




Student Mobility & Credit Transfer

A National and Global Survey

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Introduction

Technological advances in communication and transportation have increased educational opportunities for post-secondary education students around the globe. Individuals and information now travel quicker and cheaper between countries and continents. Post-secondary institutions no longer have a local, jurisdictional or even domestic focus; their vision is global. Furthermore, governments and employers recognize that the workforce of the future must include well-trained, globally aware professionals with international work experience who can solve economic and social problems. At the same time, students and faculty are becoming increasingly interested in spending time in different academic environments, often in foreign surroundings. The length of stay can range from one semester to the pursuit of a full academic credential.

A proper protocol (or mechanism) designed to recognize previous academic performance is essential in ensuring a full range of student mobility options. It is for this reason that credit transfer and student mobility are linked. Credit transfer systems provide the lubricant to ensure seamless academic mobility. Therefore, the purpose of this paper is to explain student mobility and credit transfer in a conjoined fashion.

The first half of the paper will center on student mobility and what it means to the post-secondary system. The barriers which prevent the free flow of students from jurisdiction to jurisdiction will also be focused upon. Additional sections will examine the role finance, information and most importantly – academics – play in the restriction of opportunity. Next, the paper will investigate measures designed by post-secondary institutions and governments to assist increased mobility opportunities. The mobility section will end with a detailed analysis of the Canadian performance on select mobility measures and provide additional information on the mobility picture in the main international post-secondary education systems (e.g. United States and the United Kingdom).

The second half of the paper will examine how post-secondary education credits act as a form of knowledge “currency” and how the issue of credit recognition is best seen as a policy issue which requires the “exchange” of one institution’s credits into a currency that other institutions can freely accept. It will examine how credit transfer works in various Canadian jurisdictions, the role played by Credit Transfer Councils in certain jurisdictions and how transfer information is ultimately conveyed to the student, parent, guidance counsellor or post-secondary institution. Finally, a detailed analysis of credit transfer systems in Europe, Australia, New Zealand, the United Kingdom, the United States and the European Union will be provided.

Part I: Student Mobility

Student mobility is defined as any academic mobility which takes place within a student's program of study in post-secondary education. The length of absence can range from a semester to the full program of study. There are two main types of student mobility: mobility for an entire program of study (diploma or degree mobility); and for part of a program (credit mobility). This paper will examine the latter two types of mobility.

Mobile students believe that a diversified education provides them with increased confidence, maturity, linguistic competence and academic ability.

Students studying in multiple academic settings believe that a series of benefits will accrue from their studies. These individuals may, for example, be interested in strengthening their personal development, increasing their academic opportunities or enhancing their career prospects. Mobile students believe that a diversified education provides them with increased confidence, maturity, linguistic competence and academic ability. Exposure to other cultural surroundings is also perceived as being important (King 2004, Malysheva 2005). Higher education institutions likewise benefit from student mobility. The learning environment for all students is often greatly enhanced, as returning students and incoming exchange students bring an added dimension to the classroom.

European countries have benefited for the past two decades from a regional student mobility initiative known as Erasmus (European Action Scheme for the Mobility of University Students). This program, which will be discussed in greater detail later in the paper, is the operational framework for the European Commission's initiatives in higher education and in some cases makes transfer of credit across national borders easier than transfer of credits within them. As a result, a number of European countries (e.g. United Kingdom) are revisiting (or recently have revisited) their student mobility policies to encourage mobility internally and throughout the European Union (EU) to build off the success of Erasmus. These countries are also trying to expand the influx of students from their former colonies and reach out to new markets.

In the Asia-Pacific region, institutions can join the UMAP (University Mobility in Asia Pacific) program designed to promote regional student mobility. UMAP membership includes over 30 countries, territories, and special administrative regions. This membership also includes 24 American institutions – located in 16 different states.

Barriers to Student Mobility

Barriers to student mobility are not entirely different from barriers preventing individuals from attending post-secondary education in general. Youth who choose not to go on to post-secondary education cite a variety

of reasons for their decision. Roughly three major “sets” of barriers effect these decisions. These are, in order of increasing importance: information/motivation, financial, and academic (Junor and Usher 2004).

Insufficient information on study possibilities outside one’s local area may prevent students from studying away from home. With respect to semester or year-abroad opportunities, home and host institutions often do not provide enough information on mobility opportunities and do not assure students that they will receive the necessary support before going abroad, during their studies at foreign institutions and after their return. Many qualified students may fear that they could lose academic standing by taking different credits at another institution.

Lack of adequate financial resources may also be a very important factor in a student’s decision not to leave home in order to attend PSE. The issue of finances refers not only to a shortage of money; it also pertains to student lifestyles (in particular, part-time employment that students are afraid to lose by going elsewhere) and future issues (e.g., students can lose tuition fees paid to their home university if they go to study elsewhere). However, financial support can be provided to minimize the influence of financial barriers, and students can receive funding to cover their expenses from institutions and national or international funds.

Academic barriers to mobility largely consist of two main components – lack of academic qualification and the absence of credit recognition. Post-secondary students face the demand for different academic qualifications required for entry into programs abroad – this is likely less of an issue for those students interested in taking courses or credits only for a short period of time.

The second issue, which will be explored in full later in the paper, is non-transferability of credits. Post-secondary students maybe reluctant to attempt a semester or year away from their home institution if they are not certain they will receive full credit value for their studies.

There are a few additional barriers that prevent full mobility inside an increasingly global post-secondary system. General language proficiency and cultural integration (culture shock) often hold individuals back from choosing to study abroad. The issue of cultural integration is not limited to students studying abroad. It is also a common barrier for many first-generation, visible-minority or Aboriginal students inside various countries, including Canada.

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Financial Measures Promoting Student Mobility

We will return to issues of academic barriers to mobility in Part II of this paper, which deals with credit transfer. Credit transfer is not the only barrier that governments and other funders can play in role in helping students to overcome. As noted above, financial barriers to mobility are also substantial, but private foundations, post-secondary institutions and governments all provide varying levels of support to encourage or enhance post-secondary student mobility throughout home countries and around the globe. There are two main categories of student aid programs designed to encourage mobility—portable aid targeting intra-state (i.e. domestic) mobility and portable aid targeting inter-state (i.e. international) mobility.

Domestic mobility programs do not appear to be a priority for many national or local governments. In fact, in many parts of the world there are actually financial barriers erected for non-local, domestic students in the form of differential tuition fees.

Student aid designed to increase international mobility, on the other hand, is relatively widespread. The four best examples of this type of aid are the Fulbright US Student Program, the Chevening Scholarship in the United Kingdom, Australian Scholarships and the financial component of the EU's Erasmus program, all of which were designed to promote global mobility.

The Fulbright U.S. Student Program is the largest American exchange program offering opportunities for students and young professionals to undertake international graduate study, advanced research, university teaching, and teaching in elementary and secondary schools worldwide. Approximately 3,500 students from over 150 countries receive Fulbright awards including 1,200 American students from all fields of study.

The Chevening Scholarships program is the premier British government scholarships scheme for international students. Chevening is funded by the Foreign and Commonwealth Office in the United Kingdom. Significant contributions are also made by UK higher education institutions, the private sector, other government departments and devolved administrations (i.e. the Welsh and Scottish governments). The program is administered by the British Council and assists over 1,700 students annually with a scholarship budget of just over £33.4 million (\$76.5 million) (Foreign and Commonwealth Office 2006).

Australian Scholarships is an initiative of the Australian Government to promote education cooperation and development in the Asia-Pacific region. There are three main components of this merit-based award program: Development Scholarships – undergraduate and graduate, Leadership Awards – postgraduate and fellowships and the Endeavour programme. In 2006, the Australian government committed an additional A\$1.4 billion

(\$1.32 billion CDN) to the program to assist an additional 19,000 top flight students from around the region until 2011. The maximum award available is A\$250,000 (\$235,000 CDN) for PhD programs.

The Erasmus program provides European students with the opportunity to study outside their home country in another European country for a period of between three and 12 months. Each year approximately 140,000 students receive grants to study inside Europe at various institutions. The program has an annual budget of €190 million (\$294.5 million CDN) to support students.

It should be noted, however, that this is not the only form of assistance available to EU residents who move from one country to another. EU law requires every country to treat nationals from other EU countries identically to citizens of its own when it comes to issues such as social assistance. As a result, students who move from one country to another are also eligible to benefit from the host country's student financial aid system (this is the inverse of student aid mobility provisions in Canada, where provinces are required to treat their own citizens identically regardless of where they study). Depending on the relative generosity of the student aid systems of the student's home and destination country's student aid systems, this can be a very important source of support as well.

Canada provides very little of either type of aid. Programs designed to facilitate intra-national mobility are few and far between. There are only two truly notable examples of this type of activity. The first is the Council of Ministers of Education (CMEC) Explore bursary program – which offers students an opportunity study in a second language inside of Canada. The second is the Canadian Merit Scholarship Foundation (CMSF) program. Though the CMSF does not have inter-provincial mobility as one of its main goals, the fact that it grants \$75,000 scholarships over four years and stipulates leaving home as one of the de facto conditions of the award, makes it this country's closest thing to a financial mobility incentive.

Canadian student aid designed to promote global mobility is largely disjointed and often consists of very modest sums of money. Many Canadian colleges and universities (e.g. University of Ottawa's Student Mobility fund and University of British Columbia Student Mobility Awards) have one-off scholarships and awards to encourage students to take a semester or year abroad. Canadian provinces and territories (e.g. The Ministry of Education of Quebec Student Mobility Bursary program) also

offer some financial measures to support students pursuing a portion of their studies abroad.

Results: Data on Student Mobility

Data Limitations

Student mobility, whether it be inward mobility (i.e., from one domestic institution to another) or outward mobility (i.e., Canadian students studying abroad), can be difficult to measure. Statistics Canada's data collection in this area is notably deficient in this area. Canadian post-secondary institutions, particularly community colleges, report unit record data to Statistics Canada in an inconsistent manner. Some institutions report various student characteristics (e.g., age, gender and province of origin), while others report only the total number of students enrolled, making additional analysis on the aggregate file impossible. Statistics on student mobility therefore need to be viewed with caution, as they can only approximate, rather than reflect, the real situation.

The state of knowledge on Canadian students pursuing credits or credentials abroad is even worse. There is no single accessible database tracking such developments. The credit data reside with each Canadian institution that has established agreements with international institutions. The Association of Universities and Colleges of Canada collects information from its members and has constructed the Canadian University International Exchange Agreements Database (CUE). Data on credentials are best accessed through either the Institute for International Education (IIE) or UNESCO – but neither one is considered infallible. Until 2001, the IIE published data on the number of Canadians studying in the U.S. by state and by institution, but the data are no longer available due to security concerns. As a result, it is largely unclear how Canada compares with other educational world leaders in terms of student mobility.

The various Canadian survey instruments from which data on barriers to post-secondary education can be extrapolated – e.g., School Leavers' Survey/School Leavers' Follow-up Survey (SLS/SLF), 2000 Youth in Transition Survey (YITS), 2002 Post-Secondary Education Participation Survey (PEPS) – have never asked students directly about mobility barriers.

For all the flaws in Canadian data collection, the collection and availability of data from other countries is often a problem as well, especially when it comes to ensuring cross-nationally comparable statistics. For example, it is unclear whether comparable local and national data is finding its way to various international datasets- UNESCO, OECD and EUROSTAT. Various studies (Lanzendorf and Teichler 2003 and Kelo et al 2006) have

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identified the problem as larger than just a national one. Many European countries (and increasingly Canada) are not reporting highly relevant and politically sensitive data at all. Furthermore, data quality differs strikingly by level of post-secondary education. Finally, the lack of uniform definitions on all post-secondary education terms presents a problem to the user and the reader.

Canadian mobility data

There are several potential metrics by which to measure the degree of student mobility in Canada. Traditionally, it has been measured in terms of inter-provincial mobility (which is the only statistic regularly tracked by Statistics Canada), but this is a fairly restrictive definition of mobility. It could equally be measured as the percentage of students who move away from their parents' home to study or the percentage who move more than a certain distance away from their parents' home. Students moving abroad to study is also a factor in the mobility equation. The sections below look at mobility from each of these perspectives.

Four in ten students between 20 and 25 years of age reported moving. Younger students (under 18) were the least likely to move (17 per cent), while students aged over 30 were only slightly more likely to do so (20 per cent).

Leaving home to study in Canada

At the most basic level of mobility – that is, simply moving from away from the parental home in order to study - the *Canadian Undergraduate Survey Consortium* (2005) and the *Canadian College Student Survey* (2005) both show that approximately 40 per cent of college and university students live away from their parents. According to the undergraduate survey consortium data this figure appears to be largely unchanged over the past six years.

Another pair of Canadian studies have further investigated student relocation patterns for academic pursuits. The 2003-04 EKOS Canadian post-secondary student financial survey *Investing in Their Future: A Survey of Student and Parental Support for Learning* and the *Canada College Student Survey* provide the best available data on this subject. According to the EKOS survey, just over one-third of post-secondary students – including 38 percent of university students and 21 percent of college students - indicated that they moved from one city to another to attend a post-secondary institution.

These studies also show that students who relocate are most likely to be in their mid-20s. In fact, four in ten students between 20 and 25 years of age reported moving. Younger students (under 18) were the least likely to move (17 per cent), while students aged over 30 were only slightly more likely to do so (20 per cent). This is not surprising, since the majority of older students would be fairly settled in their lives, while younger students, in part due to the significant number of college students (including those attending CEGEPs in Quebec) who are less likely to need to move for school.

Inter-Provincial Student Flows

Students often choose to study outside of their province of residence, for many reasons – a desire to move away from home, a desire to study in a program unavailable in their province of residence, etc. As indicated above, this decision is much more common among university students than college students.

At the university level, just over one in ten students leaves his or her province of origin to study; at the college level, the number is not much more than one in 50. The number for university students has risen somewhat over the past decade, but for most of the past 20 years the proportion of students studying out of province has remained within the range of eight to ten per cent. The most recent available figures suggest that the number is now 12 per cent, but the rise in this percentage has been accompanied by a rise in the percentage of students whose origin is “unknown” or “unreported,” so the increase may be due to data irregularity rather than actual changes.

Table 1 below describes the in- and out-migration of full-time university students for all provinces in the 2003-04 academic year. The data in this table show that the majority of jurisdictions (i.e., seven of ten) are net “exporters” of students, and only three provinces (New Brunswick, Nova Scotia and Quebec) “import” more students than they “export”.

Table 1 – Full-Time Canadian University Student Migration in 2003-04a

Province	Total number of students	Total number of students arriving to study	Total number of students leaving to study	Net gain (+) or loss (-)	Out-of-province students as a percentage of total enrolment
NL	14,446	1,179	2,342	-1,163	8%
PE	3,251	608	1,628	-1,020	20%
NS	36,237	10,627	4,397	6,230	29%
NB	21,123	4,862	4,460	402	23%
QC	161,775	12,687	5,988	6,699	8%
ON	313,654	15,550	17,115	-1,615	5%
MB	27,846	1,183	1,921	-738	4%
SK	26,479	1,205	2,278	-1,073	5%
AB	65,034	4,985	5,272	-287	8%
BC	65,754	2,260	9,695	-7,435	3%

Source: Association of Universities and Colleges of Canada

Note: ^a The number of students currently labelled as having home residence of “unknown” or “not applicable” is quite high. The problem is particularly noticeable in the provinces of Alberta and British Columbia, where the University of Alberta and Simon Fraser University block reported significant segments of data under these categories in 2003-2004.

Generally speaking, students who leave their province in order to study tend not to travel too far. As Table 2 shows, in most provinces the major sources of out-of-province students are the neighbouring provinces. Nearly half of all Newfoundland and Labrador students who leave the province go to nearby Nova Scotia, while Ontario attracts 80 per cent of all Quebec university students who leave their province. In all jurisdictions except the Yukon, Ontario is one of the top three destinations for students leaving their home province to study. Newfoundland and Labrador, Prince Edward Island and Manitoba are not among the top three destinations for students from any other province. Alberta is the major destination of students leaving the territories to attend university.

Table 2 – Preferred Destinations of Out-of-Province University Students in 2003-04

Jurisdiction	Arriving to Study			Leaving to Study		
	1	2	3	1	2	3
NF	ON (395)	NS (316)	NB (137)	NS (1,259)	NB (461)	ON (371)
PE	NS (216)	NB (176)	ON (91)	NS (705)	NB (562)	ON (202)
NS	ON (4,612)	NB (2,314)	NF (1,259)	NB (1,905)	ON (1,200)	QC (543)
NB	NS (1,905)	ON (1,110)	PE (562)	NS (2,314)	ON (886)	QC (856)
QC	ON (8,084)	BC (1,784)	NB (856)	ON (4,937)	NB (428)	NS (324)
ON	QC (4,937)	BC (4,169)	AB (2,300)	QC (8,084)	NS (4,612)	BC (1,117)
MB	ON (511)	SK (292)	BC (175)	ON (836)	AB (337)	SK (254)
SK	AB (472)	BC (296)	MB (254)	AB (893)	ON (599)	MB (292)
AB	BC (2,356)	ON (1,052)	SK (893)	ON (2,300)	QC (794)	BC (741)
BC	ON (1,117)	AB (741)	QC (125)	ON (4,169)	AB (2,356)	QC (1,784)

Source: Association of Universities and Colleges of Canada

As noted above, data on college student migration patterns suffer from massive institutional under-reporting and data gaps, particularly from institutions in the western provinces. In the absence of comprehensive data, very little pan-Canadian analysis can be performed. Nevertheless, on the basis of the available data, some facts can be ascertained. Virtually all college students from Quebec (99 per cent) and Ontario (98 per cent) come from within the province – in other words, almost no one in either of these provinces goes to another province to pursue college studies. Prince Edward Island, a major exporter of university students, is a major importer of college students: nearly 20 per cent of Holland College's students come from outside the province.

According to data from UNESCO, the number of Canadian students studying abroad has nearly doubled over the past a decade. In 1990-91, there were just under 20,000 Canadians studying abroad at the tertiary level, and by 2001-02, the number had grown to just under 39,000.

International Students Flows to and From Canada

Studying abroad, as discussed earlier, can greatly enhance the value of a student's education. A student studying outside his or her city, province or country of residence has the opportunity to gain all kinds of important insights into cultural or global issues, acquire new skills and abilities, and perhaps learn a second or third language. The skills acquired while studying abroad subsequently benefit both the individual and society at large.

According to the International Student Mobility Report compiled by the Sussex Centre for Migration Research (2004), students who have studied abroad often pursue a higher degree, have a greater chance of employment upon graduation and also have a greater chance of entering a degree-related job, having a professional occupation status, and earning upwards of £20,000 (\$50,000 CDN) per annum.

According to data from UNESCO, the number of Canadian students studying abroad has nearly doubled over the past a decade. In 1990-91, there were just under 20,000 Canadians studying abroad at the tertiary level, and by 2001-02 (the last year for which data are available), the number had grown to just under 39,000. It is unclear how many of these students have left Canada to pursue an entire degree and how many are simply going abroad for a year or a semester, as UNESCO data do not distinguish between students in these two situations.

By far the most popular international study destination for Canadian students is the United States – almost 70 per cent of Canadian students studying abroad are located in the U.S. This is down from five years earlier, when over 75 per cent of Canadians abroad were studying in the U.S. The share of foreign U.S. students who are Canadian has remained constant for over a decade, at five per cent. According to Open Doors: Report on International Educational Exchange, Canada is the fifth-ranked place of origin for students coming to the U.S and is the only non-Asian country in the top five.

The United Kingdom, which now hosts over three times as many Canadian students as it did ten years ago, is the second-most chosen destination for international study. In third place is Australia where over 3,000 Canadian students now study (a figure which has increased by a factor of 20 over the past decade). Fewer than 800 Canadians choose to study abroad in non-OECD countries.

Table 3 – Destinations of Canadian Students Studying Abroad from 1993-94 to 2003-04

Country	1993-94	1998-99	2003-04
United States	22,665	22,746	27,017
United Kingdom	1,287	3,342	3,890
Australia	150 ^a	1,267	3,100
France	1,091	1,005	1,267
Germany	425 ^a	446	556
All other countries	1,672	N/A	N/A
Total	27,437	30,255^a	N/A

Source: UNESCO's *Statistical Yearbook* (annual) and UNESCO Institute for Statistics

Notes:

^a Estimates for OECD countries only.

Measuring students coming into Canada should be a relatively easy matter, but different sources provide wildly different estimates. Statistics Canada data suggests that the number of foreign students studying at Canadian universities was just over 62,000 and the number at Canadian colleges was roughly 7,500. UNESCO, on the other hand, reports 138,000 coming to Canada to study. It is possible that the discrepancy is explained by the presence of in the UNSECO numbers of students arriving to study for short terms at private language schools.

United States mobility data

Interstate migration

Interstate college student mobility is more common among American post-secondary students than it is in Canada. According to the National Center for Education Statistics 2004 Digest, close to 20 percent of American freshman relocate to the another state to study. Close to 450,000 freshman now cross state lines each year to pursue degrees, despite the presence of financial disincentives like out-of-state tuition fees.

The majority of inter-state student migration is consolidated in three main areas. The first is the Northeast, where a large number of prestigious private schools are located and a commute across state lines is a short drive. The second are the two large Southern states of Texas and Florida. Though neither take a high percentage of their students from out of state, their large absolute size means they contain tens of thousands of out-of-state students. The third destination area is California. Like Texas and Florida, it does not take in a large percentage of its students from out-of-state; however, over 20,000 out-of-state freshman a year move to the state to study. Table 4 shows the top five and bottom 5 states by percentage for out of state university freshman.

Table 4 – Top 5 and Bottom 5 States by Percentage for Out of State Freshman University Students (2003-2004)

State	Percentage of Students from Out of State	Total Number of Students
District of Columbia	90 percent	11,350
Vermont	68 percent	6,343
Rhode Island	59 percent	15,388
New Hampshire	48 percent	12,430
North Dakota	42 percent	9,477
New Jersey	8 percent	57,564
Texas	8 percent	205,221
Michigan	9 percent	88,078
California	11 percent	259,869
Alaska	12 percent	2,760

Source: National Center for Education Statistics

Studies have shown that out-of-state migration rates are positively affected by the presence of large population centers, well-funded higher education systems, and selective public and private colleges and universities. Family income is a positive predictor of a student's likelihood to migrate out of state. Student migrants are likely to follow in the footsteps of friends, relatives and classmates and attend out-of-state colleges they have heard about through word of mouth (Western Interstate Commission on Higher Education 2005).

These numbers have been constant for the past decade and could likely be much higher if not for a few state policy rules that likely restrict interstate mobility. The state policy rules are targeted at increasing access to local opportunities and not geared towards increasing student choice beyond state borders.

Unlike in Canada, state student aid program funds are not fully portable; fewer than ten jurisdictions make their student aid portable. Also, many states, similar to Quebec and Nova Scotia, employ differential tuition fees¹ and those fees for out-of-state residents continue to rise at rates faster than those for state residents. State student financial aid programs continue to expand, supported with federal matching funds, though these programs still tend to be limited to state residents.

¹ There are reciprocal tuition agreements (13) between states and student exchange programs coordinated by regional state agencies, however, they are the exception not the rule.

For the past 60 years, more students studying abroad have made the United States their destination than any other country. In 2005, there were over half a million international students enrolled in American community colleges and universities, which represents nearly a quarter of all students studying abroad worldwide.

International students and Americans studying abroad

For the past 60 years, more students studying abroad have made the United States their destination than any other country. In 2005, there were over half a million international students enrolled in American community colleges and universities, which represents nearly a quarter of all students studying abroad worldwide. Though there were small declines in student numbers after September 11, 2001 and its resultant tightening of immigration rules, student numbers have again stabilized and indeed are rising once again. Almost 60 percent of these students come from Asia, two-thirds of which come from India, Japan, China, and Korea).

Just over 200,000 Americans choose to study abroad each year. The United Kingdom is the number one destination (close to 16 percent) for American post-secondary students outside their home country and close to 12 percent chose to study in Italy – the second most popular destination spot for Americans. The remaining three most popular destinations are: Spain, France and Australia.

Other international examples

Australia

The last three decades have seen significant growth in the number of international students arriving to study at Australian post-secondary education institutions. In the mid-1980s less than five percent of the total student population (or approximately 13,000 international students) were enrolled in Australian higher education. By 2005, it was estimated that almost 170,000 international students were studying in Australia - which represents close to 20 percent of the total student population. It is worth noting that a significant portion of these students, much like Canada, are likely studying English as a Second Language, and not enrolled at a university.

The increase in foreign students studying in Australia is a direct result of increased recruitment activities abroad by all parties involved in the higher education system – governments and institutions. Australia is attempting to increase its international enrolment base beyond Asia, since more than 3/4 of all international enrolments still come from Asia. This decision is borne partially out of choice - Australia is trying to prove student mobility is not a restricted regional activity and can be an intercontinental phenomenon. However, the decision has also been made partially out of necessity. Since over 40 percent of all Australian international students are from China and India and increasingly those students have quality domestic educational opportunities and may not need or want to relocate to study, Australia is looking for ways to expand its international student base beyond Asia.

In 2004, almost 240,000 international students were studying at post-secondary institutions in France. The top five destinations sending students to France were: Morocco, Algeria, China, Tunisia and Senegal, representing close to 40 percent of all international students in France.

In comparison, very few students leave Australia to pursue higher education opportunities. Fewer than 9,000 higher education students leave the country to study. Almost 30 percent (2,706) of those head to the United States and another 27 percent (2,590) go to New Zealand. The three most popular destinations after those two are: the United Kingdom (1,501), Canada (572) and Japan (346) (Atlas of Student Mobility 2006).

France

France is a popular destination for many international students looking to study abroad. There are two distinct streams of post-secondary students choosing to study in France. The first group of students comes from former French colonies – mainly in Northern Africa – who relish the opportunity to study in world-class institutions in French. The second stream comes from neighbouring European countries (e.g. Germany, Italy).

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Belgium is the number one destination (close to 26 percent) for French post-secondary students outside their home country; another quarter study in the United Kingdom. The remaining three most popular destinations are: United States, Germany and Canada.

Germany

The number of incoming mobile students has increased six-fold in the last 25 years. The rate of increase of incoming student mobility is, however, lower than that of the global increase in student mobility. This seems to suggest that Germany, despite growth in absolute numbers, has not been as attractive to mobile students as had been expected, especially in strategic regions (Japan, USA, Southeast Asia) (West et al 2001).

Students from Europe comprise over 50 percent of international students in Germany. In 2004, there were almost 250,000 international students pursuing studies at German institutions. The German post-secondary education system has benefited from the expansion of Eastern European economies and post-secondary education opportunities. China is still the number one sending country (11 percent), however, there has been significant growth in the number of students from Poland, Russia and many other former Soviet block countries choosing to study in Germany.

The United Kingdom is the number one destination (17 percent) for German post-secondary students outside their home country and another

14 percent chose to study in the United States. The remaining top three popular destinations are close by inside Europe: France, Switzerland and Austria.

United Kingdom

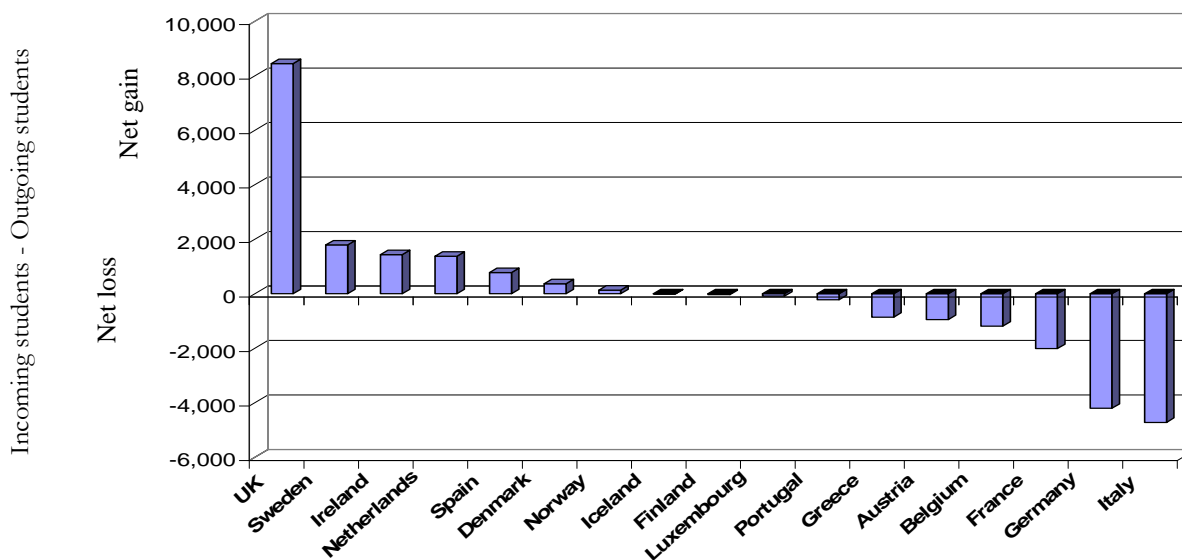
Next to the United States, the United Kingdom (UK) is the second most preferred study destination for international students, with roughly 290 000 foreign students attending its institutions each year. The UK is a major provider of higher education for students from outside the UK from both within the EU and from outside the EU. Just over one in five students studying outside their home country do so in the UK.

There has been a marked change in the composition of overseas students. In particular, there has been a substantial growth in the number of incoming EU students, increasing from 11 percent in early 1980s to just under 40 percent by the early 1990s. This is against an overall increase in numbers – in absolute terms, EU students in UK higher education institutions have grown six-fold over the period (from 5,400 to 35,400). The rise in EU students coming to British higher education institutions appears inexorable. Almost half of all incoming international students enrolled for programmes in three broad subject areas – engineering and technology, social sciences and business and finance (Greenaway & Tuck 1995).

The United States is far and away the number one destination (almost 40 percent) for British post-secondary students outside their home country. Another 12 percent of students leave through the Chunnel to study in France. The remaining three most popular destinations are: Ireland, Germany and Australia.

European Union

Between 8 and 10 percent of all European students study abroad in any given year. Nearly three-quarters of this flow comes from just five countries - France, Germany, Italy, Spain and the United Kingdom. Roughly one-third of all students moving between European states use the well-known Erasmus-Socrates student mobility program. Figure 1 shows the impact of Erasmus on EU countries (King et al 2004).

Figure 2: Net balance of Erasmus students across the EU, 2001-02

Source: King et al 2004

Conclusions and Observations on Student Mobility

From the foregoing survey, four major observations and conclusions can be drawn.

First, to the extent that governments pay attention to mobility, it is international mobility rather than intra-national mobility which is the focus of policy initiatives. Outside of Canada, only the United States even collects data on domestic mobility, but even here, the promotion of mobility is not considered a policy priority. In fact, US states actually construct barriers to interstate mobility through policies like out-of-state tuition fees rather than seek ways to increase educational flow across state lines. Yet this is considered uncontroversial – in contrast to Canada, internal mobility barriers are not considered a source of political outrage.

Second, the vast majority of energy and resources expended on promoting student mobility is done so with the hope of increasing opportunities abroad. Institutions and governments are jockeying to recruit global talent to enhance the labour market or increase research and innovation capacities. Australia is now spending \$1 billion/year to recruit academic talent from within the Asia-Pacific region. The United Kingdom and the United States have traditionally funded such initiatives and show no signs of slowing down. Erasmus has assisted over 1 million European students

pursue a semester or year in a foreign country. Canada's challenge is figuring out how to compete against this while saddled with a largely disjointed and under-funded policy approach where the recruitment process is almost exclusively driven by the educational institutions themselves rather than through a national agency.

Third, the collection and reporting on mobility could be improved significantly. In Canada, this would require political will – the technology is available, but better institutional cooperation at the university level would be required to ensure an accurate picture of all types of mobility. At the college level, administrative systems would need to be modified to ensure that appropriate definitions are elaborated.

Fourth, if new policies are to be developed in the area of mobility, more needs to be understood about both the demand for mobility and the benefits of mobility. In terms of the former, it is unclear how one would measure demand for student mobility. There are very few, if any, research projects that ask individuals in colleges or universities if they would like to study at other institutions, whether it be in other domestic jurisdictions or internationally. Even when data is collected, it often only tracks a student's movement from one institution to another and does not delve into reasons why the transfer has occurred. Similarly, we are largely ignorant about the social and economic returns to mobility. Though the benefits of mobility are often extolled, the empirical basis for this view is slim to non-existent. If mobility-enhancing policies are to be developed, there is a clear need for these benefits to be more accurately measured.

Part II: Credit Transfer Systems

Overview

As noted in Part I, the inability to transfer academic credit is an academic barrier to mobility. Even though credit transferability may not be the most important barrier to mobility, it is perhaps the most intractable one simply because of the number of partners which need to be mobilized in order for a solution to be found.

It is important at the outset to define what is meant by a credit. A post-secondary credit is awarded to students who have demonstrated successful completion of a module or unit which represents a portion of an academic qualification. In order for this to occur, a student must meet a minimum standard, commonly known as a “pass,” in the assessment process. These credits often allow individuals to continue further academic pursuits and form the building blocks of a post-secondary credential.

A credential (i.e., diploma and/or degree) is awarded after a student has successfully completed all of the curricular requirements, one of which is normally the accumulation of a minimum number of credits (assuming that a credit system exists). In a traditional four-year degree, one-quarter of the total required credits are available in a typical year of study, and modules, each with a certain number of credits attached, are designed to enable a student who successfully completes them to obtain the desired number of credits at the end of the year (Bekhradnia 2004).

Given the fluidity of the post-secondary education system, credit transfer systems are a vital element in supporting students along educational pathways and allowing for movement between programs and institutions. Credit transfer systems can help further lifelong learning, improve and widen post-secondary participation rates, eliminate unnecessary student tuition and educational costs (mitigating borrowing for some students) and reduce post-secondary non-completion rates.

The issue of credit transfer is important not just to the student but also to governments and post-secondary institutions. For institutions, credit transferability is a key issue given quality assurance arrangements within the post-secondary education system. For governments, credit recognition is perceived as an important issue because an improved system of credit

transfers could result in net savings by enabling more students to complete their studies in a timely manner; it would also increase a student's ability to study anything, anywhere, at any time.

Toyne (1979) offers the best description of the significance of credit transfer systems, stating that they are “an essential process whereby qualifications, part qualifications and learning experience are given appropriate recognition (or credit) to enable students to progress in their studies without unnecessarily having to repeat material or levels of study, to transfer from one course to another, and to gain further educational experience and qualifications without undue loss of time.”

The easiest way to position the discussion about transferability of post-secondary education credits is to think of them as currency (Bekhradnia 2004). This is not to say they have a tradable monetary value like a bar of gold, a stamp or a dollar bill, but rather that post-secondary education credits are “knowledge currency.” A student receives knowledge currency for successfully completing a post-secondary credit course. The end goal, for the vast majority of students, is to accumulate currency and convert it into a credential upon completion of studies.

If post-secondary education credits are knowledge currency, then it stands to reason that individual institutional Senates perform the role of a central bank. Institutional Senates by law have the right to establish individualized curricula and graduation requirements. This includes the right to choose not to treat credits (currency) from other institutions as equivalent to their own, because they have a responsibility to ensure that credits issued from their institutions conform to certain standards. Moreover, institutions are being encouraged by governments, the private sector and the marketplace to make their own programs and course offerings more distinctive, in order to occupy more individual educational niches. This goal is difficult to square with that of total mutual credit recognition, since the nature of many niche programs is that they are seamless and integrated; thus, recognition of credits (partial credentials) from other institutions may undermine both the educational content of the program in question and lessen the uniqueness of the credential it confers.

Extending the monetary metaphor somewhat, it is useful to think of each institutional Senate as a central bank issuing credits as its own currency, and credit transfer arrangements as being analogous to three types of currency exchange regimes. The first is the floating exchange rate. In this scenario, institutions establish a value for internal credits and, as in the example above, assess external credits on a case-by-case basis. An example of this format is operational in the province of Manitoba, where there is no formal credit transfer body, and students are required to negotiate with the institution to which they wish to transfer credits.

The second type of arrangement is a fixed exchange rate. This system has an exchange rate regime whereby the value of a credit is matched to the value of another credit (or combination of credits) at a different institution or institutions, as agreed upon by all participating Institutional Senates. These agreements are often accompanied by the creation of a monitoring agency, which performs one or more of the following three tasks: communicating institutional credit transfer agreements to learners; encouraging institutions to develop policies and practices regarding the transferability of post-secondary credit courses; and examining post-secondary research issues (supply, demand and student mobility) and making recommendations to decision makers on how to best improve the overall efficiency of the system. An example of this system is operational in the provinces of Alberta and British Columbia. Throughout these two jurisdictions, institutions have agreed to honour credits at face value.

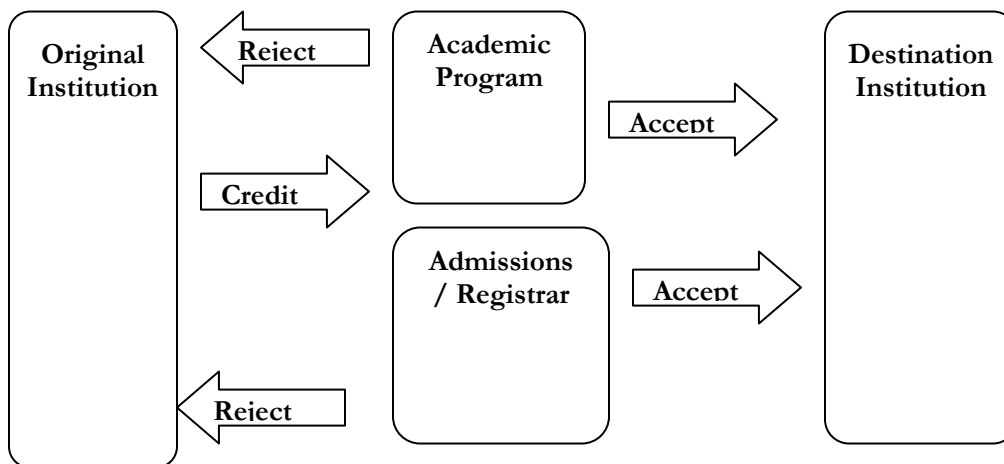
The final type of credit exchange rate is a pure currency union. This is the system commonly used in the European Union (EU) for both monetary currency and, increasingly, knowledge currency. Under this type of exchange, all credits are fully integrated. The best example of this is individual post-secondary institutions themselves – that is, departments in post-secondary education institutions will generally honour credits awarded by other departments in the same institution at full value.

Some policymakers have suggested that anything other than a full currency union – that is, a complete and unhesitating recognition of credits from other institutions represents a mobility barrier for student transitions between institutions. But this view is based on the not-uncontroversial notion that individual credits are discrete building blocks of knowledge which should be interchangeable and applicable toward a wide range of credentials. It could be argued, however, that curricula – or at least some of them – are designed to be integrated programs, and individual credits are thus not discrete and easily transferable building blocks but rather parts of an integrated whole.

Indeed, it is for precisely this reason that credit transferability is actually not one issue but two: even assuming that credits could be transferred seamlessly from one institution to another, a credential is almost never granted simply because of an accumulation of a certain number of credits. Rather, it is an accumulation of a certain number of credits, including a specified number of pre-requisites, the demonstrated mastery of which has been designated essential by that institution's academic governing body in order to obtain a credential. In other words, if a student transferred from University X to University Y in a geography program, his or her geography credits from University X might be accepted as credits toward a degree at University Y, but University Y's geography department could still demand

that the student take certain "required" or "core" courses which in some respects duplicate courses taken at University X.

Figure 3 – Potential Credit Pathway for Students Seeking Transfer



Source: United States Government Accountability Office

As Figure 4 above shows, a credit from one university might be equivalent to a credit from another according to institutional guidelines (“Admissions/Registrar”), but a specific department (“Academic Program”) may feel strongly that its core or upper-year courses are essential to its distinctive niche and require the student to take additional credits. For the student, this can result in a longer time to graduation and greater costs and thus represents a potential barrier to mobility and transitions. For the institution, it is an essential process to ensure the integrity of its own credentials by ensuring that all graduates possess the same core knowledge and competencies.

The credit mobility barrier, therefore, is two-fold. In part, it is an issue of getting institutions to recognize of credits (or “currency”) issued elsewhere. But even if there were universal mutual credit recognition, a second barrier to seamless transfers would remain: that of the recognition of pre-requisite courses. The latter is a much more intractable problem which, as we shall see, has not seriously been tackled in any jurisdiction.

Basic Tools for Credit Transfer

Students, parents and guidance counsellors need assistance to determine whether or not select credits will be accepted at the future institution. As a

result, jurisdictions have created Credit Transfer Councils to disseminate information and Credit Transfer Guides to ensure that all pertinent information is available in a single spot.

Credit Transfer Councils are usually government-created, but operate at arms-length. Their primary function is to facilitate admission, articulation, and transfer arrangements among the colleges, polytechnic institutes and universities within their jurisdictions. The majority of Councils are not in charge of accreditation. Some Councils (British Columbia) are engaged in research and policy work, while others (Newfoundland and Labrador) act as clearinghouses of information.

A Credit Transfer Guide is an annual publication (usually now accompanied with an online database) that lists established course-by-course and program/block transfer of credit precedents available to students in jurisdictions. Credit transfer arrangements are based on a sending to receiving institution basis. Information is also provided on the postsecondary system, institutional transfer policies, and programs linked to secondary school. The purpose of the guide is to enable parents, students, faculty, administrators, and guidance counsellors to view transfer information on a course-by-course basis.

According to 2003 CUSC data, just over one in three (31 per cent) of university students had transferred some form of post-secondary education credits. Over 60 per cent of those transferring credits did so from one university to another university.

Credit Transferability in Canada

Canadian post-secondary students' ability to transfer credits between institutions differs depending on where they study and where they wish to study. As a result of the Council of Ministers' Protocol on Credit Transfer (1995) – also known as the Victoria Accord – first- and second-year university credits are transferable among nearly all Canadian post-secondary institutions. The remaining post-secondary students, however, do not enjoy such universal credit transfer benefits. In fact, credit transfer options for the remaining students are literally all over the map, since the country lacks a comprehensive common currency for all post-secondary education credits.

The best available national data on credit transfer come from the Canadian Undergraduate Survey Consortium's (CUSC) Graduating Surveys 2000 and 2003 (unfortunately, the question was not asked in the 2006 version). According to 2003 CUSC data, just over one in three (31 per cent) of university students had transferred some form of post-secondary education credits. This percentage was virtually unchanged since 2000. Over 60 per cent of those transferring credits did so from one university to another university.

Generally, most universities in Canada will accept each other's credits for transfer, provided that they fit within the student's degree program, that they have been completed within a certain time period and that the final

grade meets the institution's minimum grade requirement. Transfer of credits is assessed on an individual basis once students apply to the university. ²

The absence of a common “knowledge currency” in Canada results in differing treatment of credits among various institutions (e.g., community colleges to technical institutes or universities), among different domestic jurisdictions (e.g., British Columbia to Ontario or Nova Scotia) and among countries (e.g., Canada to the United States or France).

Some Canadian post-secondary students do, however, benefit from jurisdictional credit transfer agreements. Alberta and British Columbia students have a much greater ability to transfer credits between institutions in their respective provinces. This transferability pays dividends not only in terms of academic mobility, but in financial terms as well. Comprehensive credit transfer agreement allows students to pursue at least a portion of their studies at institutions close to their family home, meaning that they often pay substantially lower tuition fees and learn in smaller classes than they would if they automatically attended larger urban institutions. The transfer arrangements in these provinces have to some extent dealt with the issue of pre-requisite transfer, but not to the same extent as credit transfer.

In Saskatchewan and Ontario, there are the makings of credit transfer programs, but these jurisdictions still have much work to do before they reach the level of either Alberta or British Columbia. Students in the remaining Canadian jurisdictions must deal with a series of one-off arrangements between institutions in the various provinces. There has been no systemic attempt anywhere to deal with the issue of pre-requisite transfer. Table 5 illustrates how credits in the Canadian post-secondary system are treated.

² Saskatchewan Council for Admissions and Transfer (SaskCAT), March 2007 (<http://www.saskcat.ca/faq/>).

Table 5 – Canadian Post-Secondary Education Credit Transfer Overview

Jurisdiction	Transfer Guides	Transfer Council	Credit Exchange Rates		
			Floating	Fixed	Currency Union
British Columbia	X	X		X	
Alberta	X	X		X	
Saskatchewan	X	X	X		
Manitoba			X		
Ontario	X		X	X ³	
Quebec			X		
New Brunswick	X		X		
Nova Scotia			X		
Prince Edward Island			X	X ⁴	
Newfoundland and Labrador	X		X		

a) British Columbia

British Columbia has a systematic, province-wide credit transfer process that has evolved over time. In the 1960s, the provincial government expanded post-secondary education opportunities to all corners of the province. This decision, intended to benefit students from the interior, rural areas and remote locations, introduced a post-secondary model whereby students could pursue the first two years of a degree program at a local college and then transfer to one of the province's universities to complete their studies. In order to ensure that this works smoothly, there are over 50,000 articulation agreements throughout the province. These agreements provide a series of signals to the student (e.g., courses which are acceptable at a specific university as the first two years of a given degree program) and the institution (e.g., the understanding that a student transferring from a specific two-year college program will have successfully completed certain courses necessary to a given program at the university).

In 1989, the province created the British Columbia Council on Admissions and Transfer (BCCAT), which facilitates admission, articulation and transfer arrangements among the province's publicly⁵ funded post-secondary institutions (CMEC 2003). The BCCAT also prepares and maintains a systematic on-line transfer guide (the *BC Transfer Guide*), which presents credit equivalencies of first- and second-year university-level courses for the province's universities and other institutions. Credit transfer

³ Ontario colleges and universities are gradually working toward a more integrated system of credit transfer. There is, however, much work to be done in both streams; in many cases, Ontario's system is effectively still a "floating" system.

⁴ A series of credit transfer, block transfer and articulated programs have been developed between Prince Edward Island post-secondary institutions and institutions both within and outside of the province.

⁵ There are also a few private post-secondary institutions in British Columbia that offer academic courses which are transferable to public degree-granting universities.

beyond year two is less standardized and is determined by individual institutions.

b) Alberta

Alberta, much like its neighbour to the west, has a province-wide credit transfer process. As in British Columbia, this process allows students to begin their studies at a public college and transfer to one of the province's universities at a later time to complete the program.

In 1974, the government of Alberta created an independent body – the Alberta Council on Admissions and Transfer (ACAT) – to oversee credit transferability in the post-secondary sector. The ACAT monitors the effectiveness of admissions and transfer policies and practices throughout the province's post-secondary education system and ensures that all stakeholders are aware of the guidelines for transferability. It also publishes the *Alberta Transfer Guide*.

The articulation network in Alberta, while advanced by Canadian standards, is not quite as comprehensive as that of British Columbia. Articulation agreements are in place between some Alberta universities and its colleges and technical institutes. Through these agreements, specific academic programs are jointly developed, delivery is shared and the universities grant the associated degrees.

c) Saskatchewan

The credit transfer system in Saskatchewan is in a state of transition. The province's two universities have multiple agreements to recognize credits from each other and an increasing number of other partnerships are emerging between the province's colleges and universities. For example, credits earned in select programs (e.g., nursing and business) from the Saskatchewan Institute of Applied Science and Technology and the Saskatchewan Indian Institute of Technologies are now being accepted at the universities.

The recent creation of the Saskatchewan Council for Admissions and Transfer (SaskCAT) is intended to increase transfer agreements between the universities and training institutions. It is, however, unclear whether SaskCAT will have any role beyond simply encouraging credit transfer between post-secondary institutions in the province and serving as an information clearinghouse for students.

As is the case in most other jurisdictions, Saskatchewan has developed an online *Transfer Credit Guide* to provide up-to-date information on and transfer status of articulated courses and programs among provincial institutions.

d) Manitoba

Credit transfer in Manitoba is decentralized. The province does not have a systematic, province-wide process for conducting credit transfers to any post-secondary institutions. Credit procedures therefore vary from one institution to another. There is no credit transfer guide for students.

e) Ontario

There is no systematic or province-wide credit transfer system in the province of Ontario. Instead, there are a series of individual credit transfer arrangements between interested community colleges, polytechnic institutes and universities. These arrangements are often negotiated on an ad hoc basis, though the province does have a credit transfer guide.

Ontario institutions also offer an additional form of credit recognition in the form of joint-integrated programs. These allow a student to become integrated into a single program from two separate institutions (e.g., a college and a university). Students receive a single credential from two institutions taught over a fixed period of time.

The Council of Ontario Universities – through the Student Equivalency Program and the College-University Consortium Council – works to ensure student credit recognition is a successful process. However, membership in the Council is voluntary, and credit recognition agreements are still left up to individual institutions to negotiate with other institutions.

f) Quebec

Quebec has a high degree of credit transferability within its Université du Québec system. These arrangements bear a strong resemblance to transfer credit agreements commonly found in some American state university systems (California, Texas, etc.). The remaining Quebec universities are not involved in a province-wide transfer process, and transferability is handled between institutions. There is no provincial guide covering equivalencies or transfers.

g) The Maritimes

None of the Atlantic provinces have a systematic or province-wide credit transfer system. Credit acceptance is generally assessed locally, and in Nova Scotia in particular credit recognition involves a significant number of internal decision makers. However, the four provincial college systems – including New Brunswick Community College, Holland College (Prince Edward Island), the College of the North Atlantic (Newfoundland and Labrador) and Nova Scotia Community College – have a formal commitment to recognize transfer credits for all courses in approved programs.

In Prince Edward Island, a small number of articulation agreements for joint programs and credits exist between the province's single university -- the University of Prince Edward Island -- and Holland College. Also, the University of Prince Edward Island has committed to recognize credits earned at any university in Canada.

Nova Scotia and Prince Edward Island do not produce transfer guides. New Brunswick produces a *Guide to Transfer of Credit* that documents available credit transfer between New Brunswick's community colleges and universities. Newfoundland and Labrador -- through the Articulation, Transfer and Admissions Committee of the Council on Higher Education -- compiles an annual transfer guide that includes transfer of credit arrangements for courses and programs within the provincial post-secondary system. The Council, however, does not have any formal power to ensure credits are ultimately accepted at the province's two public institutions -- Memorial University and the College of the North Atlantic. Rather, it functions as an information clearinghouse for students.

Credit Transfer – International Perspectives

This section briefly examines credit transfer practices arrangements in Australia, New Zealand, the UK, the US and Europe. More details on each may be found in the appendix to this document.

In several countries, the development of credit-transfer arrangements have had less to do with geographic mobility than they have with educational laddering between further and higher education (as, arguably, has been the case in Canada, where similar considerations drove the development of the British Columbia and Alberta credit-transfer systems). This has particularly been the case in Australia and the United States.

In Australia, a national framework for credit transfer between the two vocational and higher education systems was agreed upon in 1995. This framework does not guarantee transferability between the two systems, but rather lays out guidelines for individual articulation agreements to be signed between institutions.

In the United States, where a cornerstone of the post-secondary education system is its flexibility and openness, all states have tried to find ways to promote credit transfer between two- and four-year systems. The most popular mechanism to do this is state-wide co-operative agreements between institutions. These transfer arrangements are laborious and often formulated on a course-by-course, department-to-department or institution-to-institution basis. Over half of all states (30) have passed legislation that requires public community colleges and four-year public institutions to establish transfer agreements. In other states, there has been

a movement toward either a common core curriculum (23 states) or the creation of a state-wide common course numbering system (eight states). Some states (15) have even launched state-wide financial incentives for institutions to develop articulation agreements, and others (Maryland, Massachusetts and Wyoming) offer scholarships or tuition rebates to encourage transfers between two- and four-year public institutions. Some of these arrangements have as a by-product increased the transferability of credits between four-year institutions, but that was not their primary purpose. All these arrangements, of course, are all strictly within-state. No fixed arrangements exist for credit-transferability between 2- and 4-year institutions in different states.

In other places, such as New Zealand and Great Britain, the emphasis in credit-transferability has been to promote credit transfers within the higher education system. This has not been done out of a concern to promote geographic mobility; as noted in Part I, this is simply not an especially important public policy objective. In England at least, credit-transfer arrangements are not even national in scope – they tend to take the form of regional articulation agreements involving just a few institutions (Scotland and Wales, on the other, have nearly full credit transferability within their borders). In the United States, as noted above, some state-wide initiatives have promoted credit transferability within public institutions within single states, but transferability across state lines or between public and private institutions (whether in- or out-of-state) is largely conducted on an ad hoc basis. It is unclear from public documentation whether or not any of these arrangements deal with the issue of pre-requisite transferability, but it seems unlikely that they do.

In Australia, until March 2007, credit transferability within higher education was a fairly ad hoc affair – there were some credit transfer agreements of a regional nature and some inter-institutional agreements, but always of a voluntary nature. In that month, however, the country's elite institutions (known as the G8) signed a credit transfer agreement permitting full transfer of credits amongst these institutions. The wording of the agreement appears to also go some way to dealing with the issue of prerequisite transferability as well. If so, this would be impressive – but it is well to note that such an arrangement was likely only possible because the institutions participating in the agreement believed that the instruction the other signatories were providing was equivalent to their own.

The European Credit Transfer System (ECTS) has also received a great deal of attention because of the way in which it makes possible some credit transferability between 31 countries on the continent. That said, however, it is more impressive in the scope of its work and ambition than its practical effect for European students, whose scope for mobility still lags significantly behind Canada.

The ECTS was created to facilitate students' transfers under the Erasmus program. This is an important factor because Erasmus is not about mobility per se, but about facilitating single years of study in alternate jurisdictions. Erasmus is not about starting a degree in one country and finishing it in another; it is about starting and finishing a degree at one institution and having a year abroad somewhere in between. In order to do this, some agreement needed to be hammered out with respect to what constituted a "credit" in order to provide the home institution with a sense of the amount of work undertaken by the student while abroad. This was an arduous task – not all countries were on a credit system to begin with, and the number of credits per year of study in those that were, ranged from 1 to 120.

Intriguingly, one benefit of the ECTS has been to encourage individual countries to consider their own internal transfer arrangements. In some cases, Erasmus made transferring between institutions in two different countries easier than transferring between two institutions within the same country.

However, on its own, ECTS does not create credit transferability. Under the Erasmus program, the student's home institution still has full veto power over the student's selection of courses at the institution at which the student is going to spend a year abroad – and it is under no compulsion to accept all credits at that institution as equivalent. In other words, student must still negotiate their course of study at a home institution, just as they do under various ad hoc arrangements in Canada. On a more positive note, the fact that the "home" institution approves the course of study in advance means that the problems of credit recognition and prerequisite recognition are solved simultaneously in the Erasmus system. It should be noted, however, that this works only because a student begins and ends his or her studies at a single institution. If he or she tried to start at one and finish at another, the process would be considerably more cumbersome.

That said, some universities are now starting to work on the problem of prerequisite transfer. The Tuning project – which is an initiative of roughly 100 universities as opposed to a government-led initiative like Erasmus – is an attempt by institutions to make their actual curricula more comparable and identify common points of reference for generic and subject-specific competencies in bachelor's and master's degree programs in nine specific subject areas. Over the long term, this may have a much more important effect on portability than Erasmus because it implies a real convergence of quality standards rather than a simple declaration of equivalencies.

Table 6 – Select Jurisdictional Post-Secondary Education Credit Transfer Overview

Jurisdiction	Transfer Guides	Transfer Council ⁶	Credit Exchange Rates		
			Floating	Fixed	Currency Union
Australia			X	X ⁷	
Europe	X	X	X	X	
New Zealand		X		X	
United Kingdom	X	X	X	X	
United States	X	X	X	X	

Conclusions and Observations on Credit Transfer

The past decade has seen increasing interest in the issue of credit recognition and transfer around the globe. Many countries have taken steps to ensure credits are portable and any transfer does not put the student back to square one in their academic pursuits. This interest is being fuelled by a desire to further lifelong learning, improve and widen post-secondary participation, increase student mobility and reduce non-completion.

But while there is increasing interest in this area, it is important also to recognize the limitations of many credit transfer arrangements. Credit transfer can often be centrally encouraged but it is still very much a localized process. The two-year and four-year college distinction in the majority of the United States and in Alberta and British Columbia (with university transfer programs) was developed to enable students to begin courses at a college and complete them at a university. These systems, for example, were not designed to allow transfer of credits between universities. As a result, credit transfer agreements are very specific, university to university, college to college and even course to course. Few, if any, arrangements, deal with the problem of pre-requisite recognition. All transfer arrangements vary widely with respect to the distance over which credit may be transferred, in terms of subject and institution.

While the intervention of government or para-public agencies in the form of credit transfer councils can play a role in increasing mobility, at the end of the day, credit transfer systems are severely limited in their effectiveness if institutions do not buy in to the process completely. It is telling that the most intriguing recent developments in mobility (the G8 agreement in

⁶ The title or brand may be different in select countries, however, many of the core functions defining a Council are applicable to Agencies, Authorities and Networks. These are the names that many jurisdictions have selected for credit transfer information clearinghouse groups.

⁷ G8 institutions only

Australia and the Tuning project in Europe) are both university-led, not government led. Where governments have led, it has tended to come as a by-product of some kind of national commission on post-secondary where the issue of mobility has been raised.

The conditions for a major advance in increased credit transferability do not appear to be in place currently in Canada. There does not appear to be a strong desire among some of the most important educational stakeholders – universities, student groups and provincial governments - to see a national credit transfer system in Canada. Although the community colleges and polytechnic institutes seem interested in advancing the file, this is largely for purposes of educational laddering (a largely local process) rather than geographic mobility. Neither does the federal government appear to be especially interested in advancing the file. As far as mobility is concerned, it is likely to be more interested in promoting labour mobility than student mobility. This is not a criticism but a reality: the federal government has more policy tools to facilitate labour market movement than student movement. In any case, the federal government needs the co-operation of the provincial and territorial governments to address barriers to mobility.

It is also unclear what the demand for increased credit transfer is in Canada. There have been no national surveys asking students any questions about potential mobility around Canada or outside the borders. Furthermore, as the demographic picture changes (a decline in the traditional 18-21 age cohort) in Canada, it is likely that more post-secondary students will opt to go directly to university (where capacity constraints will have eased) at the expense of colleges or university–colleges. There is some evidence that this already happened in British Columbia. This development would likely dampen the interest in credit transfer.

A final challenge for increased credit transfer in Canada is that transfer students are expensive to educate. Unlike individuals directly entering from secondary school, transfer students are more likely to enter into upper years of study. Universities, given a preference, would prefer direct entry secondary students since they can educate them in the first and cheapest year of studies.

A pan-Canadian system for Credit transfer remains an elusive goal for the country. There are elements (Alberta and British Columbia) that represent building blocks towards a national system of transferability, but a tremendous amount of work remains. The construction of credit transfer systems is not easy and requires lots of resources – both time and money. It is not an exercise that is well suited for a top-down approach, but one in which a national body / bodies need to take the lead. But even then, as mentioned earlier, ensuring stakeholder support from institutions,

provinces and students would be crucial to achieving any national consensus.

Part III: Recommendations

Assess the impact on student mobility of the 1995 Victoria Accord.

There has been some work done in Canada to increase credit transfer in the past decade, specifically the signing of a Pan-Canadian protocol (Victoria Accord) providing for the transferability of first- and second-year university courses. Has this had any impact on student mobility in Canada? If not, why not? And what lessons does it hold for future attempts to promote national credit mobility?

Assess what changes have occurred with transfers, enrolments and applications in Ontario, Alberta and British Columbia.

All three of these provinces have significant levels of transferability between their two- and four-year systems of education (though this is far more informal in Ontario than in the other two provinces). A better understanding of the patterns of transfer between university and college sectors would be of great assistance in developing further policies in the area of credit transferability. Some work on this subject has been done in British Columbia through the BC Admissions and Transfer Council, however, more work could be done there and equivalent work should be undertaken in Ontario and Alberta.

Introduce new survey questions or instruments to get a better understanding on the extent of demand for increased student mobility in Canada and how many students are impacted by restrictive credit transfer arrangements.

The country lacks regular, accurate data on student mobility and credit transferability. It is exceptionally difficult to discuss credit transfer policy issues in Canada without having more accurate statistics on mobility within and between provinces. More work also needs to be done to understand the impact of key variables like socio-economic status, geography and educational status on mobility. In addition, more should be done to try to understand the extent – if any – of the latent demand for educational mobility.

Develop a research plan to document the benefits of student mobility

Policymakers are unlikely to invest serious amounts of time or political capital into increasing mobility through financial incentives or credit transfer arrangements unless the benefits are more tangibly spelled out. For the moment, these benefits are mostly rhetorical; more work is needed to provide an empirical basis for these claims.

Highlight a series of promising practices with regards to credit transfer at Canadian colleges and universities.

We have seen that institutional buy-in is key to the success of credit transfer and mobility arrangements. Yet institutions that do exceptional work in this area are not recognized. More needs to be done in this area if institutions are to begin to see mobility as a priority.

Establish a merit base scholarship to recruit global academic talent.

In order for Canada to compete with other international countries (Australia, the United Kingdom and the United States) the country needs to create significant financial awards to recruit and retain global students. This program would need to target undergraduate, graduate and post-graduate students and would have to carry a price tag of at least \$100 million per annum.

Engage with pan-Canadian stakeholders on the value of credit transfer arrangements.

The majority of credit transfer arrangements around the globe were not borne through the interest of a single party. These arrangements came as a result of interest from key stakeholders who were all pushing for changes to better the learning environment. Failure to do this will likely consign any Canadian attempt to improve mobility to failure.

Appendix A – National Policies on Credit Transfer

Australia

Australia resembles Canada insofar as the states and territories have the primary legislative responsibility for the establishment and oversight of higher education institutions, including the maintenance of standards through controls. The approval of higher education providers and courses takes place within the framework known as the National Protocols for Higher Education Approval Processes (Government of Australia 2005).

There are three types of credit examined at Australian universities. *Specified credits* may be awarded when the study already undertaken is substantially of the same standard and has substantially the same syllabus as an equivalent topic offered at the destination university. *Unspecified credits* may be awarded on the basis of work done which is deemed to be equivalent in amount and academic value to a body of work at the destination university for which there is no direct topic equivalent. *Block credits* may be awarded for work of a similar standard in a program of studies (e.g., major or minor) which is equivalent to one offered at the destination university.

There are two main types of credit transfer currently operating in Australia. The first is the transfer of credits obtained at vocational education and training institutions to a higher education institution. This mechanism has received the most attention in the country in recent years and has undergone significant modifications.

In 1995, the Australian Qualifications Framework was introduced and later augmented with a more complete national framework known as the Cross-Sector Qualification Linkage, created in 2003 by the federal Ministerial Council on Education, Employment, Training and Youth Affairs in conjunction with vocational education and training providers and universities. The Linkage was created after the completion of work conducted by the Australian Vice-Chancellors Committee and the Australian National Training Authority in response to the need for a new joint approach to policy on credit transfer and articulation between the vocational education and training sector and higher education sector (i.e., universities and non-self-accrediting institutions). The Linkage is designed to speed up credit transfer agreements for all types of post-secondary education, with particular emphasis on the vocational education and training sector and universities. It is also intended to promote the efficiency of Australia's education and training system and make lifelong learning more attractive.

There are an increasing number of voluntary partnerships between registered vocational education and training providers and universities, and there are now a number of different organizational models in Australia for

developing linkage arrangements. These include the following: individual partnership arrangements between institutions in each sector; dual-sector institutions; cross-sector campuses; and state-wide or partial systematic arrangements (*Pathways to Partnership* 2000).

The second type of credit transfer in Australia is the movement of credits within the higher education sector. There are 39 publicly funded higher education providers in Australia, of which 37 have been accorded the title of university. In addition, there are three private universities and a number of other self-accrediting and non-self-accrediting institutions which provide higher education throughout the country. There are a series of agreements between institutions inside a particular region (e.g., South Australian schools) and there have been arrangements between institutions to recognize credits from a previously attended institution. These arrangements, however, are voluntary and lack a consistent or predictable standard throughout the country. In all cases, the student wishing to transfer has the responsibility to research and apply to their desired institution for credit acceptance.

In March 2007, the G8 (The University of Adelaide, The Australian National University, The University of Melbourne, Monash University, The University of New South Wales, The University of Queensland, The University of Sydney and The University of Western Australia) in Australia introduced the Go8 Credit Transfer Agreement. This transfer agreement will ensure that credit will be granted when transferring to an equivalent degree, credit will be available to students in all undergraduate degree programs who have successfully completed at least one year of equivalent full-time study at a Group of Eight university, transferring undergraduate students will be required to complete at least one year of equivalent full-time study in the university from which they graduate; and credit will be considered for postgraduate degree programs that have similar content (Group of Eight 2007).

European Union

There is a movement, led by many European countries, to harmonize post-secondary education systems across nation-states. The Bologna Process, initiated by some 40 European countries, is the best known example of this. It aims to create an integrated higher education precinct with common features in the areas of degree structures; a credit and recognition system that allows for easy transfer and articulation; and development of comparable criteria and methodologies in quality assurance processes. Credit transfer among European countries has thus become the envy of many international post-secondary education policymakers and even of some politicians. Credit transfer arrangements in the region did not happen

by accident – they required a phenomenal amount of work from multiple countries, institutions and organizations.

The European Credit Transfer and Accumulation System (ECTS) is the standard for comparing study attainment and performance of students in higher education across the EU. For successfully completed studies, ECTS credits are awarded. One academic year corresponds to 60 ECTS credits in all countries, irrespective of standard or qualification type, and is used to facilitate transfer and progression throughout the EU.

It is important to note that ECTS is meant to act as a calculation mechanism for parts of study students completed successfully and is a vehicle to stimulate mobility, but does not automatically trigger mobility. The majority of mobility arrangements, within institutions, across institutions and across national borders rely heavily on mutual agreements for credit recognition. There is no open education space in which students consume chunks of study and put it all together towards a degree - not within one institution, a country or Europe.

The European Council of Ministers of Education's meeting on June 3, 1985, was an important first step toward increasing student mobility. The Council reconfirmed the importance of accelerating the promotion of mobility. In 1986, the Commission of the European Communities submitted their proposals for a student mobility program. Over the next two years, the Ministers of Education approved the objectives and the general plan of the program, which was launched in 1987 and given the name Erasmus, or European Action Scheme for the Mobility of University Students (Corradi 2004).

In order to participate in the Erasmus program, every higher education institution has to apply to the European Commission for an Erasmus University Charter (EUC). The awarding of an EUC gives a university the right to participate in Erasmus and to apply to its National Agency for funding for decentralized activities.

Erasmus gives all students (up to and including those at the doctorate level, but excluding students enrolled in their first year of higher education) the opportunity to study for a period of three to 12 months at a university or higher education establishment in another participating country within the framework of agreed arrangements between universities. Students who have been selected by their universities to spend an Erasmus study period at a partner university in Europe do not have to pay fees to the host university for tuition, registration, examinations or access to laboratory and library facilities during that period. However, fees for insurance, student unions, the use of photocopiers and laboratory products, and so on, may be charged. (European Commission 2004)

It is important to note that all students who participate in Erasmus and successfully complete some studies at foreign schools have those studies recorded by that that school in a certified transcript. The student's home school will then recognize these studies in such a way that they replace comparable courses found in their own curriculum.

There are now 31 countries (all 27 countries in the European Union plus Iceland, Liechtenstein, Norway and Turkey) participating in the Erasmus program, which involves over 2,000 European higher education institutions. Nearly 150,000 students a year move freely throughout most of Europe to pursue their post-secondary education. Well over 1.5 million students have so far benefited from Erasmus grants, and the European Commission hopes to reach a total of three million by 2012.

b) European Credit Transfer System

The ECTS was introduced in 1989, within the framework of Erasmus, and is now part of the Socrates program. The ECTS is the only credit system which has been successfully tested and used across Europe. It was initially set up to handle credit transfers but has since expanded to act as a catalyst for change in the European higher education system. Its goals include bringing consistency to the region, expanding international study opportunities and facilitating the recognition of periods of study abroad. All of this has worked to enhance the quality and volume of student mobility throughout Europe.

Recently, the ECTS has been developing into an accumulation system to be implemented at the institutional, regional, national and European level. This is one of the key objectives of the Bologna Declaration of June 1999 (Eurydice 2005).

There are three key components of the ECTS:

- an *Information Package/Course Catalogue* for the institution to be published in the local/national language and in English (or only in English for programs taught in English) on the Web and/or in hard copy in one or more booklets;
- the *Learning Agreement* containing the list of courses to be taken and the ECTS credits which will be awarded for each course; and
- the *Transcript of Records* documenting the performance of a student by showing the list of courses taken, the ECTS credits gained, local or national credits (if any), local grades and possibly ECTS grades awarded.

Table 7 outlines the credit equivalents in selected European countries.

Table 7 – List of Credits Given in One Year in European Countries

Country	Credits in One Year	Credits Unit
Europe	60	ECTS credits
Denmark	1	årsværk
England, Wales and Northern Ireland	120	Credits
Estonia	40	Ainepunkt (AP)
Finland	40	Opintoviikko (old system)
	60	Opintopiste (new system)
Norway	60	Studiepoeng
Scotland	120	Credits
Sweden	40	Poäng (until July 2007)
	60	Högskolepoäng (from July 2007)
Germany (old system)	40	Semesterwochenstunden
The Netherlands (old system)	42	Studiepunten

Source: European Commission

c) Diploma Supplement

In 2003, European Ministers moved beyond simple credit transfer and recognition with the adoption of the Berlin Communiqué. The Communiqué outlined necessary steps to ensure European higher education credentials have maximum value for graduates. One of the highlights of this document was the creation of the Diploma Supplement (DS).

The DS seeks to ensure that acquired ability, knowledge and skills will be transparent and readily understood in the context of mobility. The DS is a document attached to a higher education diploma and is aimed at improving international transparency and facilitating the academic and professional recognition of qualifications (diplomas, degrees, certificates, etc.) by higher education institutions or employers. It is designed to provide a description of the nature, level, context, content and status of the studies that were successfully completed by the individual named on the original qualification to which it is appended. The DS has a stated objective of ensuring that, from 2005, all graduate students receive the document automatically, free of charge and in a widely used European language (Eurydice 2005).

d) Tuning Project

European educational structures are going further than simply establishing a credit transfer system for the region. As a result of the Bologna Declaration, all European countries have shifted their focus to the comparability of curricula and actual teaching in the educational systems. In 2000, over 100 (since expanded to over 135) different European institutions from 16 different countries, with the assistance of the European Commission,

established a process designed to identify points of reference for generic and subject-specific competences of first and second cycle graduates in a series of nine subject areas: Business Administration, Education Sciences, Geology, History, Mathematics, Physics and Chemistry. A series of pilot projects – called the Tuning Project - was born from this process.

It is important to note that the Tuning Project was a university, not government initiative. The Tuning Project has since been expanded to include two additional lines of inquiry and now currently has four lines of approach:

- 1) generic competences;
- 2) subject-specific competences;
- 3) the role of ECTS as an accumulation system; and
- 4) the role of learning, teaching, assessment and performance in relation to quality assurance and evaluation (Tuning Management Committee 2004)

In order to ensure individual institutional autonomy and abilities to innovate across all institutions and countries, the four lines of approach are "*tuned*" to the individual curricula. The Tuning Project has also influenced Latin American institutions. In 2002, the Latin American institutions created a sister project in the region which now has participation from over 130 institutions in 19 countries and covers 12 subject areas.

United Kingdom

In Scotland and Wales, the credit exchange rate is a pure currency union. However, in England and Northern Ireland, there are no universal national systems. Instead, regional credit consortia operate under nationally agreed-upon credit guidelines, which means that the credit exchange rate is pegged somewhere between fixed and floating in these countries. The true value of a student's knowledge currency is therefore contingent on where inside the U.K. he or she resides. This has been a source of frustration for many in the higher education community, particularly in light of the significant developments in the rest of Europe.

The expansion of higher education in the United Kingdom in the 1990s opened up a series of new policy discussions. Higher education stakeholders and governments were increasingly concerned about future costs and directions – in other words, who should pay fees, and what should the educational pathway look like? These issues were contextualized in 1996 when Sir Ronald Dearing, Chancellor of the University of Nottingham, was appointed to lead a national inquiry into higher education. The National Committee of Inquiry into Higher Education examined the purposes, shape, structure, size and funding of higher education and published its findings in the *Dearing Report* in 1997.

One of the major issues raised in the *Dearing Report* was how to handle higher education expansion in a way that allowed for the development of flexible pathways within the system. Most institutions had introduced modular course structures and many had developed credit arrangements, but these moves toward flexibility were generally viewed as primarily token gestures. Following the *Dearing Report*, a number of systematic changes were enacted to enable greater student choice and flexibility. The largest change was the introduction of Foundation degrees in 2001 by the Department for Education and Skills. Foundation degrees are two-year credentials delivered by colleges, universities and employers and designed to provide students with intermediate technical and professional skills in demand by the labour market and also to provide additional ways of studying that are flexible and accessible.

The majority of credit transfer arrangements in the United Kingdom were developed on a regional or inter-institutional basis – most notably, the Southern England Consortium for Credit Accumulation and Transfer (SEEC) and the Northern Universities Consortium for Credit Accumulation and Transfer (NUCCAT) in England. (Scotland and Wales are notable exceptions: these two jurisdictions have truly national post-secondary education credit transfer systems, which will be examined in the case studies below.)

The SEEC was formed in 1985 and is the oldest higher education consortium for credit accumulation and transfer in the United Kingdom. Its membership includes over 25 per cent of universities and colleges funded by the Higher Education Funding Council for England, private enterprises, public and professional bodies and other education and training providers. The SEEC is one of the U.K.'s leading reference points for credit-based learning, structures and processes. It produces a newsletter and trains post-secondary administrators on practical implementation of the credit transfer process.

The NUCCAT is the U.K.'s other major post-secondary education credit consortium. It was developed by a group of university registrars formed to collaborate on modularization. The NUCCAT acts as a forum for universities in northern England and Northern Ireland to meet on a regular basis to discuss issues relating to credit and assessment. The consortium now includes 37 universities, with membership and involvement almost evenly divided between new and traditional universities.

There has been a recent renewal of interest in developing a national credit framework for England. In late 2006, U.K. universities agreed to parameters that would bring together a range of similar schemes and approaches in a more coherent, clear and transparent fashion. This

agreement followed a series of consultations by the Measuring and Recording Student Achievement Steering Group, chaired by Professor Robert Burgess, Vice-Chancellor of the University of Leicester. The exact details of the framework have not been released, nor has a timeline been established.

England Case Study

The Derbyshire Access Network is a partnership between the University of Derby and local further education institutions, within which a local credit system has been developed and is recognized by all partnership institutions. The system is based on numerical grades, which reflect academic achievement within an agreed standards framework. It has helped smooth progression from further into higher education, given students greater control over the direction and pace of their studies, and helped the university and colleges to respond flexibly to the growing diversity of students' needs (U.K. Department of Education 2003).

Scotland Case Study

The Scottish national system of credit transfer (SCOTCAT) covers all universities and colleges and is probably the best known example of credit transfer in the United Kingdom. It is important to note that institutional participation is not universal. The extent to which institutions utilize or recognize SCOTCAT when admitting students or giving credit for earlier study is open to individual interpretation.

SCOTCAT is a non-regulatory framework managed through a partnership of Universities Scotland, the Scottish Qualifications Authority, the Association of Scotland's Colleges, the Quality Assurance Agency for Higher Education Scotland and the Scottish Executive (Scottish Credit and Qualifications Framework 2006). One of the reasons that the system functions so efficiently is the unprecedented national co-operation between more than just post-secondary education qualifications groups. The Scottish Qualifications Authority's National and Higher National Qualifications Frameworks (for delivery in schools and colleges) and the Scottish Vocational Qualifications Framework are also part of the national framework.

Wales Case Study

There has been a full national credit transfer framework in place since 2003 in Wales. The framework took almost a decade to fully implement and originated with a Department of Education and Employment Project, "Implementing a Credit Framework for Higher Education," that was undertaken by the Welsh Access Unit in the mid-1990s. An important outcome of that project was the creation of the *Welsh Higher Education Credit Framework Handbook*, published and endorsed in 1996 by the Higher Education Credit Initiative Wales.

In 1998, the Welsh Government tabled a green paper called *Welsh Lifelong Learning*, which proposed a single qualifications framework for Wales based on unitization and credit. The paper recommended that a national qualifications regulatory body should advise on how to implement a single, integrated post-age 16 qualifications framework. The Green Paper was shortly followed by a KPMG report in 1999 to the Welsh Funding Councils on the establishment of a national framework for credit and qualifications within higher and further education. The report noted that there was a strong willingness from all parties involved to see something happen on the file (Credit and Qualifications Framework for Wales 2004).

In 2001, the Welsh National Assembly's Post-Secondary Education and Training Committee, in partnership with the Higher Education Funding Council for Wales, Welsh post-secondary institutions and Sector Skills Councils, adopted a credit-based qualifications framework (CQFW) in Wales. The CQFW was officially launched in 2003 and applied to all learners from that point onward.

The highlight of the Welsh CQFW was the establishment of a Common Credit Accord. The Accord was developed in conjunction with a working group consisting of awarding bodies, regulatory authorities, open college networks and others with the goal of being universally recognized and valued by learners, providers, employers, awarding bodies and others. The Accord also established agreed terminology, principles and quality assurance to ensure stakeholder and public confidence in credit as an award for learning achievement.

New Zealand

In New Zealand, the higher or post-compulsory education system is made up of 36 public tertiary education institutions, including eight universities, 21 institutes of technology and polytechnics, four colleges of education and three wananga (Maori tertiary education institutions). There are also 46 industry training organizations and approximately 895 private training establishments, which include private English language schools, registered by the New Zealand Qualifications Authority.

New Zealand was one of the first major industrialized countries to move toward a national system of credit recognition. In the 1980s, the government of New Zealand wanted to create a modern education system that would encourage lifelong learning and increase skill levels in the labour force. The country recognized that for these goals to be achieved, a national educational plan was required.

The first step toward the plan was the introduction of the Education Act in 1989. One of the highlights of the Act was the development of a

framework for national qualifications in secondary schools and in post-secondary education and training. This later became known as the National Qualifications Framework and was created through a two-year process of policy development and public consultation in the early 1990s.

Since the 1990s, the New Zealand Qualifications Authority has been responsible for overseeing the development and implementation of a national qualifications system. It does this in consultation with other educational organizations within the country. The New Zealand Register of Quality Assured Qualifications (the Register) was introduced in 2001 (New Zealand Qualifications Authority 2002).

The country's credit transfer policy was developed by the New Zealand Qualifications Authority, working with a group from across the tertiary sector, including universities, polytechnics, wananga, student associations and private training establishments. The Authority now publishes credit transfer information and disseminates information online.

United States

Among western industrialized nations, the issue of credit transfer is probably most complex in the United States. The American post-secondary education system is made up of approximately 6,500 accredited degree-granting and non-degree-granting institutions. These institutions may be public or private, non-profit or for-profit, and offering two- or four-year programs. This diversity of institution types makes implementing a unified, national credit transfer arrangement exceptionally difficult, if not impossible.

A discussion of United States post-secondary education credit transfer can not proceed without emphasizing two key points. First, despite the high percentage of students using community college as a springboard to a four-year baccalaureate degree, credit transfer from community college to university is not an automatic process. Transferability depends on the development of transfer and articulation arrangements between community colleges and state universities (Bekhradnia 2004). Second, the United States accreditation process is decentralized and complex and is carried out by private, non-profit organizations designed for this specific purpose (unlike most other countries, where these activities are typically carried out by governments).

Accreditation in American post-secondary education serves a series of purposes. It ensures academic quality to students and the general public, plays an essential role in gaining access to federal education funds (e.g., student aid), engenders employee confidence and eases the student credit transfer process. There are three types of accreditors (Eaton 2000):

- *Regional accreditors* accredit public and private, non-profit and for-profit, and two- and four-year institutions. They provide a comprehensive review of all institutional functions.
- *National accreditors* accredit public and private, non-profit and for-profit institutions, and frequently accredit single-purpose institutions, including distance learning colleges and universities, private career institutions and faith-based colleges and universities.
- *Specialized and professional accreditors* accredit specific programs or schools, including law schools, medical schools, engineering schools and programs, and health profession programs.

Credit Transfer Examples

The existence of a for-profit college sector – even though it serves a relatively small fraction of American students (less than six per cent) – results in an additional set of opinions regarding how to determine the value of post-secondary education credits. The discussion is thus expanded beyond the normal credit transfer dialogue between community colleges (two-year) and baccalaureate (four-year) university programs. Nationally (as opposed to regionally) accredited colleges, which are overwhelmingly for-profit⁸ rather than non-profit, add another dimension to the discussion.

Similar to Canada, credit transfers in American post-secondary education are handled at the state level. The majority of U.S. states have some infrastructure in place to facilitate credit transfer between, at the very least, regionally accredited two- and four-year colleges. California and Florida have credit transfer systems which are worth examining in some detail; they are discussed in the case studies below.

There are a variety of different credit transfer policy mechanisms in the United States. The most popular mechanism is state-wide co-operative agreements between institutions. These transfer arrangements are laborious and often formulated on a course-by-course, department-to-department or institution-to-institution basis. Over half of all states (30) have passed legislation that requires public community colleges and four-year public institutions to establish transfer agreements. In other states, there has been a movement to either a common core curriculum (23 states) or the creation of a state-wide common course numbering system (eight states). Some

⁸ Nationally accredited institutions also tend toward program specialization more than regionally accredited colleges do. That is, these institutions are based much more on career and technical educational outcomes and focus less on general, liberal arts education.

states (15) have even launched state-wide rewards, and others (Maryland, Massachusetts and Wyoming) offer scholarships or tuition rebates to encourage transfers between two- and four-year public institutions. In 2001, the Education Commission of the States (ECS) surveyed all 50 states in order to identify the different ways that states define policies for two- and four-year transfers. Table 8 displays the ECS's seven categories of transfer policies. A complete list of all state activities is available in Appendix A.

Table 8: Two- and Four-Year State Transfer Policies

Category	Explanation	Number of States
Legislation	Some states have written transfer and articulation policy into legislation through statutes, bills or resolutions.	30 states
Co-operative agreements	Statewide co-operative agreements between post-secondary institutions can sometimes take the place of legislation if there is no official policy regarding transfer and articulation.	40 states
Transfer data reporting	Data is reported on transfer activities in the state	33 states
Student incentives and rewards for transfer	In an effort to encourage transfer between community colleges and four-year universities, some states provide extra incentive by offering financial aid, guaranteed transfer of credit or priority admission to transfer students.	18 states
State-wide articulation	State-wide articulation guides provide concrete descriptions of the requirements and attempt to answer questions students may have regarding the transfer process.	26 states
State-wide common core curricula	A common core curriculum streamlines the articulation process by eliminating the confusion that can arise when separate institutions require different core courses to fulfill graduation requirements.	23 states
Common course numbering systems	A student at a community college will be assured of taking the proper requirements if there is a common course numbering system.	8 states

Source: Education Commission of the States

California Case Study

In the 1960s, California created a unique method of delivery for post-secondary education with a focus on access, affordability and excellence. The introduction of the Master Plan for Higher Education provided a new roadmap for the state's public post-secondary education system. It created a three-tiered system that included the University of California (UC), California State Universities (CSU) and California Community Colleges (CCC).

From the outset, all three systems were designed to have unique academic mandates. The UC provides graduate and undergraduate instruction and is the only segment that independently awards doctorates, as well as professional degrees in law and medicine. The CSU provides undergraduate instruction and graduate instruction up to and including the Master's degree level and is the primary provider of teacher certification and professional Master's degrees. The CCC acts as a feeder institution for the other two systems and also offers academic and vocational programs at the lower levels, as well as remedial instruction, non-credit adult education and workforce training. California's CCC system serves more than 70 per cent

of all students enrolled in public post-secondary education; in comparison, the national average is just over 40 per cent (Shulock and Moore 2005).

According to the Master Plan, students wishing to pursue a baccalaureate degree can begin their studies at a community college and transfer to a four-year program at a later date. Students who have successfully fulfilled a minimum set of requirements at a community college are guaranteed a place at one of the public four-year institutions (Shulock and Moore 2005, Bekhradnia 2004).

The Master Plan is not a static document, and the state has been making continuous refinements to strengthen educational opportunities for all residents over the last 40 years. California introduced further legislation directing the governing boards of UC, CSU and CCC to jointly develop and adopt a common core curriculum in general education for the purpose of transfer. These efforts led to California's general education transfer curriculum, which identifies courses that community college students may complete to satisfy general education requirements at the campuses of both the UC and CSU (General Accountability Office 2005).

In 1985, California's three post-secondary systems created an online student transfer system called Articulation System Stimulating Inter-institutional Student Transfer (ASSIST) that serves as the official repository of transfer agreements for all public post-secondary institutions in California and facilitates transfer from a CCC to a UC or CSU. In addition, California's community colleges have created Transfer Centres to further strengthen the transfer process and to increase the number of CCC students prepared for transfer to baccalaureate-level institutions.

In the past few years California has been increasingly active in trying to ensure that students can transfer credits freely inside the state's post-secondary system. The first big step was the establishment of a common core curriculum among public two- and four-year institutions. The second step is not yet complete but will be equally important: in 2006, the state legislature took steps to establish a common course numbering system. Once passed, this statute will be applicable to the 20 highest demand majors in the respective segments.

Florida Case Study

The state of Florida has also taken an innovative approach to college credit mobility with the establishment of guaranteed transferability of core education courses (i.e., common prerequisite course requirements), as well as the creation of a common course numbering system that is intended to give students a reliable means of predicting how their credits will be transferred among institutions.

In 2000, the State-wide Articulation Agreement (SAA) was drafted in Florida to ease the credit transfer process among the state's post-secondary institutions. This agreement ensures that if a student has completed an Associate in Arts (AA) degree, admission to the State University System is guaranteed. The SAA also addresses the transfer of general education coursework, since transfer of a student's "core" courses is guaranteed. The state's 36-hour general education program is designed to introduce college and university students to the fundamental knowledge, skills and values that are essential to the study of academic disciplines. General education requirements include courses within the subject areas of communications, mathematics, humanities, social sciences and natural sciences.

Additionally, to assist students in planning for transfer to desired degree programs, the state requires identification and approval of "common" prerequisites across program areas. Common prerequisite courses have been identified for more than 600 university Bachelor's degrees across all public institutions (Klebacha 2005).

Finally, the state has created the Florida State-wide Course Numbering System. This is a building block mechanism that allows the articulation infrastructure to function. The system facilitates the transfer of coursework by classifying courses according to subject matter and faculty credentials, as assigned by one of 166 faculty discipline committee co-ordinators. There are currently over 100,000 active courses in the system. All public universities, community colleges and post-secondary vocational-technical centres are required to participate. For a fee, private post-secondary institutions may volunteer to participate in this numbering system.

According to Florida law, an institution accepting a transfer student from another participating institution must award credit for satisfactorily completed courses which are equivalent to courses offered by the receiving institution, including consideration of faculty credentials. Credits awarded must satisfy the requirements of the receiving institution on the same basis as credits awarded to its own students. The credit must be awarded as though the course was taken at the receiving institution (Klebacha 2005).

Federal Involvement in Credit Transfer

Despite the best efforts of many nationally accredited institutions and heads of various for-profit post-secondary institutions, there appears to be little national stakeholder appetite for the federal Education Department to introduce a new federal regulatory process on credit transfer. However, the American Association of Collegiate Registrars and Admissions Officers and the American Council on Education and the Council for Higher Education Accreditation have recently appeared united in the drive to have a federal regulatory process foisted upon their members. They issued a statement in

2001 confirming their support of the principles of easier credit transfer and a firm commitment to ensuring localized (institutional) academic standards.

There has been some progress made in the United States to ensure that states across the country at least have access to standardized information on credit transfer. In 2001, the National Articulation & Transfer Network (NATN) was created by the Alliance for Equity in Higher Education and the Institute for Higher Education Policy to try to fill in some of the information gaps for post-secondary stakeholders. The NATN is an information clearinghouse for students and school administrators and provides an up-to-date repository of state articulation policies and other key information on transfer issues.

Finally, it is worth noting that the absence of a standardized credit transfer mechanism has once again caught the eye of politicians. In February 2005, Howard P. “Buck” McKeon⁹ (Republican-California), Chairman, Subcommittee on 21st-Century Competitiveness, joined Education and the Workforce Committee Chairman John Boehner (Republican-Ohio) to introduce the College Access and Opportunity Act (H.R. 609), a bill that aims to ease college credit mobility for students by asking colleges and universities to: establish transfer of credit policies; make those policies available to the public; and to abide by their own individual policies. In addition, the bill would ensure credits are not unfairly and arbitrarily denied based on the accreditor of the college or university where the credits being transferred were earned, as long as the accreditor is recognized by the U.S. Secretary of Education. This renewed political interest culminated with the inclusion of some recommendations in the Secretary of Education’s Commission on the Future of Higher Education (*Spellings Report*) regarding the need to build a more national and formalized system of credit recognition and transfer. The challenge for the American post-secondary system remains where to begin the process.

⁹ Buck McKeon (Republican-California), Chairman, Subcommittee on 21st-Century Competitiveness, also has called American post-secondary experts to Congress to appear at various hearings, including one in May 2005 on “College Credit Mobility: Can Transfer of Credit Policies Be Improved?”.

Overview of Seven Key Elements of Credit Transfer in 50 States¹⁰

State	Legislation	Co-operative Agreements	Transfer Data Reporting	Incentives & Rewards	State-wide Articulation Guide	Common Core	Common Course Numbering
Alabama	Y	Y	Y	Y	Y	Y	N
Alaska	N	Y	N	Y	N	N	Y
Arizona	N	N	N	Y	Y	N	N
Arkansas	Y	N	Y	N	N	N	N
California	Y	Y	Y	N	Y	Yes; community college only	N
Colorado	Y	Y	Y	N	Y	Yes; community college only	N
Connecticut	Y	N	Y	N	N	Y	N
Delaware	N	Y	N	N	N	N	N
Florida	Y	N	Y	N	Y	Y	Y
Georgia	N	Y	Y	Y	Y	Y	N
Hawaii	N	N	Y	N	Y	N	N
Idaho	N	N	Y	N	N	Y	Y
Illinois	Y	N	Y	Y	Y	Y	N
Indiana	Y	N	N	N	N	N	N
Iowa	N	N	Y	Y	N	N	N
Kansas	Y	Y	Y	N	N	N	N
Kentucky	Y	N	Y	Y	Y	N	N
Louisiana	Y	Y	Y	N	N	Y	N
Maine	N	N	N	N	N	N	N
Maryland	Y	N	Y	Y	Y	Y	N
Massachusetts	Y	N	Y	Y	N	N	N
Michigan	Y	N	N	N	N	N	N
Minnesota	N/A						
Mississippi	N	N	Y	N	N	N	Y
Missouri	N	Y	Y	N	N	Y	N
Montana	N/A						
Nebraska	Y	N	N	N	Y	Yes; A.A. degree only	N
New Hampshire	N	N	N	N	N/A	N	N
New Jersey	N	N	Y	N	N/A	N	N
New Mexico	Y	N	N	N	N	Y	N
New York	N	N	Y	N	N	N	N
North Carolina	Y	Y	Y	Y	Y	Yes;	N

¹⁰ This chart is intended to provide a snapshot of the seven different transfer credit policies in each state. A full description of each category and the progress being made in each state is available from the Education Commission of States.

State	Legislation	Co-operative Agreements	Transfer Data Reporting	Incentives & Rewards	State-wide Articulation Guide	Common Core	Common Course Numbering
						community colleges only	
North Dakota	N	N	N	Y	Y	Y	Y
Ohio	Y	N	Y	Y	N	N	N
Oklahoma	Y	N	Y	Y	Y	Y	N
Oregon	Y	N	Y	N	N	Yes; community college only	Y
Pennsylvania	N	N	N	N	Y	N	N
Rhode Island	Y	N	Y	N	Y	N	N
South Carolina	Y	N	Y	Y	Y	N	N
South Dakota	Y	N	N	Y	N	Y	N
Tennessee	Y	N	Y	N	N	N	N
Texas	Y	Y	Y	N	N	Y	Y
Utah	Y	N	N	N	N	Y	N
Vermont	N	N	N	N	N	Yes; community college only	N
Virginia	Y	Y	Y	Y	Y	N	N
Washington	Y	N	Y	Y	N	Yes; community college only	N
West Virginia	Y	Y	N	N	N	N	N
Wisconsin	N	N	Y	N	Y	Yes; community college only	N
Wyoming	Y	N	Y	Y	Y	N	Y

Source: Education Commission of States