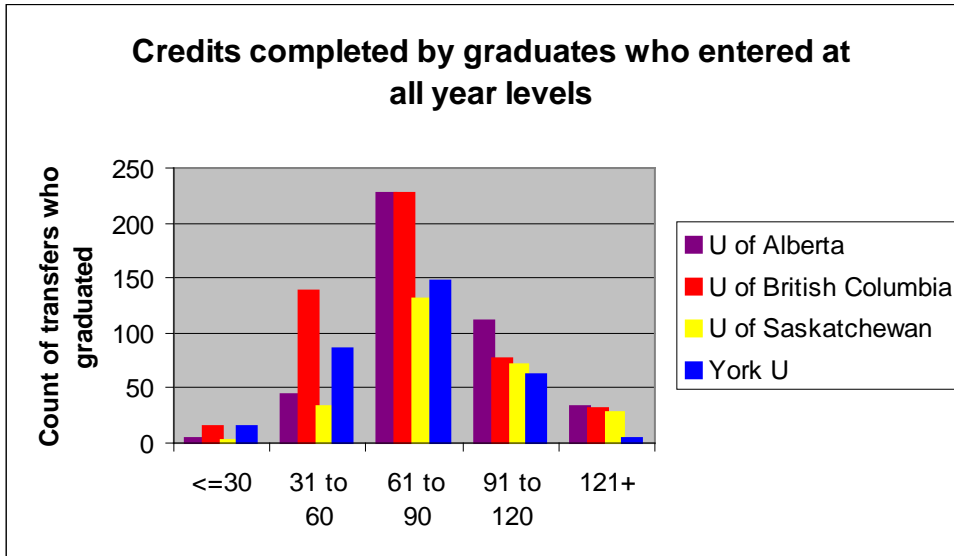


Figure 30 combines all entry year levels and shows a normal distribution for each university, as one might expect, and that significant numbers of transfer students complete more than 120 credits to complete their degrees. It is not known whether the students receive relatively little transfer credit compared with their entry year levels, the degrees required more credit or the students chose to complete more credit.

Performance of transfer students

An admission or transfer average may be calculated for each admitted transfer student when he or she enters one of the four universities. This is normally calculated by converting the grades earned at previous postsecondary institutions to the home institution's scale. Non-transferable courses are usually ignored. Some universities limit the courses included in the average to those taken most recently, such as in the past year, or the last 30 credits attempted. Most institutions include failed courses even though they do not earn transfer credit and there are various policies for dealing with duplicate courses. Not all institutions calculate an admission or transfer average or record that average in the student's record. Some will determine simply that the minimum threshold value has been achieved and do no further analysis of admission average.

Sometimes, even for a transfer student, the admission average will be a secondary school course average rather than a postsecondary average. For example, at the University of British Columbia, admission averages for students who have 24 or more credits are calculated on the basis of their postsecondary performance alone, but students with fewer than 24 credits will have a blended average, calculated on the basis of both high school and postsecondary performance. Some other universities might employ different protocols. For example, a university that is not one of the study participants uses an unblended secondary school Grade 12 average if the applicant has attempted fewer than 9 credits of postsecondary transferable course work and an unblended cumulative postsecondary average for all other transfers who have not completed a bachelor's degree, thus avoiding the need to blend secondary and postsecondary admission averages.

After roughly one year of study, usually made up of two terms or semesters but possibly including more terms, a student's initial sessional average is calculated by most institutions and recorded. There might be multiple sessional averages for a student depending on how many sessions are attended, but the next sessional average that is considered in this study is the final sessional average, calculated at the end of the students' programs, i.e., when s/he graduates. In some universities sessional averages are not recorded but a cumulative average will be calculated instead, based on the student's entire record at the university.

It is relevant and of interest to compare the admission and sessional averages of transfer students along several lines:

- by source province
- by sending institution type
- by academic program
- by comparison with the other averages available.

Sessional or cumulative averages are not usually based on grades in courses completed outside the university.

Grading schemes at the four universities are as given below in Table 22.

Table 22: Grading schemes used at the four study universities

University	Grades in individual courses	Grading scheme for averaging course grades	example	Conversion to 4 point scale required?
U of Alberta	A+ to F	4 point scale	2.8	No
U of British Columbia	A+ to F	Percentage scale	75.9%	Yes
U of Saskatchewan	100% to 0%	Percentage scale	75.9%	Yes
York U	A+ to F	9 point scale	5.5	Yes

In specifying the report formats for the four study universities, it was expected that each university would convert its grades to a four point scale, for ease of comparison. However, this conversion was not made by the three universities for which conversion was needed. In large part this was because no agreed method was provided to them to convert their grade data.

The University of Alberta uses a four point scale, so requires no conversion. The Universities of British Columbia and Saskatchewan both use percentage scales, but the scales are not identical to each other. There is no commonly accepted formula for converting grade averages between institutions that use different grading scales.

Converting grades¹

Most institutions encounter issues related to grading. One concern is over internal consistency: for instance do the students in Engineering receive or deserve the same average grades as the students in Education? Internal consistency issues also apply between year levels, instructors in the same discipline, sections of the same course, different delivery modes of the same course and so on. Another concern is consistency over time. Grade inflation is a common manifestation of such inconsistency.

External consistency is another major issue, affecting academic reputation of the institution, fair treatment of students and graduates in competition for external scholarships and awards and fair treatment of applicants for admission.

One of the assumptions that surround this issue is the ability of the students (are the Engineering students not as able as their counterparts in Education – and is that the reason that they might achieve lower performance standards, as a consequence of inherent lesser talent or diligence?). It is sometimes assumed that admission averages are a good measure of student ability and that subsequent performance differences can be attributed in part to the variability in admission averages.

Another assumption is that all students experience the same level of supportive learning, which might be re-constructed as quality of teaching. Fairness of evaluation obviously plays a part, too.

¹ See Appendix 2 for details on the grade conversion method used in this report.

These issues are more pronounced across institutions than within institutions. Grading practices and schemes are likely to vary substantially across the hundreds of sending institutions that transfer students have attended. Some programs and universities will have higher admission requirements than others for various reasons.

To do justice to this topic, knowledge of each institution's grade distribution pattern would be of assistance – if 60% of students at institution A have averages of 3.5 or higher, how can average grades be compared with another institution that has only 20% of its students in this same grade range? Also, are the grade distribution patterns consistent across faculties and disciplines?

Only if the grading distribution is considered and strong assumptions are made about the average performance of students can valid direct comparisons be made across grading systems.

However this level of detail is rarely available or usable. Instead, admission departments at universities and national scholarship awarding bodies deal with grade conversion on a daily basis, usually with rather crude internally developed ad hoc conversion tables that may or may not deliver fair outcomes. Although expedient, rarely are these tables available for public scrutiny, because they are often indefensible. Most commonly, external grades are individually reduced to the home university's own grading format and the admission average is re-calculated using the home institution's rules. Hence, an admission average at a receiving institution might be quite different from the final average that the student had earned at the sending institution.

When grades are mapped from one scale to another, it is most common to employ a linear mapping, based on benchmark equivalences that are widely accepted. One prominent organization, the Ontario Medical School Admission Service (OMSAS), publishes a University Undergraduate Conversion Table that encompasses most of the grading schemes in use currently at major Canadian universities. This table (see Table 39 in Appendix 2) provides a simple equivalency lookup for individual course grades received by a student, enabling OMSAS staff to convert certain of the student's coursework into a medical school-specific admission average, but it is less useful for averages of groups of courses because these averages do not match exactly the step values of the individual courses. For example, it gives the equivalent of A- earned at the University of Alberta as 3.70, but offers no specific conversion for a University of Alberta average such as 3.65 except by linear interpolation between 3.70 and the next lower step decrement of 3.30, the equivalent of a B+ grade at the University of Alberta.

From this point forward, the OMSAS scale will be used to compare grade averages among the four universities. Conversion details are given in Appendix 2.

Admission averages

Comparison of admission averages

Admission averages of transfer students are regularly calculated only by the University of British Columbia and York University. At the University of Alberta, these calculations are made as needed, but not for all programs, hence valid data are not available. Admission averages are not recorded at the University of Saskatchewan.

Table 23: Admission averages of transfer students during the study period

	Scale	2004/05	2005/06	2006/07	2007/08	2008/09	All Years
U of British Columbia	%	75.9	76.0	75.2	75.0	74.3	75.3
	OMSAS	3.29	3.30	3.24	3.22	3.16	3.24
York U	9 pt.	5.5	5.7	5.8	5.6	5.5	5.6
	OMSAS	2.65	2.79	2.86	2.72	2.65	2.72

Admission averages vary a little year by year, according to the demand for and the availability of places. When programs are normally filled to capacity and some qualified students are turned away, expansion of program capacity explains most of these changes in admission averages.

The decline in admission averages at the University of British Columbia is explained by expanded capacity in programs, allowing for additional transfer admits in those programs in which transfer limits are in place. The admission average at York University peaked in 2006/07. The reasons for this are not known. The transfer admission average is consistently higher at the University of British Columbia than at York University. It is not known whether this difference is real or results from flaws in the grade conversion method (see Appendix 2).

Table 24: Admission average by full-time/part-time status and institution type

	Scale	Status	Transfer from College	Transfer from University	Transfer from Both
U of British Columbia	%	full-time	74.4	75.5	75.3
		part-time	74.2	75.8	75.5
		Both full & part	74.4	75.5	75.3
	OMSAS	full-time	3.17	3.26	3.24
		part-time	3.16	3.28	3.26
		Both full & part	3.17	3.26	3.24
York U	9 pt	full-time	6.1	5.5	5.60
		part-time	5.9	5.4	5.50
		Both full & part	6.0	5.5	5.6
	OMSAS	full-time	3.03	2.65	2.72
		part-time	2.93	2.58	2.65
		Both full & part	3.00	2.65	2.72

Overall there is very little difference in the admission averages of students to either university, based on whether students enroll in full-time or part-time studies in their first term or year.

At York University, those who transfer from colleges have higher admission averages but, at the University of British Columbia, those from universities have higher admission averages, although the difference is small. One reason for higher averages of transfer students from colleges at York University might lie in substantial differences in the admission requirements to York University from the two types of institution:

*“Students transferring from a **community college**...general minimum admission requirements:
 Completion of a diploma program or at least two full semesters at an accredited college, OR
 One year of full-time academic studies at an accredited college.
 Minimum overall average of **3.0 on a 4-point scale (B/70% or equivalent)**.
 All attempted college courses will be included in the calculation of your cumulative grade point average.”*

*“Students transferring from another **university**...general minimum admission requirements:
 Completion of at least 4 full courses or 1 year of full-time degree studies at an accredited university.
 Minimum overall average of **2.0 on a 4-point scale (C/60% or equivalent)**.
 Honours-level programs: Minimum overall average of **2.3 on a 4-point scale (C+/65% or equivalent)**.
 All attempted university courses will be included in the calculation of your cumulative grade point average.”*

It is understood that the University of British Columbia requires the same minimum average from an out-of-province transfer student whether the student previously attended a college or a university, provided that only transferable course work is included in the average.

Comparison of admission average by gender and institution type

Table 25: Admission average by gender and institution type

	Scale	Gender	Transfer from College	Transfer from University	Transfer from Both
U of British Columbia	%	female	75.2	76.0	75.8
		male	72.9	74.7	74.3
		Total	74.4	75.5	75.3
	OMSAS	female	3.24	3.30	3.28
		male	3.06	3.20	3.16
		Total	3.17	3.26	3.24
York U	9 pt.	female	6.3	5.7	5.9
		male	5.6	5.0	5.2
		Total	6.0	5.5	5.6
	OMSAS	female	3.09	2.79	2.93
		male	2.72	2.30	2.44
		Total	3.00	2.65	2.72

Female transfer students had higher admission averages than male transfer students at both the University of British Columbia and York University, where this tendency is more marked among transfers from other universities than from colleges. At York University, there is a marked tendency for both female and male transfers from colleges to have higher admission averages than those who transferred from universities, but the opposite is true, although not as significantly, at the University of British Columbia. The comments on the previous page, relating to Table 24, apply equally to this table.

Admission Average by Province

Table 26: Admission average by province

Scale	U of British Columbia		York U	
	%	OMSAS	9 pt.	OMSAS
Alberta	73.7	3.12	5.7	2.79
British Columbia	n/a	n/a	5.7	2.79
Manitoba	76.5	3.35	6.2	3.06
New Brunswick	75.6	3.27	5.1	2.37
Newfoundland	76.0	3.30	6.0	3.00
Nova Scotia	75.4	3.25	5.3	2.51
Ontario	75.9	3.29	n/a	n/a
Quebec	78.1	3.51	5.6	2.72
Saskatchewan	76.5	3.35	5.5	2.65
Total	75.3	3.24	5.6	2.72

The largest variation in admission average by province from the mean of 75.3% at the University of British Columbia is Quebec at 78.1%. It is unclear whether these are differences in the quality of applicants or instead reflect grading practices or schemes that yield somewhat different numerical averages even for similar performance levels. However, if this were so, the same pattern would be evident at other universities and this is not what is found in the admission averages of York University. Instead, the admission averages of Quebec transfers at York were the same as the overall mean average, while entrants from New Brunswick and Nova Scotia have admission averages that are below the average. The numbers of students entering from some provinces is quite small and not all comparisons are reliable.

Admission average by degree completion status

This comparison is possible only for the University of British Columbia and York University. Only transfer entrants in the years 2004-05 and 2005-06 are included.

Table 27: Admission average by degree completion status and entry year level

University	Entry year level	No degree yet		Received degree	
		Internal (% or 9 pt.)	OMSAS	Internal (% or 9 pt.)	OMSAS
U of British Columbia	Year 1	80.1	3.70	79.1	3.61
	Year 2	73.9	3.13	75.7	3.28
	Year 3	73.0	3.07	75.0	3.22
	Year 4	77.6	3.46	75.8	3.28
York University	Year 1	4.5	2.15	5.2	2.44
	Year 2	5.7	2.79	5.8	2.86
	Year 3	5.4	2.58	5.8	2.86
	Year 4	6.1	3.03	6.2	3.06

Year one transfer students who enter the University of British Columbia do not fit the general pattern in which graduation is positively correlated with higher admission averages, but by only a small margin.

Initial sessional year averages

After a transfer student has attended for a period, (typically two terms or semesters also usually constituting an academic year), a sessional average is usually calculated and recorded, showing how well that student performed in courses compared with other fellow students. Because a transfer student may enter at a year level above the first year level, the initial sessional average is not necessarily their first year average in the program.

Initial Year Sessional Average by Institution Type

Table 27: Initial year sessional average by institution type

	Scale	Transfer from college	Transfer from university	Transfer from both
U of Alberta	4 pt./OMSAS	unavailable	unavailable	2.80
U of British Columbia	%	71.5	72.7	72.4
	OMSAS	2.96	3.05	3.03
U of Saskatchewan	%	67.5	72.8	69.9
	OMSAS	2.37	2.98	2.69
York University	9 pt	5.7	5.7	5.7
	OMSAS	2.79	2.79	2.79

It is notable that college transfers to the University of Saskatchewan had much weaker performances at the end of one year than transfers from universities. The same effect, but much less pronounced, is evident at the University of British Columbia. There is no difference in the performance levels for these two types of transfer students at York University. The admission criteria of York University appear to be selecting students optimally at the margin, resulting in equal probability of success regardless of the source institution type.

Table 28: Initial year sessional average by program year level

Program year level	Scale	Year 1	Year 2	Year 3	Year 4	Year 5	All year levels
U of Alberta	4 pt./OMSAS	2.70	2.80	3.00	3.20	n/a	2.80
U of British Columbia	%	72.0	71.1	74.6	66.9	85.7	72.4
	OMSAS	3.00	2.93	3.19	2.59	3.91	3.03
U of Saskatchewan	%	69.3	69.3	72.4	77.0	n/a	69.9
	OMSAS	2.60	2.60	2.94	3.30	n/a	2.69
York University	9 pt	5.3	5.7	5.8	6.5	n/a	5.7
	OMSAS	2.51	2.79	2.86	3.15	n/a	2.79

In general, the sessional average is higher as transfer students are admitted at higher year levels. This is consistent with performance by continuing students in most institutions and reflects in part self-selection by students into courses and disciplines where their talents and interests lie. The data from the University of British Columbia are less even, for reasons that are not understood.

Table 29: Initial year sessional average by province

	U of Alberta	U of British Columbia		U of Saskatchewan		York U	
Scale	4 pt./OMSAS	%	OMSAS	%	OMSAS	9 pt.	OMSAS
Alberta	n/a	72.1	3.01	68.9	2.55	6.2	3.06
British Columbia	2.7	n/a	n/a	70.3	2.73	5.7	2.79
Manitoba	2.7	71.9	2.99	69.7	2.66	5.6	2.72
New Brunswick	2.4	69.0	2.77	64.9	2.15	4.4	2.12
Newfoundland	2.6	66.2	2.52	--	--	--	--
Nova Scotia	2.7	70.9	2.91	78.2	3.46	5.5	2.65
Ontario	2.8	71.7	2.98	73.2	3.02	n/a	n/a
Quebec	3.1	74.8	3.20	76.8	3.29	5.9	2.93
Saskatchewan	2.8	74.3	3.16	n/a	n/a	6.0	3.0
Total	2.8	72.4	3.03	69.9	2.69	5.7	2.79

Figure 31: Initial sessional averages by province of transfers to the University of Alberta

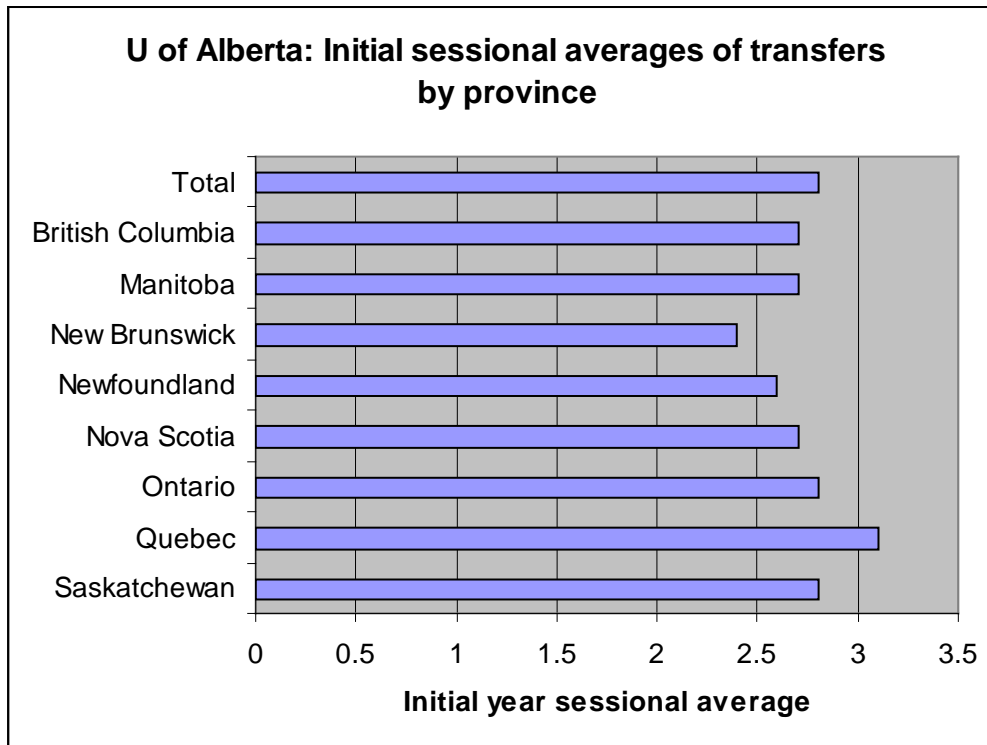


Figure 32: Initial sessional averages by province of transfers to the University of British Columbia

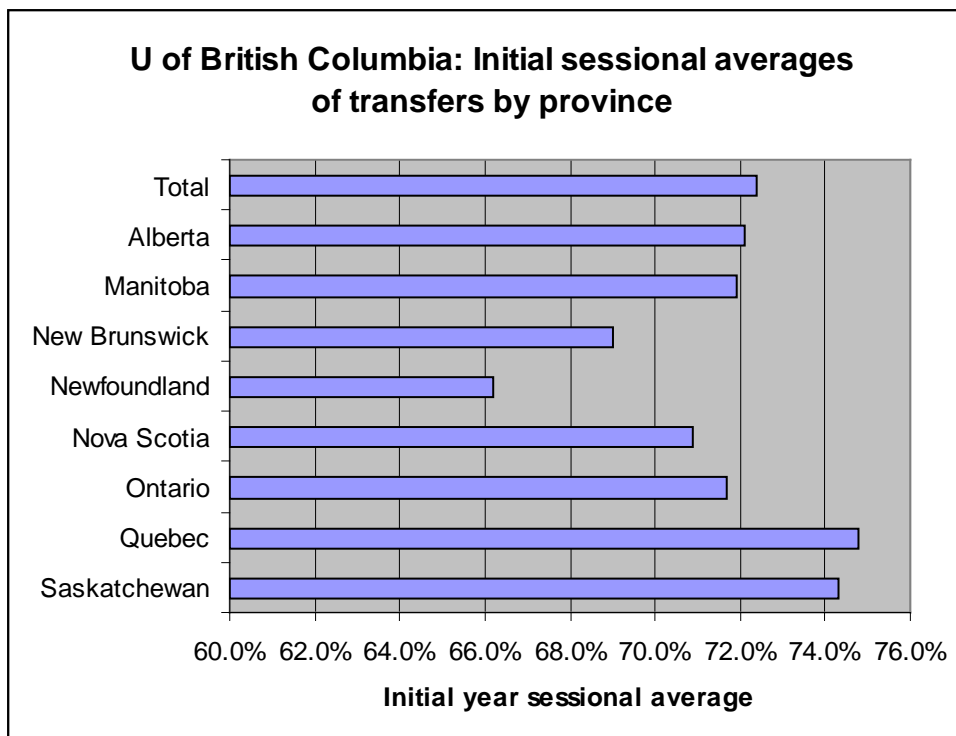


Figure 33: Initial sessional averages by province of transfers to the University of Saskatchewan

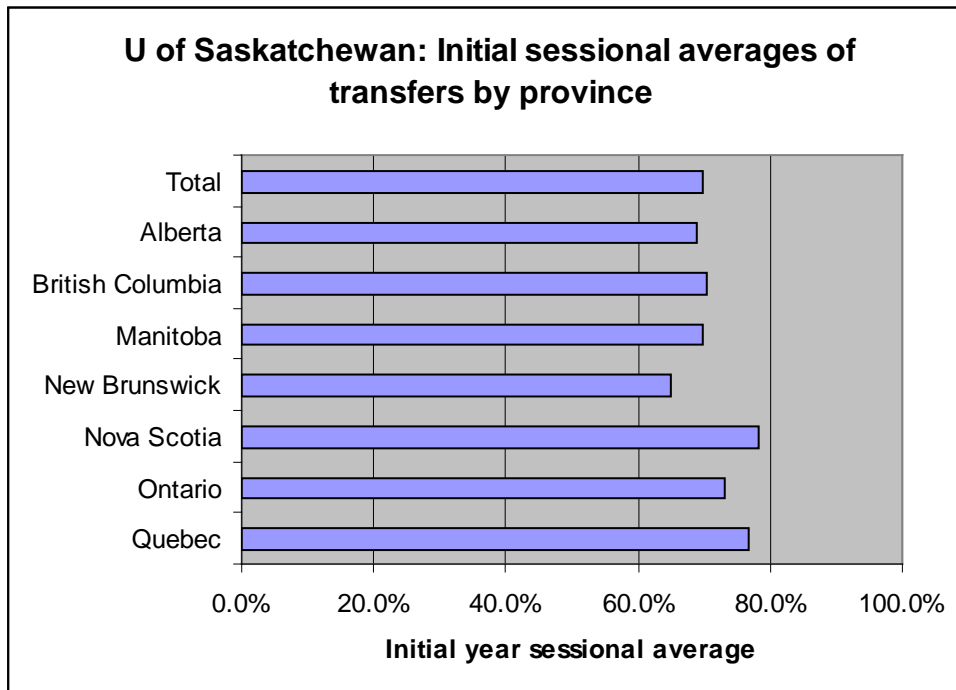
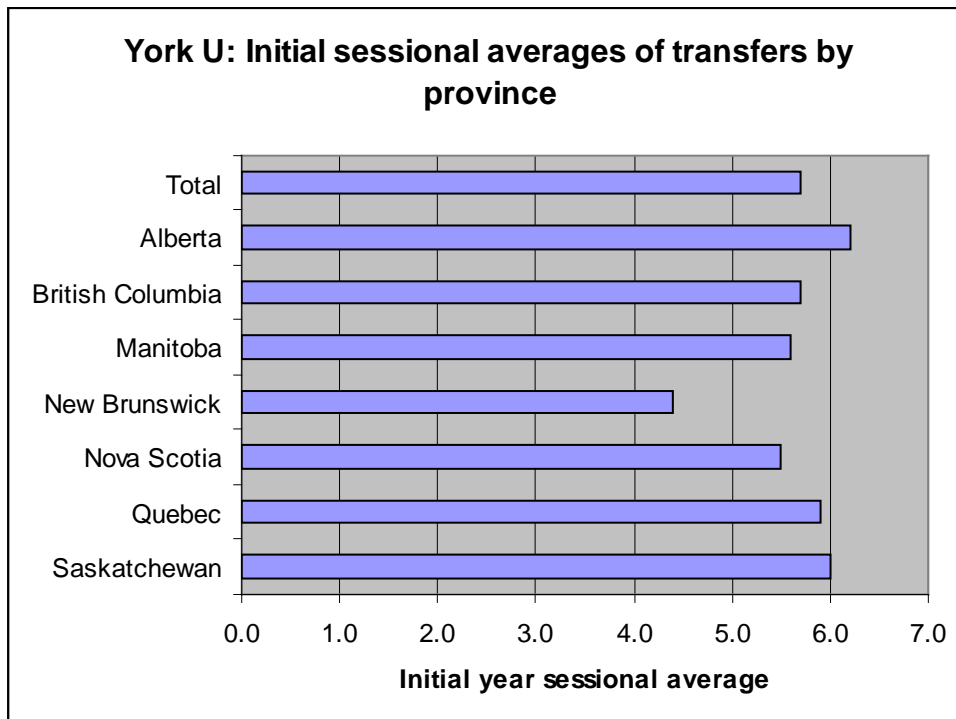


Figure 34: Initial sessional averages by province of transfers to York University



Results for provinces that yielded fewer than 10 new students are not displayed.

Transfer students from Quebec tend to have higher initial sessional averages at all four universities, whereas transfer students from New Brunswick performed markedly less well than average at all four.

Comparison between admission average and initial year sessional average by province

This comparison is possible only for the University of British Columbia and York University

Table 30: Admission average and initial year sessional average of transfers to the University of British Columbia and York University, by province.

Type of average	U of British Columbia				York U			
	Admission average		Initial year sessional average		Admission average		Initial year sessional average	
	Scale	%	OMSAS	%	OMSAS	9 pt.	OMSAS	9 pt.
Alberta	73.7	3.12	72.1	3.01	5.7	2.79	6.2	3.06
British Columbia	n/a	n/a	n/a	n/a	5.7	2.79	5.7	2.79
Manitoba	76.5	3.35	71.9	2.99	6.2	3.06	5.6	2.72
New Brunswick	75.6	3.27	69.0	2.77	5.1	2.37	4.4	2.12
Newfoundland	76.0	3.30	66.2	2.52				
Nova Scotia	76.0	3.30	70.9	2.91	5.3	2.51	5.5	2.65
Ontario	75.9	3.29	71.7	2.98	n/a	n/a	n/a	n/a
Quebec	78.2	3.52	74.8	3.20	5.6	2.72	5.9	2.93
Saskatchewan	76.5	3.35	74.3	3.16	5.5	2.65	6.0	3.00
Total	75.3	3.24	72.4	3.03	5.6	2.72	5.7	2.79

At the University of British Columbia, the initial year sessional average is lower than the admission average. For some provinces the difference is large – e.g. for Newfoundland the apparent drop in performance, application of different grading standards or ‘transfer shock’, whichever explanation one prefers, amounts to nearly 10%.

The data for York University are more mixed. On average, initial year sessional averages are slightly higher than admission averages and are lower only for New Brunswick and Manitoba transfers. Any evidence that distance makes the transfer process harder on the student with a resultant loss of performance dependent on distance traveled is negated by the York University data indicating that transfers perform much better than their transfer admission averages would suggest, in spite of transferring across several provincial boundaries.

Comparison between admission and initial year sessional averages by program year level

This comparison is possible only for the University of British Columbia and York University

Table 31: Comparison of admission and sessional year averages by program year level.

	Program year level		Year 1	Year 2	Year 3	Year 4	Year 5	All year levels
	Type of average	Scale						
U of British Columbia	Admission average	%	78.4	74.3	74.4	70.0	76.8	75.3
		OMSAS	3.54	3.16	3.17	2.84	3.38	3.24
	Initial session year average	%	72.0	71.1	74.6	66.9	85.7	72.4
		OMSAS	3.00	2.93	3.19	2.59	3.91	3.03
York University	Admission average	9 pt.	5.0	5.7	5.7	6.3	n/a	5.6
		OMSAS	2.30	2.79	2.79	3.09	n/a	2.72
	Initial session year average	9 pt.	5.3	5.7	5.8	6.5	n/a	5.7
		OMSAS	2.51	2.79	2.86	3.15	n/a	2.79

On average, students who transfer to York University experience no grade drop after transfer, regardless of their year level. At the University of British Columbia, grade drop is pronounced at the first, second and fourth year entry levels. It is not known whether some of the averages for transfer students who entered Year 1 of their programs are based on postsecondary courses or high school courses. If the latter is true, a grade drop would be expected statistically because of generally elevated high school average grades in comparison to postsecondary course grades, partly reflecting differences between cumulative and selective averages.

Comparison between admission average and initial year sessional average by institution type

This comparison is possible only for the University of British Columbia and York University

Table 32: Comparison of admission and sessional year averages by institution type

Type of average	U of British Columbia				York University			
	Admission average		Initial year sessional average		Admission average		Initial year sessional average	
Scale	%	OMSAS	%	OMSAS	9 pt.	OMSAS	9 pt.	OMSAS
Transfer from college	74.4	3.17	71.5	2.96	6.0	3.00	5.7	2.79
Transfer from university	75.6	3.27	72.7	3.05	5.5	2.65	5.7	2.79
Total	75.3	3.24	72.4	3.03	5.6	2.72	5.7	2.79

Initial year averages are lower than admission averages for both college and university transfers to the University of British Columbia, but at York University, the transfers from universities experienced an increase in initial sessional year average, compared with their admission average, if they had transferred from a university.

Initial year sessional average by degree completion status

Students who complete their degree programs can be expected to be better performers on average than non-completers. The following table tests this hypothesis by comparing the initial year sessional averages of graduates with those who have not yet graduated. To allow sufficient numbers of graduates in programs that are typically four years long, only transfer students who entered in the years 2004-05 and 2005-06 were selected.

Table 33: Initial year sessional average by degree completion status

Scale	Entry year level	No degree yet		Received degree	
		Internal (4 pt. 9pt. or %)	OMSAS	Internal (4 pt. 9pt. or %)	OMSAS
U of Alberta	Year 1	2.3	2.30	3.0	3.00
	Year 2	2.3	2.30	2.9	2.90
	Year 3	2.0	2.00	3.0	3.00
U of British Columbia	Year 1	69.1	2.78	74.6	3.19
	Year 2	66.3	2.53	69.2	2.78
	Year 3	69.7	2.82	75.3	3.24
	Year 4	77.6	3.46	75.8	3.28
U of Saskatchewan	Year 1	69.4	2.62	70.2	2.72
	Year 2	69.2	2.59	70.2	2.72
	Year 3	71.6	2.86	74.3	3.10
York University	Year 1	5.2	2.44	5.8	2.86
	Year 2	4.9	2.27	6.1	3.03
	Year 3	4.4	2.12	6.4	3.12
	Year 4	5.8	2.86	6.6	3.18

The table shows that at all entry year levels, completion of the degree is correlated with higher initial year sessional averages, except for a few year level four entries at the University of British Columbia who showed a reverse tendency. In many cases, the differences in initial year average between those who had graduated and those who had not yet done so are large.

Degree (program) completion by transfer students

A well-established measure of student success is program completion which, in this study, means graduation in a bachelor's degree program.

The numbers of students admitted to each year level (first, second etc.) are compared with the numbers from the same groups who have graduated by the end of the study period, i.e., 2009, which is referred to as the Convocation year, but is in essence the end of the 2008-09 academic year.

Because no data are available for the 2004/05 intake year for the University of Saskatchewan, the following comparisons should be interpreted with caution,

Table 34: Proportion of transfer students who entered at year one level and who graduated by 2009 (2004/05 and 2005/06 intakes combined except as noted)

Year 1 entry to	Intake years	All transfer admits	All transfer admits who graduated	Proportion graduated
U of Alberta	2004/05 2005/06	378	96	25.4%
U of British Columbia	2004/05 2005/06	390	82	21.0%
U of Saskatchewan	2005/06	319	31	9.7%
York U	2004/05 2005/06	188	38	20.2%
Total		1275	247	19.4%

Table 35: Proportion of transfer students who entered at year two level and who graduated by 2009

Year 2 entry to	Intake years	All transfer admits	All transfer admits who graduated	Proportion graduated
U of Alberta	2004/05 2005/06	564	261	46.3%
U of British Columbia	2004/05 2005/06	758	231	30.5%
U of Saskatchewan	2005/06	632	169	26.7%
York U	2004/05 2005/06	476	172	36.1%
Total		2430	833	34.3%

Table 36: Proportion of transfer students who entered at year three level and who graduated by 2009

Year 3 entry to	Intake years	All transfer admits	All transfer admits who graduated	Proportion graduated
U of Alberta	2004/05 2005/06	93	56	60.2%
U of British Columbia	2004/05 2005/06	518	259	50.0%
U of Saskatchewan	2005/06	133	54	40.6%
York U	2004/05 2005/06	191	97	50.8%
Total		935	466	49.8%

Table 37: Proportion of transfer students who entered at year four level and who graduated by 2009

Year 4 entry to	Intake years	All transfer admits	All transfer admits who graduated	Proportion graduated
U of Alberta	2004/05 2005/06	4	4	100.9%
U of British Columbia	2004/05 2005/06	8	7	87.5%
U of Saskatchewan	2005/06	27	9	33.3%
York U	2004/05 2005/06	96	34	35.4%
Total		135	54	40.0%

Table 38: Proportion of transfer students who entered at year five level and who graduated by 2009

Year 5 entry to	Intake years	All transfer admits	All transfer admits who graduated	Proportion graduated
U of British Columbia	2004/05 2005/06	9	6	66.7%

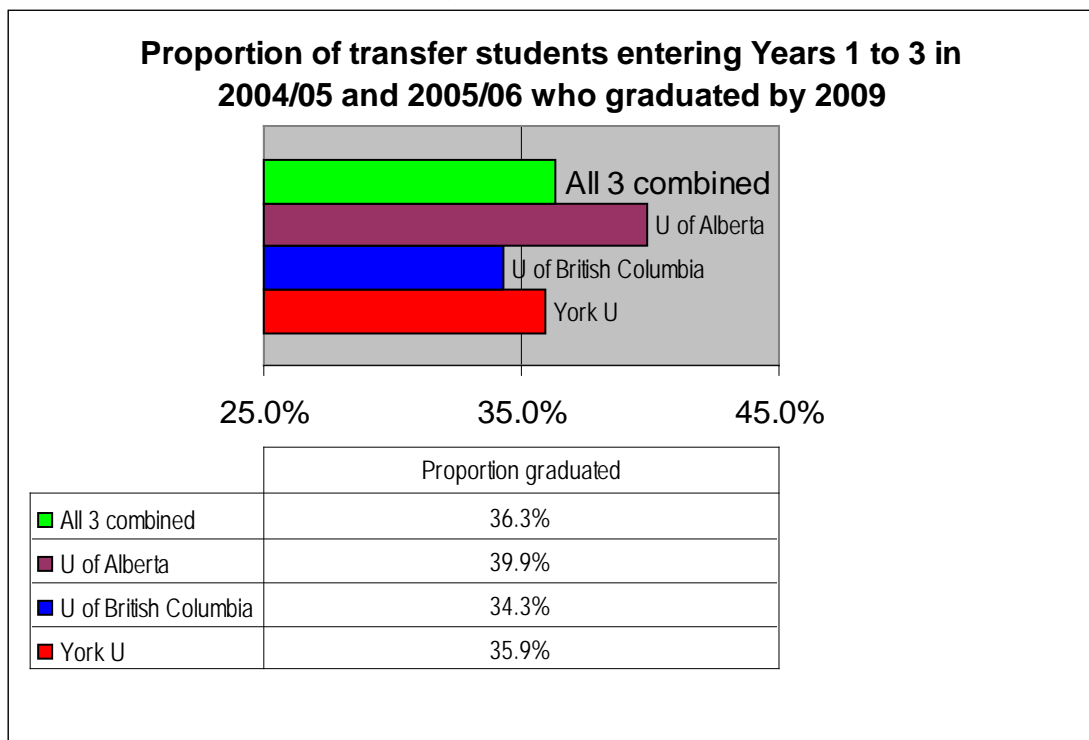
As expected, students who enter at higher years levels are more likely to graduate within the five-year time frame of the study.

There are relatively few transfer students who enter beyond year level three, so if the first three level years are combined this better illustrates comparisons between transfer student achievement at the three study universities that provided intake data for both 2004/05 and 2005/06 (i.e., excluding the University of Saskatchewan).

Table 39: Proportion of transfer students who entered any of years one through three in 2004/05 and 2005/06 and who graduated by 2009

Entered year levels 1 to 3 at	All transfer admits	All transfer admits who graduated by 2009	Proportion graduated
U of Alberta	1,035	413	39.9%
U of British Columbia	1,666	572	34.3%
York U	855	307	35.9%
Total	3,556	1,292	36.3%

Figure 34: Proportion of transfer students who entered any of years one through three in 2004/05 and 2005/06 and who graduated by 2009



About a third of transfer students entering in years 1 to 3 graduated in the study period. A longer period would be required to give a truer measure of program completion for all those in the study, but the cross-comparisons between the universities are of interest. Because there are no intake figures for 2004/05, graduation rates for transfer students who enter the University of Saskatchewan are not directly comparable but are believed to be generally similar to the other three universities for the intake year 2005/06.

Final average grades of students who completed programs

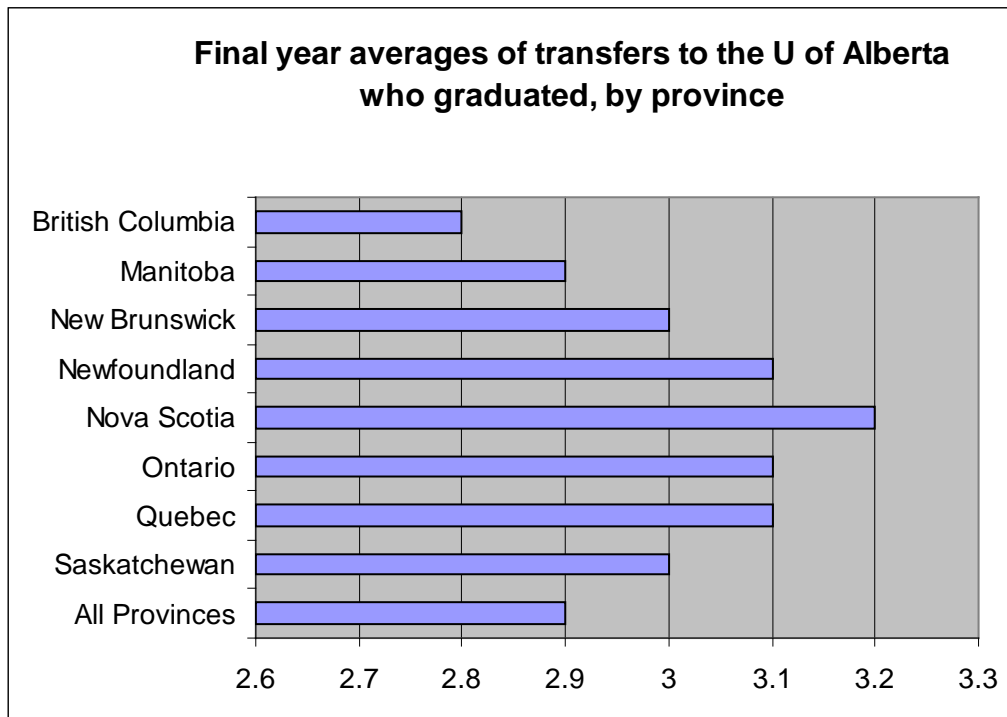
Three of the four universities calculate and record a final sessional year average for a student who graduates. This average is not available for graduates from the University of Saskatchewan. (Some universities may also calculate a cumulative average, based on all study years at the university in the program.)

Final sessional average of transfer students who graduated by receiving institution and province

Table 40: Final sessional average of transfer students who graduated by receiving institution and province

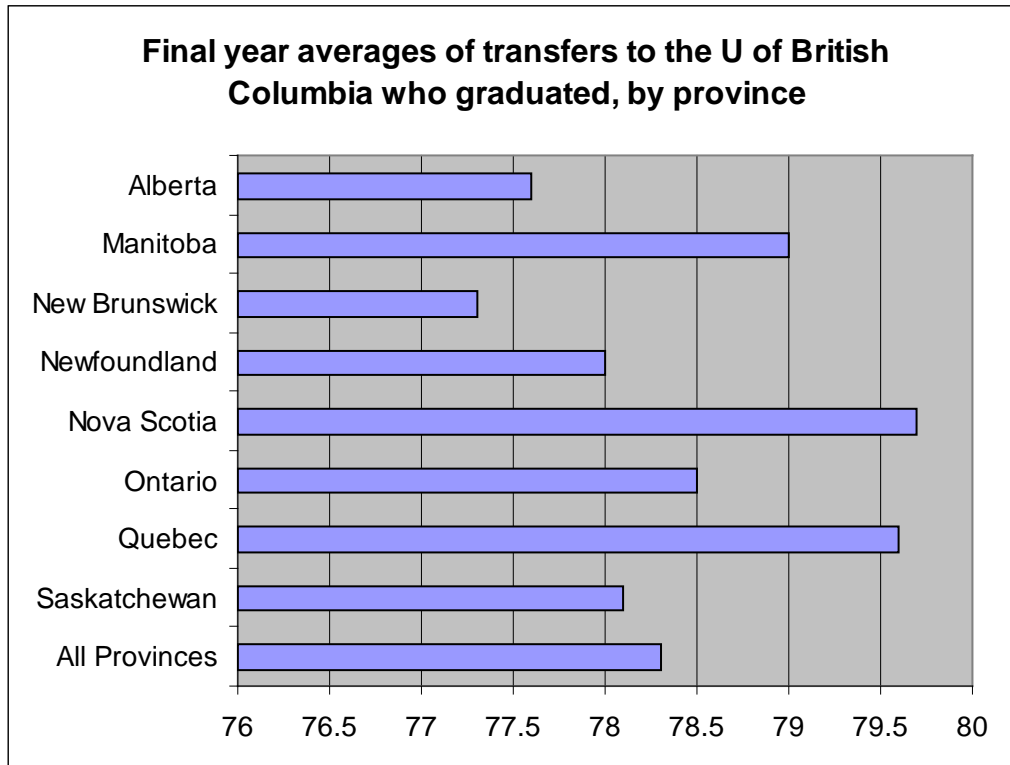
Sending institution province of transfer student	U of Alberta	U of British Columbia		York U	
	Scale	4 pt./OMSAS	%	OMSAS	9 pt.
Alberta	n/a	77.6	3.46	6.6	3.18
British Columbia	2.80	n/a	n/a	6.4	3.12
Manitoba	2.90	79.0	3.60	6.3	3.09
New Brunswick	3.00	77.3	3.43	5.5	2.65
Newfoundland	3.10	78.0	3.50	- -	- -
Nova Scotia	3.20	79.7	3.67	6.3	3.09
Ontario	3.10	78.5	3.55	n/a	n/a
Quebec	3.10	79.6	3.66	6.6	3.18
Saskatchewan	3.00	78.1	3.51	6.9	3.27
Total	2.90	78.3	3.53	6.5	3.15

Figure 35: Final year averages of transfers to the University of Alberta who graduated, by province



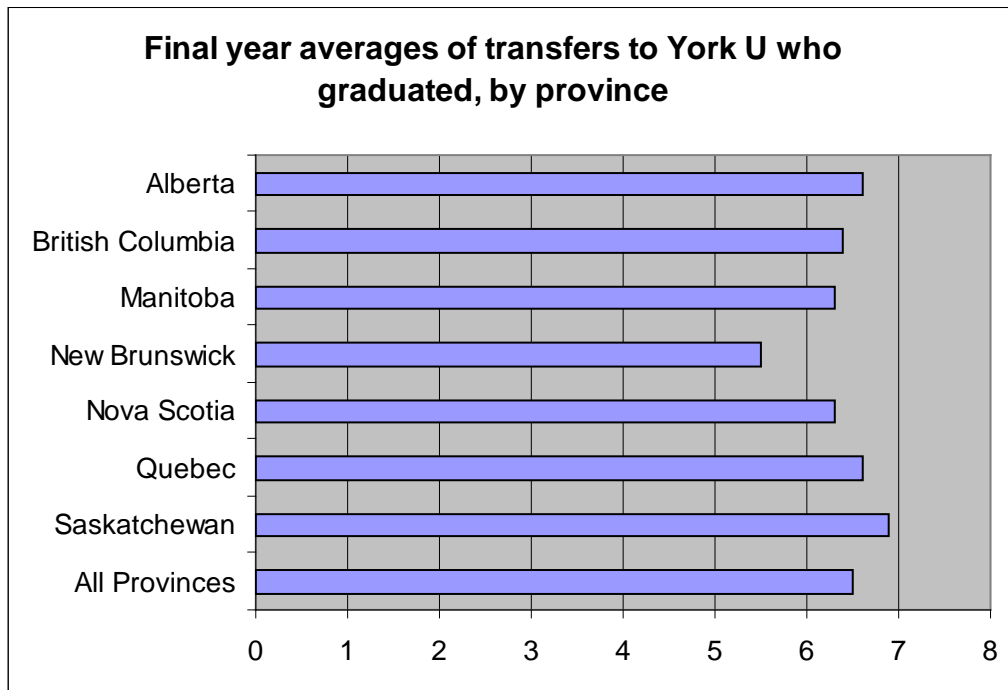
The transfer students with the highest final sessional averages at the University of Alberta are from Nova Scotia, Newfoundland, Ontario and Quebec. Graduates from British Columbia constitute the only below-average source province.

Figure 36: Final year averages of transfers to the University of British Columbia who graduated, by province



The transfer students with the highest final sessional averages at the University of British Columbia are from Nova Scotia and Quebec. Graduates from New Brunswick and Alberta have averages below the mean.

Figure 37: Final year averages of transfers to York University who graduated, by province



The final year averages of transfer students who graduated from York University from all provinces except New Brunswick are consistent and closely clustered about the mean. New Brunswick graduates have averages significantly lower than the mean when they graduate.

Comparison between admission average and final year average by province

The comparison is possible only for the University of British Columbia and York University.

Table 41: Comparison between admission and final year averages of transfers to the University of British Columbia and to York University, by province

Type of average	U of British Columbia				York U				
	admission average		final year sessional average		admission average		final year sessional average		
	Scale	%	OMSAS	%	OMSAS	9 pt.	OMSAS	9 pt.	OMSAS
Alberta		74.6	3.19	77.6	3.46	5.7	2.79	6.6	3.18
British Columbia		n/a	n/a	n/a	n/a	5.7	2.79	6.4	3.12
Manitoba		77.4	3.44	79.0	3.60	6.1	3.03	6.3	3.09
New Brunswick		78.5	3.55	77.3	3.43	5.3	2.51	5.5	2.65
Newfoundland		76.9	3.39	78.0	3.50	5.5	2.65	6.8	3.24
Nova Scotia		75.9	3.29	79.7	3.67	5.5	2.65	6.3	3.09
Ontario		75.5	3.26	78.5	3.55	n/a	n/a	n/a	n/a
Quebec		77.1	3.41	79.6	3.66	6.1	3.03	6.6	3.18
Saskatchewan		75.4	3.25	78.1	3.51	6.0	3.00	6.9	3.27
All provinces		75.5	3.26	78.3	3.53	5.8	2.86	6.5	3.15

Transfer students mostly finish their programs with higher sessional averages than their admission averages. Students from New Brunswick who entered the University of British Columbia appear to be the only exception. However, it is believed that the admission average data are not taken from only those who graduated but from all entries from that province and, in the course of program completion, some weaker students have either dropped out or are still pursuing their degree programs and are therefore excluded from the final average counts.

Conclusions

This study shows that, for the four universities involved, the volume of transfers across Canadian provincial boundaries is relatively small. It can be surmised that this is typical of major urban universities, although the institutions studied are mostly in Canada's Western provinces and might not be a representative sample. However, there is nothing about these institutions to suggest that they are less likely than other institutions to attract students from afar. Indeed, each attracts substantial numbers of international students.

None of the institutions, however, is close to a border with another province. The study suggests that proximity is a factor in determining the frequency of trans-provincial transfers.

Figure 2 shows that three of the universities, the Universities of Alberta and British Columbia and York University, admit about 8000 transfer students each year but Figure 6 shows that only around 800 or 10% of these are from other Canadian provinces. It might be unreasonable to conclude that this pattern would be repeated for all types of institution, including those in small provinces and those close to the borders of other provinces, but the pattern seems to be true at prominent universities located in the major cities of Toronto, Edmonton and Vancouver.

There is not much that is unusual in the ages of the students, their gender or the programs they choose. Many more transfers are from other universities rather than from colleges, ranging from 64% to 80% of out-of province transfers at the study universities. Whether they come from colleges or universities has some effect on the quantity of transfer credit received and their year level placement. A student from a university is likely to receive more transfer credit than a student from a college, is more likely to be placed at second or third year level, rather than at the first year level and is less likely to receive no transfer credit at all. The study does not examine why this might be so. One could surmise that students in colleges take a broader range of subjects, including vocational training and developmental education for which transfer credit is rarely given towards bachelor degrees. In addition, universities tend to be larger institutions that offer longer sequences of courses such that third year placement is achievable on transfer, whereas a small college might be unable to offer sufficient second year courses to its students to permit the same year-level placement when they transfer elsewhere.

Transfer credit seems to be readily available to students who transfer to all of the universities and transfer students finished their programs in the expected amount of time. This is in spite of the relative infrequency of transfers from some provinces, implying that when the student transfers to the receiving university, the courses previously completed by that student are unfamiliar to the receiving university and probably require transfer evaluation for the first time. Thus it appears that the universities involved in this study are providing appropriate levels of transfer credit for inter-provincial transfer students. It likely also reflects the widespread practical acceptance of the Pan-Canadian Protocol on the Transferability of University Credits (1995 CMEC), previously agreed to by the four universities in this study.

The performance of the students at the four universities is generally similar. Some indications suggest that students transferring from Quebec are better prepared for university and those from New Brunswick are less well-prepared, but the Quebec students might be transferring mostly from CEGEP institutions which have no exact equivalents in the rest of Canada and might in some cases be better compared with students from other provinces who enter directly from secondary schools. The four universities in the study were not asked to submit data concerning the performance of either direct entry students from secondary schools or transfer students from within their respective provinces, so it is not possible to compare their performance levels with those other populations.

The use of the OMSAS table to reduce grade averages to a single comparable average is open to question. It appears to produce an unusually high average on the four point scale for the students in this study at the University of British Columbia. It is possible that the University has higher entrance standards than the other universities in the study. If further research is to be conducted across institutions that have different grading schemes or even have the same apparent scheme but a different grade distribution pattern, it would be worthwhile to devote some attention to validating the grade conversion method.

Is Further Research Warranted?

There were many difficulties encountered in this study, including inconsistency of some data, unavailability of data and some lack of interest in the outcomes, possibly because for each institution students from out-of-province do not represent a major component of its enrollment. In addition, there are assumptions implicit in this research that might be misplaced. For example:

- The study shows that some Nursing students transferred in with third year standing yet received little or no transfer credit. This is a result of the university's decision to begin that program at a non-traditional start point (year 3) and to make the degree shorter (2 years). Students entering Nursing at that university have completed two years of preparatory postsecondary study, but it is not reflected in the data. There are increasing numbers of degree programs whose structure differs from the traditional entry to first year from high school, plus 3 or 4 years to degree completion;
- The study may not show a true representation of transfer entry into the more specialized programs, especially those that are in higher demand than the more general programs because a transfer student may lack a requirement for program entry at the time of admission but be accepted to the program subsequently. Hence there are two reasons why transfers may mostly enter Arts and Science programs, namely that they choose these programs and/or that they enter them by default when their real goal was another program;
- Several first degrees are longer than 120 credits. At one Western Canadian university, for example, all honors degrees require a minimum of 132 credits: Education degrees 150 credits and Engineering Science degrees 140 to 161 credits. Many students complete double majors, majors with multiple minors and even double honours programs and double degrees, most of which are unlikely to fit within a standard program length. Hence, there might be no reason to question the motives of a student who completes 120 or more credits but has not yet graduated.

- Transfer credit is not treated in the same manner by all institutions. The main issue is whether it is determined discretely for each program or if it is determined generally and then applied independently for each program. This is less of an issue for general programs such as the Bachelor of Arts, but becomes more important for more specialized programs. Many institutions determine transfer credit at the time of entry in a general manner, avoiding the need to repeat the work done, should a student change programs. The implication is that the transfer credit on the record does not necessarily count toward the credential goal. Other institutions prefer to determine the transfer credit for the specific needs of a particular program. This implies that transfer credit that would have been acceptable for many other programs is not recorded for that student because of the chosen program's structure.
- Significant subject areas such as Education are treated inconsistently because some institutions admit students into a first bachelor degree in Education but others, require that applicants first complete a degree and treat Education as a post-degree subject, depending, presumably, on provincial regulations that govern the teaching profession.

This study attempts to correct for the 'applicability issue' mentioned above by considering credit completed to achieve the degree and by considering entry year levels. These are both useful devices that allow the reader to weigh the significance of transfer credit quantities alone. With a few exceptions, there is clear evidence in this study that the transfer credit granted is the inverse of credits completed to complete a degree and that entry year level placement is strongly correlated with transfer credit granted and inversely related to credits completed to complete a degree.

Whether future studies are justified is difficult to state for a number of reasons:

- There do not appear to be large numbers of students transferring among post-secondary institutions across provincial boundaries.
- In such small populations, the reliability of the data is questionable.
- Evidence shows that those that do transfer appear to receive appropriate amounts of credit and are generally able to complete their degrees in a timely manner, so no specific issues of concern are apparent.
- It has proven difficult to compare data across institutions because of differing business practices and grading schemes at each institution.
- It has proven difficult to encourage universities to participate, possibly because the number of inter-provincial transfers represents a relatively small proportion of overall enrolments.
- Studies that are based on other studies, are more susceptible to errors of categorization and varying data definitions than studies that are based on a single source of raw data.
- For valid privacy reasons, there is reluctance on the part of the universities to release unaggregated student data even for research purposes, except as required by law, to Statistics Canada.

Given the above reasons, there are likely other issues of importance in higher education at the national and/or inter-provincial level that are more worthy of study by PCCAT.

Appendix 1

Data inventory grid

Table 38: Data elements inventory

PCCAT Transfer Student Research Project - Data Elements Inventory

Name of University:		Anticipated completion timelines:			
Person Completing Inventory:		Data collection:			
Email:		Report writing:	Date inventory completed:		
Phone #:		Available ? (✓) Y	Available? (✓) N	If not, what is available?	Other Notes/Comments
Data Element					
1. For the 5-year period ending 2008/09 (Fall & Winter/Sept to Apr sessions), the number of 1st time undergraduate students enrolled who had previously completed any number of credits from another public pse institution in another Cdn province or territory					
2. For the above students:					
a. Age					
b. Gender					
c. Province of previous institution					
d. Type of previous public institution:					
i. University					
ii. College, university college, or institute					
e. Type of program at previous institution transferred from:					
i. Undergraduate degree					
ii. Diploma or Associate Degree					
iii. Certificate					
f. Number of students in 1. above who received some transfer credit					
g. Number of transfer credits granted by your university					
h. Number of credits completed prior to moving to your university					
i. Faculty and/or degree program enrolled in at your university					
j. FT or PT status in the 1st semester enrolled in as defined by your university					

3. Performance at your university of students who transferred and received some transfer credit:	
<ul style="list-style-type: none"> a. Admission GPA or equivalent b. CGPA in the first term/semester/year c. CGPA in subsequent terms/semesters/years d. Number of additional credits earned at your university towards the 1st undergraduate degree at your university 	
4. Students who received some transfer credit and graduated from your university in the timeframe of the study:	
<ul style="list-style-type: none"> a. Number who graduated b. Credentials of those who graduated c. CGPA at graduation d. Proportion of total credit required for the 1st undergraduate degree that was completed at your university 	
5. Comparisons	
a. Compare academic performance of transfer students (see 3. & 4. above) across types of transfer students (e.g., by type of sending institution, FT/PT status, etc.)	

Appendix 2

Conversion of grade averages

Table 39: Grade conversion table of the Ontario Medical School Admission Service

Undergraduate Grading System
Conversion Table

OMSAS 2010

Échelles de notation
au premier cycle

Type Scale Échelle	Numeric/Numérique		Percentage/Pourcentage				Alpha/Alpha			OMSAS Value Valeur OMSAS
	1	2	3	4	5	6	7	8	9	
4.00	9	8	90-100	93-100	94-100	94-100	A+	A	A+	4.00
3.90			85-89	84-92	87-93	85-93	A			3.90
3.80									A	3.80
3.70	8	7	80-84	75-83	80-86	80-84	A-	A-		3.70
3.30	7	6	77-79	72-74	75-79	75-79	B+	B+	B+	3.30
3.00			73-76	69-71	70-74	70-74	B	B	B	3.00
2.70	6	5	70-72	66-68	65-69	65-69	B-	B-		2.70
2.30	5	4	67-69	64-65	60-64	60-64	C+	C+	C+	2.30
2.00			63-66	62-63	55-59	55-59	C	C	C	2.00
1.70	4	3	60-62	60-61	50-54		C-	C-		1.70
1.30		2	57-59	56-59			D+	D+	D+	1.30
1.00			53-56	53-55		50-54	D	D	D	1.00
0.70			50-52	50-52			D-	D-		0.70
0.00	3	1	≤ 49	≤ 49	≤ 49	≤ 49	E/F	E/F	E/F	0.00

Algoma	3	Guelph	3	Mt. Allison	7	Royal Roads	7	Trinity Western	7
Acadia	7	Lakehead	3	Mt. St. Vincent	7	Ryerson	7	UBC	7
Alberta	7	Laurentian	3	New Brunswick	7	Saskatchewan	3	UOIT	7
Athabasca	7	Laval	7	Nipissing	3	Sherbrooke	7	Victoria	7
Bishop's	3	Lethbridge	7	Northern B.C.	7	Simon Fraser	7	Waterloo	3, 7
Brandon	7	Manitoba	9	Ottawa	7	St. Francis Xavier	3	Western	3
Brock	3	McGill	8	Prince Edward Island	3	St. Mary's	7	Wilfrid Laurier	7
Calgary	7	McMaster	7	Quebec	7	St. Thomas	7	Windsor	7
Carleton	7	Memorial	6	Queen's	3	Ste-Anne	7	Winnipeg	7
Concordia	7	Moncton	7	Regina	3	Toronto	3, 7	York	9
Dalhousie	3, 7	Montreal	7	RMC/CMR	4, 7	Trent	3		

Please note: The above scales are applicable only to current grading schemes.

As can be seen in the OMSAS table (Table 39 above), the four universities in the study use grading schemes summarized below:

Table 40: Grading scale used by study universities according to OMSAS

	System used in university's report	OMSAS Type	Comments
U of Alberta	0.0 to 4.0	7 (F to A+)	A common scheme with C= 2.0 and B= 3.0, A= 3.9, A+ = 4.0
U of British Columbia	0% to 100%	7 (F to A+)	Individual letter grades are averaged by UBC as a percentages
U of Saskatchewan	0% to 100%	3 (0% to 100%)	Equivalent of 2.0 is 63% to 66% which is higher than many otherwise similar percent scales, such as that of the U of British Columbia.
York U	0.0 to 9.0	9 (F to A+ without minus grades)	Mostly similar to common scheme #7 but lack of minus modifiers makes A= 3.8

The University of British Columbia converts individual course grades to percentage form when calculating averages. In most faculties, individual courses are normally graded and are converted as follows:

Table 41: University of British Columbia internal grade conversion from letter grade to percentage

Letter Grade	Percentage (%)
A+	90-100
A	85-89
A-	80-84
B+	76-79
B	72-75
B-	68-71
C+	64-67
C	60-63
C-	55-59
D	50-54
F	0-49

A similar process is followed at York University.

Table 42: York University internal grade conversion from letter grade to percentage

Letter grade	Numerical value for average	Description	Detailed description
A+	9	Exceptional	Thorough knowledge of concepts and/or techniques and exceptional skill or great originality in the use of those concepts, techniques in satisfying the requirements of an assignment or course.
A	8	Excellent	Thorough knowledge of concepts and/or techniques with a high degree of skill and/or some elements of originality in satisfying the requirements of an assignment or course.
B+	7	Very Good	Thorough knowledge of concepts and/or techniques with a fairly high degree of skill in the use of those concepts, techniques in satisfying the requirements of an assignment or course.

Letter grade	Numerical value for average	Description	Detailed description
B	6	Good	Good level of knowledge of concepts and/or techniques together with considerable skill in using them to satisfy the requirements of an assignment or course.
C+	5	Competent	Acceptable level of knowledge of concepts and/or techniques together with considerable skill in using them to satisfy the requirements of an assignment or course.
C	4	Fairly Competent	Acceptable level of knowledge of concepts and/or techniques together with some skill in using them to satisfy the requirements of an assignment or course.
D+	3	Passing	Slightly better than minimal knowledge of required concepts and/or techniques together with some ability to use them in satisfying the requirements of an assignment or course.
D	2	Barely Passing	Minimum knowledge of concepts and/or techniques needed to satisfy the requirements of an assignment or course.
E	1	Marginally Failing	
F	0	Failing	

This results in a modification of the OMSAS table (Table 39) for conversion of averages from the four universities in this study.

Table 43: Basis of a linear conversion model for grade averages, based on the OMSAS table

Source: OMSAS					Source: Tables 27 and 28	
OMSAS Scale	U of Alberta (letter)	U of British Columbia (letter)	U of Saskatchewan (%)	York U (letter)	U of British Columbia (%)	York U (9 point)
4.00	A+	A+	90-100	A+	90-100	9
3.90	A	A	85-89		85-89	
3.80				A		8
3.70	A-	A-	80-84		80-84	
3.30	B+	B+	77-79	B+	76-79	7
3.00	B	B	73-76	B	72-75	6
2.70	B-	B-	70-72		68-71	
2.30	C+	C+	67-69	C+	64-67	5
2.00	C	C	63-66	C	60-63	4
1.70	C-	C-	60-62		55-59	
1.30	D+		57-59	D+		3
1.00	D	D	53-55	D	50-54	2
0.70	D-		50-52			
0.00	E/F	E/F	Less than 50	E/F	0-49	1

Conversion of averages from the University of Alberta

From Table 43, it can be seen that there is a 1:1 correspondence between the OMSAS scale and the University of Alberta 4 point scale. Therefore no conversion is necessary to state University of Alberta averages on the OMSAS scale, assuming a linear relationship. i.e., if the grade point average from the University of Alberta has value of 2.30, the OMSAS value will be identical.

Conversion of averages from the University of British Columbia

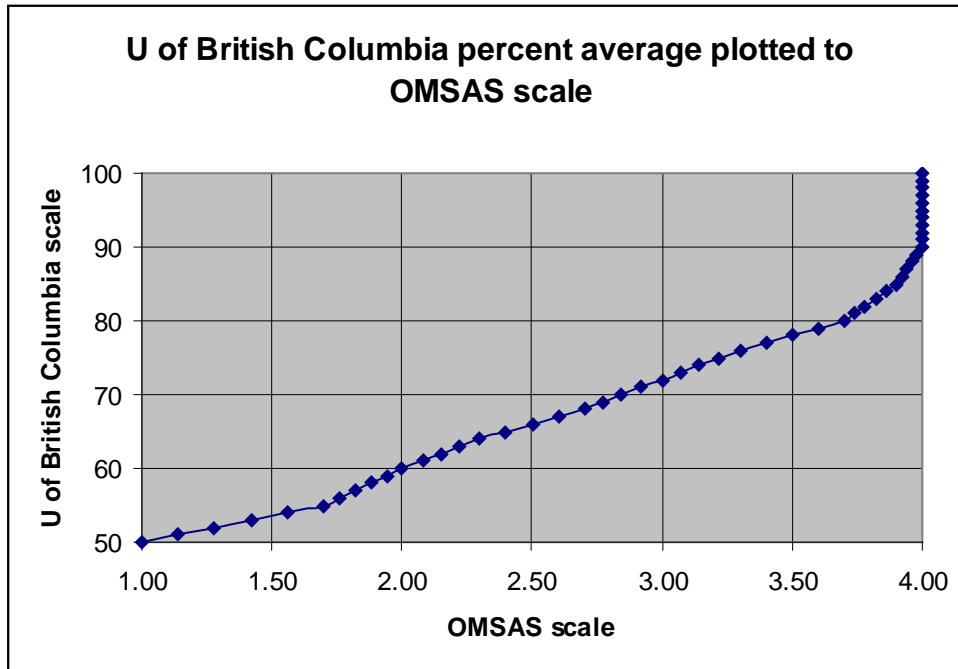
Converting averages from the University of British Columbia is more involved. Firstly, the letter grade scale is mapped to the percent scale used for averages by the University. (see Table 41 above). Then the percent values are mapped to the OMSAS scale as follows:

Table 44: University of British Columbia percent averages and their corresponding values on the OMSAS scale

OMSAS	U of British Columbia	OMSAS	U of British Columbia	OMSAS	U of British Columbia
4.00	100	3.82	83	2.50	66
4.00	99	3.78	82	2.40	65
4.00	98	3.74	81	2.30	64
4.00	97	3.70	80	2.22	63
4.00	96	3.60	79	2.15	62
4.00	95	3.50	78	2.08	61
4.00	94	3.40	77	2.00	60
4.00	93	3.30	76	1.94	59
4.00	92	3.22	75	1.88	58
4.00	91	3.14	74	1.82	57
4.00	90	3.07	73	1.76	56
3.98	89	3.00	72	1.70	55
3.96	88	2.92	71	1.56	54
3.94	87	2.84	70	1.42	53
3.92	86	2.77	69	1.28	52
3.90	85	2.70	68	1.14	51
3.86	84	2.60	67	1.00	50

From the above tables, values can be mapped to the OMSAS scale, i.e., if the initial year sessional average from the University of British Columbia has value of 64%, the OMSAS value will be 2.30.

Figure 38: University of British Columbia percent average grades plotted to the OMSAS scale.



Conversion of averages from the University of Saskatchewan

Converting averages from the University of Saskatchewan is a little simpler than from the University of British Columbia because the same scale is used by the University for averages as used for grades, hence the conversion scale is shown directly on the OMSAS table (see Tables 39 and 43 above)

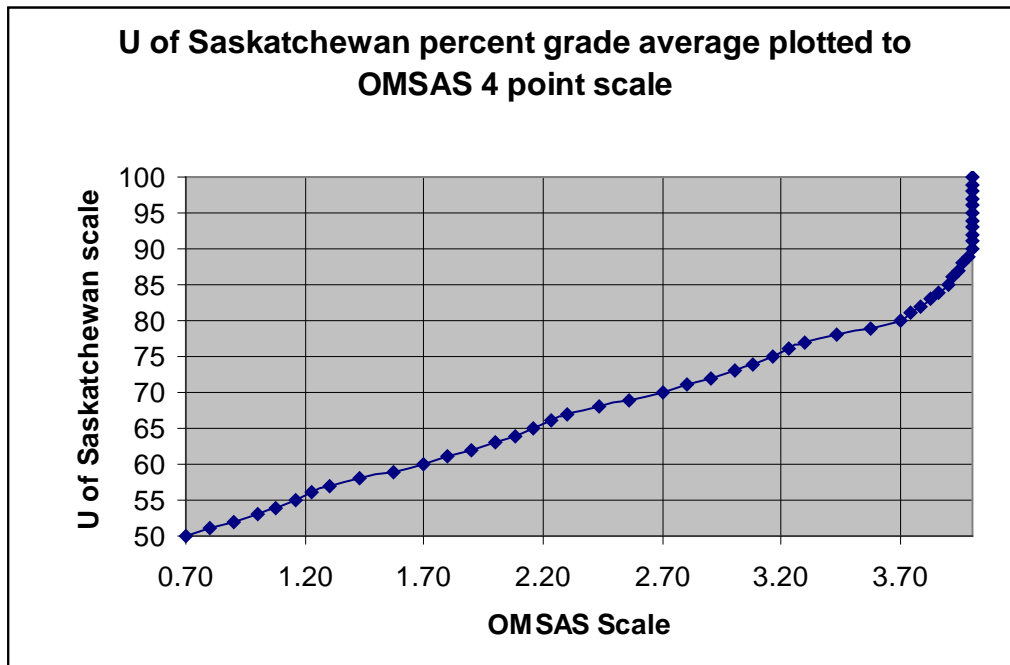
The percent values are then mapped to the OMSAS scale as follows:

Table 45: University of Saskatchewan percent averages and their corresponding values on the OMSAS scale.

OMSAS	U of Saskatchewan	OMSAS	U of Saskatchewan	OMSAS	U of Saskatchewan
4.00	100	3.82	83	2.23	66
4.00	99	3.78	82	2.16	65
4.00	98	3.74	81	2.08	64
4.00	97	3.70	80	2.00	63
4.00	96	3.57	79	1.90	62
4.00	95	3.43	78	1.80	61
4.00	94	3.30	77	1.70	60
4.00	93	3.23	76	1.57	59
4.00	92	3.16	75	1.43	58
4.00	91	3.08	74	1.30	57
4.00	90	3.00	73	1.23	56
3.98	89	2.90	72	1.16	55
3.96	88	2.80	71	1.08	54
3.94	87	2.70	70	1.00	53
3.92	86	2.56	69	0.90	52
3.90	85	2.43	68	0.80	51
3.86	84	2.30	67	0.70	50

From the above table, whole percentage values on the University of Saskatchewan scale can be read directly off the table. Intermediate values can be interpolated, i.e., if the initial year sessional average from the University of Saskatchewan has value of 64%, the OMSAS value will be 2.08.

Figure 39: University of Saskatchewan percent average grades plotted to the OMSAS scale.



Conversion of averages from York University

Converting averages from York University is similar to the process of converting the University of British Columbia's averages involving firstly the mapping of the letter grade to the nine point grade and then to the OMSAS scale (see Tables 39 and 43 above).

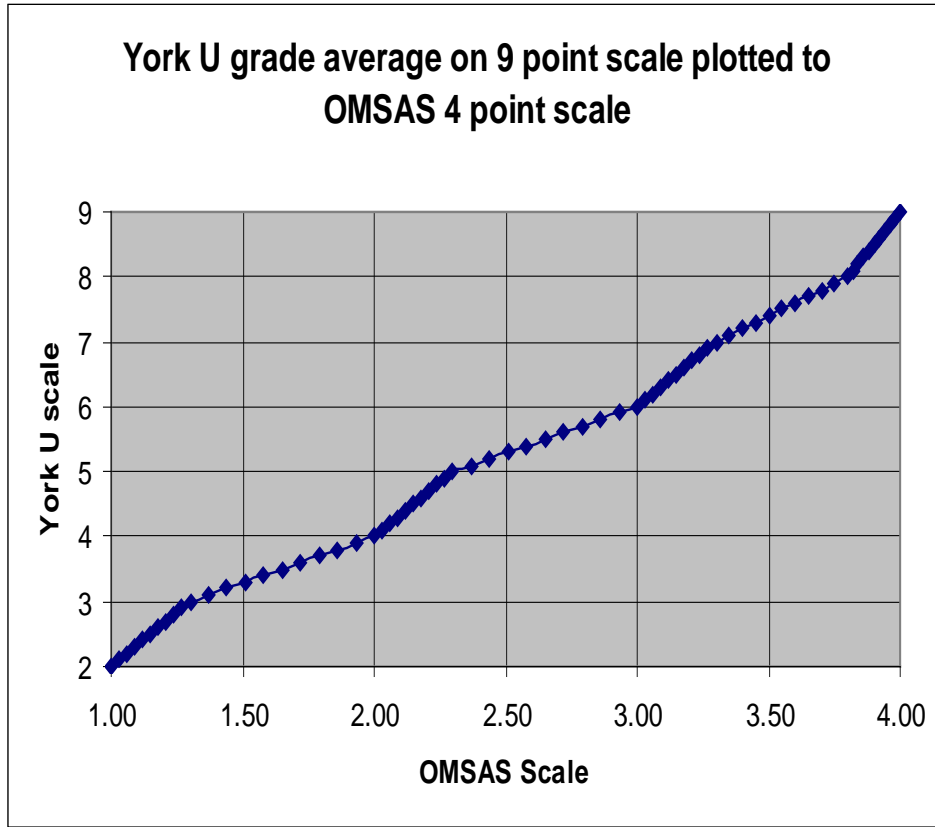
The result is as follows:

Table 46: York University nine point averages and their corresponding values on the OMSAS scale.

OMSAS	York U	OMSAS	York U	OMSAS	York U
4.00	9.0	3.18	6.6	2.06	4.2
3.98	8.9	3.15	6.5	2.03	4.1
3.96	8.8	3.12	6.4	2.00	4.0
3.94	8.7	3.09	6.3	1.93	3.9
3.92	8.6	3.06	6.2	1.86	3.8
3.90	8.5	3.03	6.1	1.79	3.7
3.88	8.4	3.00	6.0	1.72	3.6
3.86	8.3	2.93	5.9	1.65	3.5
3.84	8.2	2.86	5.8	1.58	3.4
3.82	8.1	2.79	5.7	1.51	3.3
3.80	8.0	2.72	5.6	1.44	3.2
3.75	7.9	2.65	5.5	1.37	3.1
3.70	7.8	2.58	5.4	1.30	3.0
3.65	7.7	2.51	5.3	1.27	2.9
3.60	7.6	2.44	5.2	1.24	2.8
3.55	7.5	2.37	5.1	1.21	2.7
3.50	7.4	2.30	5.0	1.18	2.6
3.45	7.3	2.27	4.9	1.15	2.5
3.40	7.2	2.24	4.8	1.12	2.4
3.35	7.1	2.21	4.7	1.09	2.3
3.30	7.0	2.18	4.6	1.06	2.2
3.27	6.9	2.15	4.5	1.03	2.1
3.24	6.8	2.12	4.4	1.00	2.0
3.21	6.7	2.09	4.3		

From the above table, one tenth incremental values on the York University scale can be read directly off the table, e.g., if the initial year sessional average from the York University has value of 5.7, the OMSAS value will be 2.79.

Figure 40: York University nine point average grades plotted to the OMSAS scale



Appendix 3

Data Definitions

Academic Year

The academic year is defined as the Fall and Winter sessions combined (September through April). Thus the 2008-09 academic year falls from September 2008 to April 2009.

Admission Grade Point Average (GPA)

The *grade point average* (on a 4 point scale, or converted to a 4 point scale) of a *transfer student* as calculated by the receiving institution for the purposes of admitting the student to a degree program. For transfer students, an admission average might be based on all postsecondary courses or all transferable postsecondary courses, possibly restricted to the courses most recently completed. The admission average of some transfer students who have completed relatively little postsecondary course work might be a blended average of selected secondary school and postsecondary courses. Practices vary widely.

Cumulative Grade Point Average (CGPA)

The grade point average (on a 4 point scale, or converted to a 4 point scale) of a *transfer student* representing the average of all grades attained since enrolment at the *receiving institution*.

Degree completion: a student is defined as completing a degree if s/he successfully completes the degree requirements and is awarded the credential. Some students choose to continue to enroll in courses after completing the courses required for their degrees without applying for and being awarded those degrees. They will be defined as not yet having completed a degree.

Full-time and Part-time:

U of Alberta	9 or more units of course weight in one term.
U of British Columbia	Full-time is enrollment in 24 or more credits in Winter Session. Enrollment in fewer than 24 credits is part-time.
U of Saskatchewan	Full time in Regular Session if student registers for 18 or more credit units. (Student loan rules require enrollment in at least 9 credit units in each term of the regular session).
York U	A student taking a 60% load or higher is considered full time

Grading Scale: Each university has its own grading scale. The scale of individual course grades might be different from the scale used to report averages of grades across several courses. Averages are weighted by the quantity of credit carried by each course.

Program Type

One of the following types of credit programs offered by a public post-secondary institution in another Canadian province or territory:

- a. Undergraduate degree (typically a length of 3 to 5 years)
- b. Diploma or Associate Degree (typically a length of 2 or 3 years)

c. Certificate (typically a length of one year or less)

Receiving Institution

The public postsecondary institution participating in the research in which the *transfer student* has enrolled with any number of prior credits completed at another public postsecondary institution in another Canadian province or territory.

Residency requirements

Most institutions require that a minimum of credit be earned in its courses when granting a credential such as a degree. Often this amounts to at least half of the credits required for the credential, including senior level courses. A few have no residency requirement, i.e., they will grant a degree even though none of the requirements was completed at the institution (100% by transfer). Residency requirements are most simply applied by limiting the quantity of transfer credit recorded, but methods vary by institution.

Second undergraduate degree

A second undergraduate degree is often shorter (requires fewer credits) than a first undergraduate degree in the same discipline. Entry to a second undergraduate degree normally requires a bachelor's degree. Institutions have different transfer credit and residency policies for second undergraduate degrees compared with first degrees.

Sending Institution

The public postsecondary institution in another Canadian province or territory where the *transfer student* has completed any number of credits before enrolling in the *receiving* institution.

Transfer Credit

Credit that is assessed by the receiving institution and, if granted, may count towards completion of a credential. It is normally based on courses successfully completed at another recognized institution at the postsecondary level. A minimum grade above the passing grade may be required or a minimum admission average, or both. Some institutions place limits on the quantity of transfer credit they grant (see *Residency Requirements*). Other institutions might have no limit, but do not necessarily allow the transfer credit to apply to every program offered.

Transfer student

A first time undergraduate student enrolled at the receiving institution that has previously completed any number of credits from another public postsecondary institution in another Canadian province or territory.

The University of Alberta defines a transfer student as one who enters with some credit from another institution (limited for this study to those from Canadian provinces or territories other than Alberta).

The University of British Columbia defines a transfer student as one who has completed credits at a postsecondary institution and whose grades are submitted to form at least part of the basis for evaluation and admission decision (limited for this study to those from Canadian provinces or territories other than British Columbia).

The University of Saskatchewan includes students who transferred from private institutions. It is not clear if the other universities in this study exclude private institutions.

Type of institution

One of the following four types of Canadian public post-secondary institutions:

- a. University
- b. College, University College, or Institute (referred to as colleges in this report)

Undergraduate student

A first time student in an undergraduate degree program at the *receiving* institution. This includes students that have completed an undergraduate degree at a *sending institution* if they are pursuing a *second undergraduate degree* at the *receiving institution*. Those who are pursuing a professional or graduate degree or other credential at the *receiving* institution, which requires an undergraduate degree as a prerequisite for entry into such a program, are excluded.