CHALLENGES IN CANADIAN POST-SECONDARY EDUCATION

Navigating Post-secondary Education in Canada: The Challenge of a Changing Landscape

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The Canadian Council on Learning is an independent, not-for-profit corporation. It provides evidence-based information to Canadians so they can make the best decisions about learning throughout all stages of life, from early childhood through to the senior years.

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Introduction

As Canada's youth consider their increasingly broad and complex array of post-secondary education (PSE) options, they are faced with potentially costly decisions. Moreover, they often do not have the information they need to make appropriate choices, which can negatively impact their participation and persistence in PSE. For many students, it is a challenge to choose, design and follow a post-secondary pathway to its conclusion without deviating from their original plan. Students are increasingly taking non-linear pathways through PSE. Some may need to relocate and attend a different institution. Many students may decide to change the focus of their study, while others may wish to change their program entirely. Some may shift their goals from academic to applied forms of study, or vice versa. However, the structures of post-secondary systems in our provinces, and the various mechanisms that bind them, do not always provide clearly apparent and unobstructed pathways for students, particularly for mobile students. These problems are exacerbated by shifting mandates, roles, and labels of institutions across the Canadian PSE sector.

Canada does not have a clear framework for understanding the many changes that have occurred within its PSE sector over the past 15 years. This monograph sets out to explain these changes, with a view to clarifying their potential effects on students' comprehension of, and mobility through, the structures that comprise our current PSE landscape.

In the past, Canadian post-secondary education has been described as *binary*, a term that indicates the presence of two separate institutional sectors: public universities offering academic and professional programming at the degree-level; and public colleges providing diplomas and certificates in programs of a more technical or vocational nature. However, this conceptualization overlooks private post-secondary institutions and, as Marshall (2006) notes, "significant growth in the number and types of degrees offered by a wider variety of Canadian post-secondary institutions" over recent decades.[1] As a result, the distinction between the university and college sectors has become increasingly blurred, and the nature of some Canadian post-secondary institutions is no longer made clear by their names. Canada's PSE sector is now characterized by a broad and complex mix of institutions for which a clear and comprehensive taxonomy has yet to be developed.

Evolutionary and legislative changes in many Canadian jurisdictions challenge the transparency of current Canadian post-secondary education vocabulary. Students' ideas about which institutions offer which programs, and which programs lead to which opportunities, may not be aligned with these changes. It is arguable that Canadian PSE has become less transparent in recent years, exacerbating the potential that students make PSE decisions inappropriate to their aspirations. Issues of program choice and fit might be better addressed through the provision of a classification framework aimed at making Canadian PSE more transparent to its users.

Despite this emerging diversity, Canadians' understanding of this subject is still influenced by the traditional view of post-secondary education as a dichotomy between universities that grant degrees and colleges that do not. The continued application of the binary model in media, research and popular discourse fosters the erroneous impression that Canada's post-secondary sector is less differentiated than it actually is, which can have deleterious consequences for uninformed students.

In the absence of a clear understanding of institutional and credential types, students may find it increasingly difficult to navigate institutions and programs, and this may, in turn, undermine their ability to discover the best pathways to achieving their aspirations. Moreover, the challenges that students sometimes face when moving between institutions are exacerbated as systems become more heterogeneous.[2]

The issue of system structure is at the forefront of discussions about accessibility, sustainability and international competitiveness in Canadian PSE. This is evident in the call for a more stratified university sector made in 2009 by the "Big Five" universities[*]—a contested subject of recent media reports. Nevertheless, before Canada can fully engage in meaningful discussions about how post-secondary systems should be structured in the future, we require a means of understanding and classifying the totality of post-secondary education options in existence today.

As argued in the Canadian Council on Learning's (CCL) inaugural monograph in the series *Challenges in Canadian Post-secondary Education*, "Canada lacks a clear and common understanding of the future directions and top priorities of its post-secondary education (PSE) sector."[3] CCL believes that this understanding must first be built on a solid comprehension of the current post-secondary landscape and a clarification of the various types of institutions that exist, the roles they play and the relationships among them.

This monograph sets out to explain the effects that evolutionary and legislated system-design changes can have on students' understanding of Canada's PSE sector, how it functions and the various opportunities it provides. In so doing, we argue that a new approach to classifying post-secondary education is required to provide students with a clearer and more accurate understanding of the sector and the many opportunities it provides. Without such an understanding, students may be at risk of making choices that limit their options for pursuing progressive levels of education.

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[*] This term refers to a group of five large Canadian universities, the presidents of which were interviewed in a 2009 *Maclean's Magazine* article (See Wells (2009) in the bibliography). The group consists of the Universities of Alberta, British Columbia, Toronto, McGill University and Université de Montréal.

The monograph is organized into five parts:

Part 1: *Beyond the Binary Model: Canada's Post-secondary Institutions and Credentials*—a brief synopsis of the development of the institutions and structures of Canada's PSE systems, surveying the different types of institutions and credentials currently in Canada;

Part 2: *Increased Differentiation, Inter-institutional Relationships and Student Mobility*—a contextual discussion describing the forces behind institutional transformation and examining the ways in which system design can impact upon student mobility and the transparency of post-secondary education information;

Part 3: *Classifying Canadian Post-secondary Institutions*—an examination of various approaches to the classification of post-secondary institutions and qualifications;

Part 4: *Sorting Out Canadian PSE: Can it be Done?*—an exploration of whether current approaches are sufficient to help students sort out their many post-secondary opportunities; and

Conclusion—a discussion of whether the implementation of a widely understood institutional classification system would be of benefit to Canadians.

Part 1: Beyond the Binary Model: Canada's Post-secondary Institutions and Credentials

At the outset of any comprehensive discussion of the Canadian post-secondary education sector, it is necessary to describe the sector's parameters. For the purposes of this monograph, post-secondary education is defined as educational programming that is intended for adults who have completed secondary school, and therefore does not include programs such as adult basic education or upgrading. In addition, other types of adult learning, such as continuing education and workplace and corporate training, are not included in the analysis.

Any proposal for changes to Canada's current assortment of post-secondary institutions and their mandates first requires an understanding of the current milieu. For this purpose, the subsequent part provides a review of the types of institutions that currently exist in Canada and the credentials they offer.

A. Institutions

1. Public post-secondary institutions

Universities

Among the longest-established institutions in the world, universities are steeped in traditional values. This is also true in Canada where some public universities date back to the 18th century. Perhaps stemming from their historic origins, Canada's public universities have been viewed as largely homogeneous and share a number of general characteristics. Jones (2006) notes that the vast majority are "publicly funded, secular degree-granting institutions, with missions that [include] both teaching and research."[4] Indeed, two salient features of Canadian universities, *institutional autonomy* and *bicameral governance*, have historical roots in the Flavelle Commission of 1906, which was established to explore the relationship between government and the University of Toronto.

Morris (2008) observes that institutional autonomy is one of the most-valued principles in higher education in Canada, "arising from the conviction that a university can best serve the needs of society when it is free to do so according to the dictates of the intellectual enterprise itself."[5] This principle accounts for why provincial governments refrain from interfering in the day-to-day operations of universities.[6]

Bicameral governance is one of the eligibility criteria for institutional membership in the Association of Universities and Colleges of Canada (AUCC), the advocacy group that represents the university sector.[*] Bicameral governance consists of shared authority between an academic senate responsible "for decisions affecting academic programs" and an independent board of governors responsible for the day-to-day management of the institutions.[7]

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[*] The AUCC is the major national advocacy group for institutions within Canada's university sector.

In Canada, there is no distinct, elite group of universities comparable to the Ivy League schools in the United States, Australia's *Group of Eight*, or the United Kingdom's *Russell Group*. As Shanahan and Jones (2007) note, provincial governments have "treated universities equally with regards to the distribution of grants and resources."[8]

Research funding, however, is generally awarded on a competitive basis through federal and provincial programs and the national granting councils. Depending on their program focus and capacity, some institutions are better placed to compete for grants and sponsorships.

The University of Ontario Institute of Technology, which opened its doors in 2003, is the most recent Canadian public institution to be established as a university from its onset. Other new universities have since arrived on the scene, but these emerged from their previous incarnations as institutions within the college sector. This development, in turn, has challenged the traditional perception of homogeneity among Canadian universities.

Despite the perception of homogeneity, there has long been diversity in the university sector. In fact, there are at least four broad categories of *public* university in Canada:

- Special-purpose universities that offer university degree-level education in specific fields such as art and design or agriculture. The Royal Military College, although labelled as a college, falls within this category.

- Small universities that focus primarily on undergraduate education. Many of the universities emerging from the college sector would fall into this second category, although some, such as Emily Carr University of Art and Design, would fall into the special-purpose category.

- Universities that "have a significant amount of research activity and a wide range of programs at the undergraduate and graduate levels, including professional degrees."[9] The annual rankings published in *Maclean's Magazine* refer to these institutions as *comprehensive universities*.

- Large research-intensive universities that offer a broad array of Ph.D. programs in addition to other graduate and undergraduate programs.

The above categories are based on the approach used in the *Maclean's Magazine* annual university rankings, and describe public universities according to their mix of programs and activities and their size. Other methods for classifying universities would yield different results, depending upon the purposes for which the categories were established.

Community colleges

Whereas the university sector in Canada has its origins in the 18th century, the college sector in this country is a much more recent phenomenon. Many institutions in the college sector were established in the 1960s—as a result of what Kirby (2008) describes as "massive, mostly federal investments in non-university education" during that period—having emerged from various traditions including special-purpose colleges (e.g., agriculture) and technical training delivered in the high-school setting.[10] As Campbell (1969) then noted, although the comprehensive community college would find "expression in varied forms throughout the provinces," the general idea was for such an institution to offer "technical and related forms of training, programmes in continuing education for all ages of adult citizens, and [in some provinces] courses equivalent to initial university education."[11] Colleges were also more numerous and geographically dispersed than were universities, providing access to post-secondary education in smaller communities throughout Canada.

Institutions within the college sector are very diverse, reflecting the needs of many local communities that these institutions serve. Perhaps because of this diversity, there is little uniformity in colleges' nomenclature across the country.[12] Today, labels for institutions in this sector include technical or polytechnic institute, community or regional college, and Quebec's *Collèges d'enseignement général et professionnel* (CEGEPs).

Yet despite this diversity, institutions in this sector share certain principles, which, according to Levin (1996) include "institutional responsiveness to community needs, maintenance of a comprehensive curriculum, institutional emphasis upon teaching and providing services to students."[13] Scholarly research has not been part of the traditional college mandate, although institutions in the sector are increasingly pursuing activities such as research, and engagement in college-industry partnerships.[14]

In general, institutions in the college sector do not enjoy autonomy and governance to the same extent as universities. Rather, community colleges have historically been governed by a government-appointed board of governors, or even, in New Brunswick, directly by a government department.[15]* This reflects Skolnik's (2004) assertion that "Canada's community colleges from the outset have been instruments of government policy."[16]

Institutes and polytechnics

Some post-secondary institutions that are traditionally grouped within the public college sector have a particular focus, such as trades and technological education. Institutions that fall under this category are sometimes labelled as *institutes of technology*. Large institutions of this nature can also be referred to as *polytechnics*. A new national advocacy group, Polytechnics Canada, has emerged to represent the interests of institutions in this sector. According to Polytechnics Canada, polytechnics, like many colleges, "develop curriculum

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* New Brunswick, however, has announced plans to create more autonomy and corporate governance for its community colleges.

through Program Advisory Committees (PACs) composed of employers, practitioners and recent program graduates."[17]

Among the institutional members of Polytechnics Canada are nine degree-granting institutes and colleges. These institutions offer credentials ranging from trades training certificates to diplomas, to degrees and post-graduate certificates. Generally, an applied focus is germane to programs at all credential levels.

Degree-granting institutions emerging from the traditional public college sector

Until recently, the primary distinction between community colleges and universities was that degree-granting was limited to the university realm.[18] There are now many institutions granting degrees that are generally considered part of this sector. Despite the legacy of a binary system in Canada, it has become difficult to distinguish which institutions belong to which sector, and which criteria are most appropriate for making such distinctions.

Since 2003, colleges in British Columbia, Alberta, and Ontario have been able to submit degree program proposals for review by, and approval from, provincial quality-assurance boards.[*]

In Ontario, degree-granting activity in colleges was originally restricted to only 5% of program offerings. The Ontario government then introduced "deliberate differentiation" in its college sector by designating five colleges as Institutes of Technology and Advanced Learning (ITALs), which are allowed a higher proportion of degree-granting activity (15%).[19]

One aspect of differentiation is the growing collaboration between the university and non-university sectors, as evident in the increasing number of transfer agreements, joint degrees and bilateral affiliations between these two sectors. However, the degree-granting function within these arrangements has remained within the ambit of the public university sector and consequently the conventional degree-granting structures of the binary system have remained unchallenged.

In some cases, collaborative relationships have spurred institutional evolution. Dennison (2006) notes that the success of academic transfer programs between British Columbia's colleges and universities prompted the provincial government to recognize, in the context of colleges, the opportunity "to widen access to degree programs in lieu of creating new institutions."[20] This was behind the move to transform five of British Columbia's community colleges into *university colleges*. Initially these institutions provided access to degrees through joint programs with the province's universities, but in 1995 they received the authority to grant undergraduate degrees in their own right.

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[*] In most cases, however, these degrees were to be of an applied nature. For a more detailed discussion on applied degrees, see page 19 of this monograph.

Dennison (2006) observes also that in regions where these university colleges had been established, community leaders expressed their hope that a fully fledged university would someday emerge.[21] By 2000, four out of five university colleges had taken the next logical step toward legitimating their new degree-granting capacity by becoming members of the AUCC. This was possible, in part, because of legislation establishing bicameral governance structures in British Columbia's college-sector institutions. Governing boards of colleges, institutes and university colleges were complemented by the establishment of education councils "with powers similar to, but not identical with, university senates."[22]

In 2005, 10 years after the five university colleges were given the authority to grant degrees in their own right, university status was granted to two of these institutions: Okanagan University College was split into two institutions— Okanagan College and a second campus of the University of British Columbia. The University College of the Cariboo, on the other hand, became Thompson Rivers University, a special-purpose university retaining the college-type programming it had offered as a university college.

British Columbia's three remaining university colleges were granted university status in 2008, a development that was likely influenced by the report *Campus 2020: Thinking Ahead (2007)*. As Plant concluded, the university-college label was a source of confusion "in part because the label was deliberately intended to connote a hybrid, and therefore something which is neither completely one thing nor another."[23]

In 2009, Grant MacEwan and Mount Royal—two of Alberta's colleges that had earned the authority to grant academic undergraduate degrees—were granted university status. These new universities emerged from existing institutions in the non-university sector over a relatively lengthy period of time. Through much planning, effort and growth, they breached what was once a clear boundary between the university and college sectors—a boundary that may no longer exist in many provinces. In Atlantic Canada, however, clear distinctions between college and university sectors remain.

Although the university-college label has disappeared in British Columbia, institutions carrying this name remain in Alberta, Manitoba and Ontario. In Alberta, these are private, denominational institutions that have permission to grant undergraduate degrees in academic and religious areas of study. Manitoba's two university-colleges are public institutions, of which only one has the legislated authority to grant degrees. In Ontario, these institutions are associated with, and located on the grounds of a public university.

Regardless of their label or name, numerous PSE institutions in Canada are neither completely one type of institution nor another. The emergence of institutions that engage in the traditional functions of both universities *and* colleges is rendering the binary view of Canadian PSE obsolete, as this is ostensibly a new category of public institution in Canada.

Canada's public post-secondary education sector is arguably more differentiated than ever before. Degree granting in Canadian colleges continues to evolve, as evidenced by Manitoba's proposed legislative changes, announced in April 2009, that would enable colleges in that province to grant baccalaureate degrees.[24] Further, the government of New Brunswick announced plans in 2008 to establish Institutes of Applied Learning and Training (IALTs). These institutes would be "incorporated entities owned jointly by the community college and university in each region" and established where there is "a clear demand for a public university or community college campus to work together with members of the local community to develop in-demand programs." [25]

While new institutional categories within the public college sector continue to emerge, there are at least as many categories of institution within another post-secondary sector, namely the private sector.

2. Private post-secondary institutions

The distinction between public and private institutions is generally based on the type of funding sources upon which these institutions depend. Public institutions, though funded in part by the tuition provided by private citizens, are largely subsidized by the public purse. Private institutions subsist mostly upon revenue they generate through tuition and fees. Private institutions sometimes receive public funds through indirect avenues such as the tuition they receive as a result of government-sponsored student loans and grants. In addition, some private institutions, such as the private colleges in Quebec that offer similar programming to CEGEPs, may be considered as quasi-public institutions, in that they receive subsidies from provincial governments.

Public institutions are generally established through provincial legislation. In contrast, most private institutions are incorporated under a provincial statute such as the *Societies Act* or *Companies Act*, as would be the case for a not-for-profit organization or private business, respectively. One exception to this rule is faith-based/denominational colleges and seminaries that are not public entities but are often sanctioned through a provincial charter.

The distinction between for-profit and not-for-profit institutions within the private sector is considered by some to be significant. For instance, to qualify for AUCC membership, a private institution must operate on a not-for-profit basis. The United States post-secondary institutional classification system, known as the Carnegie Classifications, places private, for-profit institutions in a different category from private, not-for-profit institutions. For-profit institutions are often viewed less favourably by those who contend that profit-seeking behaviour can lead to cost-cutting measures that in turn may negatively affect academic standards.

The following part briefly describes different types of private, post-secondary institutions in Canada. The sector is highly differentiated and dynamic—private institutions are structurally flexible, capable of changing their mission, program

focus or name rather quickly. Despite or perhaps because of its complexity and fluidity, the private, post-secondary sector is often excluded from analyses of Canadian post-secondary education.

Private career colleges and institutes

Private vocational or career-training institutes, many of which operate on a for-profit basis, are quite prevalent in Canada. Each province has a regulatory framework requiring these institutions to register or become licensed as a measure of consumer protection. This protection is necessary because these businesses sometimes close without delivering the whole of the program for which a student has paid in advance.

As Sweet and Gallagher (1999) report, private vocational institutions "respond directly to the perceived demands of the labour market," offering courses of shorter duration, frequent student intakes, and often providing guided access to employment after graduation.[26] In the 1980s, private institutions grew in number as a result of government training contracts and as some private institutions were approved to participate in government student-loan programs.[27] Statistics Canada's 1993 survey of private training schools revealed that there were 1,738 private institutions across the country, with over 600,000 registrations in various business and vocational training programs.[28] In 2003, 87,000 young Canadian adults held a private-college certificate as their only post-secondary credential.[29]

Not all private institutions are vocational: a number of private colleges offer programming of an academic nature, thereby providing an alternative avenue into university studies. For instance, over 20 private colleges in Quebec are subsidized by the provincial government and provide training similar to that of CEGEPs. In addition, a new species of private institution established by the Australia-based corporation, Navitas, can be found on the campuses of Simon Fraser University and the University of Manitoba. These colleges focus entirely on international students, providing first-year university studies, as well as recruitment services and preparation such as English-language enhancement.

Policy developments in some provinces may, however, raise the profile of private institutions. In Alberta, Ontario, British Columbia and New Brunswick, private institutions may apply to provincial quality-assessment boards for approval to offer degree programs. Most of the private institutions applying to offer degree programs are either: a) degree-granting institutions from outside Canada seeking to set up satellite operations; or, b) denominational colleges and university-colleges. In some cases, private degree-granting institutions may be granted permission to use the restricted term university in their name, although these institutions may be considerably different in scope and size from the average Canadian public university.

Secular private universities

The secular private university is a new category of institution on the Canadian PSE landscape. Institutions in this category are few in number. To date there are two such universities in British Columbia (Quest University and University Canada West) and four in New Brunswick (Lansbridge, Yorkville, Meritus and the University of Fredericton).

Faith-based or denominational institutions

Many colleges and seminaries throughout Canada have been established to provide faith-based education within a particular religious denomination. Although public post-secondary institutions are not religious in nature, many religious colleges, however, are located on the grounds of public universities. In addition, the Council on Post-secondary Education, located in Manitoba, partially subsidizes a small number of private religious institutions within the province.

Many denominational colleges offer degrees, but only in fields such as bible studies, divinity or worship. While the degrees offered may be identified as bachelor's, master's or doctorates, the degrees themselves are generally not recognized in the academic sphere and as such are not regulated by governments or scrutinized by universities. This does not mean, however, that faith-based institutions offering degrees have evaded legislative restrictions regarding degree granting. In general, these institutions have provincial charters granting them the authority to award degrees in non-academic, religious programs (e.g., Master's of Divinity, Bachelor of Bible Studies).

Some denominational colleges offer transfer courses that articulate with academic programs offered at universities and a number of denominational colleges have been granted authority to award academic degrees by their provincial authorities (e.g., Alberta's Ambrose University College and Seminary and New Brunswick's St. Stephen's University). Some of these degree-granting institutions are not yet members of AUCC.

There are also private, faith-based institutions that grant academic degrees and are AUCC members, including British Columbia's Trinity Western University and Manitoba's Canadian Mennonite University. A number of other denominational colleges are AUCC members and are affiliated with public universities, including Luther College at the University of Regina and St. Jerome's University at the University of Waterloo.

International institutions operating in Canada

A number of private universities based in other countries, such as the United States, have set up satellite or branch campuses in Canada, offering services to both Canadian and international students. Examples in British Columbia include Fairleigh Dickenson University and the New York Institute of Technology. These institutions have been granted accreditation by one of the United States'

regional accrediting agencies and provincial authorization to grant degrees. Ontario also hosts a number of degree-granting institutions from outside of Canada such as the United States' Embry-Riddle Aeronautical University and Australia's Charles Sturt University. Furthermore, there are institutions open to Canadian consumers, such as Kaplan University, which operate entirely online, have no physical presence in Canada, and are unregulated by Canadian authorities.

3. Indigenous Institutes of Higher Learning (public or independent)

According to the Aboriginal Institutes Consortium (2005), "Aboriginal-controlled postsecondary institutions have emerged in order to design, develop, and deliver educational programs that respond to the higher learning needs of Aboriginal persons."[30] Institutions governed by Aboriginal peoples and that focus upon programming for Aboriginal students are included in this category.

In Canada, Indigenous post-secondary institutions "fall under the full spectrum of Canadian postsecondary education terminology, including everything from community learning centres and institutes to community colleges and universities."[31] Private and public institutions have been established with the specific purpose of serving Aboriginal people, and these are often referred to as Indigenous Institutes of Higher Learning (IIHLs). A number of these institutions, such as Nicola Valley Institute of Technology in British Columbia, are provincial public institutions. The First Nations University of Canada,* on the other hand, is federally funded and operates in partnership with the University of Regina. Public institutions that serve a large number of Aboriginal students, yet do not have Aboriginal governance and programming oriented toward Aboriginal students, are not considered to fall under the definition of an IIHL.

There are also independent IIHLs, such as Blue Quills College in Alberta and the First Nations Institute of Technology in Ontario. Blue Quills offers apprenticeship programs, upgrading and post-secondary preparation, post-secondary diploma and career-preparation programs, and degree programs in partnership with public universities such as Athabasca University and the University of Alberta.

The distinction between public and private within the context of Aboriginal PSE institutions has become complicated. The federal government provides funds to the Post-secondary Student Support Program (PSSSP), the majority of which are appropriated by grants provided to Aboriginal students to cover the costs associated with their PSE attendance. Yet a portion of the PSSSP funding is distributed to post-secondary institutions, both public and private, to support programming for Aboriginal students. As a result, some private Aboriginal institutions rely heavily on public funds provided by the federal government, although they operate under provincial regulations and frequently partner with provincial institutions to provide students with pathways to further education. Therefore, these institutions may properly be considered as quasi-public institutions.

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* At the time of writing of this monograph, the future funding of the First Nations University of Canada was in question.

4. Unregulated institutions

The term post-secondary education generally refers to educational programs that require high-school completion as a prerequisite. However, the regulatory frameworks of some provinces do not apply to some programs that fit within this definition. Therefore, institutions that only offer programs in non-career and non-academic areas, such as English/French-as-a-second-language training (ESL/FSL), may not fall under provincial regulation. However, some existing voluntary associations do ensure quality and provide credibility in these sectors. For example, Languages Canada was established in 2007 to provide a voluntary accreditation process to ensure and promote quality in the ESL/FSL sector.[32]

Corporate and workplace-training programs are not generally included in the definition of post-secondary education. Oversight of the quality of this type of education is the responsibility of the corporate clients that it serves. Further, learning via the internet is difficult to regulate unless offered under the auspices of an institution operating in Canada.

One of the functions of regulatory frameworks in PSE is to protect citizens from fraudulent operations such as *degree mills*—a global phenomenon to which Canada is not immune. Although degree mills have no authority to offer degrees, they offer fake credentials in exchange for money. To refer to degree mills as an institutional type is perhaps a misnomer as these types of operations generally consist of little more than a post-office box and a website. However, fraud can also occur in the case of a substandard, unrecognized institution that requires very little educational work from its students, ultimately granting an expensive credential that has little or no value in the marketplace. Providing clear information to prospective students through a well-established and understood classification system may be one strategy to protect prospective students from such fraudulent operations in Canada.

These various groups do not constitute such a system of classification. Rather, the above descriptions of Canadian post-secondary institutions are loosely based on popular notions of public and private, university and college, degree-granting and so on. As a result, these categories do not take into account a number of issues, such as an institution's predominant mode of program delivery.

B. Post-secondary Education Credentials and their Labels

One approach to quality control in post-secondary education in Canada is to restrict, through legislation, the use of important educational labels. For instance, one of the purposes in restricting the use of the words *university* and *degree* is to prevent the proliferation of fraudulent institutions. Only those institutions with statutory authority to grant degrees, or those that have received authorization to grant degrees from a governmental authority, may legitimately grant degrees. Non-degree credentials are, therefore, prevalent among private institutions, the majority of which do not have degree-granting authority. The following part provides a brief overview of the types of credentials, and their various nomenclatures, that are offered in Canada.

1. Non-restricted credentials

i. Certificates

The word *certificate* is generally applied to programs that are one-year or less in duration. Programs leading to certificates are offered at almost every type of post-secondary institution, including ESL schools, private career colleges, public community colleges, institutes of technology and universities. In the university setting, the certificate is sometimes awarded as the result of a short, post-graduate program (e.g., certificate of advanced graduate standing) and in these cases, the completion of a degree is a pre-requisite. Because of its widespread use, the certificate is a credential to which many different types of programs may lead, including training in trades, languages or vocational/career fields, as well as technical, academic or professional education.

ii. Diplomas

Much like the certificate, the term **diploma** is also applied in a wide variety of settings and in association with almost every type of program or institution. A diploma program is generally considered to be longer in duration than a certificate program, with most college diploma programs requiring two years of full-time study. As in the case of certificates, diplomas are also offered in the university setting, but usually at a post-graduate level. In some cases, articulation agreements are in place between colleges and universities to enable a diploma program to ladder into the third-year of a baccalaureate degree. These articulations are sometimes referred to as *block transfers*.

In Quebec, CEGEPs and a number of publicly subsidized private colleges offer the *Diplôme d'études collégiales* (DEC) or Diploma of Collegial Studies at the completion of a two-year, university-preparation program, as well as for the completion of a three-year technical program. The two-year DEC is offered in various subjects of concentration such as humanities, social sciences, natural sciences and fine arts, and consists of a mix of general subjects required of all students for degree completion (including literature, second language, philosophy and physical-education courses) taken in combination with specific subjects selected to provide basic, university-level preparation in program areas of interest to students.

The two-year DEC is considered a prerequisite for admission to baccalaureate programs by most Quebec universities, and courses completed at this level are generally recognized as the equivalent of first-year university courses. In contrast, a three-year DEC is intended as a terminal credential[*] and provides advanced technical training leading directly into the workplace. While students pursuing a three-year DEC are also required to complete successfully courses in the same general subjects as those in the two-year DEC, their programs consist of a much greater number of credit units in specialized courses providing in-depth applied training in the sector of their choice. Approximately 20 three-year DEC program concentrations are available to students, offering technical training in areas such as agriculture and fisheries, nursing, fashion design and business administration.

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[*] For a discussion of the meaning of the term *terminal*, see page 19.

iii. Degrees of divinity and other non-academic degrees at faith-based or denominational institutions

Many colleges and seminaries have been established throughout Canada to provide faith-based education within a particular religious denomination. Provinces do not generally intrude into matters of religious education and training, and these degrees are therefore not generally regulated. However, if a faith-based institution offers academic credentials, it may be subject to quality assurance and other forms of provincial regulation.

2. Restricted credentials

Any credential that is referred to as a degree can be considered a restricted credential because it is illegal under provincial law to offer a degree for sale or to purport to offer an educational program that leads to a degree without the province's authorization to do so. This restriction applies to all degrees—bachelor's, master's, or doctoral—whether academic or applied.

i. Trades certificates (apprenticeship programs)

Many trades occupations in Canada are regulated by a professional organization or regulatory body, usually at the provincial level. To become certified in a regulated trade, one must fulfil on-the-job training as required through an apprenticeship agreement.[33] The issuing of a trades certificate by the appropriate authority requires demonstration that a candidate has fulfilled all training requirements and passed the qualifying entrance examination.

While the majority of apprenticeship training occurs on-the-job, apprenticeship training also includes an in-class component that can be undertaken through public colleges and institutes, or private training facilities. Certification is granted by the authority responsible for the trade, regardless of whether the training took place in a public or private institution. It is therefore problematic to assign apprenticeship training and trades credentials to a particular institutional typology.

ii. Undergraduate degrees

Associate degrees: This nomenclature is sometimes confusing, as a two-year credential with a similar label exists in the United States. In Canada, this type of degree is available only in British Columbia and serves a very specific purpose. The two-year Associate Degree in Arts or Associate Degree in Science was designed to offer greater flexibility and choice for students who begin university studies in college and then transfer to a university.[*] A student undertaking an associate degree, for example, can take the first and second year of a program of study at a college with confidence that research universities in the province will recognize the degree as counting for 60 credits, even if some of the constituent courses do not transfer to that institution. Private institutions may apply to offer an associate degree, but this is most prevalent among public colleges and other public institutions that have emerged from the college sector.

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[*] A number of associate degree programs are still available at universities that emerged from British Columbia's college sector.

Applied degrees: Prior to the year 2000, Canadian PSE institutions did not use the word *applied* in conjunction with the word *degree* except in connection with disciplines that were heavily knowledge and research based (e.g., applied science, applied mathematics). However, the *applied* label has since been assigned to a new brand of degree offered in the public, non-university sector as a result of government efforts in some provinces to expand post-secondary choices. Because these efforts were largely focused on the undergraduate level of study, applied degrees are usually baccalaureates.[*]

While the definition of an applied degree may vary according to the regulations of the province in which it is offered, Dunlop (2004) notes that "an applied degree at the undergraduate level may be defined as a baccalaureate qualification, with a strong vocational orientation, offered by a community college, technical institute, polytechnic or private technical institute."[34] Regarding the advent of the applied degree, Skolnik (2004) makes the following observation: "because of changes in technology and advances in knowledge, workers in many of the occupations for which labour market preparation is provided by community colleges now require more advanced education…[T]he increased level of complexity and sophistication of the curriculum; the argument goes, warrants the awarding of baccalaureate degree[s]."[35]

A 2003 study of market perceptions about Ontario's applied degrees revealed that negative connotations were associated with the word applied when it was used in the context of secondary schools—where "'applied' and 'academic' streams were positioned as mutually exclusive."[36] Indeed, the applied degree was intended, in most cases, to be a credential quite separate from the traditional academic degree. Applied degrees were established with the intention of creating advanced technical credentials that would lead to higher-level jobs in the workplace. However, confusion as to which degrees are applied and which are academic may arise from the fact that not all applied degrees include the word applied in the name of the associated program or credential.

According to the British Columbia Council on Admissions and Transfer (BCCAT, 2006), "some applied degrees may be considered terminal in nature in that their employment skills focus is not intended as preparation for graduate and professional programs."[37] However, the meaning of the word *terminal* is ambiguous. This term has been used to designate technical or occupational programs, but as Campbell noted as early as 1969, "in a modern concept of education, the word terminal clearly has no place,"[38] as it connotes an ultimate point at which learning and studies no longer progress. To complicate matters, the word is also often used to refer to the most-advanced degree available in a given discipline or field (e.g., Ph.D., Ed.D.). Therefore, use of the word terminal to describe the parameters of an applied baccalaureate in business, for example, could create confusion, as this is obviously not the most-advanced degree obtainable within the field.

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[*] The British Columbia Institute of Technology offers master's degrees of an applied nature. Before they were granted university status, British Columbia's university-colleges were briefly able to propose applied Master's programs for approval.

In 2004, Marshall remarked that applied degrees have not "caused a significant challenge to the traditional degree-granting environment, since they were approved and continue to be recognized as unique applied workplace credentials and not intended to be in competition or a substitute for a traditional baccalaureate degree."[39] However, Shanahan and Jones (2007) note that there are "unresolved issues related to the ways in which these new degree programs will be recognized by the more-established universities."[40] The extent to which students and others recognize these degrees as "unique workplace credentials" is also questionable. As Skolnik (2005) observes, how an applied degree is actually different from a conventional or academic degree "has been difficult to explicate precisely."[41]

Despite the potential for confusion, many applied degrees have been established successfully over the course of the past decade, and it is reasonable to expect that they will continue to grow in number. Marshall (2005) asserts that the "introduction of workplace-focused degrees such as applied degrees will continue to be a welcome innovation for employers," and that some applied degrees "are bridging the world between preparation for the workplace and further study."[42]

Baccalaureate degrees: The completion of a baccalaureate degree can require between three and four years of full-time study. A more rigorous course of study for a given baccalaureate program, known as an honours degree, is also available to students in some programs.

Generally, the nomenclature of a given baccalaureate program includes the faculty or broad area of study undertaken (e.g., Bachelor of Arts, Bachelor of Sciences) followed by an indication of the field in which the student majored, or the specialization pursued (e.g., Sociology, Biochemistry, Music, Marketing, Information Technology). However, nomenclatures that dispense with labelling the faculty and simply indicate the field of study are becoming more common, particularly in fields with an occupational focus. For instance, there are baccalaureate degrees in Interior Design, Therapeutic Recreation, and Hospitality Management.

Baccalaureate degrees are offered throughout Canada's public universities, a number of public colleges and some authorized private institutions. In all but exceptional circumstances, a recognized baccalaureate degree is required for admission into subsequent levels of post-secondary study, whether graduate-level programming or first professional degrees.

First professional degrees: Some professional programs require near or full completion of a baccalaureate as a prerequisite, but are still considered undergraduate degrees. One well-known degree in this category is the Bachelor of Laws (L.L.B). A Bachelor of Pharmaceutical Science also generally requires some university-level study prior to admission to the program. The M.D. designation (Doctor of Medicine) may also be considered a first professional degree, as educational progression toward the M.D. resembles this structure more closely than it does the educational progression toward the Ph.D.

First professional degrees generally fall within the exclusive domain of public universities. One exception is the Canadian Memorial Chiropractic College, an Ontario private institution that was authorized to grant a Doctor of Chiropractic by that province's Postsecondary Education Quality Assessment Board.

iii. Graduate degrees

Master's degrees: Master's degrees are offered at most public universities, some institutes of technology and a small number of private institutions. As noted by the Council of Ministers of Education, Canada (CMEC), the master's degree "builds on knowledge and competencies acquired during related undergraduate study and requires more specialized knowledge and intellectual autonomy than a bachelor's degree program."[43] Admittance to graduate studies generally requires the completion of an undergraduate degree and is generally competitive, requiring the applicant to have high academic standing in their undergraduate record.

According to the Canadian Association of Graduate Studies, "[m]aster's-level education favours in-depth studies leading to greater understanding of a particular field of study and is an opportunity to develop research, professional and vocational skills."[44]

Research-based master's programs generally require one or two years of full-time study, and may require the defence of a thesis—the outcome of a research project enabling the student to "develop and demonstrate advanced research skills under supervision."[45] Nomenclatures of research-oriented master's degrees mimic those of baccalaureates, naming first the broad area of study (e.g., arts, science), followed by the discipline or specialization (e.g., sociology, chemistry).

Professional master's degrees are also an option for students who have previously earned baccalaureates. However, these programs are more likely to be course-based than thesis-based, and are "intended to prepare [students] for a particular profession or field of practice" rather than provide entrance to doctoral study.[46] Well-known degrees such as the Master's of Business Administration, Master's of Public Administration, and Master's of Education fall into this category.

Some professional master's programs are labelled as executive programs (e.g., Executive MBAs) and are intended for senior practitioners in the professional field of study who may or may not have completed the usual pre-requisite baccalaureate. Executive master's programs may be shorter in duration and are often offered on a part-time basis or online.

Doctoral degrees: Very few institutions outside the public university sector offer doctoral degrees, and, furthermore, a number of smaller public universities do not offer programming at this level. A master's degree is typically the pre-requisite for admission to a doctoral program. As with a master's degree, there are both academic and professionally oriented doctoral programs. Within doctoral studies, academic doctorates are generally assigned the designation

Ph.D. (Doctor of Philosophy) in the given discipline. Professional doctorates are more likely to have nomenclature that follows the structure Doctor of X (e.g., Business Administration, Education).

According to the AUCC (2008b), the pursuit of a doctorate generally "requires the successful completion of original research and the defense of a thesis that makes a substantial contribution to the advancement of knowledge in the student's chosen field of study."[47]

As CMEC describes in its report *Canadian Degree Qualifications Framework* (2007), "Holders of the doctoral degree must have demonstrated a high degree of intellectual autonomy, and an ability to conceptualize, design and implement projects for the generation of significant new knowledge."[48] The doctorate is typically considered to be the point of entry into research and professorial careers in academe, and is generally the highest level of credentialed study available in a discipline.

Part 2: Increased Differentiation, Inter-Institutional Relationships and Student Mobility

According to Shavit, Arum and Gamoran (2007), post-secondary systems become "more complex as greater numbers of students enrol."[49] As described in CCL's previous monograph, "Up to Par: The Challenge of Demonstrating Quality in Canadian Post-secondary Education,"* demand for post-secondary education has increased sharply over the past few decades, and a broader spectrum of students is seeking access. New and changing types of institutions and credentials have emerged as a result of increased demand and other forces.

1. Forces behind institutional differentiation

Canada's post-secondary education sector is as dynamic as it is complex, and a number of forces are at work to fuel its continuous transformation. These forces are discussed in detail in the previous monograph in this series, and include such phenomena as increased global demand for post-secondary education and constrained institutional and governmental budgets. These factors can impact upon post-secondary system design, which is, in turn, largely influenced by government policy.

Although governments are reluctant to interfere with the autonomy of institutions, universities in particular, governments can and do specify the mandates of public institutions, authorize the creation of new degree-granting institutions and distribute research and operational funding. These policies can serve to make a system more differentiated. Governments may seek to create a more heterogeneous system because, according to Clark, Moran, Skolnik and Trick (2009), "institutional differentiation is an important property of post-secondary education systems: in general, it can result in more access, better quality, and lower costs."[50]

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*   See Canadian Council on Learning, "Up to Par: The Challenge of Demonstrating Quality in Canadian Post-secondary Education" (Ottawa: 2009), available at www.ccl-cca.ca/PSE (accessed Feb. 17, 2009).

However, as CCL notes in its previous monograph, differentiation can also be driven by inter-institutional competition, as some institutions "attempt to establish niche positions through innovative programs and branding."[51] Institutions may also join together to advocate for their collective interests, defining more clearly the parameters of their particular group of institutions in the process, such as is the case with Polytechnics Canada.

However, institutions do not always seek to set themselves apart. Another phenomenon, known as *isomorphism,*[*] often drives different types of institutions to emulate the same qualities. One type of isomorphism has been referred to as *vocational drift*, and is characterized by a "tendency towards enhanced practice orientation" in traditional academic and university programming, i.e., a shift toward a more practical curriculum that may enhance the labour-market competitiveness of graduates.[52]

A more contentious type of isomorphism, *academic drift*, leads other types of institutions to attempt to emulate the qualities of highly ranked, prestigious universities. Top-ranking institutions are almost always large research-intensive universities because, as Marginson (2006) observes, "research performance is visible and measurable in ways that are generally understood… It attracts cross-border faculty, and enhances the university's capacity in all global spheres."[53] Because of isomorphism, Clark and colleagues (2009) assert that "left to their own devices, degree-granting institutions… will gravitate to the same model of emphasizing research and having light teaching loads."[54]

These forces have influenced the shift toward degree-granting among Canadian colleges. This trend toward "university-ness" both counters and spurs on differentiation. Less differentiation has resulted from what Skolnik (2004) describes as "post-secondary institutions that started off as something quite distinct from universities evolving into universities."[55] However, the increasing number of universities emerging from the non-university sector may in turn fuel desires for greater differentiation in the university sector among long-established universities.

A recent proposal by the presidents of the "Big Five" universities would, if adopted, result in a more clearly stratified university sector across Canada. Under this vision, research and graduate education would be concentrated in a small number of large universities, while other universities would focus on undergraduate education. Its advocates viewed this proposal as "a challenge to the one-size-fits-all mentality that has governed Canada's higher education system."[56] For the "other" universities, however, such a path would lead to unwelcome change as many of these institutions would be asked to relinquish the significant research and graduate-education activities in which they are currently engaged.

A similar call for differentiation at the provincial level was recently proposed. Following their examination of the Ontario PSE system, Clark and colleagues (2009) concluded that the system would benefit from greater differentiation among institutions and from "the establishment, or emergence, of new types of

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[*] In organization theory, the phenomenon known as *mimetic isomorphism* occurs when one organization emulates the characteristics of another perceiving some sort of benefit from doing so.

post-secondary institutions, and measures that would lead existing institutions to concentrate more on certain types of activities and less on others."[57]

Should these recommendations manifest in future policies, clarification of the categories and functions of different types of institutions would be of paramount importance. This would help to ensure that Canadians are fully apprised of the activities and functions upon which different types of institutions concentrate. Yet, even now, the current Canadian post-secondary landscape is sufficiently confusing to warrant a clear and public delineation of institutional types.

One approach would be to categorize institutions according to various criteria, such as size, function (e.g., teaching or research), or program mix. According to Skolnik (2005), "[o]ne of the aspects of institutional differentiation that often has been a particular subject of interest in the planning of higher education systems is that of the highest level of academic credentials that an institution is authorized to award."[58] There is an intimate connection between the types of programs and level of credentials offered by an institution and the manner in which that institution is characterized. This affects the ways in which institutions inter-relate to facilitate collaboration and student mobility. As the following part describes, the emergence of new institutional and credential types challenges assumptions about student mobility in Canada.

2. Student mobility in a dynamic and complex system

As demonstrated above, there are many types of post-secondary institutions and credentials in Canada, and these continue to evolve. Institutions and programs also inter-relate in various ways, such as the extent to which institutions recognize one another's credentials and credits. The recognition of credentials and the transfer of credits can be achieved through various informal and formal mechanisms, all of which facilitate student mobility and expand choice. However, with increasing differentiation these mechanisms and relationships can become strained.

As institutions become more specialized through differentiation, students may not be able to pursue a full range of educational opportunities in one location.[59] To pursue their selected educational pathway, students in highly differentiated systems may need to attend numerous institutions. As Skolnik (2009) notes: "The greater the institutional differentiation in a PSE system, the greater the need for, and the potential benefits of, student mobility."[60] However, clear pathways between institutions are required to ensure that student mobility is not fettered in a highly differentiated system.

Junor and Usher (2008) suggest there are two main types of student mobility: *credit mobility*, which is enabled by the completion of parts of a program, or credits; and, *degree mobility* or the mobility enabled by the completion of an entire program of study.[61] The following parts explain the different types of inter-institutional relationships that facilitate this mobility.

Credit transfer

Post-secondary students in provinces with transfer systems often plan to change institutions or programs en route to program completion by transferring the credits earned at one institution into a program offered at another. Alternatively, students across Canada may choose to pursue the transfer route while in the process of pursuing a credential. Often, students choose to transfer without having anticipated doing so. Depending upon the courses they have taken, and the institution into which they seek to transfer, students who change institutions while in pursuit of a credential may or may not receive credit for the learning they have already undertaken. Where credits are not transferable, mobile students may be required to repeat learning that they have already successfully undertaken.

Whether or not a credit is transferable can hinge upon many factors. First, a transferring student must meet all of admissions requirements at the receiving institution. Second, the student must have achieved a threshold of success in the completed courses for which he or she is requesting transfer of credits. Third, the receiving institution must recognize the course as an acceptable substitute for one of its own similar courses. This third factor involves an implicit judgment made by the receiving institution about the quality of the sending institution. A fourth, and often overlooked dimension of credit transfer, is that the course for which a student is seeking credit must be a pre-requisite or elective course that is applicable to the requirements of the program into which the student is seeking to transfer.

In order to be transferable, credits earned in one program must relate to the learning undertaken in the other. Therefore, the transferability of credits among institutions becomes more likely where institutions are offering similar programs. Institutions with highly specialized programs, therefore, are less permeable to the transfer student.

To facilitate transfer, institutions can enter into formal *articulation* agreements. As Finlay (2009) describes, articulation in the post-secondary context is "the process whereby two (or more) institutions reach agreement on whether or how the curriculum of one is equivalent to the curriculum of the other, and on the appropriate credit that a receiving institution assigns to a course or program from a sending institution."[62] These agreements can be negotiated on the basis of individual courses (course-to-course transfer) or a group of courses (block transfer).

In Alberta and British Columbia, course-to-course articulation agreements have been formalized between many colleges and universities, facilitated by the well-established transfer systems within those provinces. These multi-lateral systems enable students to undertake the initial one or two years of a degree program at a college before transferring those credits toward a baccalaureate completed at a university.* Also in existence are bilateral transfer agreements, such as those made between colleges and universities in Ontario (e.g., Guelph–Humber). Joint degree programs are also emerging, where two institutions collaborate

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* However, as many former colleges in these provinces are now universities, university-to-university transfer is now facilitated through transfer systems as well.

in the offering of a program, enabling the student to be granted a credential for learning undertaken at more than one institution. Through these innovative partnerships, institutions can build on and utilize each other's strengths and capacities. It appears that student educational pathways are diversifying as are the post-secondary education systems themselves.

Through formal articulation, students can plan to incorporate transfer in their educational pathway, as they have assurances that their credits will be recognized, and can inform themselves, in advance, about the pre-determined equivalencies of the courses they will take. However, the impetus for transferring is not always anticipated. Not all students are completely certain about the paths they wish to take, even as they undertake college or university studies.

Where no formal articulation agreements exist between institutions, transfer credit may still be awarded, if this is determined to be appropriate, through informal case-by-case assessment by the receiving institution.[63] Case-by-case assessment is considered to be the preferred method for assigning transfer credit when students move from one university to another. However, this method prohibits students from knowing, prior to transfer, which type of credit they can expect to receive.

Whether transfer occurs through formal or informal mechanisms, inter-institutional collaboration is necessary to enable the inter-institutional relationships that are required.[64] British Columbia and Alberta have coordinating agencies that manage transfer systems, facilitating the articulation of college courses and programs offered at those universities.

CMEC's 1995 *Pan-Canadian Protocol on the Transferability of University Credits* attempts to facilitate the recognition of transfer credit among public universities throughout Canadian provinces. More recently, CMEC enshrined the principles of credit transfer in Canada in its *Ministerial Statement on Credit Transfer in Canada* (2009), which recognizes that credit transfer can occur between all different types of post-secondary institutions, public and private.[65]

However, inter-institutional competition for students, funding and prestige intensifies as more institutions begin to participate in similar activities (e.g., research, degree-granting, international education). This kind of competition can undermine the collaborative efforts required to create pathways for student mobility. Institutions may not want to enable student departures to competitor institutions. This may prove to be less of a problem in systems where institutional roles and mandates, and the differences between them, are clearly delineated and well understood.

Degree mobility: Progressing to further levels of study

One common mode of student mobility is progression through subsequent levels of study, which may or may not involve changing institutions. When progressing, students apply for admission to a subsequent program of study

based on their completion of the lower-level program (e.g., Bachelor of Arts to Master of Arts). Progressive levels of study are more germane to universities than colleges because of the sequential nature of academic degrees (i.e., bachelor's, master's, doctorate). In Quebec, progression from CEGEP to university is akin to this type of student mobility.

As noted above, before 1995 the granting of academic degrees was the near exclusive domain of Canadian public universities, which were generally considered to be characteristically homogeneous. Under these circumstances, students were able to move from one university to another with relative ease as they progressed through levels of further study, largely because Canadian universities recognized the comparative value of each other's credentials.

Credential recognition does not, however, guarantee admission into programs of further study. Gaining admission into graduate and professional schools is a competitive process, and universities have the discretion to select candidates according to their own criteria.

As a result of Canada's emerging range of degree types and degree-granting institutions, Canadian degrees are no longer consistently recognized. In other jurisdictions with highly differentiated PSE sectors, such as the United States, degree recognition is facilitated by third-party accrediting agencies that assess institutions and grant a "seal of approval" to the products of institutions that meet established standards. However, Shanahan and Jones (2007) note that in Canada, "there has never been a national accreditation or program assessment mechanism… largely because of an assumption that Canadian universities were roughly equal in terms of standards."[66]

As previously noted, institutional membership in AUCC has traditionally been accepted as a proxy for institutional accreditation in Canada's university sector. Dennison (2006) asserts that AUCC membership provides "instant recognition" of the baccalaureate degrees offered by any new member.[67] In a growing number of international jurisdictions, the broad recognition of an institution's credentials, or specifically of its individual programs and credentials, is assured through an established process for accreditation or other form of quality assurance process. In Canada, at present there is no established institutional accreditation process, nor is there any other widely accepted and well-understood method for assuring the broad recognition (by higher education institutions in Canada and elsewhere) of degrees offered at non-AUCC institutions.

BCCAT (2006) notes that the AUCC is not an accrediting agency but "an organization in which institutions seek membership to benefit from its public policy, communications, research and advocacy roles."[68] Nevertheless, because AUCC membership is Canada's only structure for ensuring the acceptance and recognition of degrees, an institution's status within the AUCC membership is a very important consideration for prospective students who have not ruled out applying for graduate programs in the future.[69]

While leaders in PSE have made considerable efforts in recent years to ensure that the new degrees offered by non-AUCC members are eligible for consideration in graduate admissions processes, there is evidence of preference, in some cases, for applicants with undergraduate degrees from institutions that are AUCC members.[70] As AUCC membership becomes increasingly significant, new degree-granting institutions often strive to achieve membership, which necessitates that they acquire university characteristics. This is one of the issues driving isomorphism in Canadian PSE.

There are a number of AUCC membership criteria that would disqualify many institutions in the college sector. For instance, an AUCC member is required to have "as its core teaching mission the provision of education of university standard with the majority of programs at that level."[71] Its undergraduate programs must also be "characterized by breadth and depth in the traditional areas of the liberal arts and/or sciences."[72] Colleges that are new to the degree-granting sphere and are likely to have a limited number of degree programs as their main program activities, have traditionally been in the realm of career, technical and adult education. Institutions in the college sector may also lack the bicameral governance structure required of AUCC membership.

Moreover, the mission of an AUCC-member institution must demonstrate a commitment to research and scholarship in addition to teaching and community service. The institution must also have a "proven record of scholarship, academic inquiry and research, [and expect] its academic staff to be engaged in externally peer reviewed research."[73] While some college professors may engage in research, this pursuit is likely to be tangential to their core function of teaching. Moreover, colleges often lack the resources and capacity required to support broad research activity.

It is possible for a college to evolve into an institution that qualifies for AUCC membership, as demonstrated in British Columbia and Alberta, but such a shift cannot reasonably occur within a short time-frame. A gray area emerges: institutions that have received authorization to grant degrees but have yet to achieve AUCC membership.

These issues remain unresolved. Indeed, little has been done to clarify the lines of demarcation among degree and institutional types, prompting calls for a "national credentials framework."[74] Such a national framework would certainly help students to understand better their post-secondary choices, and the various future pathways to which their choices may lead. Although CMEC has articulated and endorsed a degree qualifications framework along these lines, it has done so more for the purpose of quality assurance in emerging sectors rather than for transparent classification. Its *Ministerial Statement on Quality Assurance of Degree Education in Canada* delineates standards and outcomes for degrees at the baccalaureate, master's and doctoral levels, but because they apply only to new institutions, these procedures and standards are not intended for use by the AUCC or its membership. This offers little help to students, who may lack an in-depth understanding of Canadian PSE and all of its nuances.

Asymmetric information

Canada's youth are expected to make potentially costly decisions about their post-secondary education, and must do so in an increasingly complex PSE universe, but often without the information they need to make appropriate decisions. Asymmetric information is a defining characteristic of the post-secondary education marketplace. It occurs because providers of post-secondary education know much more about their products than do prospective students. This imbalance in information can limit students' abilities to compare and judge the various PSE opportunities available to them.

In such an environment, potential students often rely on signals of quality, such as institutional rankings, to guide their choices. This explains, in part, why it is common for some post-secondary institutions to emulate the behaviours and brands of top-ranked universities. Proulx (2007) notes that rankings tend to "induce a homogeneous and isomorphic profile of universities," reinforcing "the ever-present modelling effect of research universities on other categories of universities."[75]

The increasing complexity of Canada's post-secondary sector exacerbates this problem. Despite media rankings and government and institutional websites informing students about their options, Winston (1999) argues that investments in PSE will be made "in the face of a considerable degree of ignorance."[76]

Issues of program choice and student mobility would be better addressed if the post-secondary education sector were more transparent to its users. Moreover, any discussion about how the roles and mandates of institutions may change requires a full understanding of institutions' current roles and interrelationships. A method of classifying post-secondary institutions, credentials and pathways is required.

Part 3: Classifying Canadian Post-secondary Institutions

Without a comprehensive and clearly understood framework for categorizing post-secondary institutions and programs, it is difficult to respond to questions about post-secondary education in Canada. For example, how are we to quantify the number of colleges and universities in Canada? Which institutions or programs should be listed? Would an Australian university operating a campus in Canada be included in such a list? Would private universities be included?

Classification requires: 1) the definition of the parameters of the overall universe that is being categorized; 2) determination of the categories and sub-categories that will make up the classification; and 3) criteria that guide the process of sorting institutions, programs or pathways into the various categories and sub-groups. Classification is not a simple exercise in any arena, but Canadian PSE offers particular challenges to taxonomists. As the discussion above has revealed, names of institutions and credentials do not often correspond with their proper categorization.

Developing a classification system for a diverse network of PSE institutions, programs or credentials involves making careful choices, but these choices depend largely on the reasons for making the categorizations in the first place. Many classification systems in post-secondary education are developed to aid in research—to create categories or groups of institutions that possess enough similar characteristics that will enable reasonable comparisons among groups. Such was the situation with the development of the first set of Carnegie Classifications in 1973, a classification organized by degree level and specialization.[77]

According to McCormick and Zhao (2005):

> "... choosing the number of classification categories is a matter of judgement that involves tension between precision and parsimony. As categories are defined more precisely, the number of categories increases, as does homogeneity within them, while the size of the group within each category declines. Favouring parsimony yields more manageable and more easily comprehended classification made up of fewer categories, but with more members and more variation within the categories."[78]

Therefore we can infer that a basic methodology for establishing a classification system would require: a) clearly identifying the problem which the classification intends to solve; and b) choosing a point on the spectrum between the bi-polar priorities of accuracy and simplicity. Canada's multi-jurisdictional nature, however, often confounds efforts to explain clearly our PSE sector. Although differences exist amongst provincial and territorial systems, many of these differences can be, and have been, reconciled in Canada-wide classification systems. As described below, there are a number of existing classifications systems from which we can learn.

Maclean's Magazine university rankings

In November 2009, *Maclean's Magazine* published its 19th annual rankings of Canadian universities. These rankings categorize universities into three groups: medical/doctoral (what we have called large, research-intensive); comprehensive; and primarily undergraduate. The *Maclean's* classification system does not include special-purpose universities or non-universities. In fact, it is able to offer a simple approach to classification precisely because it excludes all those universities that do not fit into its three categories. For instance, Nova Scotia Agricultural College (a university) is not ranked, ostensibly because of its small size, and its narrow focus on agriculture and related sciences. Though the Royal Military College (also a university) offers a broad range of programs in arts, sciences and engineering, it too is not ranked because, as the site for training officers in the Canadian military, it has a highly specialized purpose and curriculum. Also excluded are a handful of small, relatively new universities.[79]

Statistics Canada's Centre for Education Statistics

With a view to creating a framework for "publishing national statistics," the Centre for Education Statistics at Statistics Canada undertook a systematic review of Canadian post-secondary institutions in 2003 to create a comprehensive classification system for post-secondary education institutions in Canada. The intention of this initiative was to ease frustrations about the lack of basic data, including the number of different types of institutions in Canada. Definitions of private and public had not been consistently applied, and there was recognition of a growing "grey area" between the terms *university* and *college*.[80]

In contrast to the *Maclean's* classification, Statistics Canada sought a more comprehensive approach, including all institutions that fit within the following definition of post-secondary education: "All formal educational activities offered to people normally considered "adults" or for which the normal entrance requirement is either high school completion or reaching adulthood."[81]

Each identified institution was classified using three concepts: *institution type (see Table 1)*, sector (e.g., public versus private), and *relationship type*. This third concept concerns affiliations such as federated colleges of universities and multi-campus institutions.[82]

As indicated in Table 1 below, this broad definition includes remedial or preparatory programs offered to adults, such as Adult Basic Education offered through school boards and programs offered to new immigrants at immigration centres. The information contained in Table 1 indicates that Statistics Canada appreciated the logic within the *Maclean's* classification of universities, adding two sub-categories to that framework for special-purpose universities, and for universities dedicated to serving Aboriginal people.

For the purpose of statistical reporting and research in PSE, the 2003 classifications represented an important advance, because, as Orton (2003) explains, "Rigorous statistics are based on a clearly delineated universe, and the entities in that universe need to be classified using very specific descriptions of their characteristics."[83] The basic institutional categories of the original classification are presented in Table 1.

Statistics Canada used the definitions and categories to populate a Register of Postsecondary and Adult Education Institutions, an effort that was suspended in 2008. Nevertheless, the classification remains an important framework for Statistics Canada's educational surveys.

Table 1: 2003 Classification – Basic categories of institution types

Proposed institution types and sub-types

Type	Sub-type
University and degree-granting	Primarily undergraduate Comprehensive Medical doctoral First Nations and Metis Special purpose
Colleges and institutes	Degree-granting colleges and institutes Multi-purpose First Nations and Metis Special purpose
Career colleges	Multi-purpose Special purpose
School board adult education	
Government - direct	Apprenticeship Special purpose
Consortia	

Source: Larry Orton, *A New Understanding of Postsecondary Education in Canada: A Discussion Paper*
(Ottawa: Statistics Canada, 2003), Catalogue no. 81-595-MIE2003011.

The 2003 classifications were revised in 2009, following extensive consultations that revealed that "traditional distinctions are becoming increasingly blurred as colleges and institutes and private for-profit institutions are given limited authority to grant degrees, and as colleges and institutes develop research programs, some of which are funded by the national granting councils."[84] The 2009 classifications are therefore more complex. The institution types and sub-types (listed in Table 1) are now further categorized according to whether they are public; private for-profit; or private, not-for-profit organizations. In addition, definitions have been refined, the First Nations and Métis sub-type has been abandoned, various types of "special purposes" have been delineated and a new framework has been introduced to describe relationships between branch campuses and parent institutions.

The Statistics Canada classifications may not, however, provide the clarity needed to help prospective and current students to navigate Canada's complex post-secondary systems. Important distinctions between secular and denominational, and domestic and foreign institutions are masked, and the classifications themselves do not address key issues of asymmetrical information within the Canadian post-secondary realm. The supporting definitions are complex, as institutional categorizations are made according to considerations of "legal basis, mission and control, primary purpose, academic authority, research, recognition or accreditation, field of instruction, sector, and various operational characteristics."[85] There is no category for small, undergraduate universities that also provide career-track programs akin to those of colleges.

Furthermore, important considerations, such as the transferability of credits and the recognition of credentials that would qualify an individual to progress to further levels of study, are not addressed.

Carnegie classifications

In the United States, the Carnegie Foundation for the Advancement of Teaching established a commission in 1967 to investigate the key issues facing higher education. The commission revealed that there was no classification system in the country that "differentiated colleges and universities along dimensions that were most relevant to its work."[86] It addressed this deficiency by establishing institutional categories that have come to be known as the Carnegie Classifications. With the initial set of classifications, the commission sought to "identify categories of colleges and universities that would be relatively homogeneous with respect to the functions of the institutions as well as with respect to characteristics of students and faculty members."[87]

With the primary purpose of supporting research in higher education, the first Carnegie Classification system consisting of five major institutional groups was released in 1973.[88] To date, four versions of the system have since been published: 1973, 1994, 2000 and 2005 (Table 2 below does not include the 2005 classification.)

Table 2: Major institutional categories in the Carnegie Classifications, 1973–2000

1973	1994	2000
Doctoral-granting Institutions	Doctoral-granting Institutions	Doctoral/Research Universities
Comprehensive Universities and Colleges	Master's (Comprehensive) Colleges and Universities	Master's Colleges and Universities
Liberal Arts Colleges	Baccalaureate Colleges	Baccalaureate Colleges
Two-year Colleges and Institutes	Associate of Arts Colleges	Two-year, Associate of Arts, Associate's Colleges
Professional Schools and other Specialized Institutions	Specialized Institutions	Specialized Institutions
	Tribal Colleges and Universities	Institutions for Non-traditional Study
		Tribal Colleges and Universities

Source: Alexander C. McCormick, "The 2000 Carnegie Classification: background and description," in *The Carnegie Classification of Institutions of Higher Education: A Technical Report* (Menlo Park, California: The Carnegie Foundation for the Advancement of Teaching, 2001), http://classifications.carnegiefoundation.org/downloads/2000_edition_data_printable.pdf (accessed Jan. 10, 2010).

As the information contained in Table 1 makes clear, one of the main distinctions employed in the Carnegie taxonomy is the "highest degree-level" offered at a given institution. In 2005, this distinction was changed quite dramatically. According to the Carnegie Foundation (2007), "the single classification system was replaced by a set of multiple, parallel classifications. … provid[ing] different lenses through which to view U.S. colleges and universities, offering researchers greater flexibility in meeting their analytic needs."[89]

The classifications, definitions of institutional categories and sub-groups within the Carnegie taxonomy are continuously adjusted. Such adjustments are required not only because of the evolutionary nature of post-secondary systems and institutions, but also because of the political nature of classifications systems in general. Classification systems can highlight and solidify the hierarchies that are implicit to post-secondary systems. For example, the Carnegie Foundation reports being frequently contacted by institutions seeking "to understand why their institution was not placed in a higher category, and ideally [seeking] reclassification."[90] McCormick (2008) emphasizes that although the Carnegie taxonomy "aims to group institutions on a relatively neutral and objective basis," it is nonetheless "interpreted as a form of ranking, with institutions' placement perceived to have an important impact on recruitment, alumni relations, and so on."[91]

Classifications systems are political in nature, and "misalignment between an institution's self-proclaimed identity or mission and its Carnegie Classification can affect relations with important constituencies."[92] A lesson that can be inferred from this is as follows: Classification systems are best constructed and developed in consultation with institutional representatives, but should remain under the control of an independent third-party. This approach allows the forces of homogenization and differentiation to play out in the post-secondary education marketplace and circumvents the inherent conflict of interest that would arise if institutions were to classify themselves.

Not all PSE classifications focus on institutions. Some focus on programs or credential types. This is the case with the type of classification system exemplified by CMEC's aforementioned *Canadian Degree Qualifications Framework*, a type of classification system that is becoming increasingly important globally.

Qualifications frameworks

Qualifications frameworks are formal documents that describe the learning qualifications or credentials offered in a given educational system and how they interrelate. According to Adelman (2009), qualifications frameworks are a set of statements describing the "learning outcomes and competencies a student must demonstrate in order for a degree at a specific level to be awarded."[93]

These frameworks also describe how students may progress from one credential to another, essentially delineating key educational pathways. The Canadian Information Centre for International Credentials (2010) asserts that

qualifications frameworks create a continuum of learning expectations along which qualifications might be compared to each other, facilitating credit transfer, credential recognition, and lifelong learning.[94]

Perhaps the best example of a national qualifications framework exists in Ireland, where a framework has been established with 10 credential levels corresponding to learning progressing from primary to doctoral education. Levels 6 through 10 correspond to PSE levels, with levels 7 and 8 representing the ordinary and honours baccalaureate, respectively. According to the National Qualifications Authority of Ireland (NQAI), Ireland's national qualifications framework is defined as "[t]he single, nationally and internationally accepted entity, through which all learning achievements may be measured and related to each other in a coherent way and which defines the relationship between all education and training awards."[95]

Qualifications frameworks can also enable the comparison of qualifications across jurisdictions. Indeed, the qualifications framework is an innovation that emerged from the creation of the European Higher Education Area (EHEA), through an initiative known as the Bologna Process.[*] As Adelman (2009) describes: "[o]ne of the more prominent features of the Bologna Process portfolio was the agreement of participants to move from an ofttimes incomprehensible melange of degrees to a familiar and common three-degree hierarchy (Bachelor's, Master's, and Doctorate)."[96] In fact, the higher education levels of the Irish National Qualifications Framework can be mapped against these three European degree cycles, allowing for both internal and external recognition of Irish credentials.

Establishing a multi-jurisdictional framework upon which national qualifications frameworks can be mapped requires a coherent and commonly understood method for describing credentials and expected learning outcomes. In the Framework of Qualifications for the European Higher Education Area,[*] descriptions of expected learning outcomes for a given level of qualification are based on five dimensions:

1. knowledge and understanding;

2. application of knowledge and understanding;

3. fluency in the use of increasingly complex data and information;

4. breadth and depth and range of audience communication; and

5. the degree of autonomy gained for subsequent learning.[97]

The assumption underpinning this framework is that, as one moves up the credential ladder, the level of challenge associated with each dimension intensifies. Further, the focus of learning becomes less occupational, social and ethical dimensions emerge, and the learner progresses through increasingly fluid, complex contexts and problems.[98]

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[*] See "Up to Par: The Challenge of Demonstrating Quality in Canadian Post-secondary Education" (2009) accessible at www.ccl-cca.ca/PSE

[*] A second qualifications framework in the EHEA is the European Qualifications Framework, which extends beyond PSE credentials to encompass a broader spectrum of lifelong learning.

In the EHEA, descriptions of expected learning outcomes, known as the Dublin Descriptors, have been established for each of the three degree cycles, according to the five constructs listed above. For instance, the descriptors for a "first-cycle" (baccalaureate) level award would anticipate that students holding a European qualification at this level:

- have demonstrated knowledge and understanding in a field of study that builds upon their general secondary education, and is typically at a level that, whilst supported by advanced textbooks, includes some aspects that will be informed by knowledge of the forefront of their field of study;

- can apply their knowledge and understanding in a manner that indicates a professional approach to their work or vocation, and have competences typically demonstrated through devising and sustaining arguments and solving problems within their field of study;

- have the ability to gather and interpret relevant data (usually within their field of study) to inform judgments that include reflection on relevant social, scientific or ethical issues;

- can communicate information, ideas, problems and solutions to both specialist and non-specialist audiences; and

- have developed those learning skills that are necessary for them to continue to undertake further study with a high degree of autonomy.[99]

Adelman (2008) suggests that the use of national qualifications frameworks in the European Higher Education Area forms the foundation for a "scaffolding" of accountability based upon student learning: its degree descriptions are "*not* simply a statement of objectives or goals…*not* a wish list [but] a set of performance criteria" against which a given degree program, institution or system can be judged.[100] Along with other innovations such as the *diploma supplement*,[*] Adelman (2008) perceives that qualifications frameworks are enabling the EHEA to provide "a public warranty and a private assurance of the meaning of a degree, of the standards for awarding it, and of what the student did to earn it."[101]

Canada has developed a similar qualifications framework of its own, through the efforts of CMEC and its Pan-Canadian Committee on Quality Assurance. The structure of the *Canadian Degree Qualifications Framework* (2007) likewise reflects the three degree cycles: bachelor's, master's and doctoral. The bachelor's level encompasses a range of different programs including those "designed to provide a broad education as an end in itself," those "designed to provide in-depth study in academic disciplines," those with "an applied focus," and those with a "professional focus."[102]

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[*] As described in CCL's previous monograph "Up to Par: The Challenge of Demonstrating Quality in Canadian Post-secondary Education" (2009), a diploma supplement is a document providing a detailed description of the learning an individual student has achieved in the process of earning a given credential, and is provided in addition to the diploma and transcript.

The Canadian framework could form the foundation for a broader classification of Canadian PSE credentials, should other types of shorter programs (i.e., certificates, diplomas) be brought into the fold. However, it was initially developed as a tool against which to benchmark proposals for new degree programs, with the inherent assumption that all pre-existing degree programs would conform to its descriptions. The Canadian qualifications framework would require further development were it to provide the accountability and transparency afforded by qualification frameworks that serve the European Higher Education Area.

International Standard Classification of Education

Another important system for the classification of educational programs is the International Standard Classification of Education (ISCED) developed by the United Nations Educational, Scientific and Cultural Organization (UNESCO). ISCED categories were first developed in the 1970s as "an instrument suitable for assembling, compiling and presenting statistics of education both within individual countries and internationally."[103] The Organisation for Economic Co-operation and Development (OECD) uses this framework in their annual *Education at a Glance* reports, and many international comparisons of PSE data, such as enrolment and completion rates, rely on this classification system.

Because it attempts to encompass all learning programs across many countries, ISCED is understandably complex. Moreover, not all countries' systems easily map onto the ISCED's categories—indeed the process of submitting and interpreting data in a way that aligns with the framework can be challenging. Because of the dynamic nature of education systems, ISCED was revised in 1997 (a second review is currently underway). ISCED-97 contains seven classification levels: Level 0 corresponds to early childhood education, while levels 4, 5 and 6 encompass post-secondary education. While this monograph defines post-secondary education as adult education programs that require high-school completion as a pre-requisite, ISCED-97 allows for programs that, in the Canadian context, might be considered as Adult Basic Education or upgrading, Level 4 of ISCED-97 corresponds to programs that are available to adults following their participation in secondary-school education, but distinguishes between programs (Level 4A) that prepare students for entry into ISCED 5 and those that do not (Level 4B).

Levels 5 and 6 correspond to a conception of post-secondary education comparable to the one defined in this monograph, and referred to internationally as tertiary education. Level 6 refers to doctoral education, while Level 5 encompasses all other post-secondary programs. Level 5 is broken down further: Level 5A signifies academic programs, while 5B programs are considered to be more practical and with an occupational focus. However, there are numerous problems with the current ISCED categories at the post-secondary/tertiary levels. As Adelman (2009) observes, "it is assumed by ISCED that all 5A degrees provide access to Level 6, the research/doctoral. That clearly is not the case."[104]

A full discussion of the issues contributing to and arising from misalignment between ISCED categories and national/provincial PSE systems is beyond the scope of this monograph. However, consideration of ISCED's alpha-numeric approach to categorization could benefit any discussion about classifying Canada's PSE institutions and programs. As this monograph has shown, the nomenclatures assigned to Canadian post-secondary institutions and programs are complicated and unclear, and this may confuse the classification process.

CICIC's directory of universities, colleges and schools in Canada

The above list of classifications systems is by no means exhaustive. There are also classifications that are created with the purpose of better informing students. In fact, every searchable directory of Canadian post-secondary institutions and programs on the internet is supported by a database with its own set of categories and definitions.

One of the most comprehensive examples is the Canadian Information Centre for International Credentials' (CICIC) Directory.[*] Here, one can search through a list of public and private institutions, as well as Languages Canada member schools. Users can filter their searches by province, language of instruction, credential type, whether or not an institution is faith-based, and where online programs are available.

Part 4: Sorting Out Canadian PSE: Can it be Done?

Although the CICIC directory and Statistic Canada's classifications can be useful tools, they do not address some important considerations of prospective students, such as which pathways ensure transferability and recognition. Indeed, the concepts of transferability and recognition are difficult to incorporate into classifications that focus solely on institutions. The ease with which learning can be transferred from one institution to another is largely a function of the type of learning that was previously undertaken, but in some situations, can be influenced by *where* it was undertaken. As well, issues of trust among different institutional types also play a role. Some institutions simply do not recognize that the quality of learning undertaken at another institutional type could compare to their own.

Ease of student mobility, then, requires a parity of esteem among institutions, as exemplified by AUCC members. Adelman (2009) refers to "zones of mutual trust" (ZMT) in post-secondary education, where mutually confident institutions and agencies establish a series of agreements on the "delivery, recognition and evaluation" of "learning outcomes (knowledge, skills and competences)."[105] Provincial transfer systems would fall into this category.

Adelman asserts that "[y]ou can't impose a ZMT; you can't regulate it into existence: it's got to come from people who reach out to understand and

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[*] Available at www.cicic.ca/664/directory-of-universities-colleges-and-schools-in-canada.canada

shape criteria for education and training and arrangements for delivering that knowledge and ensuring its quality."[106] It also follows that the expansion of a particular ZMT cannot be imposed. Although new types of institutions in Canada are authorized to offer degrees, they may not yet be included in the various groups of mutual trust and recognition. It is extremely important, and yet doubtful, that students are clearly aware of these factors. Their options for transfer and progression may be limited by certain choices or pathways, yet the language which we use to discuss our institutions and credentials can obscure these factors.
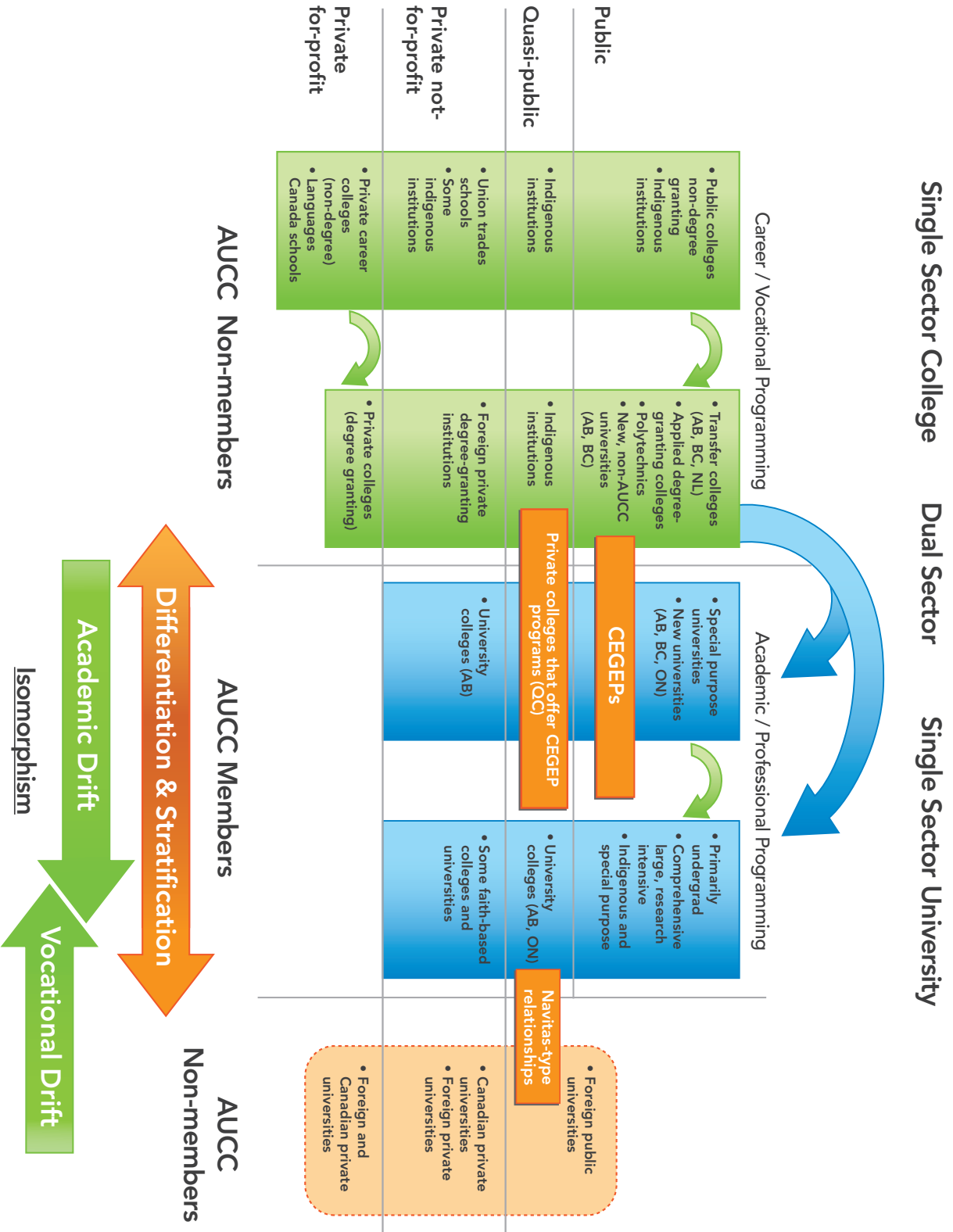
It is also vital that the Canadian public understand the nature of emerging dual-sector institutions, namely, those that offer both the career and vocational programming traditional to a college and the academic and professional programming of universities. As demonstrated, names of institutions do not always tell the full story.

Nevertheless, a necessary first step toward developing a comprehensive and transparent classification system for Canadian PSE would be to "sort things out" at the institutional level. Beyond an institution's name, Canadians need to understand what kind of institution it is, and how it is similar or different from other institutions. The framework presented in Figure 1 attempts to convey an accurate understanding of the totality of Canadian post-secondary institutions. Institutions are grouped according to type of programming, their status as a private/public institution, whether they straddle the traditional college and university sector, and their status within the AUCC membership.

The model also indicates the relevance of AUCC membership to student mobility. Tacit mutual recognition among AUCC member institutions serves to facilitate student movement within this "zone," whereas students from only some non-AUCC institutions may be assured of the ability to transfer into AUCC institutions. Blue arrows indicate that students are able to transfer from some public colleges into public universities. Green arrows signify student mobility between institutions with similar programming.

This conceptual model provides an entry point for sorting existing Canadian institutions into main groups. Classifying these institutions would require the development of definitions and criteria for each of these groups, necessitating a process of extensive consultation and collaboration. However, more than rational institutional groupings and categories based on programs are needed to make educational pathways more visible and navigable for students. Students must know whether their credential qualifies them for further levels of study and whether it will be recognized by other institutions that they may wish to attend at a later date.

Figure 1: Conceptual Model for Sorting Canadian Post-secondary Institutions

Single Sector College   Dual Sector   Single Sector University

Career / Vocational Programming

Public
- Public colleges non-degree granting
- Indigenous institutions

Quasi-public
- Indigenous institutions

Private not-for-profit
- Union trades schools
- Some indigenous institutions

Private for-profit
- Private career colleges (non-degree)
- Languages Canada schools

- Transfer colleges (AB, BC, NL)
- Applied degree-granting colleges
- Polytechnics
- New, non-AUCC universities (AB, BC)

- Indigenous institutions

- Foreign private degree-granting institutions

- Private colleges (degree granting)

AUCC Non-members

Academic / Professional Programming

Private colleges that offer CEGEP programs (QC)

CEGEPs

- Special purpose universities
- New universities (AB, BC, ON)

- University colleges (AB)

AUCC Members

- Primarily undergrad
- Comprehensive large, research intensive
- Indigenous and special purpose

- University colleges (AB, ON)

- Some faith-based colleges and universities

Navitas-type relationships

- Foreign public universities

- Canadian private universities
- Foreign private universities

- Foreign and Canadian private universities

AUCC Non-members

Differentiation & Stratification

Academic Drift

Vocational Drift

Isomorphism

Conclusion

Canada's post-secondary education sector is considerably more complex than what is often presented in media reports and research projects. Despite its complexity, a large number of students successfully follow well-understood PSE paths. As a result, some may argue that only a few Canadian institutions and programs are not yet well understood, and thus there is no need to engage in the lengthy and difficult exercise of developing a comprehensive classification framework.

This type of perception actually reflects a lack of understanding of the sector's inherent dynamics. As the PSE sector continues to evolve, its increasing complexity renders our current PSE vocabulary obsolete. Uninformed students risk choosing inappropriate educational paths without understanding the extent to which their choices can open, or close, future pathways.

Canada needs a comprehensive framework that provides students with clear indications of the pathways they may take throughout the PSE sector, and across the boundaries of its various provincial and territorial systems. CCL contends that it is possible to develop a classification and database that could provide such a framework, building on the work undertaken by Statistics Canada, CMEC and CICIC.

The current Canadian Degree Qualifications Framework constitutes a key building block for such a framework, particularly because it represents agreement across provinces and territories on degree descriptions. Building on this pre-existing agreement provides an opportunity for institutions to refine descriptions and broaden their scope beyond the baccalaureate, master's and doctoral credentials, creating clear expectations across Canadian PSE. This type of work would strengthen Canada's position within the international community should it wish to adopt other Bologna innovations, such as the diploma supplement or more robust quality-assurance measures. While understanding the different characteristics and missions of various institutional and program types is a necessary prerequisite for assuring their quality, simply grouping together like institutions and programs does not provide evidence of quality, only of similar characteristics.

The primary concern of this monograph, and the classification initiative it proposes, is that prospective and current students have a clear and accurate understanding of the PSE sector. This would require efforts to ensure public awareness, as well as encouraging the widespread use of the categories and definitions employed in the classification for other uses such as surveys, government forms and informational websites. The widespread use of a well-understood classification, as with the Carnegie Classifications, would create a clear vocabulary with which to discuss, measure and understand the PSE sector.

The task of categorizing and describing the totality of Canadian post-secondary education represents a monumental challenge, one that would require extensive consultations with a multitude of stakeholders. Given our numerous educational

jurisdictions and the dynamics within the post-secondary realm, pegging down clear definitions and descriptive learning outcomes for Canadian post-secondary education will pose many challenges. As Fryshman (2010) describes, definitions in PSE are "imprecise, variable and sometimes even fluid, as independent and autonomous institutions experiment, compete, modify, and adapt."[107]

Canada's PSE sector aims to serve an increasing number of people from a broader spectrum of backgrounds, while its resources are ever more constrained. Given these conditions, the fluidity of the PSE sector is unlikely to abate. For instance, it appears that the recent penchant for reform exhibited by some provincial governments will likely continue. New and changing types of institutions and credential types are imminent. Moreover, as demands for access and affordability increase, technology-enabled modalities of PSE may become more prevalent. Whatever changes are to come, we can be assured that a significant proportion of students will continue to seek progressive educational opportunities, sometimes through non-traditional pathways. Canada must ensure that these students have the information they need to do so without undue risk.

We must consider that, because of the mobility of students, faculty, researchers and knowledge, any change made to a given PSE system can have a ripple effect on other systems and jurisdictions. Pathways and relationships can, as a result, become less clear. However, these effects may be overlooked in the process of deliberating system change. Institutions will likely focus on attracting and retaining students, while governments may concentrate on issues of resources, efficiency and duplication of efforts.

For these and other reasons, any initiative to classify Canadian PSE would best be situated with an independent, pan-Canadian body mandated with the responsibility of creating, maintaining and providing transparent and accurate information about the PSE sector for use by the general public. This body would develop, in consultation with governments and institutions, a classification framework aimed at clarifying our understanding of current and future PSE structures in Canada. The resulting framework would necessarily be comprehensive and flexible. Its purpose would be to foster, rather than constrain, any future evolution of the sector, enabling the mapping and communication of new innovations and adaptations as they arise.

Faced with difficult choices resulting from the inopportune coincidence of shrinking resources and expanding demands, governments and institutions in Canada seem to be reconsidering a question raised by Michael Skolnik in 2004 about whether current structures of Canada's post-secondary education systems are appropriate for the 21st century or "in need of significant renovation?"[108] However, these questions should not be focused solely on universities or colleges, but include the full spectrum of post-secondary options in Canada.

As further changes to system structures are contemplated, the following question must be asked in tandem: How can we enable Canadian families and students to understand the full effects of past and future "renovations"

to Canada's post-secondary sector? Students invest substantially in their post-secondary education—their choices should be guided by the availability of clear, comprehensive, accurate, timely and accessible information about all of the options available to them in Canada.

Endnotes

1. Dave Marshall, "Differentiation by degrees: student mobility and the changing undergraduate environment in Canada," presented at the Canadian Society for the Study of Higher Education Annual Conference, York University, Toronto, May 28–30, 2006, www.mtroyal.ca/wcm/groups/public/documents/pdf/differentiation_degrees.pdf (accessed Dec. 1, 2009).

2. Michael L. Skolnik, "The impact of post-secondary system design on student mobility," presented at the Annual Meeting of the Pan-Canadian Consortium on Admissions and Transfer, Fredericton, New Brunswick, June 2, 2009.

3. Canadian Council on Learning, "Up to Par: The Challenge of Demonstrating Quality in Canadian Post-secondary Education," *Challenges in Canadian Post-secondary Education* (Ottawa: 2009). Available at www.ccl-cca.ca/PSE (accessed Dec. 1, 2009).

4. Glen Jones, "Canada," in James J. F. Forest and Philip G. Atbach, eds., *International Handbook of Higher Education*, Vol. 2: Regions and Countries (Dordecht, Netherlands: Springer, 2006).

5. Claire Morris, "Why must universities be autonomous?" *Globe and Mail* (Aug. 8, 2008), published online by the Association of Universities and Colleges Canada (Ottawa: n.d.), www.aucc.ca/publications/media/2008/globe_oped_08_08_e.html (accessed Dec. 1, 2009).

6. Theresa Shanahan and Glen A. Jones, "Shifting roles and approaches: government coordination of post-secondary education in Canada, 1995–2006," *Higher Education Research and Development* 26, no. 1 (March 2007): 31–43.

7. Association of Universities and Colleges of Canada (AUCC), "Criteria to become a member of the Association of Universities and Colleges of Canada," *About AUCC: Membership*, www.aucc.ca/about_us/membership/criteria_e.html (accessed Oct. 9, 2008).

8. Shanahan and Jones, "Shifting roles and approaches."

9. Mary Dwyer, "Our 19th annual rankings," *Macleans.ca* (Toronto: Nov. 5, 2009), http://oncampus.macleans.ca/education/2009/11/05/our-19th-annual-rankings/ (accessed Nov. 5, 2009).

10. Dale Kirby, "Higher education in Canada: new millennium, new students, new directions," presented at the 5th General Conference on the Idea of Education, Budapest, Hungary, May 8–10, 2008, www.inter-disciplinary.net/ati/education/ioe/ioe5/Kirby%20paper.pdf (accessed Dec. 1, 2009).

11. Gordon Campbell, *The Community College in Canada* (Ottawa: Association of Universities and Colleges of Canada, 1969), http://eric.ed.gov/ERICWebPortal/contentdelivery/servlet/ERICServlet?accno=ED034542 (accessed Dec. 1, 2009).

12. Campbell, *The Community College in Canada*.

13. John S. Levin, "Limits to organizational change in the community college," *Community College Journal of Research and Practice* 20, no. 2 (March/April 1996): 185–197.

14. Association of Canadian Community Colleges, *Colleges and Institutes: Advanced Skills and Applied Research* (Ottawa: Association of Canadian Community Colleges, August 2009). Available at www.accc.ca/ftp/briefs-memoires/200909_FinanceBrief.pdf (accessed Jan. 7, 2010).

15. John D. Dennison, "The case for democratic governance in Canada's community colleges," *Interchange* 25, no. 1 (January 1994): 25–37, p. 37.

16. Michael L. Skolnik, "The relationship of the community colleges to other providers of post-secondary education in Canada and other implications for policy," *Higher Education Perspectives* 1, no. 1 (2004), http://hep.oise.utoronto.ca/index.php/hep/article/view/574/652 (accessed Dec. 2, 2009).

17. Polytechnics Canada, *The Polytechnic Advantage* (Ottawa: 2008), www.polytechnicscanada.ca/advantages/ (accessed Nov. 4, 2008).

18. Polytechnics Canada, *The Polytechnic Advantage*.

19. Ian D. Clark, Greg Moran, Michael L. Skolnik and David Trick, *Academic Transformation: The Forces Shaping Higher Education in Ontario* (Montreal and Kingston: McGill-Queen's University, 2009).

20. John D. Dennison, "From community college to university: a personal commentary on the evolution of an institution," *Canadian Journal of Higher Education* 36, no. 2 (Sept. 2006): 107–124, www.ingentaconnect.com/content/csshe/cjhe/2006/00000036/00000002/art00005 (accessed Dec. 1, 2009).

21. Dennison, "From community college to university."

22. Dennison, "From community college to university."

23. Geoff P. Plant, *Campus 2020: Thinking Ahead: The Report – Access and Excellence* (Victoria, B.C.: Government of British Columbia, April 2007), www.aved.gov.bc.ca/campus2020/campus2020-thinkingahead-report.pdf (accessed Oct. 28, 2008).

24. Government of Manitoba, Department of Advanced Education and Literacy, "Manitoba colleges would offer baccalaureate degrees under proposed amendments," News Release (April 23, 2009), www.gov.mb.ca/chc/press/top/2009/04/2009-04-23-152800-5720.html (accessed Dec. 3, 2009).

25. Government of New Brunswick, Department of Post-secondary Education, Training and Labour, "Institutes of applied learning and training to complement universities and community colleges," Press Release (June 26, 2008), www.gnb.ca/cnb/news/pet/2008e0956pe.htm (accessed Oct. 28, 2008).

26. Robert Sweet and Paul Gallagher, "Private training institutions in Canada: new directions for a public resource," *Journal of Educational Administration and Foundations* 13, no. 2 (January 1999): 54–77, p. 54.

27. Sweet and Gallagher, "Private training institutions in Canada."

28. Sweet and Gallagher, "Private training institutions in Canada."

29. Chris Li, *Canada's Private Colleges: The Lesser Known Players in Postsecondary Education* (Ottawa: Statistics Canada, February 2006), Catalogue no. 11-621-MIE, no. 36.

30. Aboriginal Institutes' Consortium, *Aboriginal Institutions of Higher Education: A Struggle for the Education of Aboriginal Students, Control of Indigenous Knowledge, and Recognition of Aboriginal Institutions – An Examination of Government Policy* (Toronto: Canadian Race Relations Foundation, 2005), www.crr.ca/divers-files/en/pub/repAboriginal%20 Institutions%20of%20Higher%20Education.pdf (accessed Dec. 2, 2009).

31. Andrea L. Jenkins, "Indigenous postsecondary institutions in Canada and the U.S.," *Higher Education Perspectives* 3, no. 1 (2007): 1–27.

32. Languages Canada, "Purpose/Mission/Vision statement," *Languages Canada* (Surrey, B.C.: 2007), www.languagescanada.ca/en/purpose-mission-vision-statement (accessed Dec. 3, 2009).

33. Canadian Apprenticeship Forum, "How does the apprenticeship "system" work? What you should know" (2006), www.apprenticetrades.ca/EN/ displayContent/default.asp?userAction=LOADARTICLE&txtArticleID=1125 (accessed Oct. 28, 2008).

34. Ted Dunlop, *Lessons from Down Under: Quality Assurance, Accreditation and the Legitimization of the Applied Degree*, Monograph Series no. 4 (Ottawa: Association of Canadian Community Colleges, October 2004), www.accc.ca/ftp/pubs/monographs/Dunlopmonograph.pdf (accessed Oct. 28, 2008).

35. Michael L. Skolnik, "Does structure matter: (Where) do questions about structure fit on the higher education policy agenda?" Paper prepared for the Higher Education in Canada Conference, John Deutsch Institute, Queen's University, Kingston, Feb. 13–14, 2004, http://cclp.mior.ca/Reference%20 Shelf/Skolnikconferencepaper.pdf (accessed Dec. 1, 2009).

36. Academica Group Inc., *Positioning Applied Degrees in Ontario* (Toronto and London, ON: 2008), www.academica.ca/node/165 (accessed Nov. 4, 2008).

37. British Columbia Council on Admissions and Transfer (BCCAT), *Recognition of Degrees from Non-AUCC Member Institutions* (Vancouver, B.C.: 2006), www.bccat.bc.ca/pubs/degreerecognition.pdf (accessed Oct. 28, 2008).

38. Campbell, *The Community College in Canada*.

39. Dave Marshall, "Degree accreditation in Canada," *The Canadian Journal of Higher Education* 34, no. 2 (2004): 69–96.

40. Shanahan and Jones, "Shifting roles and approaches."

41. Michael L. Skolnik, "Discussion of some issues pertaining to the structure of postsecondary education in Ontario and some suggestions for addressing them," *College Quarterly* 8, no. 1 (Winter 2005): n.p., www.senecac.on.ca/ quarterly/2005-vol08-num01-winter/skolnik.html (accessed Jan. 7, 2010).

42. Dave Marshall, "The degree mobility spectrum: the tiering of Canadian degrees" (2005), www.mtroyal.ca/wcm/groups/public/documents/pdf/the_degree_mobility_spectrum.pdf (accessed Jan. 8, 2010).

43. Council of Ministers of Education, Canada (CMEC), *Ministerial Statement on Quality Assurance of Degree Education in Canada* (Toronto: 2007), www.cicic.ca/docs/cmec/QA-Statement-2007.en.pdf (accessed Dec. 2, 2009).

44. Canadian Association for Graduate Studies, *A Profile of Master's Degree Education in Canada* (Ottawa: 2006), www.cags.ca/media/docs/cags-publication/CAGS-Master.pdf (accessed Dec. 2, 2009).

45. CMEC, *Ministerial Statement on Quality Assurance of Degree Education in Canada*.

46. CMEC, *Ministerial Statement on Quality Assurance of Degree Education in Canada*.

47. Association of Universities and Colleges of Canada (AUCC), "Canadian universities: information for students – an overview of graduate studies in Canada" (Ottawa: 2008), www.aucc.ca/can_uni/student_info/can_student/grad_studies_e.html (accessed Oct. 28, 2008).

48. CMEC, *Ministerial Statement on Quality Assurance of Degree Education in Canada*.

49. Yossi Shavit, Richard Arum and Adam Gamoran, "Expansion, differentiation and stratification in higher education: a comparative study of 15 countries," presented at the Annual Meeting of the American Sociological Association, San Francisco, Aug. 14, 2004, www.allacademic.com/meta/p108256_index.html (accessed Dec. 1, 2009).

50. Clark et al., *Academic Transformation: The Forces Shaping Higher Education in Ontario*.

51. Canadian Council on Learning, "Up to Par: The Challenge of Demonstrating Quality in Canadian Post-secondary Education."

52. Torsten Dunkel, Isabelle Le Mouillour and Ulrich Teichler, "'Through the looking-glass': diversification and differentiation in vocational education and training and higher education," in *Modernising Vocational Education and Training: Fourth Report on Vocational Training Research in Europe: Background Report, Volume 2* (Luxembourg: European Centre for the Development of Vocational Training (CEDEFOP), 2009), pp. 257–287, www.cedefop.europa.eu/etv/Upload/Information_resources/Bookshop/544/3050_II_en.pdf (accessed Jan. 10, 2010).

53. Simon Marginson, "Dynamics of national and global competition in higher education." *Higher Education* 52, no 1 (2006):1–39.

54. Clark et al., *Academic Transformation: The Forces Shaping Higher Education in Ontario.*

55. Skolnik, "The relationship of the community colleges to other providers of post-secondary education in Canada and other implications for policy," p. 36.

56. Paul Wells, "Our universities can be smarter," *Macleans.ca* (July 28, 2009), www2.macleans.ca/2009/07/28/our-universities-can-be-smarter/ (accessed July 28, 2009).

57. Clark et al., *Academic Transformation: The Forces Shaping Higher Education in Ontario*.

58. Skolnik, "Discussion of some issues pertaining to the structure of postsecondary education in Ontario and some suggestions for addressing them."

59. Clark et al., *Academic Transformation: The Forces Shaping Higher Education in Ontario*.

60. Skolnik, "The impact of post-secondary system design on student mobility."

61. Sean Junor and Alex Usher, *Student Mobility & Credit Transfer: A National and Global Survey*. (Toronto: Educational Policy Institute, 2008), www.educationalpolicy.org/pub/pubpdf/credit.pdf (accessed Jan. 8, 2010).

62. Finola Finlay, *Credit Transfer: Models and Systems in BC, North America and Beyond* (Vancouver: The British Columbia Council on Admissions and Transfer, 2009), www.bccat.bc.ca/pubs/sr_transfermodels.pdf (accessed Jan. 12, 2010).

63. Finlay, *Credit Transfer: Models and Systems in BC, North America and Beyond*.

64. Council of Ministers of Education, Canada (CMEC), "*Pan-Canadian Protocol on the Transferability of University Credits*, February 1995 (Toronto: 2009), www.cmec.ca/Publications/Lists/Publications/Attachments/198/Pan-Canadian-Protocol-Transferability-University-Credits.pdf (accessed Jan. 11, 2010).

65. Council of Education Ministers, Canada (CMEC), *CMEC Ministerial Statement on Credit Transfer in Canada* (Toronto: 2009), www.cmec.ca/Publications/Lists/Publications/Attachments/216/ministerial-statement-credit-transfer-2009.pdf (accessed Jan. 11, 2010).

66. Shanahan and Jones, "Shifting roles and approaches."

67. Dennison, "From community college to university."

68. BCCAT, *Recognition of Degrees from Non-AUCC Member Institutions*.

69. Alex Usher, "Navigating the postsecondary maze," *globecampus* [online] (Toronto: Sept. 26, 2008), www.globecampus.ca/in-the-news/article/navigating-the-postsecondary-maze/ (accessed Sept. 26, 2008).

70. Dave Marshall, "What's it worth? the tiering of Canadian degrees," *Education Canada* 46, no. 1 (Winter 2005): 55–57, www.mtroyal.ca/wcm/groups/public/documents/pdf/whats_worth_magazine.pdf (accessed Oct. 8, 2008).

71. AUCC, "Canadian universities: information for students."

72. AUCC, "Canadian universities: information for students."

73. AUCC, "Canadian universities: information for students."

74. Polytechnics Canada, "Advocacy priorities: academic mobility and transferability of credits" (Ottawa: n.d.), www.polytechnicscanada.ca/advocacy/mobility.shtml (accessed Oct. 17, 2008).

75. Roland Proulx, "Higher education ranking and leagues tables: lessons learned from benchmarking," *Higher Education in Europe* 32, no. 2 (April 2007): 71–82, p. 71.

76. Gordon C. Winston, "Subsidies, hierarchy and peers": the awkward economies of higher education," *Journal of Economic Perspectives* 13, no. 1 (Winter 1999): 13–16.

77. Alexander C. McCormick and Chun-Mei Zhao, "Rethinking and reframing the Carnegie Classification," *Change* (September/October 2005.): 51–57, www.carnegiefoundation.org/sites/default/files/publications/elibrary_pdf_634.pdf (accessed Jan. 6, 2009).

78. McCormick and Zhao, "Rethinking and reframing the Carnegie Classification."

79. Dwyer, "Our 19th annual rankings."

80. Larry Orton, *A New Understanding of Postsecondary Education in Canada: A Discussion Paper* (Ottawa: Statistics Canada, 2003), Catalogue no. 81-595-MIE2003011.

81. Orton, *A New Understanding of Postsecondary Education in Canada.*

82. Orton, *A New Understanding of Postsecondary Education in Canada.*

83. Orton, *A New Understanding of Postsecondary Education in Canada.*

84. Larry Orton, *Statistics Canada's Definition and Classification of Postsecondary and Adult Education Providers in Canada* (Ottawa: Statistics Canada, 2009), Catalogue no. 81-595-M, no. 71.

85. Orton, *Statistics Canada's Definition and Classification of Postsecondary and Adult Education Providers in Canada.*

86. McCormick and Zhao, "Rethinking and reframing the Carnegie Classification."

87. Carnegie Commission on Higher Education, *A Classification of Institutions of Higher Education* (New York: McGraw Hill, 1973).

88. Alexander C. McCormick, "The 2000 Carnegie Classification: Background and description," in *The Carnegie Classification of Institutions of Higher Education: Technical Report* (Menlo Park, California: The Carnegie Foundation for the Advancement of Teaching, 2001), http://classifications.carnegiefoundation.org/downloads/2000_edition_data_printable.pdf (accessed Jan. 10, 2010).

89. The Carnegie Foundation for the Advancement of Teaching, *The Carnegie Classifications of Institutions of Higher Education* (2007), www.carnegiefoundation.org/classifications/ (accessed Nov. 14, 2008).

90. Alexander C. McCormick, "The complex interplay between classification and ranking of colleges and universities: should the Berlin Principles apply equally to classification?" *Higher Education in Europe* 33 nos. 2 & 3 (July 2008): 209–218, p. 209.

91. McCormick, "The complex interplay between classification and ranking of colleges and universities."

92. McCormick and Zhao, "Rethinking and reframing the Carnegie Classification."

93. Clifford Adelman, *The Bologna Process for U.S. Eyes: Re-learning Higher Education in the Age of Convergence* (Washington, D.C.: Institute for Higher Education Policy, 2009).

94. Canadian Information Centre for International Credentials, *Qualifications Frameworks in Canada* (Ottawa: Canadian Information Centre for International Credentials, a unit of the Council of Ministers of Education, Canada, 2010), www.cicic.ca/706/qualifications-frameworks.canada (accessed Jan. 14, 2010).

95. National Qualifications Authority of Ireland, *The National Framework of Qualifications: An Overview* (Dublin: 2003), www.nqai.ie/docs/publications/13.pdf (accessed Feb. 16, 2010).

96. Adelman, *The Bologna Process for U.S. Eyes.*

97. Adelman, *The Bologna Process for U.S. Eyes.*

98. Adelman, *The Bologna Process for U.S. Eyes.*

99. Joint Quality Initiative, *Shared 'Dublin' Descriptors for Short Cycle, First Cycle, Second Cycle and Third Cycle Awards* (Amsterdam, Netherlands: 2004), www.jointquality.nl/content/descriptors/CompletesetDublinDescriptors.doc (accessed Jan. 21, 2010).

100. Clifford Adelman, "Accountability 'light': our version is going the way of the dollar vs. the Euro," *Liberal Education* (Fall 2008), www.neasc.org/downloads/PDFs/assessment_forum/Adelman_Accountability_Light.pdf (accessed Jan. 22, 2010).

101. Adelman, "Accountability 'light': our version is going the way of the dollar vs. the Euro."

102. CMEC, *Ministerial Statement on Quality Assurance of Degree Education in Canada.*

103. United Nations Educational, Scientific and Cultural Organization (UNESCO), *International Standard Classification of Education, 1997* (Paris: UNESCO, 2006), www.uis.unesco.org/TEMPLATE/pdf/isced/ISCED_A.pdf (accessed Jan. 6, 2010).

104. Clifford Adelman, *The Spaces Between Numbers: Getting International Data on Higher Education Straight* (Washington, D.C.: Institute for Higher Education Policy, 2009), www.ihep.org/assets/files/publications/s-z/(Report)_The_Spaces_Between_Numbers-Getting_International_Data_on_Higher_Education_Straight.pdf (accessed Nov. 6, 2009).

105. Adelman, *The Bologna Process for U.S. Eyes.*

106. Adelman, *The Bologna Process for U.S. Eyes.*

107. Bernard Fryshman, "The Carnegie Unit: articulate and expressive," *Inside Higher Ed* (January 22, 2010), www.insidehighered.com/views/2010/01/22/fryshman.

108. Skolnik, "Does structure matter?"

BIBLIOGRAPHY

Aboriginal Institutes' Consortium. *Aboriginal Institutions of Higher Education: A Struggle for the Education of Aboriginal Students, Control of Indigenous Knowledge, and Recognition of Aboriginal Institutions – An Examination of Government Policy.* Toronto: Canadian Race Relations Foundation, 2005, www.crr.ca/divers-files/en/pub/repAboriginal%20Institutions%20of%20Higher%20Education.pdf (accessed Dec. 2, 2009).

Academica Group Inc. *Positioning Applied Degrees in Ontario.* Toronto and London, ON: 2008, www.academica.ca/node/165 (accessed Nov. 4, 2008).

Adelman, Clifford. "Accountability 'light': our version is going the way of the dollar vs. the Euro." *Liberal Education* (Fall 2008), www.neasc.org/downloads/PDFs/assessment_forum/Adelman_Accountability_Light.pdf (accessed Jan. 22, 2010).

Adelman, Clifford. *The Bologna Process for U.S. Eyes: Re-learning Higher Education in the Age of Convergence.* Washington, D.C.: Institute for Higher Education Policy, 2009.

Adelman, Clifford. *The Spaces Between Numbers: Getting International Data on Higher Education Straight.* Washington, D.C.: Institute for Higher Education Policy, 2009, www.ihep.org/assets/files/publications/s-z/(Report)_The_Spaces_Between_Numbers-Getting_International_Data_on_Higher_Education_Straight.pdf (accessed Nov. 6, 2009).

Association of Canadian Community Colleges. *Colleges and Institutes: Advanced Skills and Applied Research.* Ottawa: Association of Canadian Community Colleges, August 2009. Available at www.accc.ca/ftp/briefs-memoires/200909_FinanceBrief.pdf (accessed Jan. 7, 2010).

Association of Universities and Colleges of Canada (AUCC). "Canadian universities: information for students – an overview of graduate studies in Canada." Ottawa: 2008, www.aucc.ca/can_uni/student_info/can_student/grad_studies_e.html (accessed Oct. 28, 2008).

Association of Universities and Colleges of Canada (AUCC). "Criteria to become a member of the Association of Universities and Colleges of Canada." *About AUCC: Membership*, www.aucc.ca/about_us/membership/criteria_e.html (accessed Oct. 9, 2008).

British Columbia Council on Admissions and Transfer (BCCAT). *Recognition of Degrees from Non-AUCC Member Institutions.* Vancouver, B.C.: 2006, www.bccat.bc.ca/pubs/degreerecognition.pdf (accessed Oct. 28, 2008).

Campbell, Gordon. *The Community College in Canada.* Ottawa: Association of Universities and Colleges of Canada, 1969, http://eric.ed.gov/ERICWebPortal/contentdelivery/servlet/ERICServlet?accno=ED034542 (accessed Dec. 1, 2009).

Canadian Apprenticeship Forum. "How does the apprenticeship "system" work? What you should know" (2006), www.apprenticetrades.ca/EN/displayContent/default.asp?userAction=LOADARTICLE&txtArticleID=1125 (accessed Oct. 28, 2008).

Canadian Association for Graduate Studies. *A Profile of Master's Degree Education in Canada.* Ottawa: 2006, www.cags.ca/media/docs/cags-publication/CAGS-Master.pdf (accessed Dec. 2, 2009).

Canadian Council on Learning. "Up to Par: The Challenge of Demonstrating Quality in Canadian Post-secondary Education." *Challenges in Canadian Post-secondary Education,* Ottawa: 2009, www.ccl-cca.ca/PSE (accessed Dec. 1, 2009).

Canadian Information Centre for International Credentials. *Qualifications Frameworks in Canada.* Ottawa: Canadian Information Centre for International Credentials, a unit of the Council of Ministers of Education, Canada, 2010, www.cicic.ca/706/qualifications-frameworks.canada (accessed Jan. 14, 2010).

Carnegie Commission on Higher Education. *A Classification of Institutions of Higher Education.* New York: McGraw Hill, 1973.

The Carnegie Foundation for the Advancement of Teaching. *The Carnegie Classifications of Institutions of Higher Education* (2007), www.carnegiefoundation.org/classifications/ (accessed Nov. 14, 2008).

Clark, Ian D., Greg Moran, Michael L. Skolnik and David Trick. *Academic Transformation: The Forces Shaping Higher Education in Ontario.* Montreal and Kingston: McGill-Queen's University, 2009.

Council of Education Ministers, Canada (CMEC). *CMEC Ministerial Statement on Credit Transfer in Canada.* Toronto: 2009, www.cmec.ca/Publications/Lists/Publications/Attachments/216/ministerial-statement-credit-transfer-2009.pdf (accessed Jan. 11, 2010).

Council of Ministers of Education, Canada (CMEC). *Ministerial Statement on Quality Assurance of Degree Education in Canada.* Toronto: 2007, www.cicic.ca/docs/cmec/QA-Statement-2007.en.pdf (accessed Dec. 2, 2009).

Council of Ministers of Education, Canada (CMEC). *Pan-Canadian Protocol on the Transferability of University Credits*, February 1995. Toronto: 2009, www.cmec.ca/Publications/Lists/Publications/Attachments/198/Pan-Canadian-Protocol-Transferability-University-Credits.pdf (accessed Jan. 11, 2010).

Dennison, John D. "From community college to university: a personal commentary on the evolution of an institution." *Canadian Journal of Higher Education* 36, no. 2 (September 2006): 107–124, www.ingentaconnect.com/content/csshe/cjhe (accessed Dec. 1, 2009).

Dennison, John D. "The case for democratic governance in Canada's community colleges." *Interchange* 25, no. 1 (January 1994): 25–37.

Dunkel, Torsten, Isabelle Le Mouillour and Ulrich Teichler. "'Through the looking-glass': diversification and differentiation in vocational education and training and higher education." In *Modernising Vocational Education and Training: Fourth Report on Vocational Training Research in Europe: Background Report, Volume 2.* Luxembourg: European Centre for the Development of Vocational Training (CEDEFOP), 2009, pp. 257–287, www.cedefop.europa.eu/etv/Upload/Information_resources/Bookshop/544/3050_II_en.pdf (accessed Jan. 10, 2010).

Dunlop, Ted. *Lessons from Down Under: Quality Assurance, Accreditation and the Legitimization of the Applied Degree*. Monograph Series no. 4. Ottawa: Association of Canadian Community Colleges, October 2004, www.accc.ca/ftp/pubs/monographs/Dunlopmonograph.pdf (accessed Oct. 28, 2008).

Dwyer, Mary. "Our 19th annual rankings." *Macleans.ca* (Toronto: Nov. 5, 2009), http://oncampus.macleans.ca/education/2009/11/05/our-19th-annual-rankings/ (accessed Nov. 5, 2009).

Finlay, Finola. *Credit Transfer: Models and Systems in BC, North America and Beyond.* Vancouver: The British Columbia Council on Admissions and Transfer, 2009, www.bccat.bc.ca/pubs/sr_transfermodels.pdf (accessed Jan. 12, 2010).

Fryshman, Bernard. "The Carnegie Unit: Articulate and Expressive." *Inside Higher Ed,* Jan. 22, 2010, www.insidehighered.com/views/2010/01/22/fryshman

Government of Manitoba, Department of Advanced Education and Literacy. "Manitoba colleges would offer baccalaureate degrees under proposed amendments." News Release (April 23, 2009), www.gov.mb.ca/chc/press/top/2009/04/2009-04-23-152800-5720.html (accessed Dec. 3, 2009).

Government of New Brunswick, Department of Post-secondary Education, Training and Labour. "Institutes of applied learning and training to complement universities and community colleges." Press Release (June 26, 2008), www.gnb.ca/cnb/news/pet/2008e0956pe.htm (accessed Oct. 28, 2008).

Jenkins, Andrea L. "Indigenous postsecondary institutions in Canada and the U.S." Higher Education Perspectives 3, no. 1 (2007): 1–27.

Joint Quality Initiative. *Shared 'Dublin' Descriptors for Short Cycle, First Cycle, Second Cycle and Third Cycle Awards*. Amsterdam, Netherlands: 2004, www.jointquality.nl/content/descriptors/CompletesetDublinDescriptors.doc (accessed Jan. 21, 2010).

Jones, Glen. "Canada." In *International Handbook of Higher Education, Vol. 2: Regions and Countries*, edited by James J. F. Forest and Philip G. Atbach. Dordecht, Netherlands: Springer, 2006.

Junor, Sean and Alex Usher. *Student Mobility & Credit Transfer: A National and Global Survey.* Toronto: Educational Policy Institute, 2008, www.educationalpolicy.org/pub/pubpdf/credit.pdf (accessed Jan. 8, 2010).

Kirby, Dale. "Higher education in Canada: new millennium, new students, new directions." Paper presented at the 5th General Conference on the Idea of Education, Budapest, Hungary, May 8–10, 2008, www.inter-disciplinary.net/ati/education/ioe/ioe5/Kirby%20paper.pdf (accessed Dec. 1, 2009).

Languages Canada. "Purpose/Mission/Vision statement." *Languages Canada.* Surrey, B.C.: 2007, www.languagescanada.ca/en/about-us (accessed Dec. 3, 2009).

Levin, John S. "Limits to organizational change in the community college." *Community College Journal of Research and Practice* 20, no. 2 (March/April 1996): 185–197.

Li, Chris. *Canada's Private Colleges: The Lesser Known Players in Postsecondary Education.* Catalogue no. 11-621-MIE, no. 36. Ottawa: Statistics Canada, February 2006.

Marginson, Simon. "Dynamics of national and global competition in higher education." *Higher Education* 52, no.1 (2006): 1–39.

Marshall, Dave. "Differentiation by degrees: student mobility and the changing undergraduate environment in Canada." Paper presented at the Canadian Society for the Study of Higher Education Annual Conference, York University, Toronto, May 28–30, 2006, www.mtroyal.ca/wcm/groups/public/documents/pdf/differentiation_degrees.pdf (accessed Dec. 1, 2009).

Marshall, Dave. "Degree accreditation in Canada." *The Canadian Journal of Higher Education* 34, no. 2 (2004): 69–96.

Marshall, Dave. "The degree mobility spectrum: the tiering of Canadian degrees" (2005), www.mtroyal.ca/wcm/groups/public/documents/pdf/the_degree_mobility_spectrum.pdf (accessed Jan. 8, 2010).

Marshall, Dave. "What's it worth? the tiering of Canadian degrees." *Education Canada* 46, no. 1 (Winter 2005): 55–57, www.mtroyal.ca/wcm/groups/public/documents/pdf/whats_worth_magazine.pdf (accessed Oct. 8, 2008).

McCormick, Alexander C. "The 2000 Carnegie Classification: Background and description." In *The Carnegie Classification of Institutions of Higher Education: Technical Report.* Menlo Park, California: The Carnegie Foundation for the Advancement of Teaching, 2001, http://classifications.carnegiefoundation.org/downloads/2000_edition_data_printable.pdf (accessed Jan. 10, 2010).

McCormick, Alexander C. "The complex interplay between classification and ranking of colleges and universities: should the Berlin Principles apply equally to classification?" *Higher Education in Europe* 33 nos. 2 & 3 (July 2008): 209–218.

McCormick, Alexander C. and Chun-Mei Zhao. "Rethinking and reframing the Carnegie Classification." *Change* (September/October 2005.): 51–57, www.carnegiefoundation.org/sites/default/files/publications/elibrary_pdf_634.pdf (accessed Jan. 6, 2009).

Morris, Claire. "Why must universities be autonomous?" *Globe and Mail* (Aug. 8, 2008). Published online by the Association of Universities and Colleges Canada (Ottawa: n.d.), www.aucc.ca/publications/media/2008/globe_oped_08_08_e.html (accessed Dec. 1, 2009).

National Qualifications Authority of Ireland. *The National Framework of Qualifications: An Overview.* Dublin: 2003, www.nqai.ie/docs/publications/13.pdf (accessed Feb. 16, 2010).

Orton, Larry. *A New Understanding of Postsecondary Education in Canada: A Discussion Paper.* Catalogue no. 81-595-MIE2003011. Ottawa: Statistics Canada, 2003.

Orton, Larry. *Statistics Canada's Definition and Classification of Postsecondary and Adult Education Providers in Canada.* Catalogue no. 81-595-M, no. 71. Ottawa: Statistics Canada, 2009.

Plant, Geoff P. *Campus 2020: Thinking Ahead: The Report – Access and Excellence.* Victoria, B.C.: Government of British Columbia, April 2007, www.aved.gov.bc.ca/campus2020/campus2020-thinkingahead-report.pdf (accessed Oct. 28, 2008).

Polytechnics Canada. "Advocacy priorities: academic mobility and transferability of credits." Ottawa: n.d., www.polytechnicscanada.ca/advocacy/mobility.shtml (accessed Oct. 17, 2008).

Polytechnics Canada. *The Polytechnic Advantage* (Ottawa: 2008), www.polytechnicscanada.ca/advantages/ (accessed Nov. 4, 2008).

Proulx, Roland. "Higher education ranking and leagues tables: lessons learned from benchmarking." *Higher Education in Europe* 32, no. 2 (April 2007): 71–82.

Shanahan, Theresa and Glen A. Jones. "Shifting roles and approaches: government coordination of post-secondary education in Canada, 1995–2006." *Higher Education Research and Development* 26, no. 1 (March 2007): 31–43.

Shavit, Yossi, Richard Arum and Adam Gamoran. "Expansion, differentiation and stratification in higher education: a comparative study of 15 countries." Paper presented at the Annual Meeting of the American Sociological Association, San Francisco, Aug. 14, 2004, www.allacademic.com/meta/p108256_index.html (accessed Dec. 1, 2009).

Skolnik, Michael L. "Discussion of some issues pertaining to the structure of postsecondary education in Ontario and some suggestions for addressing them." *College Quarterly* 8, no. 1 (Winter 2005): n.p., www.senecac.on.ca/quarterly/2005-vol08-num01-winter/skolnik.html (accessed Jan. 7, 2010).

Skolnik, Michael L. "Does structure matter: (Where) do questions about structure fit on the higher education policy agenda?" Paper prepared for the Higher Education in Canada Conference, John Deutsch Institute, Queen's University, Kingston, Feb. 13–14, 2004, http://jdi.econ.queensu.ca/Files/Conferences/PSEconferencepapers/Skolnikconferencepaper.pdf (accessed Dec. 1, 2009).

Skolnik, Michael L. "The impact of post-secondary system design on student mobility." Paper presented at the Annual Meeting of the Pan-Canadian Consortium on Admissions and Transfer, Fredericton, New Brunswick, June 2, 2009.

Skolnik, Michael L. "The relationship of the community colleges to other providers of post-secondary education in Canada and other implications for policy." *Higher Education Perspectives* 1, no. 1 (2004), http://hep.oise.utoronto.ca/index.php/hep/article/view/574/652 (accessed Dec. 2, 2009).

Sweet, Robert and Paul Gallagher. "Private training institutions in Canada: new directions for a public resource." *Journal of Educational Administration and Foundations* 13, no. 2 (January 1999): 54–77.

United Nations Educational, Scientific and Cultural Organization (UNESCO). *International Standard Classification of Education*, 1997. Paris: UNESCO, 2006, www.uis.unesco.org/TEMPLATE/pdf/isced/ISCED_A.pdf (accessed Jan. 6, 2010).

Usher, Alex. "Navigating the postsecondary maze." *globecampus* [online] (Toronto: Sept. 26, 2008), www.globecampus.ca/in-the-news/article/navigating-the-postsecondary-maze/ (accessed Sept. 26, 2008).

Wells, Paul. "Our universities can be smarter." *Macleans.ca* (July 28, 2009), www2.macleans.ca/2009/07/28/our-universities-can-be-smarter/ (accessed July 28, 2009).

Winston, Gordon C. "Subsidies, hierarchy and peers: the awkward economies of higher education." *Journal of Economic Perspectives* 13, no. 1 (Winter 1999): 13–16.