Post-Baccalaureate Programs



Bob Cowin Douglas College March 2013

Preface

Enrolment may be small compared to other educational sectors in British Columbia, but a disproportionate share of opinion makers and society's change agents have participated in the programs described in this paper. These programs represent a growing aspect of postsecondary education, one that has received a fair amount of attention in government and institutions.

Yet despite all this, and my own sense that post-baccalaureate programs matter a great deal, I hesitated to tackle the topic of post-baccalaureate programming. I feared that my source material might be fine grained and dispersed – no simple synthesis and summary here. My fears turned out to have some basis: however much postsecondary educators might ponder and discuss trends in their work environment, publicly accessible articles about credential creep, the long term impact of competing for research funding, or the implications of scrambling for academic prestige in BC are scarce.

Once again, this volume is simply another starting point, an extended briefing note that seeks to be broad rather than deep. Its goal is consolidate information so that well contextualized decisions might be made about the future of postsecondary education in BC.

Part of her argument is that the reason cultures die, or enter a dark age, is that they begin to lose the memory of their story....

This is especially so in our increasingly pluralistic neighbourhoods [postsecondary institutions] characterized by multiple and often competing stories about the nature and meaning of life [education].

- Alan Roxburgh commenting on Jane Jacobs

[Text in square brackets added]

Other papers in this series on the history of postsecondary education in British Columbia:

- Overview (2007)
- Faith-Based Institutions (2009)
- Continuing Education in Public Institutions (2010)
- Aboriginal Postsecondary Education (2011)
- Apprenticeship and Pre-Apprenticeship Training (2012)
- Agencies and Organizations (2012)

Available electronically in the ERIC database at: www.eric.ed.gov and in the Douglas College library at http://innopac.douglas.bc.ca

Library and Archives Canada Cataloguing in Publication

Cowin, Bob, 1954-

Post-baccalaureate programs / Bob Cowin. (Made in B.C.: a history of postsecondary education in British Columbia; v. 7)

Includes bibliographical references.

ISBN: 9781896019369

- 1. Postsecondary education--British Columbia. 2. Universities and colleges--British Columbia--History.
- 3. Education, Higher--British Columbia--History. I. Title. (Series)

LA418.B7 C695 2013

Contents

Summary

Introduction	1	
Scope of the Paper	1	
Organization of the Paper		
Graduate Studies	2	
Context	2	
Academic versus Professional Degrees	2	
Federal Influence on Former Teaching Institutions	4 5	
Public Institutions		
Research Universities	5	
University of British Columbia	5	
Simon Fraser University	6	
Technical University of British Columbia	7	
University of Victoria	7	
University of Northern British Columbia	8	
Teaching Intensive Universities	8	
Other Institutions	9	
BC Institute of Technology	9	
Private Institutions	9	
Based in British Columbia	9	
Quest University	9	
University of Canada West	9	
Faith-Based Institutions	10	
Comprehensive	10	
Trinity Western University	10	
Theological	10	
Associated Canadian Theological Schools	11	
Canadian Graduate School of Ministry	11	
Carey Theological College	11	
Regent College	12	
Seminary of Christ the King	12	
St. Mark's College	12	
Vancouver School of Theology	12	
Out-of-Province	12	
Adler School of Professional Psychology	12	
City University	13	
Fairleigh Dickinson University	13	
Lansbridge University of New Brunswick	13	
New York Institute of Technology	13	
Queen's University	14	
University of Phoenix	14	
Master's Programs for Teachers	14	
Institutions Assessed by DQAB but Not Offering		
Graduate Programs in BC	15	
Professional Programs	17	
Accounting	17	
Chartered Accountants	17	
Certified General Accountants	17	
Certified Management Accountants	18	

	Architecture	18
	Community and Regional Planning	18
	Education	19
	Engineering	19
	Health	19
	Medicine	19
	Other Health Sciences	20
	Dentistry	20
	Nursing	20
	Complementary Medicine	21
	Boucher Institute of Naturopathic Medicine	21
	Human Services	21
	Law	22
	University of British Columbia	22
	University of Victoria	23
	Thompson Rivers University	23
	Librarianship	24
	2.0.11.11.11.11	
Post-	Degree Certificates, Diplomas and Second Degrees	25
	Undergraduate Level	26
	Public Institutions	26
	Simon Fraser University	26
	University of British Columbia	26
	University of Northern British Columbia	26
	University of Victoria	26
	British Columbia Institute of Technology	27
	Capilano University	27
	Other Institutions	27
	Teacher Education	28
	Private Institutions	28
	Kutenai Art Therapy Institute	28
	Graduate Level	29
Disan	analon	20
DISCU	ussion Delivery Formats	30 30
	For-Profit Institutions	30
	Nomenclature	30
	Quality Assurance	30
	Research	31
	Trends	31
	Tuition Fees	31
	Tutton rees	31
Refer	rences	32
Appe	endix	33
	BC Public Institutions	33
	Map	34

Summary

This paper considers programs that require a bachelor's degree, not necessarily in the same field, for entry to the program. They are equivalent to at least one semester of full-time study, with at least some of the instruction delivered face-to-face in BC. Student learning may be evaluated for academic credit, for professional certification, or for both. Public institutions, private for-profit institutions, private not-for-profit institutions, and professional organizations all lie within its scope.

The paper describes a representative sample of programs and institutions, and does not provide a complete inventory. The focus is on how programs were established, not on everything that has happened subsequently.

Graduate Programs

Although a few graduate programs existed prior to World War II, postsecondary education in BC until the mid 1940s consisted mainly of undergraduate teaching institutions and various apprenticeship and articling opportunities. With the growth of research funding from the federal government, graduate education began expanding in the 1950s and, by the 1960s, doctoral education had become common (although it was not until the early seventies that the debate in universities about the relative emphasis that should be accorded teaching and research waned as research became increasingly dominant.) Echoes of that debate have been heard since 1990 in a number of institutions that were originally established as community colleges.

Although John Macdonald's seminal report of 1962, *Higher Education in British Columbia and a Plan for the Future*, envisioned the University of British Columbia as the centrepiece with large graduate programs and two additional undergraduate colleges awarding bachelor's degrees, both the University of Victoria (established in 1963) and Simon Fraser University (1965) have offered graduate programs since they opened.

Simon Fraser University's original notion of teaching assistants in the late sixties was to draw upon qualified individuals from the local community, but assistantships very quickly became a way of directing funding to graduate students. The formation of a union for teaching assistants in 1978 at SFU was one of the first in North America

Graduate programs at most of the research universities developed on a disciplinary basis. In contrast, when the University of Northern British Columbia opened in 1994, graduate programs developed on a thematic basis, e.g. natural resources and community sustainability.

The legislation creating Royal Roads University in 1995 restricted its graduate programs to applied and professional fields. The upgrading of several institutions in 2005 and 2008 to become special purpose and teaching intensive universities similarly restricted their curricular breadth and limited them to master's, not doctoral, degrees. (If these new universities serve a particular geographic region, they are required, not simply permitted, to offer masters degrees.) BCIT may award only applied master's degrees. What exactly constitutes an applied program, or when a university serves the whole province rather than a geographic area, remains vague and undefined in legislation.

In a few instances, a BC institution has offered a master's program in partnership with a university in the United Kingdom, e.g. British Columbia Institute of Technology with the University of Bath.

Education, Counselling, Business Administration and Theology are the graduate programs that have most often been provided by the private sector in BC. If based in BC, most of the private institutions that offer graduate programs are not-for-profit and they are frequently faith-based, e.g. a range of master's degrees

has developed since 1993 at the comprehensive Trinity Western University and half a dozen theological schools sometimes also award doctorates in addition to master's degrees.

Private for-profit institutions headquartered outside BC have more frequently met with success in their graduate offerings in BC than those based within BC. The number of graduate programs provided by for-profit institutions has grown since 2000, although still small, and the record has been variable.

Professional Programs

Professional programs prepare students to meet the licencing requirements of particular professions. Sometimes they involve a combination of courses offered at postsecondary institutions and by the profession itself. The academic credential awarded by the postsecondary institution may be a master's degree or it may be some other credential, e.g. the LLB and JD in Law.

Accounting is unusual in that students may choose among three designations (CA, CGA and CMA), although there is an initiative at present to merge them into a single CPA designation. The Chartered Accountants were the first group to require, in 1970, a bachelor's degree for entry to the professional program. A bachelor's degree is a concurrent requirement, not any entry requirement, for the Certified General Accountants.

Education is a large profession with two main pathways for certification: an undergraduate route leading to a four or five year BEd, and a one year post-baccalaureate route.

It took the better part of fifty years to launch a medical school at UBC. The provincial government broke an impasse in 1947 by choosing to upgrade existing hospitals in support of a new Faculty of Medicine, rather than to build a separate teaching hospital. By the 1980s, debate focussed on how to expand the intake of new medical students, leading in the past decade to a decentralized model with training sites in three additional regions of the province.

Law was a profession that moved most of its training from the profession to the university. When UBC opened its Law school in the late forties, it adopted a pedagogy used at Dalhousie and Harvard universities that was considered very progressive. A Law school at the University of Victoria followed in 1975, and at Thompson Rivers University in 2011.

Several other professions are described in the full report.

Post-Degree Certificates and Diplomas

Diplomas and certificates are the "Wild West" of the post-baccalaureate world. The shorter the program, the more varied the credential terminology. Whether the level of instruction is at the undergraduate level, the graduate level, or a combination of the two levels is not necessarily evident from the credential name. Nevertheless, these credentials represent a growing component of the BC postsecondary environment over the past decade. Sometimes the programs consist of new curriculum, while in other cases they represent more a repackaging of existing curriculum for particular groups of students.

Pretest

- 1. Doctoral education was rare in BC until the:
 - a. 1940s
 - b. 1950s
 - c. 1960s
- 2. The roots of nine of BC's eleven public universities were as undergraduate teaching institutions.

What two universities were exceptions?

- 3. Which one of the following post-baccalaureate credentials has never been awarded in BC?
 - a. Post degree diploma
 - b. Graduate certificate
 - c. Licentiate
- d. Management certificate
- e. Post baccalaureate diploma
- f. Master's associate

Answers

- 1. 1960s
- University of Northern British Columbia and Simon Fraser University. (Royal Roads University arguably was another exception, but its focus was on teaching professional graduate programs, rather than on research.)
- 3. Master's associate

Introduction

Scope of the Paper

This paper concerns programs that:

- Require a bachelor's degree, not necessarily in the same field, for entry to the program. A few
 mature students with appropriate background may be admitted without a previous baccalaureate,
 but they are very much in the minority. (Bachelor's degrees, normally four years in duration in
 North America, constitute undergraduate study.)
- Are equivalent in length to at least one semester of full-time study.
- Deliver at least some of the coursework through face-to-face instruction in BC. (This excludes some online and extension programs that serve BC students.)
- Evaluate student learning for academic credit, for professional certification, or for both.

The paper describes a representative sample of programs and institutions, and does not provide a complete inventory. The focus is on how programs were established, not on everything that has happened subsequently.

The scope is inclusive: public institutions, private for-profit institutions, private not-for-profit institutions, and professional organizations such as Accounting bodies.

Organization of the Paper

Graduate programs leading to master's and doctoral degrees are what perhaps come first to mind when one thinks of further study after a bachelor's degree. They are discussed first in this paper.

The other large and familiar form of post-baccalaureate education concerns preparation for the professions. The third, smaller and newer, category consists of certificate and diploma programs that require a bachelor's degree for admission. This third component is the one that comes closest in ethos to Continuing Education.

The paper concludes with a brief discussion section.

Graduate Studies

Context

Graduate degrees (known as post-graduate degrees in Europe) represent advanced study beyond the baccalaureate within a discipline or field of studies. They normally require substantial preparatory work at the undergraduate level in the same field. This preparatory study may either be a requirement for admission to the graduate program or, in some professional programs such as the MBA or MDiv (see below), the prerequisite learning may be acquired during the first year of the graduate program. The degrees awarded are master's degrees, designed in British Columbia to be completed in one to two years of full-time study, followed by doctoral degrees of several years' duration.

Origins of the Bachelor, Master and Doctor Terminology

During the Renaissance, those who received a doctorate, upon passing their final examinations, were decorated with berried branches of bay, an ancient symbol of highest honor. From this ancient custom derives the French word baccalauréat (from the Latin bacca, a berry, and laureus, of the bay laurel), and, by modification, the term "bachelor" in referring to one who holds a university degree.

The degrees of master (magister) and doctor were for some time equivalent, "the former being more in favour at Paris and the universities modeled after it, and the latter at Bologna and its derivative universities. At Oxford and Cambridge a distinction came to be drawn between the Faculties of Law, Medicine, and Theology and the Faculty of Arts in this respect, the title of Doctor being used for the former, and that of Master for the latter." Because theology was thought to be the highest of the subjects, the doctorate came to be thought of as higher than the master's.

The main significance of the higher, postgraduate degrees was that they licensed the holder to teach ("doctor" comes from the Latin "docere", meaning "teach"; "magister" is Latin for "master", and often "schoolmaster"...)

- Wikipedia

Academic versus Professional Degrees

Some graduate programs are designed to prepare students to advance knowledge through research. These academic programs award such degrees as Master of Science (MSc), Master of Applied Science (MASc), Master of Arts (MA), and Doctor of Philosophy (PhD). They normally require completion of a thesis or dissertation.

Professional graduate programs prepare students to work as skilled practitioners in particular occupations and professions. They typically require more course work than do academic degrees, and may require a graduating paper rather than the original research of a thesis. Professional graduate degrees include the Master of Engineering (MEng), Master of Business Administration (MBA), Master of Education (MEd), Doctor of Ministry (DMin), and Doctor of Education (EdD).

Early Graduate Education in Canada and BC

In 1963, most of Canada's thirty-two English-speaking universities and colleges were small and intimate, with teaching faculties numbering 150 or fewer....PhD programs, especially in the humanities and social sciences, were embryonic. In the 1950s, Toronto ran the only graduate school in the country that covered all the disciplines. UBC, the second largest university, had produced its first PhD in 1950, and by 1963 had graduated only two PhDs in the humanities...

The country entered the 1960s producing no more than seventy-five PhDs a year in the humanities and social sciences. Graduates in the pure sciences were more numerous....In some disciplines, Canadian graduate schools did scarcely anything....

[1963 UBC President John Macdonald] saw how important graduate studies were in the US. UBC's graduate program was still very small and he believed it needed to grow. Macdonald was aware that UBC was in eighth place among leading Canadian universities in the relative size of its graduate program. American universities had long before moved heavily into graduate studies. The University of California, which was determinedly expanding its graduate program, already enrolled half as many graduate students as undergraduates. At Chicago, Columbia, Harvard and Yale, the emphasis on graduate studies was even greater. No Canadian university came close. At Toronto and McGill, about one student in ten was doing graduate work, and at UBC only one in sixteen.

...Macdonald wanted what he called a two-level system, but might more explicitly have called a three-level system – with overlaps. UBC would be the centrepiece with a large graduate program and a research emphasis. Victoria and Burnaby would have autonomous four-year, degree-granting undergraduate colleges.

...Neither Victoria nor the fledgling SFU accepted the idea that they should only be teaching undergraduates. When Gordon Shrum eventually called the first meeting of the SFU board of governors — more than six months after he was named chancellor — he announced in his definitive way that SFU was going to have graduate students. His university was going to seek excellence in the same arena as UBC....SFU opened with seventy-four graduate students.

...[Macdonald] did not accept their argument that first-class faculty would not come to a purely undergraduate institution, and he cited the existence in the US of many excellent undergraduate colleges. It wasn't fair, he thought, to take in graduate students before you could offer them a strong research library and well-established departments....

At American universities, the PhD or the "ABD" (all but dissertation) was the assumed entry-level qualification for university teaching, and this had increasingly become the case in Canada since the 1940s. Among British academics lingered a dismissive attitude towards the PhD: that it was a specialized degree for the earnest and possibly second-rate academic....If you were really talented, you did not need it....Canadian universities, like the British, put undergraduate education front and centre and expected less in scholarly publication. But a postwar emphasis on research was having a profound effect....

Shrum had looked for department heads with research reputations....But he had no question in his mind about SFU's primary mission — undergraduate teaching.... Shrum was one of those who did not like the increased emphasis on research at North American universities.... "those who clutter up the literature of their subject with mediocre publications."....It was important to Shrum that a faculty member should be a researcher because it made him or her a better teacher. But teaching was the mission....Shrum's notion of the relationship between teaching and research was probably shared by most of the early faculty at SFU.

- Hugh Johnston, 2005. Radical Campus: Making Simon Fraser University, p. 13, 21, 22, 30, and 98

Federal Influence on Former Teaching Institutions

Canadian universities were mainly teaching institutions until the 1960s, and even then doctoral programs were rare – Canadian universities recruited faculty who were either Canadians who had studied abroad or who were citizens of other countries.

The shift to more of a graduate and research emphasis was fostered by the actions of the federal government, and not so much by the provinces that had jurisdiction over education. As with the blossoming of vocational education in the sixties under the stimulus of the federal government, national economic and labour market concerns were the drivers. The mechanisms for developing the two fields of study differed, though. Whereas seat purchases, funding for students and subsidized facilities were used to expand vocational education, research grants were the stimulus for the growth of graduate education.

Stimulus of the Federal Government

Nowhere was the expansion of UBC in the late 1940s more dramatic than in the natural sciences, where federal grants played a decisive role in promoting research and graduate studies....The British and American governments began financing research to unprecedented levels by establishing national funding councils with large budgets to provide grants on a competitive basis.

- Eric Daimer and Herbert Rosengarten, 2009. UBC: The First Hundred Years, p. 126.

Following a new interest in university-based research in the United States, UBC began to attract research funding from Canada's National Research Council (its budget had doubled in the five years following the war) and local industry (either directly or through university fundraising.) Increased graduate student enrolment at UBC followed. By 1960, UBC as a whole had more NRC awards in science and engineering and more applications for graduate study than any other Canadian university, and had begun to receive contracts from military and civilian agencies in the United States.

- Eric Daimer, 2002. Discovery by Design, p. 76.

[Commenting on the Natural Sciences and Engineering Research Council, established in 1978 with more resources than its predecessor, the National Research Council:]

It [NSERC] transformed scientific research at Canadian universities over the following two decades. It encouraged larger, more substantial projects, often involving groups of scientists and employing substantial numbers of graduate students.

- Ian MacPherson, 2012. Reaching Outward and Upward: the University of Victoria, p. 66.

Public Institutions

(The institutions mentioned here are described more fully in other papers in the *Made in BC* series.)

World War II stimulated the research function of universities, and this continued after the war. UBC launched an appeal in 1946 to raise \$1 million for research. The campaign did not succeed, but it did heighten industry and outside organizations' interest in research. Funding for research gradually increased and, in 1949, the Canadian Joint Committee on Oceanography recommended UBC establish a program and fundamental research in Oceanography. Chemistry, Physics and Zoology joined to offer graduate instruction in Oceanography. A similar Institute of Fisheries was established four years later.

It was in the sciences in the postwar period that graduate education in BC developed momentum. This momentum was propelled in no small measure by federal funding.

The growing importance of graduate education was reflected in the creation of Faculties of Graduate Studies. The UBC Faculty formed in 1949. It soon came to house interdisciplinary research institutes, beginning with Oceanography in 1949 and growing to about forty institutions in 2005 (the formation of the College for Interdisciplinary Studies became the new administrative body for these institutes, leaving the Faculty once again to focus on graduate students.) In the early days, FoGS also housed some diploma programs, such as Community and Regional Planning (1950) and Criminology (1953).

The University of Victoria, established in 1963 upon the foundation of the former Victoria College, created its own Faculty of Graduate Studies by 1965. Faculties of Graduate Studies are not yet features of the new special purpose and teaching intensive universities that have been established over the past decade.

Faculties of Graduate Studies

Faculties of Graduate Studies...have certainly had an appropriate effect in raising standards of graduate study in the United States from a position in which it was widely regarded with amusement in other countries to the one it now holds of unrivalled excellence....

- Cyril Belshaw, Anatomy of a University, 1964, p. 46.

Research Universities

University of British Columbia

Within a few years of the end of World War II, most UBC departments were offering master's degrees and a few (Physics, Botany and Zoology in Biology, and Mathematics) offered doctorates. The first PhDs were awarded in 1950 in Physics and Zoology.

By the mid fifties, all the sciences were offering graduate work of national, and sometimes international, significance. By the late fifties, UBC's graduate enrolment stood at about 450, eighty of whom were pursing a doctorate in one of the two dozen departments offering that degree.

The following chronologies illustrate the growth of graduate education at UBC.

Science and Applied Science:

- 1952 MSc in Metallurgy, and a PhD a year later.
- First PhD in Mathematics, the same year as Geology started a PhD program.
- 1956 Plans for PhD in Agriculture.
- 1958 24 PhDs in Physics.

Commerce:

- 1950 Became an independent school.
- 1951 Master of Commerce degree added, replaced in 1953 by a general MBA that followed the Harvard model.
- School became an independent Faculty of Commerce and Business Administration. For several years, it debated the pros and cons of a PhD versus a Doctor of Business Administration, deciding in 1969 to offer a PhD in several fields.
- 1971 MSc, a specialized degree, was approved.

Forestry:

- A department since 1920, an MASc was authorized in 1931 and the first one awarded in
- 1949 Master of Forestry and PhD authorized.
- 1966 MSc in Forestry authorized.

Theatre:

1965 A program since 1958, Theatre became a department in 1965 and added a master's degree.

Growth in Graduate Programs at UBC in the Arts

The expansion of research in the humanities and social sciences took a less confident route. By the mid 1950s, Arts offered doctoral degrees only in Clinical Psychology, although it was theoretically possible to register for a doctoral program in history, economics or anthropology.... Thanks to the 1951 Massey Commission Report, the federal government established the Canada Council in 1957 to bolster fine arts and research in the humanities, but funding for doctoral work in these areas came through slowly....Classics was the first among these to grant a PhD – which was also the first UBC Arts PhD in 1960. English, which had obtained approval to offer the degree in 1958, saw its first PhD student graduate in 1962.

[UBC President] Macdonald noted when he arrived [1962] that UBC stood eighth in Canada in the ratio of graduate students to undergraduates, well behind universities like Toronto and McGill which themselves were far behind the large American universities...Macdonald understood that breakthroughs of great human and economic significance would occur only through investment in graduate studies at the doctoral level.

- Eric Daimer and Herbert Rosengarten, 2009. UBC: The First Hundred Years, p. 169 and 194.

Simon Fraser University

In 1965, its first year of operation, SFU enrolled master's students and 33 doctoral students, the majority of whom were foreign (a more international mix of graduate students than at other Canadian universities or at SFU forty years later.) It had not, however, done much planning for them and it did not have a way of supporting them financially. The province did not fund students and while UBC provided various awards, SFU had nothing to offer it graduate students. Hugh Johnston (2005, p.172 – 175) observed:

Department heads had hit on an alternative – teaching assistantships. Shrum, in his enthusiasm for large lectures and tutorials, had imagined using both undergraduates and graduates as tutorial leaders, or TAs as they quickly became known...But Shrum had no notion that graduate students would be the mainstay of the tutorial system. He had spoken of "dentists' wives," the

pool of well-qualified housewives that he was sure existed in all subjects....Instead, the sciences were choosing to support graduate students....

As SFU moved into its second and third years, departments found it easier to expand their pool of graduate students than to find additional qualified non-student instructors...So the graduate student population grew along with the undergraduate....In the SFU system, as it developed, TAs took 80 percent of the first- and second-year tutorials and laboratories....

In SFU's first eight years, graduate enrolments climbed tenfold while undergraduate increased by a factor of only two and a half....Departments no longer hired TAs from outside the university. By 1972 the university was able to offer TA-ships to only half of its active graduate students.

SFU's graduate student union was very active in the early seventies, with unionization emerging as one of its advocacy issues by 1974. The Teaching Support Staff Union formed in 1978, a union of temporary or casual teaching staff, of which at least four fifths have been graduate students. Although one of the first teaching assistant unions in North America, Johnston notes that its structure and independent philosophy have not been implemented elsewhere, e.g. the union subsequently formed at UBC includes undergraduates and research staff as well.

Technical University of BC

The short-lived (1999 – 2002) Technical University of BC in Surrey was legislated to provide undergraduate and graduate programs in "applied, technological and related professional fields that contribute to the economic development of British Columbia" and to conduct applied research and development. The institution remained small and instruction at the graduate level never really developed prior to its absorption by Simon Fraser University.

University of Victoria

An undercurrent of discontent was evident at the University of Victoria five to seven years after its formation in 1963. MacPherson (2012) reports that one of the reasons was the shift in the balance between teaching and research, with scientists generally wanting to promote graduate programming while faculty in the liberal arts tended to favour developing excellence in undergraduate education.

In Fall 1966, the School of Graduate Studies enrolled only 28 full-time and 17 part-time students. The approved programs fell in the Arts and Sciences (Geography, History, Linguistics, Psychology, Biology, Chemistry, and Physics) with the exception of Education. The first PhD, in Psychology, was conferred in 1969.

Planning funds from the provincial government in 1973 included provision not only to open an

Research in the Sciences at the University of Victoria

[Science departments] were in the vanguard (though they were not alone) in promoting the internationalization of research at UVic. All of these characteristics, plus increased government funding for science, meant that UVic scientists attracted steadily larger research grants. They employed graduate students in significant numbers. They proudly demonstrated the immediate, practical value of what they did.

- Ian MacPherson, 2012. Reaching Outward and Upward: The University of Victoria, p. 43.

undergraduate program in child care but also to establish a School of Public Administration with a master's program. The opening of a Law school was planned for 1974/75.

UVic launched closed to twenty graduate programs in the 1990s. In the following decade, graduate enrolment rose from about 1,800 students to 2,700, with the largest increases coming in the Sciences and in Human and Social Development. Many of the years since 2000 have seen three to six new graduate

programs added, with about a dozen in total at the doctoral level. Another sixteen doctoral programs were in various stages of consideration at the end of 2011.

Business at the University of Victoria

During the 1980s, discussions also began about starting a business faculty, though not everyone welcomed the idea. Some faculty members, notably those within the Liberal Arts tradition, opposed its development, fearing it would be too expensive and would become a programme in 'training' not education (as they interpreted the word.)

- Ian MacPherson, 2012. Reaching Outward and Upward: The University of Victoria, p. 58.

University of Northern British Columbia

The University of Northern British Columbia opened in Prince George in 1994 with a mandate to meet the distinct educational needs of the north, both in terms of research and the training of professionals locally to staunch migration to southern and urban centres. This philosophy shaped the research priorities of natural resources and the environment, rural health, community sustainability, and Aboriginal peoples and culture.

UNBC offered master's programs from the beginning and in 1997 started its first PhD program (in Natural Resources and Environmental Studies.) Today, it has master's programs in about thirty disciplines and three PhD programs (Health and Psychology followed Natural Resources.) One stream of the MBA is offered in Vancouver over a 21 month period, with one weekend session per month held at Langara College.

Teaching Intensive Universities

1995 and 2008 were key years in the evolution of graduate programming outside the research universities.

In 1995, the five university colleges (Fraser Valley, Kwantlen, Malaspina, Okanagan, and the Cariboo) were granted authority under the *College and Institute Act* to confer undergraduate degrees in their own names, rather than in partnership with UBC, SFU or UVic. This independence set the stage for developments in 2008.

Also in 1995, the Royal Roads University Act came into effect. The act restricted RRU's graduate level programs to applied and professional fields, but left that terminology undefined (e.g. are Chemistry or Economics applied fields?) The legislation left the door open to doctoral programs. All other "special purpose, teaching universities," to use the terminology of other legislation, have been restricted to awarding masters degrees as their highest credential. BCIT was especially restricted, being limited to applied masters degrees (again, with "applied" remaining undefined.)

The University College of the Cariboo, formerly Cariboo College, took the lead in BC in lobbying

Funding Master's Students

TRU president Alan Shaver said the university was supposed to have 450 master's students, but today has only 100. "Right now we don't receive any funding for those students in our university, nor do those masters students get any funding in the form of scholarships from the province. In other provinces like Quebec, Ontario and Alberta, they have provincial scholarship programs for graduate students."

- Kamloops Daily News, 4 October 2012

for university status. The *Thompson Rivers University Act* of 2005 renamed the institution and included the offering of masters degree programs among its purposes.

In 2008, with little consultation and almost no implementation planning, the premier announced over a period of weeks that the four remaining university colleges, Capilano College, and the Emily Carr Institute of Art + Design would receive university status. They were to remain teaching institutions, however, with no additional funding to support research as research was not part of their mandate. They were required to provide master's degrees if they served a geographic region but if any served the whole province, they were restricted to applied and professional master's degrees. The criteria for determining which institutions serve only a specific region and what constitutes an applied master's degree are not widely known today.

As of 2012, neither Kwantlen Polytechnic University nor Capilano University offered graduate programs. Thompson Rivers and Vancouver Island offered master's degrees in Business and Education, with TRU also offering an MSc in Environmental Sciences and a master's in Nursing. The University of the Fraser Valley has taken a different path, with master's in Criminal Justice and Social Work. The Emily Carr University of Art + Design offered master's in Applied Arts and Digital Media.

Prior to 2008 when it was Malaspina University College, VIU had offered a joint Business degree since 2002 with the University of Hertfordshire, a former polytechnic, in the United Kingdom. TRU began its Master's in Business in 2005, with half of its enrolment today consisting of international students.

Other Institutions

BCIT

Following legislative changes in 1995, BCIT received the authority to grant master's degrees in applied fields. It currently offers an MEng in Building Science, an MSc in Building Engineering/Building Science, and an MSc in International Construction Management. The latter is offered in partnership with the University of Bath in the United Kingdom and is delivered through distance education with two residential sessions.

Private Institutions

Based in British Columbia

Quest University

The Sea to Sky University Act of 2002 established a private university in Squamish with the right to grant graduate degrees, although programming to date has been restricted to undergraduate liberal arts. Originally headed by a former president of the University of British Columbia, the university nearly folded in the early days and was, for a brief period, in an alliance with a for-profit career college company. The name was changed to Quest University in 2005 and the first students admitted in 2007.

University of Canada West

The University of Canada West currently offers an MBA from its base in Vancouver, following the closure of its original Victoria campus in 2011.

A private, for-profit institution, it was previously operated by LearningWise Education Inc. but was sold to the Vancouver based Eminata Group late in 2008. Eminata, which also owns such postsecondary institutions as CDI College and Vancouver Career College, has links with a \$12 million judgment in California in 1993 about students who were found to have been defrauded.

The university was established in 2004 by a former president of the University of Victoria. The plan was to hire mainly retired professors and business people to teach courses, thus avoiding the cost of establishing a research infrastructure for mid career faculty advancement.

The university offered undergraduate and graduate business courses from a surplus elementary school of the Victoria school district. It opened in 2005 with an MBA and an Executive MBA, but encountered financial difficulties. After several years, it began working towards eliminating the residency component.

The academic year was originally organized into four ten-week terms, but was changed to five eight-week terms in September 2009. There has been some controversy regarding the transferability of credits and the MBA was not accredited by any of the three largest business school accreditors.

World Trade University

A failed private institution that was to have offered an International Master of Business Administration in World Trade, the WTU was created in 2001 under a private member's bill in the legislature. Some residents of BC erroneously thought the organization had connections with the United Nations and world trade organizations. Located on a redeveloped former military base in Chilliwack, the university never opened. Its applications to open a Law school and to provide a master's in Education were withdrawn in 2012 and 2010 respectively.

Faith-Based Institutions

More information on the institutions in this section is available in volume II of the *Made in BC* series, *Faith-Based Institutions*. Most, but not all, focus on religious curriculum.

Comprehensive Programming

Trinity Western University

Founded in 1962 in Langley by the Evangelical Free Church as Trinity Junior College, the institution evolved into Trinity Western University in 1985. Counselling Psychology became the first graduate program in 1993, followed in subsequent years by other master's programs such as Nursing, Business Administration, Educational Leadership, Linguistics and Biblical Studies. No doctoral programs are currently offered, but TWU is actively seeking to open a Law school.

The Associated Canadian Theological Schools, a partnership launched in 1987 (see below), comprise the graduate school of theological studies at TWU. TWU and each of the six seminaries jointly offer degrees.

Theological Schools

BC's theological schools offer both academic and professional (clergy preparation and upgrading) degrees at the graduate level. Regent College is distinctive in that religious education for the laity, especially graduate certificates and diplomas for holders of bachelor's degrees in fields other than theology or Christian Studies, has formed the foundation of its offerings.

Four graduate theological schools are affiliated with UBC: Carey Hall, St. Mark's College, Regent College, and the Vancouver School of Theology. A fifth affiliated theological school at UBC, St. Andrew's Hall also has its own legislation and provides student housing, but has limited educational programming. The instruction that St. Andrew's does provide is in conjunction with the Vancouver School of Theology and Regent College.

Theological schools in BC, especially those with undergraduate programming, vary in their emphasis on academic rigour. The Association of Theological Schools in the USA and Canada maintains high academic standards and has accredited the Associated Canadian Theological Schools, Carey Hall, Regent College and the Vancouver School of Theology. St. Mark's College is a member of the Catholic Colleges and Universities of Canada, an organization whose membership criteria include quality assurance.

Associated Canadian Theological Schools

ACTS was formed in 1987 as a partnership of Trinity Western Seminary, the Canadian Baptist Seminary, and Northwest Baptist Seminary. The Mennonite Brethren Biblical Seminary, an extension of a California seminary, joined in 1999. What is now Ambrose Seminary, a school with roots in the Canadian prairies, joined that same year, followed by Canadian Pentecostal Seminary in 2004. Students take the same core courses, supplemented by additional courses that teach their denomination's distinctives. The seminaries share a building on the campus of Trinity Western University.

Canadian Graduate School of Ministry

Okanagan Bible College, largely a distance education institution, formed the Canadian Graduate School of Ministry in 2008 in partnership with a California graduate school of theology. Today, it offers a Master of Christian Leadership and a Doctor of Ministry in partnership with the CREST Leadership Centre in Alberta.

Okanagan Bible College's Non-Traditional Approach to Graduate Education

Graduate education earned in the traditional manner is particularly difficult for adults. Four or more years of fulltime school with a significant educational debt upon graduation is not possible for most families.

By recognizing the validity of life experience and non-formal training (seminars, etc.) Okanagan Bible College is able to grant credits toward degrees that includes life experience equivalency. Applicants submit a transcript of all formal training earned, plus a roster of all seminars and non-formal training taken. Okanagan Bible College will assess these and determine how many credits are valid toward a degree. Credits can be earned while maintaining current responsibilities.

Okanagan Bible College welcomes you to explore creative possibilities to expand your learning and earn a degree.

- Okanagan Bible College website, January 2013

Carey Theological College

Opened by Baptists in 1959 at UBC as Carey Hall, it was the late seventies before educational programs were offered, beginning in partnership with Regent College (a partnership that lasted until 2004.) Carey Hall bifurcated in 1991, with Carey Theological College becoming the educational arm and Carey Hall providing student housing. The Master's of Pastoral Ministry and a Doctor of Ministry began in 2004. A Master Divinity was accredited in 2009. Today, Carey offers an MA in Spiritual Formation, the MDiv and the DMin.

Regent College

Opening in 1968 on the UBC campus with support from the evangelical community, transdenominational Regent College was the first graduate school of theology in North America committed to the education of laity as its central focus. Although small and specialized, the international reputation that it quickly gained made Regent College one of BC's most remarkable postsecondary successes. The professional MDiv program was introduced in 1978 to complement the lay oriented Master of Christian Studies.

The academically oriented Master of Theology program started in 1982. It requires an MDiv or MCS for admission and prepares students for doctoral studies.

Seminary of Christ the King

Located at Westminster Abbey in Mission, and with roots stretching back to 1931, provincial legislation in 1966 granted the Seminary of Christ the King the right to offer BA degrees as well as degrees in theology. Both the Master of Divinity and the Bachelor of Theology normally require a bachelor's degree for admission, preferably in Arts. Enrolment at this tiny Catholic institution has sometimes consisted of just a couple of dozen students across the high school and postsecondary divisions.

St. Mark's College

The St. Mark's College Act of 1956 authorized the granting of graduate degrees in theology and provided for the college to be entrusted to a recognized Roman Catholic teaching clerical order. Enrolments have fluctuated from less than a dozen to over one hundred. The Basilians ran the college at UBC until 2005, leaving due to a diminishing clergy base around the world.

Vancouver School of Theology

With roots dating to 1908, the Vancouver School of Theology formed in 1971 by the merger of Anglican Theological College and the United Church affiliated Union College. Both of its predecessors came to the UBC theological precinct in 1927. It describes its MDiv, MA in Public and Pastoral Leadership, and MA in Theological Studies as "basic degrees," and its Graduate Diploma in Theological Studies and Master of Theology as "advanced degrees."

Out-of-Province Institutions

The following institutions are based in other jurisdictions but offer face-to-face instruction in BC.

Adler School of Professional Psychology

Alfred Adler (1870 – 1937) is sometimes described as the first community psychologist because his work drew attention to community life, prevention and population health. The Institute of Adlerian Psychology was founded in 1952 in Chicago and received authority from the state to award a master's degree in 1973. The American Psychological Association accredited its PsyD program in 1998. Today, the Adler School offers eleven graduate programs enrolling more than 1000 students in Chicago and Vancouver.

The School had offered courses and workshops in Vancouver since 1978 through an agreement with the Adlerian Psychology Association of BC. By the 1990s, students could take graduate courses in Vancouver, supplemented by residencies in Chicago. In 2005, entire graduate programs became available in Vancouver.

The Vancouver offerings include a non-thesis Master of Counselling Psychology and an MA in Counselling Psychology. The BC Minister of Advanced Education originally authorized both in November, 2011 for a five-year period.

The related Alfred Adler Institute of the Adlerian Psychology Association of BC offers some certificates (e.g. in school counselling and in Adlerian counselling) at the graduate level, regulated by the BC government's Private Career Training Institutions Agency.

City University

City University of Seattle was established in 1973 to serve working adults. It currently has over two dozen campuses around the world, with two sites in BC: Vancouver and Victoria. It operated in Vancouver in early 1980s, delivering courses in BC but awarding credentials from Washington state. In 2004/05, the province of BC authorized an MEd and an MBA.

Currently, City University's post-baccalaureate offerings in BC include an MEd in Leadership and in School Counselling. The Master of Counselling leads to registration with the BC Association of Clinical Counsellors and is delivered in several formats: a full-time program over seven quarters, a mixed mode option that combines classroom and online learning, and a Saturdays-only schedule. The MC requires a thesis and an internship.

Fairleigh Dickinson University

Fairleigh Dickinson was founded in 1942 in New Jersey as a private junior college, adding four-year degrees in 1948. It was the first American university to own and operate an international campus (in England.)

FDU came to downtown Vancouver in 2007. Its graduate offering in BC since 2011 has been a Master of Administrative Science.

Lansbridge University of New Brunswick

A for-profit institution, Lansbridge University was founded in 1999 by Learnsoft Corporation and purchased in 2001 by the Kingston Education Group. It primarily offered online MBA and DBA programs, with two thirds of its students reportedly connected with the US military because of the university's accreditation by a distance education body. The university had been owned and operated by a Vancouver businessman and his wife.

The Vancouver operation of Lansbridge University was authorized in 2004/05 by the province to offer an MBA and then an MSc in Computing Science the following year, but it was closed by the BC government in May 2007 for failure to comply with the Degree Authorization Act. The Fredericton campus was closed in August 2010 when New Brunswick officials said it remained significantly non-compliant and substandard, following failure of two earlier reviews.

New York Institute of Technology

Founded in 1955 as a private, not-for-profit university, the New York Institute of Technology's history stretches back to 1910. In addition to two campuses in the USA, three in the Middle East and one in China, it opened a Canadian campus in 2007 in Vancouver following authorization by the province to offer an MBA and an MA in Communication Arts.

An MBA is offered in Vancouver, with the goal of offering other graduate degrees and post-graduate specialist diplomas in the future. Visiting full-time professors from other NYIT campuses offer global content, supplementing the local context of courses.

Queen's University

This public university in Kingston, Ontario was authorized by BC in 2006/07 to deliver an MBA in BC. Whether it meets this report's criteria of delivering some face-to-face instruction in BC is debatable in that it uses video conferencing, with students in Vancouver and faculty located outside the province. In any event, it offers three MBAs for working adults:

- 16 month executive MBA
- 12 month accelerated MBA for those with an undergraduate business degree (at a cost of over \$60,000 inclusive of books and a residency in Kingston)
- 18 month dual executive degree with Cornell University in New York.

University of Phoenix

The largest for-profit university in the USA, the University of Phoenix was launched in 1976, with online offerings introduced in 1989. It was formally recognized in BC in 2007, although it had been offering courses in BC since 1998 and awarding degrees from Arizona. In 2008, the university said it would close its Burnaby and Calgary campuses after all students had graduated. This closure occurred in October 2010. (Many other of its campuses around the world have also subsequently closed, following a dramatic drop in profits for its parent company, the Apollo Group. At its peak in 2010, Phoenix enrolled 600,000 students worldwide at more than 200 campuses. Enrolment dropped by a third the following year.)

The university's philosophy was to serve working adults who often had some previous post-secondary education and who needed convenient course delivery formats, both online and in-person. Phoenix used a standardized curriculum, delivered locally by adjunct faculty. It leased space with convenient parking and highway access in Burnaby and, at varying times, in Abbotsford, Nanaimo, Kelowna and Victoria.

Lower Mainland graduate offerings included a Master's in Organizational Management. An MA in Education was authorized in 2004/05 but not offered.

Master's Programs for Teachers

Teaching is a large profession and teachers have salary incentives as well as career progression incentives to upgrade their formal qualifications. Traditionally, this upgrading has occurred in the summer on the campuses of research universities in southwestern British Columbia. Despite some extension offerings by those universities, some out-of-province universities and, more recently, BC's newer teaching intensive universities have seen opportunities for delivering master's programs closer to where teachers live and work.

An example of this type of outreach can be found in **San Diego State University's** presence in the Okanagan from at least 1995 to 1997. Three streams of a master of Education program were offered: curriculum development, educational leadership, and counselling. Students spent one Saturday per month in Kelowna, did some online work, and spent two six-week summer sessions in San Diego.

The classroom courses tended to be project-based. Students were expected to be self-disciplined and self-directed. The university's philosophy was that if graduate students were not succeeding, there was something wrong with the type of support the university was providing.

During the past decade, the **University of Oregon** has collaborated with the Coquitlam school district to deliver an MSc in educational leadership. University faculty travelled to Coquitlam once a month to teach

courses on a Friday evening and Saturday during the day. Other courses were offered online or in a hybrid format. The residency requirement was met by four-week courses in July in Eugene, plus the option of a one week course at the end of June.

(The University of Oregon's connection with BC stretches back to the 1960s, when the Faculty of Education at the University of Victoria encouraged younger faculty without graduate degrees to pursue them. Several did so, especially at the University of Oregon.)

Gonzaga University, a Catholic university in Spokane, has tended to serve smaller communities in southeastern BC. At present, it is offering an MA and a MEd via distance education. It is authorized by the province to deliver an MA in Leadership and Administration, and a Master of Counselling.

Following the BC government's transformation of the University College of the Cariboo into the special purpose Thompson Rivers University in 2005, and the remaining university colleges into teaching intensive universities in 2008, additional master's programs in Education have been developed in non-metropolitan areas. **Vancouver Island University** currently offers a cohort-based MEd for practicing teachers in educational leadership and in special education. The two-year, 40-credit program is offered over six Friday nights and Saturdays per semester with a July residency. Alternatively, the program is available online with two brief summer residencies, or on-campus for a year of full-time study.

Thompson Rivers University in Kamloops offers two concentrations in its MEd: counselling, and educational leadership and curriculum. Options are available for full or part-time study, on campus or at a distance. Other options include a choice of a thesis, final project or capstone course and opportunities for international exchange. Summer institutes and weekend intensive courses are also offered.

Institutions Assessed by the Degree Quality Assessment Board but Not Offering Graduate Programs in BC

The BC government established the Degree Quality Assessment Board in May 2003 to authorize new degree programs at public and private institutions operating in BC and to regulate the use of the word "university." Its annual reports show the following institutions as having met its criteria but the institutions have not proceeded to deliver face-to-face programming for bachelor degree holders in BC. In some cases, their degree authorization has expired or been withdrawn.

2004/05

Shang Hai College of Traditional Chinese Medicine – Master's and PhD

The college does, however, offer diploma and other programs of up to five years duration in Burnaby. Programs include acupuncture, herbalist, holistic health and traditional Chinese medicine.

International College of Traditional Chinese Medicine – Master's and PhD

The college's origins lie in a society in Victoria that opened a school in 1986 to provide acupuncture and herbology education. With just one student, it was privatized and a Vancouver campus opened in 1989. The Vancouver campus had about a dozen students when it moved to a location on West Broadway in 1991. The Victoria and Vancouver campuses separated in 1995, and enrolment grew in Vancouver to 120 full-time students. It became the largest college of traditional Chinese medicine in Canada, offering undergraduate programs of up to five years duration.

Central College – Master of Science in Oriental Medicine

As well as diploma programs in traditional Chinese medicine, this New Westminster institution offers ESL and Sushi Chef programs.

University of Nevada Reno – Master of Arts

This institution, established in 1874, is Nevada's original public university.

University of Northern Virginia - Master of Business Administration

UNVA was founded in 1998 as an unaccredited for-profit institution. It has received American government scrutiny and media coverage about its academic and immigration practices.

2006/07

University of Birmingham – MA in Teaching English as a Second or Foreign Language

The University of Birmingham is a prominent public university in the United Kingdom.

Lawrence Technological University - Master of Business Administration

Lawrence is a private institution established in 1932 in Michigan. Its BC application expired in 2010.

Yorkville University – MA in Counselling Psychology

This private university in New Brunswick began registering students in 2004, offering online master's programs in Education and Counselling.

Oklahoma City University – Master of Business Administration

A private institution affiliated with the United Methodist Church, OCU's roots date back to 1902 but it has had its ups and downs over the decades. The MBA application expired in 2010.

Professional Programs

An academic degree is necessary, but not sufficient, to practice some professions. In these occupations, graduates have to be licenced by the professional body, and sometimes this involves a lengthy internship, articling, or residency.

Sometimes required courses are offered not by academic institutions but by the professions themselves. Even when offered by universities, the focus is on preparing practitioners while concurrently advancing knowledge in the field. The first credential after the bachelor's degree may be something other than a master's degree, e.g. LLB and JD degrees in Law, or the DMD in Dentistry.

Accounting

Compared to other countries, the Canadian accounting profession is fragmented. Canada has three national accounting organizations but since education falls under provincial jurisdiction, each type of accounting designation has provincial organizations to control education and entry requirements. A unification effort towards a Chartered Professional Accountant (CPA) designation began in 2011, but the Certified General Accountants in some provinces withdrew in 2012. The national Chartered Accountants and Management Accountant associations established a CPA body under the *Canada Not-for-Profit Corporations Act*, effective January 2013.

Chartered Accountants

The Chartered Accountants (CAs) were the first group to require, in 1970, a bachelor's degree.

Nationally, the Dominion Association of Chartered Accountants, now called the Canadian Institute of Chartered Accountants, formed in 1902. The BC institute was established in 1905 and, in the early 1920s, it extended the articling requirement to five years. In 1954, university graduates were exempted from introductory exams and given credit for three of the required six years of articling.

In 1969, UBC began offering a Licentiate in Accounting for graduates of programs other than Business to ease the transition into professional courses. (The UBC Senate had approved the term "licentiate" that year for certain types of post-graduate programs.) The Licentiate evolved in the 1980s into GAP courses offered by the institute, then returned in 1999 to UBC where it became the Diploma in Accounting program.

The BC institute established a School of Chartered Accountancy in 1980 to offer courses in tax, audit, and accounting. In 2000, it became the CA School of Business.

Certified General Accountants

The Canadian Certified General Accountants Association (CGAs) was incorporated in 1913 as the General Accounting Association. The Certified General Accountants of BC formed in 1951 under the provincial *Accountants (Certified General) Act*. It is now the largest – nearly two thirds of all accounting students – of the three associations in BC.

A bachelor's degree is not an entry requirement, but it must be obtained prior to receiving the CGA designation, preferably prior to completing the final professional level (PACE) of the program. Entrants with a degree receive advanced standing in the CGA program based on their academic courses.

Certified Management Accountants

The Canadian Society of Cost Accountants formed in 1920. In 1930, it added "and Industrial Engineers" to its name. Other name changes included:

Society of Industrial and Cost Accountants of Canada (1948) The Society of Industrial Accountants of Canada (1968) The Society of Management Accountants of Canada (1977)

Finally, in 1985, it became the Society of Management Accountants, with the professional designation of Certified Management Accountant (CMA. Existing Registered Industrial Accountants, RIAs, were able to retain their designation.)

The Certified Management Accountants of BC organization was incorporated in 1945 under the *Accountants Management Act* of British Columbia.

A bachelor's degree became the normal entry requirement in 2004, although a limited number of other applicants with extensive professional experience and other postsecondary education are admitted.

Both UBC and SFU offer a combined CMA-MBA program. The CMA Executive Program, which requires five year of mid management experience in addition to a bachelor's degree, is offered in partnership with the University of Victoria in downtown Vancouver and Victoria. The CMA Accredited Program is for business graduates from the BC Institute of Technology, Capilano University, Kwantlen Polytechnic University, Okanagan College, SFU or UBC.

Architecture

Undergraduate programs at BCIT (Bachelor of Technology in Architectural Science) and UBC (Environmental Design), as well as UBC's master's programs in Architecture and Landscape Design, lead to registration with the Architectural Institute of BC. In addition to possessing a relevant degree, applicants for registration must complete an extended internship that includes some professional development courses, and then write an examination.

UBC's School of Architecture was established in 1946 with an undergraduate program that was intentionally modernist. The master's program arrived in the 1990s, paralleling the 1997 introduction of the Master of Landscape Architecture degree. Landscape design had begun as a separate undergraduate program in 1979/80 and was merged into the School of Architecture in 2005 to form the School of Architecture and Landscape Architecture. In addition to the professional preparatory masters programs, the School also offers Advanced Studies master's for those seeking to redefine their professional or academic expertise through focussed, fairly independent research.

Community and Regional Planning

UBC introduced a two-year post graduate diploma in community planning, funded by the federal Central Mortgage and Housing Corporation and based in the Faculty of Graduate Studies, in 1950. By 1953, an MSc in Community and Regional Planning was being awarded. Six years later, a separate school was established.

Graduates are eligible to become certified members of the Planning Institute of BC.

Education

The means by which teachers become qualified in BC has been multifaceted. Prior to the 1950s, elementary teachers received a year or two of training following high school graduation at a Normal School, while secondary teachers received a year of training after a bachelor's degree. Eventually an undergraduate BEd was introduced with separate streams for elementary and secondary teaching. Students had a choice of either completing a BEd or completing a degree in another field and taking a year of post-baccalaureate training in either elementary or secondary fields.

The specifics have varied slightly over time and across universities. The following chronology of developments at UBC is representative of the history of teacher education in BC.

In 1925, Education was a department in UBC's Faculty of Arts and Sciences. By the late 1920s, Education was a minor for graduate degrees and in the early 1930s, it became a major subject for the MA.

The Department of Education achieved "school" status at UBC in 1951, and then in 1956 it became a Faculty. The two provincial normal schools in Vancouver and Victoria that trained elementary teachers in one and two-year programs closed in 1956 and all teacher training was consolidated at UBC. Many of the normal school instructors were retained, but academics taught the graduate courses in a range of fields from early childhood education to adult education.

An amended *University Act* created a College of Education, which consisted of a joint board of teacher education to advise on teacher preparation and a Faculty of Education to deliver courses and recommend successful candidates for provincial certification. With some additional courses after their fifth year of university study, secondary school teachers could earn a BEd degree. An MEd was also developed in 1956.

Planning for an EdD at UBC began in 1960, with the first doctoral students admitted in 1963.

Engineering

Electrical engineering was one of the earlier engineering departments to offer graduate courses. By 1950, a PhD was under consideration, becoming available in 1955.

Mechanical Engineering began offering a graduate level course during World War II. By 1949, the new Faculty of Graduate Studies had authorized Mechanical Engineering to offer its own master's degree, and five courses towards the degree became available in 1950. When the department introduced a doctorate in mechanical engineering in 1965, it was one of only a few in Canada.

Health

Medicine

Following many years of wishful thinking, dating back to the 1890s, the possibility of a medical school in British Columbia began receiving serious consideration in 1943. In 1945, the government provided a \$1.5 million capital grant to launch a medical faculty.

Daimer and Rosengarten recount that in1946, UBC's study of leading medical schools in North America concluded, among other things, that UBC would need its own teaching hospital to guarantee an adequate number of teaching beds. The BC Medical Association preferred to coordinate clinical education at existing facilities. It suggested preclinical classroom instruction could also occur close to those hospitals, although it was open to discussing such instruction being located at UBC. Negotiations stalled for a year. The provincial government broke the impasse in 1947 by choosing the expedient plan of using existing

hospitals, but promising to upgrade Vancouver General Hospital for teaching purposes to ensure at least 400 teaching beds.

A dean of medicine was hired in 1948, and in 1950 the first class of 50 students began their studies. Clinical teaching at Vancouver General Hospital began in 1952, with some tensions developing between the practicing physicians in hospitals who served as clinical staff and the academic staff at Point Grey. (Funding from different ministries compounded the tensions.) The first degrees were conferred in 1954.

Nursing opted to remain in the Faculty of Applied Science, rather than join Medicine, in order to maintain greater independence for the profession.

Medical education is expensive, and the province has relied extensively on immigration to maintain an adequate number of physicians. In the 1980s, UBC debated with the government whether the annual intake of 80 students could be expanded to 120.

Between 2002 and 2007 the annual intake doubled from 122 to about 250, including 32 students in the Northern Medical Program at UNBC, beginning in 2004, and 32 at the Island Medical Program at the University of Victoria. In 2011, another 32 spaces were made available at the Okanagan campus of UBC, making for a total of 288 spaces in BC. Practising physicians – over 5,000 in 2012 – provide clinical teaching.

All medical students spend the first six months in Vancouver, and then one third complete their studies at a distributed site. Such students spend up to half of their medical education at campuses other than UBC Vancouver. Video-conferencing and other educational technology integrate the four sites. The rationale for this distributed model of medical education, known as the Provincial Medical Education Plan, is the hope that physicians trained in smaller centres will more likely be interested upon graduation in practicing in underserved regions of the province, especially rural communities.

In 2001, a special admissions process was introduced for students of Aboriginal heritage. The goal was to reserve five percent of the spaces for Aboriginal students, with any unused spaces put back in the general pool.

In 2012, plans were underway to expand the capacity of the two to seven year residency programs for Canadian citizens and permanent residents who were trained outside North America, growing from an intake of 26 annually to 58 by 2017.

MDs must complete at least one year of internship to become licenced to practice. Many choose a two-year internship to become a family physician, while others enter four or five year specialty programs. All postgraduate medical education in Canada is provided through the nation's seventeen or so university medical faculties.

Other Health Sciences

Dentistry

UBC's Senate recommended a Dental Faculty in 1954, as did the Board of Governors in 1956, but the government did not provide any funding. Finally, when the government provided more funding for medical education in 1962, dentistry was included.

Nursing

The Master of Science in Nursing at UBC was approved around 1967, the fourth such program in Canada, and began enrolling students in 1968/69. Finding doctorally prepared faculty was challenging at that time.

In 1991, UBC, following the University of Alberta by six months, began offering the second doctoral program in Canada.

Complementary Medicine

Boucher Institute of Naturopathic Medicine

The 1936 legislation, An Act Respecting Naturopathic Physicians, gave the UBC Board of Governors, upon recommendation of the UBC Senate, a role in approving schools of naturopathy or drugless therapeutics. In 2009, legislative changes in BC gave naturopaths prescription rights, the authority to do minor surgery and additional diagnostic procedures, giving BC practitioners the most comprehensive scope of practice in Canada.

The Boucher Institute in New Westminster is one of seven accredited naturopathic medical schools in North America (accredited by both the Council on Naturopathic Medical Education and BC's private Career Training Institutions Agency.) The four-year Doctor of Naturopathic Medicine (ND) program prepares graduates for practice in regulated jurisdictions in Canada and the USA, such as BC, Manitoba and Ontario.

The institute accepted its founding class of 15 students in January 2000. In 2005, its medical clinic, with twelve treatment rooms, opened. Its accreditation came in 2008. It now accepts up to 36 new students each September and up to 30 in the January intake. All must possess a bachelor's degree with courses in Biology, Chemistry, Psychology and English. Tuition is approximately \$25,000 per year.

Human Services

Some graduate programs in counselling are offered at public universities, but private institutions are becoming increasingly important providers. (See, for example, the descriptions of the Adler Institute and of City University in the private institutions section of this report.) Trinity Western University offers an MA in Counselling Psychology and the adjacent ACTS seminaries offer an MA in Marriage and Family Therapy.

UBC has the third oldest school of Social Work in Canada, beginning with a two-year diploma in the 1920s. A department formed in 1945 and became a school in 1950. It introduced a two-year BSW in 1974 that required at least two years of previous postsecondary study in another field. The PhD came in 2005 and a Foundation MSW in 2006.

UBC, UVic and UNBC all offer two streams for an MSW, one for entrants with a BSW and a longer program involving foundational courses for those without a BSW. Those entering without a BSW may be required to have at least two years of paid or volunteer experience in the social services with direct client contact.

The University of the Fraser Valley's MSW, launched in 2011, is available only to those with a BSW. It uses a mixed delivery model with online and flexible evening and weekend classes. The practicum is two days per week for a period of two semesters. Thompson Rivers University is currently developing an MSW.

In 2013, the University of Victoria's Faculty of Graduate Studies eliminated the requirement that every master's degree must include either a thesis or a research project, opening the door to an entirely course-based MSW.

Law

Following a national trend, UBC switched its law credential from an LLB (Bachelor of Laws) to a JD (Juris Doctor) in 2008/09. Alumni were given the option of retroactively changing the name of their degree to the JD. The University of Victoria had similar discussions in 2009/10, switching to the JD in November 2010. Post-JD programs in Law in BC award the LLM and PhD degrees.

Admission to the BC Bar after receiving a Law degree currently includes nine months of articles, ten weeks of full-time attendance at the Professional Legal Training Course, and two qualification exams. The shortage of articling positions is leading to exploration of other options for students to acquire practical experience in the workplace.

At the time of writing, Trinity Western University was seeking to open a Law school. The council of deans of Canadian Law schools questioned TWU's expectations of its students regarding homosexual behaviour, criticisms that were reminiscent of the opposition TWU faced when it sought to award its own bachelor degree in Education (rather than in conjunction with SFU. This led to a case in the Supreme Court of Canada that TWU won.)

UBC

From its beginning, UBC offered courses in Law for students in Arts, Commerce and other undergraduate departments, supplying university graduates for the legal profession to then train through a combination of part-time studies and articling. By the late 1930s, UBC was feeling pressure to begin preparing professionals in several fields, including Law.

At the end of World War II, the provincial government provided \$10,000 in July 1945 towards the establishment of a Law school. Classes began in September of that year, with a number of practicing lawyers as volunteer instructors. (Members of the profession also donated to the library, although other members of the Law Society preferred legal education to occur outside the university.)

Dalhousie and Harvard universities provided models

Law as a Humanity and Social Science

It would be a mistake to assume that the "department of law" referred to in early planning for the University of British Columbia would have borne a strong resemblance to modern law schools...Law was not then conceived of as a narrow technical specialty of interest only to individuals seeking to make a living from the trade in services. It was, rather, a fully integrated aspect of cultural flourishing....The division between law and the arts had not yet been rent.

- Wesley Pue, 1995. Law School: The Story of Legal Education in British Columbia, p. 67

for the curricular approach chosen by the Law Faculty, namely case study and Socratic instruction. Students had the option of taking a five-year course for the LLB that consisted of two years of Arts and three years of Law. Alternatively, they could spend three years in Arts plus three years in Law to earn a BA as well as an LLB. By the 1960s, a bachelor's degree had become the normal admission requirement for the LLB program.

By 1951, Law had its own building and its own library (despite protest from the University librarian that UBC could not afford branch facilities.) A new building, including a library, opened in the 1970s and then was replaced again in 2012.

Innovation in the UBC Law School

[The new dean] George Curtis arrived in Vancouver in 1945 to establish Canada's first modern law facility... Infused with a new idea that had been too radical... like teaching tax law, for example. The foundation he laid at UBC enabled one of the world's leading centers for legal scholarship and education....

There was a great debate in Canada. What should the future of legal education be? Should it be essentially the old system where such law schools as existed would be run by the profession as in Ontario [Osgoode Hall], or should it be... a university enterprise?

- Eric Daimer and Herbert Rosengarten, 2009. UBC: The First Hundred Years, p. 126.

University of Victoria

In 1973, the provincial government announced planning funds for a Law school at the University of Victoria. The new Faculty admitted its first students in fall 1975. An Environmental Law Centre was created in 1995 and significant attention has been given to Indigenous law.

The University of Victoria has the only common law school in Canada that offers a cooperative education option, beginning after first year. Students are encouraged to work one term in each of a private firm, government, and a public interest organization or administrative tribunal. Placements outside British Columbia, including in Europe and Asia, are also encouraged.

Approval of the UVic Law School

With surprisingly little fanfare, the Senate on January 8, 1969, approved in principle the establishment of a Faculty of Law, to be in place not earlier than September 1970. This was no sudden whim: a committee to investigate the matter had been struck in October 1966, in response to brief from the Victoria Bar Association. Professor Ronald Cheffin and his fellow committee members... felt that the time was now ripe for action, since enrolment pressure on UBC's Law School that finally caused faculty members on that campus to support the UVic cause.

- Peter Smith, 1993. A Multitude of the Wise: UVic Remembered, p. 167.

Thompson Rivers University

Thompson Rivers University's intake of 75 students in September 2011 represented the start of the first new Law school in Canada in 33 years. Calgary was its predecessor in 1976 and TRU adopted the University of Calgary's curriculum in a partnership arrangement.

The curriculum emphasized Aboriginal law and issues related to natural resources. The university hoped to encourage graduates to practice in smaller communities.

Librarianship

The UBC Library school opened in 1961 with a one-year Bachelor of Library Science program for university graduates. The Master of Library Science replaced the BLS in 1971 and was renamed the Master of Library and Information Studies in 1994/95.

The school proposed a one-year diploma in archival studies in 1976, but the university rejected it, asking instead that it be improved and expanded. A Master of Archival Studies thus came to be offered, the first program of its kind in North America.

Curricular Opportunities in the Master of Library Science Program

...we were all a bit giddy at first. We had managed to stuff this entire curriculum into one year, thinking that what we really needed was a year and a half. Suddenly we were given two years. And we sort of went wild inventing courses....But for the first time, we were free of what had been completely unrealistic time restraints....

- Peter Simmons quoted in Dattilo and Saltman, 2001. Forty Years of Library Education, p. 19.

Post-Degree Certificates, Diplomas and Second Degrees

The credentials mentioned in this section all require a degree for admission. In some cases the curriculum extends undergraduate learning to the graduate level, while in other cases the program broadens learning at the undergraduate level. A lack of consistent credential terminology can make it difficult to determine the level of the instruction from the credential name alone. For example a Post-Graduate Diploma may refer to graduates of diploma programs (e.g. VCC's Global Business Project Management requires only a diploma for admission) rather than to graduate level instruction.

An example of an attempt to standardize and clarify credential terminology occurred in 2011 when Douglas College replaced its Post Baccalaureate Diploma with two new credentials: the Post Degree Diploma (one year of study for students who already possess a Bachelor's degree, and at least half of the course work is at the third and fourth year level) and the Graduate Diploma (one or two years of course work at the fifth year level.)

In addition to varying credential nomenclature, the administrative units offering post-baccalaureate certificates and diplomas include continuing education units, making it even more challenging to determine what programs are available. Once again, the following descriptions are intended to illustrate the types of offerings in BC and not as a complete inventory.

Repackaging Curriculum: Post Degree Diploma Proposals at Douglas College

Hospitality Management

The PDD in Hospitality Management is positioned to the international market and includes a higher number of existing lower level HOSP courses. The department is currently developing 3000 level courses.

Teaching English as a Second Language

BC school teachers qualify for a step increase in their pay scale if they complete a 30 credit program. The program would include current courses as well as some additional courses which need to be developed, two of which would be linguistics...only 50% of courses need to be upper level courses...

Sales

Most of the courses already exist and a couple of upper level sales courses have been developed. The upper level courses can also be taught in the last year of the BBA.

Information and Communication Technology

Eight courses are already offered at the College, two are new courses.

- Public minutes of the Vice President's Academic Council, May, June, and Sept. 2012

Undergraduate Level

Public Institutions

Simon Fraser University

The Faculty of Arts and Science currently describes its 30 credit post-baccalaureate diplomas as providing "the opportunity to develop and follow a program of individualized study, not usually provided by graduate or professional degrees. The program responds to changing educational needs…"

An extensive range of programs are offered, including:

Arts and Social Science French and Education

CommunicationsGerontologyComputing ScienceKinesiologyCriminologyLegal StudiesCounselling and Human DevelopmentPolice StudiesEconomicsSocial Policy Issues

First Nations Studies Sustainable Community Development

University of British Columbia

UBC has offered post-baccalaureate diplomas have for many years, e.g. a 15 unit (30 credit) post-graduate diploma in Criminology in 1953/54 to prepare people to work in Corrections. Much newer is the concept of a short second degree, separate from graduate degrees or first professional degrees such as Law.

Computing Science offers two 20-month, second degree programs in information technology. One leads to a Bachelor of Science and the other to a Bachelor of Computing Science, the only such credential in western Canada. Approved in 2004, this second degree (which differs from a double major within a single degree) evolved from the previous Alternate Routes to Computing diploma.

University of Northern British Columbia

Continuing Studies at UNBC has offered credit courses since 2007. It currently has two post-baccalaureate diplomas designed for K-12 teachers with courses at the 500 level: Curriculum and Instructional Studies, and Montessori Education.

University of Victoria

UVic's graduate certificates and diplomas cluster in the cultural and public sectors:

Cultural Heritage International Child and Youth Care and Development

Cultural Sector Leadership Learning and Teaching in Higher Education

Evaluation Library Sector Leadership

Indigenous Language Revitalization Public Health

It also offers a few programs in other fields, such as Entrepreneurship.

British Columbia Institute of Technology

As it does with some of its vocational programming, BCIT awards post-baccalaureate credentials that have unusual names in the BC context. For example, its Biotechnology program, a 21 credit, one-semester program that is 75% lab-based and which is designed for BSc grads in a molecular-based life science, leads to an Associate Certificate.

Human Resources Management, designed to prepare for career aspirations that include the Certified Human Resources Professional (CHRP) designation, awards a Management Certificate. While the CHRP requires a university degree, the BCIT program does not.

Capilano University

In institutions other than research universities, Capilano University (then Capilano College) was among the first to introduce post-baccalaureate diplomas, beginning with Asia Pacific Management Studies in the mid 1980s. With a focus on doing business in Asia, the mandatory co-operative education placement in Asia was intended, among other things, to help students form relationships that would foster business opportunities after graduation.

Capilano was intentionally trying to be innovative, offering something the universities at that time did not provide for students who wanted further postsecondary education but who did not want to, or could not, go to graduate school. The second post-baccalaureate program, in the environmental field, came in the late eighties.

Today Capilano University offers an applied Behaviour Analysis (Autism) diploma, an Art Institute certificate, an Early Childhood Care and Education diploma, a Guided Imagery and Music certificate, and a North American Business Management Diploma.

Other Institutions

The College of the Rockies was another pioneer in the college sector in offering post-baccalaureate programs, although its social sciences oriented Post-Graduate Diploma in Applied Research ended in 1998 after just one year. Planned as an online program, the college did not develop or offer the courses for the second year of the two-year program. Students instead had to transfer in courses or gain credits through Prior Learning Assessment. When the program ended, the college hoped to sell the curriculum for the courses that it had developed.

The following is a sampling of post-baccalaureate certificate and diploma programs that are currently offered in other public institutions around the province:

Camosun College: Interprofessional Mental Health and Addictions

Douglas College: Marketing, Psychosocial Rehabilitation, Accounting, Sales

Kwantlen Polytechnic University: Human Resources Management

Langara College: Aboriginal Studies
North Island College: International Business

Thompson Rivers University: Commerce, Liberal Arts and Pre-MBA Studies, Journalism, and

Teaching English as a Second Language

In addition to a steady stream of new programs, programs are sometimes discontinued. As of 2013, for example, the University of the Fraser Valley had suspended its three graduate certificate programs.

Theological schools offer a fair amount of post-baccalaureate programming that is less than a full graduate degree. The foundation of Regent College's programming is one-year in duration. Regent reports that three

quarters of its graduate diploma students, having completed the equivalent of one year of full-time studies, go on to complete a master's degree at Regent.

Carey Theological College's diplomas represent undergraduate study, whereas its certificates are at the graduate level (another example of the idiosyncratic meanings of certificates and diplomas across BC postsecondary education.) Each of Carey's credentials can be earned in one of two disciplines, Christian Studies and Ministry. Students can participate as individuals or in church-based cohorts. All programs involve online courses, mentorship and practical ministry assignments.

Teacher Education

Teacher education is such a large post-baccalaureate enterprise that it merits a section of its own. Because many teachers first earned an undergraduate degree in other fields before studying education, enrolment reports may understate the extent to which teacher preparation is occurring in postsecondary institutions, e.g. future teachers may appear as Arts students for four years and as Education students for just one year, even though all five years of study were pursued with teaching as a goal.

There are two main routes to becoming a teacher in BC: complete an undergraduate degree in Education or else take a teacher education program after completing a degree in another field. Both routes have been taken by large numbers of students, with the latter being especially common for those seeking to teach in secondary schools. Post-baccalaureate teacher training has occasionally resulted in no academic credential being awarded for successful completion of the program, e.g. at UBC in the 1970s, such teacher preparation resulted only in professional licensure by the province. Today, similar programs lead to a second degree, a BEd, in several institutions. At some universities elsewhere in Canada, post-baccalaureate teacher training leads to an MEd as the entry credential to the profession.

Along with post-baccalaureate teacher preparation programs at each of the research universities, two teaching universities offer these programs: Vancouver Island University and Thompson Rivers University. In addition to a five-year Bachelor of Education, VIU offers 1.5-year condensed-delivery program for bachelor degree holders in other fields seeking a BEd. The graduate diplomas it offers are in Special Education and Global Education. TRU provides a two-year Post-Degree BEd program

Once a teacher is certified, the teacher can upgrade his or her academic credentials for salary purposes and/or specialized job opportunities through such programs as:

Douglas College: Post-degree diplomas in Math and Science Teaching (aimed at

elementary and middle school teachers) and in Physical Education

Instruction (with elementary and secondary streams)

Trinity Western University: Graduate Certificate in Leadership

University of the Fraser Valley: Graduate Certificate in Teacher Leadership and Mentorship

University of Victoria: Professional Specialization Certificate in Information Communications

Technology, Special Education, and Teaching French Immersion The Professional Qualification Program is a 12-month, full-time

program for foreign-trained teachers that orients them to the context of

BC schools. It is based at the Surrey campus.

University of British Columbia: Early Learning, Inclusive Education, and Language and Literacy

Private Institutions

Simon Fraser University:

Kutenai Art Therapy Institute

Opened in 1995 in Nelson and recommended by the Degree Quality Assessment Board in 2008/09 for an Applied Master's in Art Therapy (application subsequently withdrawn), the Kutenai Institute currently

offers one and two year graduate certificate and diploma programs in art therapy. Students must possess an undergraduate degree in any field, but have taken Psychology courses, and present a portfolio that demonstrates proficiency in the visual arts.

Programs are offered in Nelson and also at a distance. Distance students come to Nelson three times a year, each for three weeks.

Graduate Level

It can be hard to know at first glance if a post-baccalaureate certificate or diploma represents graduate level instruction, as opposed to instruction for university graduates. Sometimes, though, it is relatively clear, e.g. the University of Northern British Columbia's graduate certificate, Leading for Learning, ladders into the MEd. The courses in this certificate are all at the 600 level.

In other instances, more of an examination of the curriculum may be needed to determine the level of instruction, e.g. the Graduate Professional Certificate and Diploma in Cultural Heritage Studies and Cultural Heritage Management that the University of Victoria occasionally offers through Continuing Studies. In a similar vein, the credential name alone does not indicate the level of instruction in BCIT's nine Advanced Specialty Certificates for nurses.

Discussion

Delivery Formats

Post-baccalaureate programs are, by definition, geared towards the adult learner. The extent to which they are delivered in formats other than full-time and face-to-face varies dramatically. Some programs are residential but allow part-time studies, so that students can simultaneously work and be involved in family life. Other programs are delivered in hybrid and compressed formats, while yet others are provided through distance education. More variety and innovation in delivery methods seems evident at the post-baccalaureate level than in undergraduate programming.

For-Profit Institutions

For-profit, private institutions in BC have a mixed track record at the post-baccalaureate level. Some programs have had issues concerning inadequate enrolment and questionable academic quality, while others were never implemented.

Nomenclature

Terminology for post-baccalaureate certificates and diplomas can be confusing. Much the same offerings can be variously known across different institutions as, for example, certificates, diplomas, post-basic diplomas, advanced diplomas, post-graduate diplomas, and graduate certificates.

At the undergraduate level, a certificate generally involves 30 credits of study and a diploma 60 credits. At the post-baccalaureate level, 30 credits of study may sometimes lead to a diploma, half the amount required at the undergraduate level.

As well as variation in the amount of credits required, the level of instruction – third and fourth year, versus graduate level – may vary, due to inconsistent use of the "post-degree" and "graduate" terminology.

It would seem helpful if the province were to develop some standard definitions for certificates and diplomas of all types and levels.

Quality Assurance

Quality assurance mechanisms for graduate degrees and post-baccalaureate professional degrees in the public and not-for-profit private sectors tend to be robust, whereas those for post-baccalaureate certificates and diplomas are variable.

Legislation over the years has restricted what new programs can be offered as well as the use of terminology, e.g. limitations as to what institutions may use the word "university." However, private institutions that have provided only instruction in BC, conferring credentials from a campus outside BC, have sometimes circumvented these restrictions in the past.

Legislation restricting academic credentials and programming differs from licensure restrictions in the regulated professions (a second hoop) through which institutions and students must pass. Thus non-educational groups with a keen interest in education may limit the curricular freedom of institutions through program accreditation requirements.

New program approval processes external to institutions have over the years been administered by such bodies as the Universities Council of BC (1974 to 1987), the Degree Quality Assessment Board (since 2003), the Private Post-Secondary Education Commission (to 2004) and the Private Career Training Institutions Agency (since 2004).

Private institutions, other than English language schools, are currently required to register, but not necessarily be accredited, by the Private Career Training Institutions Agency if their tuition fees are above a certain amount. This requirement comes more by way of consumer financial protection than educational quality assurance.

Research

As discussed at the beginning of the paper, the federal government's influence on graduate education in BC has been indirect and substantial through the provision of research grants. The tensions in the 1960s at what are now research universities about the relative emphasis to be placed on teaching and research – research prevailed – have echoed in what are now teaching universities. To a lesser extent, the tensions are also emerging in some of the remaining colleges as they encourage applied research and seek eligibility with national research granting councils.

Trends

The number of graduate and professional programs has been growing for half a century. More recent, and worthy of monitoring, is the growth of post-baccalaureate certificates and diplomas. Partnerships, such a UNBC's MBA delivered at Langara College in Vancouver, are not common but it will be interesting to see if more develop.

Tuition Fees

Tuition fees vary dramatically, seemingly reflecting what the market will bear and exaggerating differences at the undergraduate level. For example, at UBC, a research doctoral degree requires minimum tuition of \$9,000 for the entire program, whereas the Doctor of Pharmacy requires \$43,000. The Executive MBA in Health Care costs \$66,000. The expression of concerns about affordability and barriers to access for students of varying family and socioeconomic backgrounds is muted at the post-baccalaureate level compared to the undergraduate level.

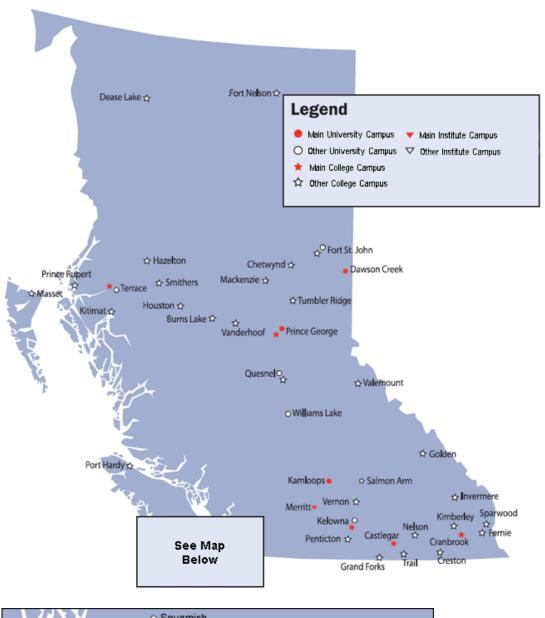
References

- Calam, John. (2007). Affecting Eternity: Origins of the University of British Columbia's Faculty of Education. Vancouver: Pacific Education Press.
- Daimer, Eric and Rosengarten, Herbert. (2009). UBC: The First 100 Years. Vancouver: UBC Press.
- Dattilo, Maurizio and Saltman, Judith. (2001). Forty Years of Library Education: The School of Library, Archival and Information Studies. Vancouver: UBC School of Library, Archival and Information Studies.
- Johnston, Hugh. (2005). Radical Campus: Making Simon Fraser University. Vancouver: Douglas & McIntyre.
- Logan, Harry. (1958). **Tuum Est: A History of The University of British Columbia.** Vancouver: The University of British Columbia.
- McPherson, Ian. (2012). **Reaching Outward and Upward: The University of Victoria, 1963 2013.** McGill-Queen's University Press.
- Pue, Wesley. (1995). Law School: The Story of Legal Education in British Columbia. University of British Columbia: Faculty of Law.
- Smith, Peter. (1993). A Multitude of the Wise: UVic Remembered. Victoria: Alumni Association of the University of Victoria.

Appendix

BC Public Institutions

		Year	Comments or
Institution	City	Opened	Former Name
Research Universities			
Simon Fraser University	Burnaby	1965	Absorbed the Technical University of BC
University of British Columbia	Vancouver	1915	
University of British Columbia – Okanagan	Kelowna	2005	Split from Okanagan University College
University of Northern British Columbia	Prince George	1994	
University of Victoria	Victoria	1963	Victoria College (1903)
Special Purpose and Teaching Universities			
Capilano University	North	1968	Capilano College
	Vancouver		
Emily Carr University of Art + Design	Vancouver	1978	Emily Carr Institute of Art and Design
K # 514 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1001	Vancouver School of Art (1937)
Kwantlen Polytechnic University	Surrey	1981	Kwantlen University College
			Kwantlen College. (Split from Douglas
Royal Roads University	Victoria	1995	College.)
Thompson Rivers University		1995	Liniversity College of the Caribas
Thompson Rivers University	Kamloops	1970	University College of the Cariboo Cariboo College
University of the Fraser Valley	Abbotsford	1974	University College of the Fraser Valley
Offiversity of the Fraser valley	Abbotsioid	1374	Fraser Valley College
Vancouver Island University	Nanaimo	1969	Malaspina University College
Variouver island onliversity	Ivananno	1303	Malaspina College
Institutes			malaspina sonoge
British Columbia Institute of Technology	Burnaby	1964	Absorbed the Pacific Vocational Institute
			and the Pacific Marine Training Institute
Justice Institute	New	1978	j
	Westminster		
Nicola Valley Institute of Technology	Merritt	1983	Absorbed assets of Institute of Indigenous
			Government
Colleges			
Camosun College	Victoria	1970	
College of New Caledonia	Prince George	1969	
College of the Rockies	Cranbrook	1975	East Kootenay Community College
Douglas College	New	1970	
	Westminster		
Langara College	Vancouver	1994	Split from Vancouver Community College
North Island College	Comox	1975	
Northern Lights College	Dawson Creek	1975	
Northwest Community College	Terrace	1975	
Okanagan College	Kelowna	1968	Okanagan University College
			Okanagan College
Selkirk College	Castlegar	1966	
Vancouver Community College	Vancouver	1965	Vancouver City College
			Vancouver Vocational Institute (1949)





Source: Ministry of Advanced Education, Innovation and Technology, 2013