

**STUDENT TRANSITIONS FROM ADULT BASIC EDUCATION UPGRADING
PROGRAMS INTO FURTHER STUDIES AT BC
POST-SECONDARY INSTITUTIONS**

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Executive Summary

Adult Basic Education (ABE) academic upgrading courses and programs are an important part of the British Columbia (BC) post-secondary system. In the 2021/22 academic year, 21,550 students were enrolled in ABE programs in 18 institutions across the province. While some students pursued completion of the Adult Graduation Diploma (the equivalent of Grade 12 completion), the majority of students were motivated to acquire or improve academic skills to meet pre-requisites for entry into further education.

As a result, there is interest in understanding more about the success of ABE upgrading students in their further post-secondary studies. Is ABE upgrading in BC functioning as a pathway to success for those who are initially under-prepared for college or university? How many former ABE students achieve post-secondary credentials at the same institution?

This research study had two stages. The first was to identify current routes from ABE upgrading courses into undergraduate and other further education programs within the BC post-secondary institutions that offer upgrading courses. An inventory of all ABE programming available province-wide was created, and each institution was asked to confirm the accuracy and completeness of the information about its own programming. A taxonomy of ABE programming was produced from this inventory.

The next stage was an evaluation of the success of ABE students in further education at the same institution. Primary data were collected from interviews with professionals in the ABE field. Secondary data were obtained from previous research on the outcomes of ABE programs, and from information from provincial data sets or local studies. Where relevant, comparisons were made between data from BC and from other jurisdictions.

Almost all previous research on the outcomes of ABE upgrading in BC was based on surveys of students about how satisfied they were with their education, whether they went on to further post-secondary studies, and how well ABE upgrading had prepared them for future education. The results indicated high student satisfaction. Other provincial-level research on post-secondary graduates focused on former ABE upgrading students. Roughly one in ten graduates of a BC post-secondary program had taken an ABE course; however, this research did not include students who failed to graduate, and did not ask whether the future education was at the same institution where the student took ABE upgrading.

Some institutions have conducted studies that compare the academic achievement of direct-entry students with students entering post-secondary programs via ABE upgrading. Although these studies rely on limited data, ABE-entry students achieved first-year course grades at least as high as those achieved by direct-entry students. Some internal institutional research indicates that perhaps as high as 75% of ABE completers went on to further education, and that 10% of all graduates of the institution had taken one or more ABE upgrading courses.

This study also included an evaluation of the success of former ABE students who pursued post-secondary studies at the same institution where they took ABE upgrading courses. Data was compiled from BC's Central Data Warehouse (CDW) on 197,149 students who had taken one or more ABE upgrading courses between 2009/10 and 2022/23. Fully 63% of these students subsequently enrolled in some post-secondary level education at the same institution, and 44% earned a post-secondary credential. Thus, 28% of the cohort progressed from ABE to earn a post-secondary credential. Approximately 10% of all BC graduates in the same time period had completed at least one ABE upgrading course.

The results suggest that ABE upgrading programs in BC are indeed facilitating successful student transitions into further education. This outcome has been shown consistently across decades and across several different types of provincial and local studies. However, more could be done to understand differences in outcomes among sub-groups and ways in which the organization and delivery of ABE upgrading could help facilitate increased transition of ABE students into further education. The report concludes with recommendations for continued discussion of the topic and for conducting further research.

Part One: Introduction

The importance of providing educational upgrading pathways in British Columbia (BC) was recognized as far back as 1962, when the MacDonald Report (MacDonald, 1962) recommended more open access to post-secondary education. This report recommended the provision of Adult Basic Education (ABE) programs as one of the four central areas of the new community colleges. Since then, ABE education has evolved considerably and remains an important part of the BC post-secondary system.

This report assesses the extent to which ABE programming in BC is meeting one of its critical purposes: assisting under-prepared adults to be successful in further post-secondary learning. While this is not the only purpose of ABE programming, it is the key one mentioned by ABE students as their motivation for pursuing academic upgrading, particularly at the upper levels of ABE programming (DEVOS, 2012).

This project identifies current pathways from ABE upgrading courses into undergraduate and other further education programs within BC post-secondary institutions that offer upgrading courses. It then seeks to evaluate student success in further education at the same institution.

The project focuses on BC public institutions that are BC Transfer System members and that offer ABE upgrading courses and/or programs. The project excludes two groups of students that are often included in statistics or discussions of “developmental education” by the BC government and some BC post-secondary institutions. While some ABE upgrading courses include students looking to improve their English language proficiency, including international students, this study focused on programs designed for domestic students with English as their primary language. Second, the study excluded programs in Adult Special Education and/or programs designed to provide personal development or career preparation for students with cognitive or learning challenges.

Students taking ABE upgrading may achieve a variety of successful outcomes. However, this project focuses primarily on the outcome of further post-secondary education at the same institution where the ABE upgrading was taken. Thus, the project focuses on the upper levels of the ABE curriculum which prepares students for post-secondary academic and career programs, rather than on the lower levels of the ABE curriculum, which focuses on the acquisition of basic literacy and numeracy skills.

The objectives of this project are:

1. To review existing literature and other relevant sources of information on the provision of ABE upgrading pathways in BC and in other jurisdictions;
2. To identify BC institutions that offer pathways from upgrading into further post-secondary programs within the same institution;
3. To develop a taxonomy of the types of ABE upgrading pathways in BC post-secondary institutions;
4. To gather data on the perceptions of various professionals on the development and success of the ABE upgrading pathways;
5. To access and evaluate quantitative data on the functioning of the pathways;
6. To provide suggestions on the development of effective institutional practices in this area; and,
7. To identify areas for further research and discussion.

Scope

The BC courses and programs designed to upgrade students' academic skills have several different names: adult basic education, access programs, career and college preparation, developmental skills, high school completion, preparatory courses, and skills upgrading. These names are not consistently used across BC post-secondary institutions, which makes it quite difficult to aggregate and compare data across institutions.

This project focuses primarily on programs/courses categorized as Adult Basic Education in institutions' annual reports of student enrolments, and/or programs/courses included in the provincial ABE Articulation Framework. Enrolments in ABE courses and programs may be included in the Developmental Education category, or in a separate category. Other upgrading courses or college preparatory routes are included when relevant, to illustrate the range of upgrading options available.

Methodology

Primary data were obtained from the following sources.

- *Communications with representatives of post-secondary institutions.* In fall 2022, the researcher contacted 18 Deans/Directors of Developmental Education at BC post-secondary institutions offering ABE upgrading. Each institution was provided with a list of ABE offerings at their institution that had been collected by the researcher from institutional websites. Respondents were asked to confirm or correct the data on their institutions. The resulting information is summarized on page 11 of this report and provided in full in Appendix A. The data informed the Taxonomy of Upgrading Routes presented in Figure 1.
- *Interviews with professionals in the ABE field.* Fourteen interviews were conducted. The 14 interviewees were six Deans or Vice-Presidents, six ABE department chairs or faculty, and two university researchers with research expertise in ABE. The interviewees were selected from people who had volunteered during the initial contacts with post-secondary representatives, or who had been identified by other potential interviewees. Several university researchers were contacted and two researchers agreed to be interviewed. The interviews were conducted via Zoom video conferencing or telephone calls in Spring 2023. The purpose of the interviews was to provide observations and commentary on the perceived success of ABE upgrading programs at providing a route into further post-secondary studies and leading to successful completion of post-secondary credentials. The information from the interviews informed the research process and analysis, rather than providing data *per se*.

Secondary data were obtained from the following sources, which are cited in the Reference list.

- BC ABE Student Outcomes Projects (ABESOP) 1993-1996
- BC Outcomes Working Group (OWG) 1997-2001
- BC Outcomes Survey (BCOS) 2005
- Developmental Student Outcomes Surveys (DEVSO) 2009-2014
- BC Graduates Surveys (BCSOP) 2018-2022
- Internal reports from 4 BC post-secondary institutions

These data sources were selected based on investigation of available or accessible data, or after interviews or communication with survey respondents, government officials and researchers.

The researcher also obtained information from the post-secondary Central Data Warehouse (CDW) maintained by the BC Ministry of Post-Secondary Education and Future Skills. Data in the CDW are submitted by 21 BC public post-secondary institutions. Data were compiled on 197,149 students who had taken at least one ABE course between 2009/10 and 2022/23. Data were also obtained on any post-secondary credentials that these students had obtained at the same post-secondary institution. These data were collected to determine how many former ABE students transitioned into post-secondary studies at the same institution, and what post-secondary credentials they obtained.

List of Current ABE Programs in BC

Since ABE programming has evolved considerably since its introduction, the researcher conducted a mapping of the landscape of current programming in BC. The resultant list of offerings is presented in Appendix A.

ABE upgrading programs in BC are offered by a variety of public post-secondary institutions of differing institutional types (mandates) spread throughout the province, as noted in Table 1.

Table 1: Overview of Post-Secondary Institutions Offering ABE Programming in BC

Institution Name	Institution Type	Geographic Region
British Columbia Institute of Technology	institute	Lower Mainland
Camosun College	college	Vancouver Island
Capilano University	teaching-intensive university	Lower Mainland
Coast Mountain College	college	Interior
College of New Caledonia	college	Northern
College of the Rockies	college	Interior
Douglas College	college	Lower Mainland
Kwantlen Polytechnic University	teaching-intensive university	Lower Mainland
Langara College	college	Lower Mainland
Nicola Valley Institute of Technology	institute	Interior
North Island College	college	Vancouver Island
Northern Lights College	college	Northern
Okanagan College	college	Interior
Selkirk College	college	Interior
Thompson Rivers University	teaching-intensive university	Interior
University of the Fraser Valley	teaching-intensive university	Lower Mainland
Vancouver Community College	college	Lower Mainland
Vancouver Island University	teaching-intensive university	Vancouver Island

Absent from Table 1 are various institutions that do not offer ABE programming. The research-intensive universities – Simon Fraser University, University of British Columbia, University of Northern British Columbia and University of Victoria – have selective admission policies that generally require applicants to already possess secondary school graduation, and, therefore, do not offer internal academic upgrading pathways. Similarly, the special purpose universities and institutes of Emily Carr University, Justice Institute of British Columbia and Royal Roads University do not have a mandate to offer this level of programming.

While some institutions use ABE as the identifying name for programs and courses (such as Capilano University and North Island College), other institutions use different names for upgrading programs and departments (such as Career and College Preparation at Northern Lights College or Academic Upgrading at Selkirk College). These name changes often reflect a desire by practitioners to “de-stigmatize” negative connotations that can be associated with the ABE label.

ABE programming is offered in a variety of locations, including main campuses, regional sites, and neighbourhood learning centres.

Synchronous and asynchronous instruction is generally available in different forms, such as classroom, hybrid, on-line, and one-on-one, although options may be limited at some locations.

While some institutions still offer ABE upgrading as a route to Grade 12 completion (such as Camosun College and Coast Mountain College), most institutions have preparation for further learning or pre-requisite skills acquisition as their primary mandate: this is especially true at Douglas College and Kwantlen Polytechnic University. Some institutions, such as British Columbia Institute of Technology and Langara College, offer specialized upgrading linked to their particular mandate. Many institutions have evolved their ABE offerings into pathways of skills upgrading facilitating entry into dedicated programs, such as the Access programs at College of New Caledonia and the Pathways to Trades or Health at Okanagan College. These options are intended to allow students to take selected college-level courses while still completing upgrading courses concurrently in order to complete credentials more quickly. Some institutions, notably Vancouver Island University, provide a comprehensive menu of offerings that include traditional levels of ABE programming with a wide range of other customized upgrading routes.

Part Two: Enrolments in BC Upgrading Programs

Taxonomy of Types of Upgrading

In BC, students completing courses in ABE upgrading programs generally receive credit, but the credit is not always applicable towards other credentials. Although most BC post-secondary institutions generally require applicants for admission to have completed high school graduation, some offer upgrading opportunities for domestic and international students through what is often called an *open admission policy* (Beatty-Guenter, Cowin & James, 2018). In addition, some BC school districts offer upgrading courses or programs at the high school level as part of their adult continuing education programming.

The BC provincial Adult Education Policy Framework broadly outlines the structure and specific objectives of ABE upgrading programs funded at public post-secondary institutions (BC Ministry of Advanced Education, 2018). The upgrading programs offered by BC post-secondary institutions can be grouped into three categories, based on their purpose and intended outcomes.

Adult Basic Education (ABE) Programs. Courses in these programs are grouped into four levels -- Fundamental, Intermediate, Advanced and Provincial -- that generally mirror the progression of the BC secondary school curriculum. The ABE curriculum also has its own framework of provincially-recognized courses, which are also articulated province-wide. The articulation standards are publicly posted in the ABE Articulation Handbook (BC Ministry of Advanced Education, 2021).

Students taking ABE courses can earn the British Columbia Adult Graduation Diploma, often referred to as the “Adult Dogwood”, which is the equivalent of Grade 12 completion. Students without high school graduation could formerly take the General Educational Development (GED) test to obtain a Grade 12 equivalency diploma, but the GED option was discontinued by the BC Ministry of Education in 2014. However, if an applicant has obtained a GED elsewhere, many BC post-secondary institutions accept this as meeting the Grade 12 admission requirement. [Note: the GED is being phased out throughout the country with the intention of replacing it with a new Canadian Adult Education Credential (CAEC), currently under development (GED, 2024)]

BC post-secondary institutions generally deliver ABE upgrading courses through a separate teaching department. ABE courses are tuition-free. Students enrolled in these courses are not eligible for BC student loans, but qualifying students are eligible for the Adult Upgrading Grant that can cover the costs of books, supplies, transportation and unsubsidized daycare. In 2022, the ABE Transition Award was introduced by the BC Scholarship Society. This is a \$5,000 annual scholarship for ABE students with records of community or volunteer service.

Preparatory Courses. These courses upgrade students’ skills in specific areas such as Mathematics, English or Science, with the goal of meeting pre-requisites for first-year courses. Students in these courses may have graduated from high school but may not have taken the courses needed to enrol in university-level courses, or may not have received a high enough grade to meet pre-requisite requirements. These courses are usually taught by faculty in undergraduate program departments. Preparatory courses may not have been articulated with other post-secondary institutions, and students may be charged tuition fees to enrol in them.

Skills Assessment Tests. Instead of completing upgrading programs or courses, students may take skills assessments. Some institutions offer placement tests in English and Mathematics, which students can use to meet course pre-requisites if they achieve a minimum test score. Prior Learning Recognition and Assessment (PLAR) options are also usually available to ABE students. Some institutions give credit for some ABE courses, such as Planning 11 or Experience 12, to students with previous certifications and/or work experience.

The characteristics of each category are summarized in Table 2.

Table 2: Taxonomy of Upgrading Routes

Adult Basic Education	<ul style="list-style-type: none"> • Provincially articulated program • Four standardized levels • Designed for student who did not complete secondary school graduation • Usually taught by separate department • Delivered self-paced or semester-based • Available on-campus or on-line • Comprehensive span of secondary school equivalent courses • Leads to British Columbia Adult Graduation Diploma (BCAGD) • Tuition-free • Ineligible for student loan (BCSAP) • Eligible for Adult Upgrading Grant (AUG)
Preparatory Courses	<ul style="list-style-type: none"> • Free-standing courses that may not be provincially articulated • Designed to provide skills needed to meet first-year course prerequisites • Students may have completed secondary school graduation but with missing courses or low grades • Usually taught by faculty in the academic field departments • Delivered semester-based • Delivered on-campus or on-line • Usually limited to English, Mathematics and Science subjects • May not be tuition-free • May be eligible for student loan (BCSAP) • May not be eligible for Adult Upgrading Grant (AUG)
Skills Assessment	<ul style="list-style-type: none"> • Alternative to taking courses • General Education Development (GED) – Five tests delivered provincially – discontinued 2014 in BC • Placement tests in English and Mathematics to bypass first-year secondary school pre-requisites • Prior Learning Assessment and Recognition (PLAR) • Usually involves some fee to the student • Not eligible for student loan • Not eligible for Adult Upgrading Grant (AUG)

This categorization is important because students can pursue ABE upgrading in a variety of different forms: formal programs, stand-alone courses, and non-course based. Some routes lead to ABE credentials and some do not. Consequently, there is no uniform profile of an ABE student's trajectory.

Institutional Enrolments

In BC, the College and Institute Act, University Act, and Thompson Rivers University Act require 18 of the 25 public post-secondary institutions to offer academic upgrading programs. Table 3 shows enrolments (unduplicated headcounts of domestic students) in upgrading programs at each institution and type of institution in the reporting year 2021/22. These data are for Developmental Programs, a category defined by the Ministry of Post-Secondary Education and Future Skills that includes Adult Basic Education, English as a Second Language, and Adult Special Education.

Table 3: Student Headcounts of Domestic Enrolment in Developmental Education Programs at BC Post-Secondary Institutions, 2022/2023

Institution Type	Institution Name	Institutional Total Enrolment	Upgrading Enrolment	Upgrading as Percentage of Institutional Enrolment	Upgrading as Percentage of Total Provincial Upgrading Enrolment
College	Camosun College	12,360	970	7.8%	4.4%
	Coast Mountain College	2,610	635	24.3%	2.9%
	College of New Caledonia	5,630	335	6.0%	1.5%
	College of the Rockies	10,320	1,025	9.9%	4.6%
	Douglas College	21,415	4,360	20.4%	19.6%
	Langara College	12,090	325	2.7%	1.5%
	North Island College	7,405	770	10.4%	3.5%
	Northern Lights College	2,350	1,010	43.0%	4.5%
	Okanagan College	17,730	1,655	9.3%	7.4%
	Selkirk College	8,090	2,220	27.4%	10.0%
	Vancouver Community College	10,235	3,425	33.5%	15.4%
Teaching-Intensive University	Capilano University	6,485	935	14.4%	4.2%
	Kwantlen Polytechnic University	13,230	250	1.9%	1.1%
	Thompson Rivers University	25,355	230	0.9%	1.0%
	University of the Fraser Valley	13,030	410	3.1%	1.8%
	Vancouver Island University	11,890	2,015	16.9%	9.1%
Institute	British Columbia Institute of Technology	39,935	1,550	3.9%	7.0%
	Nicola Valley Institute of Technology	1,390	125	9.0%	0.6%
Provincial Totals		221,550	22,250		10.0%

Percentages rounded to one decimal place. BC institutions that do not offer ABE upgrading are excluded from this table.

Source: Central Data Warehouse https://www2.gov.bc.ca/assets/gov/education/post-secondary-education/data-research/standard_reports_program_area_totals.pdf

Table 3 shows that in the 2022/23 academic year, 22,250 domestic students were taking Developmental Education courses in BC, which is 10.0 % of the total provincial enrolment. This indicates that these programs fulfill a significant part of the mandate of many BC public post-secondary institutions. The institutions with the largest percentages of upgrading students are Douglas College (19.6% of the provincial total) and Vancouver Community College (5.4% of the provincial total). The proportion of upgrading students within each institution varies widely, from 43.0% (Northern Lights College) to 0.9% (Thompson Rivers University).

The research-intensive universities in BC are excluded from these data because they do not offer ABE programming. Applicants to these institutions are usually required to have already graduated from secondary school, or to have some other qualification that equates to secondary school completion. The Native Education College offers an Indigenous ABE program, but this program is not articulated with other BC ABE programs.

The provincial data for the Developmental Education category includes other types of upgrading enrolment in addition to ABE, such as English as Second Language (ESL) and Adult Special Education (ASE), which are not reported separately by institutions. Therefore, enrolments in Developmental Education are taken as a proxy for ABE enrolments at each institution, while recognizing that these include other program entities.

Changes in Enrolments

Provincial enrolment data indicate a decline in ABE program enrolment in BC over the past two decades, as shown in Figure 1. This graph is based on the CDW data collected for this study, which includes students who ever took at least one ABE course between 2009/2010 to 2022/23. The decline in enrolment is noticeable at colleges, where ABE enrolments fell about 50% during this time. College ABE enrolments increased between 2004/05 and 2005/06, and again between 2008/09 and 2009/10; these increases coincided with changes in BC government policy that eliminated tuition for ABE courses. One college interviewee indicated that changes in student aid funding for ABE can have a large impact on enrolment:

The introduction of the Adult Upgrading Grant [in 2017] created a lot more administration and paperwork for everyone. Students are more demotivated to take ABE because of the fact there's much bureaucracy involved and having to prove their need can be so demeaning for them. It can reinforce that they feel less deserving. (College interviewee)

The rate of decline in ABE enrolments at teaching-intensive universities (TIUs) is approximately 60% over this period. One possible reason is these institutions' conversion from colleges or university-colleges to universities, which required them to start offering 3rd and 4th year level programming with limited resources. One TIU interviewee commented:

Inevitably, we saw a siphoning off of FTEs [full-time enrolments] from some areas... which included the erosion or closure of some developmental programming to provide some of the institutional capacity to meet the new institutional mandate. (TIU interviewee)

The impact of these changes might have been more pronounced at the colleges that were given degree-granting status. However, other interviewees suggested that the ABE field may need to re-examine its purpose and focus so that it may be more attractive to prospective students.

I think part of the problem is that we've got ourselves stuck in the mindset culturally about what ABE is supposed to be and who are the students supposed to be coming to us and how we can help their life trajectories. (College interviewee)

Figure 1 (in tabular format). ABE Cohort 2009/10 – 2022/23: Annual Provincial Enrolment Totals

	Teaching Intensive Universities	Colleges and Institutes	Total
2009/10	6,577	12,362	18,939
2010/11	5,990	12,007	17,997
2011/12	5,664	10,525	16,189
2012/13	5,568	9,574	15,142
2013/14	5,703	9,589	15,292
2014/15	5,451	9,268	14,719
2015/16	4,971	8,831	13,802
2016/17	4,466	7,906	12,372
2017/18	4,846	7,685	12,531
2018/19	4,843	7,593	12,436
2019/20	4,232	7,660	11,892
2020/21	4,037	7,248	11,285
2021/22	3,536	5,615	9,151
2022/23	3,716	5,560	9,276

Reporting Requirements and Targets

In BC, public post-secondary institutions receive public funding via an annual block operating grant. Within that, “institutions have the legislative autonomy to allocate funding...to support programming that is aligned with their institutional priorities and mandate to best meet the needs of their regions” (BC Ministry of Advanced Education, 2018, p. 4). However, in the 2004-05 reporting year, the BC government established a requirement for post-secondary institutions offering Developmental Education programs, including Adult Basic Education, to provide annual data on program headcounts and full-time equivalent (FTE) enrolments. These data are used to establish annual FTE targets for each institution, within the government’s accountability measures. These upgrading targets are “intended to ensure a minimum level of delivery” (BC Ministry of Advanced Education, 2018, p. 9) of upgrading student spaces at institutions.

A comparison of enrolments, target FTEs, and developmental education FTEs for 2021-22 are shown in Table 4, grouped by institutional type.

Table 4: Comparison of Institutional and Developmental Education FTE* at BC Post-Secondary Institutions, 2022-2023

Institution	Target FTE	Actual FTE	Institutional Percentage	Dev Educ Target FTE	Dev Educ Actual FTE	Dev Educ Percentage
COLLEGES						
Camosun College	7,207	4,946	68.6%	935	704	75.3%
Coast Mountain College	1,671	428	25.6%	131	77	58.8%
College of New Caledonia	3,303	1,367	41.4%	135	112	83.0%
College of the Rockies	1,799	1,589	88.3%	137	113	82.5%
Douglas College	8,426	7,842	93.1%	157	156	99.4%
Langara College	7,222	5,951	82.4%	234	254	108.5%
North Island College	2,373	1,510	63.6%	256	179	70.0%
Northern Lights College	1,570	592	37.7%	122	101	82.8%
Okanagan College	5,021	4,893	97.5%	774	571	73.8%
Selkirk College	2,444	1,239	50.7%	297	219	73.7%
Vancouver Community College	6,657	3,620	54.4%	990	905	91.4%
TEACHING-INTENSIVE UNIVERSITIES						
Capilano University	5,563	3,605	64.8%	273	225	82.4%
Kwantlen Polytechnic University	9,249	6,793	73.4%	318	166	52.2%
Thompson Rivers University	8,221	7,432	90.4%	256	218	85.2%
University of the Fraser Valley	6,737	6,274	93.1%	282	217	77.0%
Vancouver Island University	6,609	5,649	85.5%	568	451	79.4%
INSTITUTES						
British Columbia Institute of Technology	12,784	11,941	93.4%	224	242	108.0%
Nicola Valley Institute of Technology	585	566	96.8%	34	30	88.2%

Note: FTE = full-time equivalent student enrolment

Source: BC Accountability Framework Performance Measure Institution Level Results by Research & Analysis (PSFS)

However, as Table 4 shows, most institutions came closer in 2022/23 to achieving their Developmental Education enrolment targets than their general enrolment targets, although less so at the teaching-intensive universities where the pattern is largely the opposite. This is significant: both demand for and delivery of Developmental Education upgrading places at the majority of BC post-secondary institutions (except some teaching-intensive universities) is healthy and generally better than for institutional delivery overall. Again, these are enrolments in all Developmental Education areas, not just ABE ones per se.

Institutions are still recovering from the widespread impact that the COVID pandemic had on enrolments at post-secondary institutions, and on experiences for adult learners. (James & Theriault, 2020). Indeed, at some of the lower levels of ABE programming, the impact of institutional shutdowns was severe because students' literacy levels made virtual delivery difficult (Sturm & Pinsent-Johnson, 2022).

Reasons for Taking ABE Upgrading

Students who undertake upgrading programs come from a myriad of backgrounds. They may be mature students, immigrants, career changers, or parents returning to the workforce. Not surprisingly, students' goals may also differ. They may want to complete high school, obtain pre-requisites for further enrolments, prepare for employment, or upgrade academic skills.

Surveys of ABE students in BC have consistently shown the main reason reported by BC students for enrolling in upgrading programs/courses is access to further education. Upgrading is seen as a pathway into academic or career programs, and as a route towards improved life opportunities. Figure 2 shows that more than 70% of former ABE upgrading students in BC surveyed between 2009 and 2013 chose *Further Studies* as their main reason for enrolling. The percentage of students choosing that reason dipped slightly in 2014, when *Self-Improvement* was chosen more often as a reason.

Figure 2 (in tabular format). Reasons Given by Students for Enrolling in ABE Upgrading (% of respondents)

	Further Studies	Complete High School	Improve Employment Opportunities	Self-Improvement	Other
2009	71	7	12	10	0
2011	81	8	7	5	0
2012	77	10	6	4	3
2013	77	10	6	4	3
2014	62	8	5	22	3

*Note: No ABE survey was conducted in 2010.
Source: DEVSO reports 2009-2014*

While upgrading programs can assist secondary school non-graduates to obtain an Adult Dogwood Diploma, the percentage of students citing *Complete HS* as a reason for enrolling was consistently at or below 10%. One reason for this may be that the graduation rate for BC high school students has steadily increased over the past fifteen years, as shown in Figure 3. The graduation rate increased from 79% to 91% between 2007/08 and 2021/22, although the rate varies noticeably among secondary schools throughout the province (Emes & Cowley, 2020).

Figure 3 (in tabular format). BC Secondary School Graduation Rates: BC Residents 2007/08 – 2021/22

	Graduation Rate
2007/08	79%
2008/09	80%
2009/10	81%
2010/11	83%
2011/12	84%
2012/13	86%
2013/14	87%
2014/15	87%
2015/16	87%
2016/17	87%
2017/18	89%
2018/19	89%
2019/20	90%
2020/21	90%
2021/22	91%

Source: <https://studentsuccess.gov.bc.ca/school-district/099/report/completion-rates>

Most ABE students seek to take further education at the same institution where they take their upgrading courses. Student mobility in ABE programs is enabled through ABE course articulation, which allows ABE credits to be transferred to other BC Transfer System member institutions offering similar programming (BC Ministry of Advanced Education and Skills Training, 2021). Also, some upgrading programs are designed as pathways for entry into specific programs at other institutions, such as North Island College's Engineering Foundations Certificate which provides dual admission to the engineering degree program at the University of Victoria.

Part Three: Outcomes of ABE Upgrading Programs in Other Jurisdictions

Canada

Post-secondary education is a provincial responsibility in Canada. Most provinces offer upgrading programs similar to those in BC, with four levels of ABE study leading to an adult high school graduation equivalency certificate. Generally these programs are offered through community colleges. Manitoba offers high school completion programming at Adult Learning Centres. In Ontario, many colleges offer the Academic and Career Entrance (ACE) pathway of provincially-recognized courses. In Alberta, students who wish to upgrade their skills for post-secondary success can earn Prior Learning Assessment and Recognition (PLAR) credit by taking a challenge exam at a post-secondary institution. Not all ABE offerings are at public institutions: Academy Canada, for instance, a large independent career college in Newfoundland and Labrador, has a Faculty of Adult Basic Education, offering courses leading to a Diploma of Academic Training (<https://www.academycanada.com/programs/faculty-of-adult-basic-education/>).

A number of Canadian universities offer upgrading for under-prepared students to gain pre-requisite academic skills. An example is the University of Manitoba, which provides several internal pathways for students seeking entry to academic courses.

Access Program -- provides holistic support to students choosing to begin an academic journey. Students may qualify for Access if there is a demonstrated personal, academic or financial need, and can qualify for entry to one of three streams: general, health careers, and professional health. Preference is given to Indigenous peoples (Status, Non-Status, Inuit and Métis), residents of Northern Manitoba, low-income earners and newcomers. <https://umanitoba.ca/student-supports/access-program>

Preparatory Skills – provides specific free-standing courses in mathematics and physics to enhance students' knowledge and skills to meet university pre-requisites. <https://umanitoba.ca/extended-education/programs-and-courses/pathways-degree-studies/preparatory-skills>

General Studies – provides access to degree credit courses without the student needing to be already accepted by any faculty/school. This pathway is designed for students who do not wish to commit yet to a specific degree or who are studying to meet other entrance requirements. <https://umanitoba.ca/extended-education/programs-and-courses/pathways-to-degree-studies/general-studies>

However, there is little Canadian research exploring the academic outcomes of students taking ABE upgrading courses. BC has conducted research on ABE students' outcomes, but other provinces and institutions have not taken the same interest in evaluating these outcomes, or at least have not published any findings.

United States

In the USA, academic upgrading for under-prepared students entering post-secondary institutions is generally referred to as Developmental Education. These programs offer basic remedial upgrading in core subjects and exist primarily at community colleges, which educate almost 40% of all undergraduates (NSCRC, 2022), with more than 50% of students taking at least one developmental course. Remedial programs are also widely offered at four-year institutions, where nearly 20% of students are placed in these courses (Complete College America, 2012).

Research on the outcomes of ABE programs in the US has occurred steadily since the 1970s (e.g. Kent, 1973; Mahaffy, 1983). This research has assessed the outcomes of upgrading students in two-year and four-year institutions, using outcome measures of program retention and completion. The results have been less than stellar. Around 40% of students taking remedial courses in community colleges do not complete them. At four-year colleges the completion rate for similar courses is 25% (Complete College America, 2012). The percentage

of students who enter remedial programs and eventually earn a post-secondary credential is 10% at community colleges and 35% at four-year colleges, measured six years after entry into the remedial program (Chen & Simone, 2016). Credential completion rates are lower for students from minority and disadvantaged socio-economic demographic groups. Indeed, Kelly (2008) called remedial education in the USA “a herculean failure” because of its high attrition rates, and Complete College America (2012) described academic remediation as a “bridge to nowhere”. Others have wondered whether the “open door” admissions policy is instead a “revolving door” (McIntosh, 1975).

More recent studies have confirmed these concerns. Xu & Ran (2020) studied data on six years of outcomes for 60,846 students in nine community colleges in one state, who were enrolled in “noncredit” programs (a broader category including ABE and other programs). They found that “among all the students enrolled in non-credit programs, the majority do not attempt to attain any credential and instead seem to use noncredit courses to simply develop their basic or workforce skills” (p.95). More than 50% of the students only completed one term.

Responses to this situation include calls for the abandonment of remedial programs and developmental courses in colleges. Indeed, some states, such as Indiana, South Carolina and Tennessee, have mandated the end of remedial programs at four-year universities (Van Effenterre, 2017).

Other critics suggest that enrolment in remedial programs can actually be detrimental to the progress of under-prepared students (Scott-Clayton & Rodriguez, 2015). Delaying entry into “real” college programs can lead to such frustration that students simply abort their plans (Martorell & McFarlin, 2011). In this way, remedial programs may not function as a gateway but as a gatekeeper, a facet of what Clarke (1960) termed the “cooling out function in higher education.”

Several advocates for developmental education (Adelman, 1996; McCabe & Day, 1988; Roueche & Roueche, 1999) suggest that the problem with these programs lies in lackluster organization, inadequate funding, and low institutional commitment to these students by colleges and state boards, including inadequate support services.

However, some American studies have found positive outcomes of upgrading programs (Turk, 2019). For example, Reder (2007) used data from two national assessments to compare the long-term post-secondary outcomes of students with GED qualifications, with Grade 12 completion, and without Grade 12 completion. He found that students who entered post-secondary with the GED qualification (equivalent to high school graduation) completed a college program more often than those without high school graduation, although those with Grade 12 diplomas had the highest completion rate. However, “GED holders appear to take much longer than traditional college students to begin and complete their post-secondary education” (p. 5) and thus completion rates for these students may be missed by studies with shorter time frames. A more recent study of the outcomes of ABE students in Washington State colleges compared ABE students with direct entry students, and found that transfer rates to university were higher for the ABE students (State Board for Community and Technical Colleges, 2020).

Other Regions

Since the structure and organization of post-secondary systems varies so much globally, it is difficult to draw comparisons of ABE programming between other regions and BC’s academic upgrading programs. Most jurisdictions have no equivalent to North American community or junior colleges, or equivalents to the upgrading programs offered at these institutions. Generally, post-secondary institutions worldwide have not offered internal academic upgrading pathways for students, because these institutions usually have selective admission criteria that would exclude under-prepared applicants. Students outside North America generally need to complete secondary school exit examinations or other requirements to be admitted to post-secondary institutions.

Sgobbi (2020) studied the effectiveness of remedial courses for new entrants with low academic skills, enrolled in an engineering program at a medium-sized Italian university. The attrition rate for these students after two years was statistically similar to the rate of a comparison group of non-remedial students.

Rienties, Tempel, Waterval, Rehm, & Gijssels (2006) studied the effectiveness of an academic remediation program at Maastricht University in the Netherlands. Incoming students voluntarily took a test evaluating their prior knowledge in economics, and those with low scores were offered an online program of remediation in the summer before first-year entry. Students in the program re-took the test at the end of the summer, and pass rates improved.

In Australia, Cantwell, Archer, & Bourke (2001) compared the experiences and achievements of mature students entering university through an Open Foundation Course. They found that these students' outcomes compared favourably with those of direct-entry students.

Part Four: Outcomes of ABE Upgrading in BC

This project focuses on how successful ABE upgrading students are in their further education. However, further education is not the only successful outcome of upgrading programs, and students benefit in many other ways from taking upgrading programs. Therefore, to place the rest of the report within a broader landscape of student outcomes, this section starts by considering some of these non-academic outcomes.

Subsequent sections of the report examine the academic outcomes of upgrading success. These incorporate two broad ways of looking at outcomes. One is essentially from the students' perspective and may be termed the *impact of upgrading*. This outcome is how students subjectively experience the consequences of their upgrading, including how satisfied they are with the education they received and how ABE impacted their lives. Data in this section were obtained from surveys of ABE students, with the surveys often conducted after the students had left their upgrading programs. The second type of outcome is changes in observable circumstances that the upgrading program had on the *future success of students*. Data relating to this outcome measured students' subsequent enrolments, academic performance, or graduations.

Non-Academic Outcomes

As previously discussed, students enrol in ABE programs for various reasons, which may include a personal goal of “bettering” their lives. Even when students enrol in ABE programs primarily to further their education, they may experience other non-academic benefits.

Bossort (1994) investigated the impact of students' participation in ABE programs. She interviewed former students and current ABE instructors and found that

The most salient impacts of the ABE experience were psychological. Respondents credited ABE with increasing their self-esteem/self-confidence and thereby enabling them to make important changes in their lives. It was concluded that, by helping people to learn to learn and learn that they have learned, ABE/literacy programs enhance individual, family, and community growth and potential. (p.1)

Respondents to the DEVSO outcomes surveys conducted in BC from 2009 to 2014 consistently reported that their ABE courses had helped them develop critical thinking, problem-solving skills, group collaboration skills, independent learning skills, and self-confidence. While these skills are often taught in academic courses, they are not the academic content of articulated ABE courses per se. Between 71% and 79% of respondents rated their ABE studies as “very helpful” in developing these skills, while approximately seven percent of respondents each year gave a rating of “not very helpful” or “not helpful at all”. Approximately 58% of respondents each year rated their studies as “very useful” or “somewhat useful” in providing skills they were using in their current jobs (DEVSO, 2009-2014).

However, outcomes for ABE students are not uniform (Bowe & Auchinachie, 2022). Analyzing the experiences of 218 ABE students at an urban college over five years, these researchers found that “student success was multilayered, incremental, and often interrupted. ABE student success did not follow a single, ideal scenario” (p.9).

Research also suggests that non-academic outcomes for ABE students are not always positive. Ellis (2023), studying the impact of ABE participation on Indigenous students in the Yukon, found that these upgrading programs reflected rather than countered colonial injustices, and tended to undermine students' progression into further post-secondary studies. Some researchers (e.g. Mapuranga, 2011; Walker & Smythe, 2020) have suggested that fluctuations in BC government policy can hinder, rather than foster, sustained positive outcomes

for students. Systemic barriers to participation and motivation may also affect ABE student outcomes (Chenoweth, 2017; Maltesen, 2019).

Academic Impact of Upgrading

The success of ABE upgrading programs has generally been assumed rather than known, with the assumptions relying on anecdotal evidence of student outcomes rather than the findings of empirical studies (Harvey, 1981). Comments from the interviewees reflect this lack of empirical data.

We have lots of stories of students who came back to school, upgraded, and then went on to become all sorts of things from nurses to engineers. Many are highly recognized alumni and are such inspiring people. We profile these stories on our website, but we have not done really any systematic documentation of what happens to all our former students. (College interviewee)

We had two recent graduates from our medical school, both of whom were former upgrading students and they went through our rural pre-med program. They are now practicing. One of them received the top student award in 3rd year. (College interviewee)

You can walk into almost any business in our communities and find someone who took upgrading from us – a store owner, an auto mechanic, a pre-school teacher. So we know our students are out there being successful. I walked into a restaurant the other day and the cook ran out of the kitchen, gave me a hug, and said, “Oh my God, you saved my life.” Because we have small communities, it happens all the time to our instructors. So it’s not just success in academics, but also the impact it has on people’s lives. (College interviewee)

A series of provincial-level studies in BC, starting in the early 1990s, systematically explored whether upgrading programs were meeting their mandate. Beginning in 1991 a provincial steering committee produced three separate studies (Adult Education, 1996). These studies, conducted between 1993 and 1996, surveyed ABE students at three data collection points -- program entry, seven months after entry, and 13 months after entry. The largest survey involved 2,562 participants, with a mean response rate of 59.7%.

The surveys collected data on student demographics, whether students achieved their goals for enrolling, students’ rate of progression through their programs, and students’ opinions on their educational experience. The researchers reported that the aggregate findings

[c]learly indicate that ABE/College Prep is an access point to further education and training towards a desired occupation. ABE/College Prep is not seen [by respondents] as a completion of something incomplete, but rather as a potential, as a concrete move to the future – that is, the goal is not to complete high school *per se*, but rather to qualify for another program or course, thereby preparing for a career. (p.34)

In 1997, the BC Outcomes Working Group (OWG) expanded its annual survey of outcomes for BC college and institute graduates to include ABE students. These were defined as students that had taken at least three courses on the provincial list of articulated ABE courses. However, ABE students were excluded from the surveys after 2001 due to survey features that limited the usefulness of the results (BC Outcomes Survey, 2005, Appendix A, p. 2).

In 2005, in response to continuing government and system interest in ABE student outcomes, OWG conducted an ABE outcomes survey (BC Student Outcomes Survey, 2005). The survey participants were students who had studied at all levels of ABE programming and students who took other college-level courses, preparatory orientation courses, and/or career access courses during the period July 2003 to Jun 2004. Participants were classified either as “completers” who had passed at least one course or “leavers” who did not pass a course. Table 5 shows a summary of the survey responses. The percentage of “completers” who had progressed to further non-ABE education ranged from 41% to 60%, with the group with the highest percentage of further progress being those had already pursued joint ABE and college studies. Over half of the students who enrolled

in further studies chose certificate or diploma programs, with notable percentages also choosing baccalaureate (18% of ABE completers) or associate degree programs (10% of ABE completers).

Table 5: Programs Taken by BC ABE Students Who Went on to Further Education

Program Student Enrolled in/after ABE Studies	ABE Completers	ABE Leavers	Jointly Enrolled in ABE and College Courses	Enrolled in Orientation Courses	Enrolled in Career Access Courses
Certificate or Diploma	56%	61%	38%	45%	61%
Baccalaureate	18%	19%	36%	30%	7%
Associate Degree, Arts Diploma, University Transfer	10%	5%	22%	10%	8%
Pre-apprenticeship or ELTT (Entry Level Trades Training)	6%	3%	1%	5%	12%
Private Professional Association	4%	4%	2%	4%	3%
Apprenticeship	4%	4%	1%	2%	4%
Other	4%	5%	2%	4%	6%

Source: BC Outcomes Survey (2005)

This survey was later folded into the larger provincial Developmental BC Student Outcomes (DEVSO) student survey. Between 2009 and 2014, the DEVSO surveys asked students who had been formerly enrolled in an ABE program to rate their overall level of satisfaction with their upgrading studies. The results are presented in Figure 4. The proportion of students reporting being “Very Satisfied” or “Satisfied” with their studies was consistently above 45% for both categories, and less than five percent reported being “Dissatisfied” or “Very Dissatisfied”. These are certainly encouraging results; however, they could be misleading since data were collected only from students who completed upgrading studies. The data do not include students who dropped out of their upgrading programs – some of whom, presumably, would have provided less positive evaluations.

Figure 4 (in tabular format). Rates of Student Satisfaction with ABE Upgrading, 2009-2014 (% of respondents)

	Very satisfied	Satisfied	Dissatisfied or very dissatisfied
2009	49	46	5
2011	49	47	4
2012	51	44	5
2013	49	46	5
2014	47	48	5

Note: No ABE survey was conducted in 2010.

Source: BC Developmental Student Outcomes (DEVSO) survey reports 2009-2014

Most respondents to the DEVSO surveys indicated that their upgrading studies helped them achieve their main reason for enrolling. Figure 5 shows that 54% or more of respondents each year reported that their upgrading studies had been “Very Helpful”. The percentage rating their upgrading as not helpful was consistently lower than five percent.

Figure 5 (in tabular format). Student Ratings of ABE Studies' Helpfulness in Achieving Reasons for Enrolling, 2009-2014 (% of respondents)

	Very helpful	Helpful	Somewhat helpful	Not very helpful	Not at all helpful
2009	59	22	14	4	2
2011	55	29	12	3	1
2012	55	29	11	3	2
2013	55	28	12	3	2
2014	54	31	11	2	2

Note: No ABE survey was conducted in 2010.

Source: BC Developmental Student Outcomes (DEVSO) survey reports 2009-2014

Institutions typically require programs to conduct assessments, including self-studies, as part of the institution's accountability framework. These assessments examine whether a program is meeting its mandate. The results of self-studies sometimes lead to program changes or structural adjustments. These self-studies are intended to inform internal planning processes and are not generally made public. However, part of the results from a review conducted at a BC public college are shown in Table 6. The college is not named so as to respect the anonymity of the institution and students. A survey was conducted in Fall 2010 with 316 participants responding. Students reported high overall satisfaction with their upgrading programs, the quality of instruction, and their outcomes.

Table 6: ABE Student Ratings of Program Experience and Outcomes at a BC Post-Secondary Institution

Overall satisfaction	Would recommend program to others	86%
	Courses are well-designed for me to learn	88%
	Textbooks and handouts are well-chosen	83%
	Classroom activities helped me learn	82%
Quality of instruction	Instructors used class time well	85%
	Instructors provided activities that helped me learn	82%
	Instructors welcomed student questions	89%
	Instructors treated every student respectfully	90%
Outcomes	Program is good preparation for other college courses	87%
	More confident now to achieve future educational/career goals	86%
	Improved ability to think clearly	83%
	Improved ability to perform under pressure	73%

Source: Student survey conducted as part of program self-study

Respondents to the survey also described personal and academic improvement that resulted from their taking upgrading courses.

"Taking [upgrading] really opened the door for me. One day I woke up and loved mathematics."
(Student who later completed a bachelor's degree)

"If I had jumped into my program without any preparation, I can almost guarantee you I would have been overwhelmed. Taking the [upgrading program] gave me a sense of 'Yeah, I can do it'." (Student who later completed a social services diploma)

"I came here with the attitude that getting a C was good. I was in with a group of people who had very high standards. When you are with people who want to succeed, it makes you want to succeed." (Student who later completed a health technician diploma)

“The classes were smaller and the teachers had time to give me personal attention. It gave me the ability to catch up. If I had started college without those courses, I would have been broadsided. I could have wasted a lot of time and money.” (Student who later completed an associate degree)

Transition to Post-Secondary Studies

ABE upgrading students may generally be satisfied with their studies, and ABE may be a strategy for learners to improve their opportunities. But does ABE actually function as a ladder to subsequent studies?

A difficulty in answering this question is that ABE upgrading programs can easily lose track of their former students. As one interviewee said:

There isn't some sort of ABE alumni group that helps us remain in contact with former students. We often still see some of them around campus... but we are really a launchpad and once people launch we don't get to have a lot of contact with them after that. (College interviewee)

The relationship of upgrading studies to BC students' future post-secondary activities was examined by Lawrance (2008). Her research focused on the experiences of students in ABE programs in BC school districts and post-secondary institutions. Data on the academic progress of 21,720 post-secondary students indicated that one year after enrolling in ABE studies, 45% of students were enrolled in other post-secondary courses, either all ABE courses or other courses in addition to more ABE courses. Two years after their initial ABE enrolment, the rate of students' enrolment in post-secondary courses was more than six times the average rate of enrolment in ABE courses. Additionally, 13% of the former ABE students had earned a post-secondary credential (Lawrance, 2008).

The DEVSO surveys previously mentioned also asked former ABE students how well they thought their programs had prepared them for later post-secondary study. The responses are summarized in Figure 6. Over the five years of surveys, about 50% of respondents indicated they felt “very well prepared”, with less than 5% of respondents reporting they were “not at all prepared”.

Figure 6 (in tabular format). Student Ratings of How Well ABE Prepared Them for Further Studies (% of respondents)

	Very well prepared	Somewhat prepared	Not very well prepared	Not at all prepared
2009	51	41	5	4
2011	49	44	4	2
2012	52	41	4	3
2013	49	45	4	2
2014	47	45	5	2

Note: No ABE survey was conducted in 2010.

Source: BC Developmental Student Outcomes (DEVSO) survey reports 2009-2014

As shown in Figure 7, around 70% of the DEVSO respondents indicated that they were “very likely” to enrol in further post-secondary studies.

Figure 7 (in tabular format). How Likely ABE Upgrading Students Are to Enrol in Future Post-Secondary Education (% of respondents)

	Very likely	Somewhat likely	Not very likely	Not at all likely
2009	70	20	6	4

2011	71	21	5	3
2012	70	22	6	2
2013	70	23	5	3
2014	67	24	5	5

Note: No ABE survey was conducted in 2010.

Source: BC Developmental Student Outcomes (DEVSO) survey reports 2009-2014

The DEVSO surveys did not collect data on where former ABE students enrolled for further education, but some institutions have looked at ABE student enrolments in further education at their own institution. Figure 8 shows the proportion of ABE students at one BC teaching-intensive university who transitioned to further studies at the same institution between 2020 and 2022. The rate of transition has risen or fallen in tandem with the rate of enrolment. Overall, almost half (44%) of ABE students at this university used ABE upgrading as a pathway into other post-secondary programs at the institution, although the proportion ranged from 49% in mid-2010s to 37% in 2021/22.

Figure 8 (in tabular format). ABE Student Transition Rates at One Teaching-Intensive University (Number of students)

	Started as ABE	Took Further Studies
2012/13	513	218
2013/14	529	230
2014/15	449	219
2015/16	542	257
2016/17	534	261
2017/18	593	270
2018/19	473	202
2019/20	423	195
2020/21	404	153
2021/22	363	134

Source: TIU Office of University Planning and Analysis

A study conducted at a BC urban college found that 75% of all ABE upgrading students enrolled in additional courses at the college, with a mean of nine additional courses per student taken between 2006 and 2008. More additional courses were taken if students had completed pre-requisite courses for other college programs.

While these BC studies shed light on ABE students' progress into academic and career programs at post-secondary institutions, the data were reported by students, without additional verification of subsequent enrolments. This research also did not include any measures of these students' success in their later studies.

One interviewee observed that even if former ABE upgrading students were succeeding in their further studies, there was often a qualitative story that the numbers did not portray.

A lot of former ABE students repeat several first-year courses as they struggle to get into their stride. It can be a rocky road for them. Their cumulative GPAs are often lower than for direct-entry undergraduates... It's understandable because they are often not just as academically strong, so things don't come so easily and they may have to work harder. (University interviewee)

Some interviewees stressed that former ABE upgrading students may need additional support when they transition into further education.

We recognized we can't just end the pathways support when they leave ABE, so we continue it on as coaching from the coordinator when students enter their programs and for a few months afterwards. (College interviewee)

Another interviewee suggested that former ABE upgrading students may have characteristics or circumstances which are difficult to manage alongside being a student, and which make them more prone to struggle with a linear path to success.

We have a rule that requires students who have failed a course twice to meet with the Dean before having permission to register in the course a third time. So that results in me having a fair number of conversations with students. And, you know, they are sincerely interested in being successful, but they don't recognize the obstacles that they put up for themselves. So it can be a complex thing... very individual to the student and what is going on in their life. (College interviewee)

The DEVSO surveys were discontinued in 2015, but the BC Student Outcomes Surveys (BCSOS) have continued, with results published annually since 2018. The BCSOS results are classified by the type of academic credential earned by the student: Baccalaureate degree, Associate degree, Diploma, or Trades. A question on the survey asks whether a graduate took an ABE course. The respondents are not limited to students who took an ABE course at the same institution where they acquired their credential, and the question does not include the number of ABE courses the respondent took. However, the results do indicate whether ABE students later completed an academic credential. These results, compared to outcomes of graduates who did not take an ABE course, are presented in Figure 9. The complete results are shown in Appendix B.

Figure 9 (in tabular format). Comparison of BC Student Outcomes Survey Respondents Who Took an ABE Course and Respondents Who Did Not, by Type of Completed Credential (% of respondents)

	Took ABE	No ABE
Baccalaureate	6.4	93.6
Associate Degree	14.0	86.0
Diploma	10.3	89.7
Certificate	10.5	89.5
Trades	6.4	93.6

Source: BC Student Outcomes surveys, annual results 2018 to 2022. Results are expressed in percentages.

The BCSOS results show that the percentage of credential graduates who took ABE as part of their post-secondary studies ranges from 6.4% to 14% depending on the credential. The highest number of former ABE students completed shorter credentials, such as Associate Degrees, Diplomas and Certificates. There are no data to indicate whether this was their intended outcome, or whether there was some other reason for pursuing a shorter credential. There would also have to be further investigation to understand the reasons for the relatively low number of ABE graduates completing trades credentials. Despite this lack of detail, these results suggest that ABE functions as a pathway to further study and credentials.

The number of ABE students taking further post-secondary studies at the same institution has been tracked internally by some BC institutions, by examining how many post-secondary graduates previously took one or more upgrading courses. One public college, using data from 2006 to 2008, found that 10% ~~or more~~ of all graduates had taken an ABE upgrading course at the college, while students in ABE upgrading programs constituted only 2% of the college population overall. This finding suggests that students who take upgrading are more likely to graduate from this college than those who do not take upgrading courses.

Another way of tracking students' success in subsequent post-secondary studies is to compare the course success rates of direct entry students and students who took an ABE upgrading course. For example, at one public college, students enrolling in an English or Communications course are required to have completed secondary school Grade 12 English or its equivalent, with a minimum C grade, or to have completed an advanced

ABE reading and writing course. In a mandatory first-year English course, students with either pre-requisite performed almost identically. Eighty percent of former ABE students passed the course, compared to a 76% pass rate for all students in the course.

Post-Secondary Credentials Earned

Although not all students pursuing post-secondary studies intend to earn a credential, most students do, or at least start out with that goal. They may have to adjust their sights if circumstances emerge that prevent them from completing a credential. Similarly, although post-secondary institutions offer general studies pathways for students to pursue further education outside the confines of a designated program, most educational offerings are clearly defined as academic, career or vocational programs leading to a credential. The importance of convocation ceremonies, for both the student and the institution, is testimony to the value of students completing a program and earning a credential.

Therefore, the number of former ABE upgrading students who pursue post-secondary programs and earn a credential is a key measure of their later success. To determine how many former ABE upgrading students have earned a post-secondary credential at the same institution, the researcher obtained data from BC’s post-secondary Central Data Warehouse (CDW).

There is inherent difficulty in defining the population of ABE upgrading students. Students enter upgrading programs at different levels within the ABE framework. Many students also take only one or two ABE courses to obtain pre-requisites for other post-secondary courses. While some do complete the Adult Secondary Diploma, most students do not. Therefore, the researcher collected CDW data on all students who had taken at least one ABE upgrading course -- as defined by the institution and reported to the CDW. To cover a substantial period of time, the researcher chose the past 15 years of enrolment data, with the exception of data for the current year 2023/24, which is incomplete. This resulted in data from 14 years, between 2009/10 and 2022/23, covering 197,149 students at only the BC post-secondary institutions that offered ABE courses. Although the CDW data include credentials in vocational trades, they do not include data on Red Seal apprenticeship credentials, which are awarded by TradesBC.

The data include students who took at least one ABE course between 2009/10 and 2022/23 and later took at least one undergraduate-level or trades course during the same time period. As Figure 10 shows, 124,755 of the cohort pursued at least some post-secondary studies after taking some ABE courses. This 63% transition rate indicates that almost two-thirds of former ABE upgrading students participated in further studies at the same institution where they had participated in ABE.

These data were also analyzed to determine how many students completed a post-secondary credential of any kind at the same institution. The results indicated that 54,861 of all students (44%) obtained at least one credential, with some students earning more than one credential. Overall, the data showed that 28% of former ABE students did earn a post-secondary credential of some kind. A rough “rule of thirds” seems to be operating here, where about 2/3 of former ABE students do enrol in further studies at the same institution, and about 1/3 end up completing their programs and earning a credential.

Figure 10 (in tabular format). ABE Cohort 2009/10 – 2022/23: Progression into Post-Secondary Studies at Same Institution (Number of students)

	Progression into Post-Secondary at Same Institution
Anytime ABE	197,149
Enrolled in Post-Secondary	124,755
Earned Post-Secondary Credential	54,861

Figure 11 presents the numbers of the types of credentials that former ABE students earned. Perhaps not surprisingly, the majority of these students (22,307) were awarded credentials at the certificate level (30 credits). The next most commonly earned credential was the diploma, obtained by 17,083 students, while 8,527 former ABE students earned a bachelor's degree. Notably, 696 students earned graduate-level credentials. While most of these credentials were post-graduate certificates, 75 students earned master's degrees and seven students earned doctorates.

Figure 11 (in tabular format). ABE Cohort 2009/10 - 2022/23: Types of Credentials Earned (Number of students)

	Credentials Earned by ABE Cohort
Short Certificate*	2,240
Certificate	22,307
Diploma	17,083
Associate Degree	2,924
Bachelors	8,527
Graduate	696

**A short certificate program is less than 3 months' duration.*

Figure 12 shows that the number of credentials earned each year by former ABE students followed a trajectory. Since it takes time to earn a credential, most of these students would not have earned one within a couple of years of enrolling in their last ABE course. Similarly, those enrolling in ABE in the later years of the period represented by the data also would not be expected to have completed a credential. The graph also shows the total number of credentials earned at the teaching-intensive universities (TIUs), but the trajectory for ABE students is comparable and suggests the same pattern of credential completion.

Figure 12 (in tabular format). ABE Cohort 2009/10 - 2022/23: Total Credentials Earned Per Year by PSI Type (Number of students)

	Teaching Intensive Universities	Colleges and Institutes	Total Credentials
2009/10	614	1,474	2,088
2010/11	788	2,042	2,830
2011/12	1,078	2,712	3,790
2012/13	1,199	3,066	4,265
2013/14	1,533	3,063	4,596
2014/15	1,774	3,101	4,875
2015/16	1,960	3,309	5,269
2016/17	1,861	3,355	5,216
2017/18	1,859	3,362	5,221
2018/19	1,853	3,230	5,083
2019/20	1,843	2,862	4,705
2020/21	1,859	2,905	4,764
2021/22	1,626	2,707	4,333
2022/23	1,374	2,493	3,867

Similarly, when the data are analyzed by the type of credential earned, the general trajectory in this period is similar to the pattern shown in Figure 13. However, there are some contrary trends. The number of diplomas awarded to former ABE students has risen, whereas the number of certificates awarded remains about the same or slowly declines. The rise in the number of Bachelor degrees awarded over this period is also noticeable. This suggests that more former ABE students appear to be earning higher-level credentials in recent years. One possible explanation for this is the increased number of undergraduate degree programs available to BC students, with colleges and teaching-intensive universities being given degree-granting status.

Figure 13 (in tabular format). ABE Cohort 2009/10 – 2022/23: Total Credentials Earned Per Year by Type of Credential (Number of students)

	Short Certificate	Certificate	Diploma	Associate Degree	Bachelors	Graduate	Other	Total
2009/10	92	1,176	169	39	35	7	570	2,088
2010/11	101	1,625	297	95	68	5	639	2,830
2011/12	145	1,995	738	181	109	7	615	3,790
2012/13	196	2,051	1,056	210	218	10	524	4,265
2013/14	150	1,892	1,260	233	469	17	575	4,596
2014/15	153	1,950	1,369	225	650	29	499	4,875
2015/16	193	2,020	1,367	237	865	59	528	5,269
2016/17	184	1,817	1,428	229	835	102	621	5,216
2017/18	217	1,636	1,548	234	873	128	585	5,221
2018/19	156	1,531	1,676	254	871	95	500	5,083
2019/20	133	1,299	1,655	259	881	87	391	4,705
2020/21	167	1,230	1,680	296	927	58	406	4,764
2021/22	229	1,116	1,473	222	859	44	390	4,333
2022/23	122	1,041	1,238	208	854	48	356	3,867

The data were then analyzed to identify variations by institutional type in the credentials awarded to former ABE students. As Figure 14 shows, more certificates were awarded at colleges than at institutes, but more diplomas were awarded at institutes. More associate degrees were awarded at colleges than at the teaching-intensive universities, but those universities awarded most of the bachelor's degrees.

Figure 14 (in tabular format). ABE Cohort 2009/10 – 2022/23: Percentage of Credentials Awarded by Institution Type (% of credentials)

	Institute	College	Teaching-Intensive University
Short Certificate*	3.79	3.46	3.9
Certificate	37.48	42.14	29.01
Diploma	40.06	29.09	19.68
Associate Degree	0.23	7.14	3.98
Bachelors	7.14	4.25	30.85
Graduate	0.24	1.74	0.79

*A short certificate program is less than 3 months' duration.

The data were then analyzed to determine variations in the credentials awarded by geographic region. The results are presented in Figure 15. The distribution of credentials awarded is largely due to the programming available at institutions in each region. For example, the certificate is the most frequently awarded credential awarded in the Northern region, no doubt due to the comparatively smaller number of degree-granting programs in this region. Similarly, more access to bachelor's degree programs probably explains the higher percentage of credentials awarded at the bachelor's level in the Lower Mainland.

Figure 15 (in tabular format). ABE Cohort 2009/10 – 2022/23: Percentage of Credentials Awarded by BC Region (% of credentials)

	Lower Mainland	Vancouver Island	Interior	Northern
Short Certificate*	2.89	4.5	5.14	0.11
Certificate	29.56	43.04	42	56.39
Diploma	36.7	20.56	20.31	13.61
Associate Degree	6.42	2.48	4.26	2.67
Bachelors	18.32	10.14	12.47	0
Graduate	1.21	1.15	0.95	0.13

*A short certificate program is less than 3 months' duration.

To further illuminate the picture, the researcher compared the distribution of credentials awarded to former ABE upgrading students with those awarded to non-ABE upgrading students (post-secondary students who had never taken an ABE course). These data from the CDW were only available for 2019/20 through 2022/23. The results of this analysis are shown in Figure 16.

The number of credentials awarded to non-ABE upgrading students is higher, but this is because of the larger number of these students. With the exception of graduate-level credentials, there are relatively consistent percentages of students with and without ABE upgrading credit receiving each type of credential. Non-ABE students received 91% of certificates, 87% of diplomas, and 87% of bachelor's degrees, while former ABE students received 9% of certificates, 13% of diplomas, and 13% of bachelor's degrees. Clearly, the ability of former ABE students to earn credentials generally parallels the ability of non-ABE students to earn the same credentials. It should also be noted that 10.3% of all credentials awarded were earned by former ABE students.

Figure 16 (in tabular format). Credentials Awarded 2019/20 – 2022/23: Former ABE Students and Non-ABE Students (Number and % of credentials)

	Former ABE	Former ABE (%)	Non-ABE	Non-ABE (%)	Total	Total (%)
Certificate	4,686	9%	47,219	91%	51,905	100%
Diploma	7,030	13%	47,575	87%	54,605	100%
Bachelors	3,521	13%	23,344	87%	26,865	100%
Graduate	237	1%	17,223	99%	17,460	100%
Total	15,474	10%	135,361	90%	150,835	100%

The overall analysis suggests that over one-quarter (28%) of ABE upgrading students continue into post-secondary credential programs and earn at least one credential. The distribution of these credentials generally follows the same trajectory over time, and is similar across institutional type, credential type and geographic region. The percentages of credentials earned is consistent across types of credentials for former ABE students and for non-ABE students. Former ABE students earn approximately 10% of all credentials awarded at institutions that offer ABE programs.

Part Five: Looking Forward

This final section reviews the implications of the results of this research, and makes recommendations for further research, and for the future strategy and practice of ABE upgrading education in BC. First, the section summarizes some innovative practices in the delivery of ABE programming found in the data assembled in Appendix A and some of the interviews conducted with ABE practitioners in the province.

Innovative Practices

The provision of ABE upgrading has evolved over the past several decades and this is also true in BC. These changes have been in response to concerns about low numbers of students completing their ABE studies, students spending time in upgrading courses that delays their entry into “regular” post-secondary studies, and the desire to make ABE curriculum more practical for learners by combining ABE content with the content of academic and career programs.

ABE practitioners have come to embrace an additive model of upgrading rather than a deficit model. Rather than seeing students as needing to remediate deficiencies in their education, the new approach focuses on supplementing students’ existing education with skills needed for further learning. One college interviewee said:

We are seeking out new strategies and courses that provide more “just-in-time” rather than “just-in-case” curriculum. There’s a general kind of drift of ABE programming to have more laddering into first-year courses or career core programming. ABE programs can run the risk of “ghettoizing” students who make slow progress and eventually lose motivation. It helps if students feel they have already started their “real” program. (College interviewee)

Another interviewee also emphasized the need to re-evaluate how the structure of ABE upgrading programs can advance rather than impede students’ timely progression.

We’ve now thinking in terms of pre-requisite skills rather than pre-requisite courses. It can be a huge discouragement to students if they come to us and see a long upgrading path ahead of them, and we can soon lose them if they are going to have to wait two years or so before they can get into their program of choice. So rather than a whole sequence of math or English ABE courses, can we isolate the specific skills they actually need for success and create an individual pathway. (University interviewee)

This evolution has occurred partly in recognition of the reality that the majority of ABE students are not looking for high school graduation, or have already graduated. Also, many academic and career programs require specific skills in English, mathematics or science for admission rather than high school graduation *per se*. The result has been gradual and broad experimentation with new ways to offer upgrading programming.

To reduce the time students spend in ABE upgrading programs, some institutions have integrated coursework, such as combining reading and writing instruction in one course. Other ways of reducing time include the ability for students in self-paced courses who complete a course before term’s end to immediately register for the next course in the program, which is how Capilano University has structured these courses. Challenge examinations can help students receive credit for pre-requisite courses. At the British Columbia Institute of Technology, for example, students can receive credit for two ABE biology courses by passing challenge exams. This benefits students who have taken biology courses in the past but need to show their current familiarity with the material for admission into programs such as nursing.

Multi-level classes can also be an innovation in ABE programming, as described by one interviewee.

We offer some courses using a multi-level class. So one instructor might have several levels of students in that class and the students are working on their own pace through various modules at the level they are in. These classes would also make use of instructional assistants working directly in the classroom. We use them in our learning centres, on-line and in person offerings. (College interviewee)

Pathways are also another innovation in ABE programming structure. In this model, students are enrolled in upgrading courses that focus on the skills needed for entry into specific programs. Coast Mountain College, for

instance, offers students pathways into eight different certificate and diploma programs. Okanagan College provides five pathways in health sciences. The Access Program at the College of New Caledonia allows students to take certain college-level courses concurrently with upgrading courses, thus providing a head start on completing programs. Selkirk College offers a STEM pathway for entry into science and technology programs, an HCA pathway for entry into programs training health care professionals, and an HHS pathway for entry into various social service and support worker programs. In all of these pathways, students complete pre-requisite upgrading courses, have access to focused individual support, acquire study skills, and connect with others entering the same professions.

Some institutions offer “learning communities” for groups of students with common backgrounds or characteristics, such as Indigenous students. Beyond providing specialized academic advising or transition support for these learners, some institutions provide targeted access programs. For example, Camosun College offers an Indigenous College Preparation Certificate that assists Indigenous learners in acquiring the requirements for admission to post-secondary studies. At Vancouver Island University, the Aboriginal University Bridging Certificate is available for Indigenous students seeking the prerequisites to enter programs; students can also begin university courses during the program. Vancouver Community College offers ABE upgrading at Grade 10 to 12 levels, aimed at youth aged between 15 and 24 years who have left the regular high school system. BCIT offers a full-time Technology Entry (TE) full-time program aimed at students lacking entry requirements for technology programs. The program introduces students to the culture and rigour of post-secondary education and develops skills in communications, mathematics, chemistry, and physics. It also includes an introduction to computer applications, a study skills seminar, and an orientation to options and careers in technology.

Some institutions use co-requisites to facilitate the transition between upgrading courses and regular post-secondary courses. At Capilano University, for example, students can concurrently register in ENGL 100 (first-year university level English) and BENG 0502 (a support course equivalent to Grade 12 English). Pairing courses in a single term - sometimes called course “scaffolding” - enhances transitions to university-level writing. Vancouver Island University provides Foundations for Success (FNFS) courses designed to be taken “before, during, or after” other university courses. These supplemental mini-courses provide instruction beyond what is normally provided in regular classes. One interviewee described how the co-requisite model has replaced pre-requisites:

Sometimes a program requires Foundation Math and the student only has Trades Math. So depending on their circumstances, we'll allow them into the program without meeting that pre-req but say they must do the college math course alongside regular courses as a co-req. The program instructor does an assessment and says, “I'm letting this student into the program and they can take this needed math course by themselves because it doesn't conflict with our schedule.” (College interviewee)

To assist students seeking the Adult Graduation Diploma, institutions have explored ways of reducing the time it takes for students to meet the diploma requirements. Some of these strategies include assembling course credits from previous high school courses, credits from ABE upgrading, and credit from other courses passed at the post-secondary level. For example, Camosun College enables students to earn the diploma by completing English 12 and Math 11 (or equivalents) and three other courses from over 80 post-secondary subject areas. Providing credit for prior learning was described by one interviewee:

We look to find ways for students to pick up credit for work experience or other things they have done in their life. For example, we've given credit for Class 1 truck driving training. We look for things over 100 hours where there have been distinct learning outcomes and an evaluation component. (College interviewee)

Some of these innovations have been fostered by provincial pathway funding provided in 2022 and 2023. This funding was intended to increase successful transitions from ABE upgrading into post-secondary programs in health, trades and technologies. Along with projects aimed at ESL learners, this initiative was intended to prepare students for future success “by integrating students into post-secondary life, tailoring offerings to students' target careers or disciplines, and offering career guidance and additional academic supports” (BC Ministry, 2023, p.1).

One interviewee emphasized the need to provide supports for ABE upgrading students pursuing further education.

Our students don't tend to realize they need support until they get into difficulty. So we are trying to find ways to be proactive rather than wait until a reactive response is needed... how to embed the supports so they are not mandatory but still very visible. Sort of like "here's your support", rather than "would you like some help?" So they have access to support in a very intentional and not accidental way. We're recognizing we can't just throw them off the end of the dock to swim by themselves. We need to continue the supports after the pathway program ends. (University interviewee)

Another interviewee suggested that the potential of generative artificial intelligence (AI) is only just being realized and could offer substantial new instructional possibilities:

Is there a way for AI to assist in helping under-prepared and marginalized learners? Perhaps by creating avatars that become a student's assistant in navigating academics. Will every student be able to have a mentor they create who can be fed information about where the student wants to improve, and the AI will create exercises and present tailored information? (College interviewee)

Looking forward, further developments in the organization and delivery of ABE upgrading in BC can be anticipated as part of the continual evolution of the field, especially finding new ways to assist students to make successful transitions from ABE into other academic programs:

We are somewhat on a cusp... the field is facing the need to re-invent itself from a past based on a deficit model of upgrading to a future additive model... one using tailored pathways, rather than prescribed programs. We need to explore which ones of those can achieve the best results for students. Recent innovations are encouraging, but they need more exploration. One size won't fit all. (College interviewee)

Conclusion

The results of this study indicate that ABE upgrading programs in BC are facilitating successful student transitions into further education. This pattern is consistent across time and has been shown by several different provincial and local studies of former ABE students.

Some internal institutional research indicates that 75% of ABE completers went on to further education. Additionally, former ABE students are succeeding in later post-secondary studies. Institutional research studies comparing the academic achievement of direct-entry students and ABE upgrading students show that ABE-entry students achieve grades in first-year courses at least as high as those achieved by direct-entry students. Provincial surveys of graduates show that roughly 10% of all BC post-secondary program graduates took at least one ABE course. The CDW data show that 28% of ABE students progress into post-secondary programs and earn at least one credential, and that former ABE students earn one in ten of all credentials awarded at institutions that offer ABE programming.

However, there are some caveats to this conclusion. First, almost all previous provincial research on the outcomes of ABE upgrading were surveys of student satisfaction, and of students' intention to pursue further post-secondary studies; these were self-reported data. More recent provincial research on post-secondary graduates who had previously taken an ABE upgrading course was also based on self-reporting, and did not survey students who failed to graduate. These surveys also did not ask whether any future education taken by ABE students was at the same institution as where they took the ABE course(s). Additionally, any institutional data related to these issues, such as assessments of the comparative academic performance of ABE students and direct-entry students, are generally not publicly available.

Nonetheless, since the results of the CDW data reported in this study are based on provincial enrolment data and not student self-reports, this study has confirmed the overall picture that ABE upgrading programs provide a valuable route of access to success in further education at the same institution.

Further Research

A fuller understanding of the academic progression of ABE upgrading students requires filling the gaps in our current knowledge:

- 1) Institutions can conduct their own research, such as:
 - Comparisons between the academic achievement of ABE upgrading participants with those of direct-entry students. This could, for example, compare grades for students in gateway first-year courses in English and Mathematics, as well as in courses in other areas such as Psychology, Economics and Geography.
 - Comparisons between the academic achievement of students who use ABE upgrading programs, pathway upgrading programs, or qualifying programs for program entry, and students who use direct entry.
 - Analyses of the academic performance (e.g. cumulative grade point averages) of graduates that took an ABE course at an institution, and graduates that did not take an ABE course.
- 2) Provincial-level research can examine system-wide or demographic impacts of ABE program strategies, such as:
 - Whether different types of ABE programs have different outcomes on the academic progress of students in different demographic groups, such as Indigenous students, students with disabilities, and first-generation students.
 - Whether financial aid programs such as the Adult Upgrading Grant or student loans “level the playing field” by reducing financial barriers to student access and accomplishment; for example, comparing the outcomes of students who receive this aid and students who do not.
 - Why ABE students choose to pursue further education at a different institution from where they took ABE programming.
- 3) Both institutional and provincial research could explore the decline in ABE program enrolment in BC over the past twenty years:
 - What reasons lie behind this decline in enrolment – for example, is it linked to falling demand for academic upgrading because of higher secondary school completion rates, or to decreased interest in pursuing upgrading due to higher opportunity costs. or perceived lower return on investment?
 - Why has the decline in enrolment been different at various institutions both by type and geographic region?

Further Discussion

Hopefully, this project will stimulate renewed interest in the outcomes of ABE upgrading programs and in ABE students' transitions into further education. Based on the analyses presented in this project, the recommendations below are presented for ABE practitioners and administrators to consider for further discussion.

- 1) There are many different names for ABE upgrading at post-secondary institutions – academic preparation, career access, college readiness, and developmental studies. Consideration should be given to whether using a single name across institutions and replacing the term "ABE" would be advantageous. This change could assist the marketing of these programs, so that students can readily understand the programs' purpose, but it may also have wider purpose.
- 2) The population of ABE upgrading students is changing. More ABE students are high school graduates, and most students in upper-level ABE courses are taking ABE upgrading to meet post-secondary admission requirements and course pre-requisites. The current four-level progression of ABE courses – fundamental, intermediate, advanced and provincial – may no longer be relevant. A revised articulation framework may be more effective if it corresponds more closely to the range of ABE upgrading and college preparatory (qualifying) courses now being offered.
- 3) Pathways into other programs, learning communities, and other forms of innovation in ABE curriculum and program structure may become more widespread. These changes may require re-assessing the traditional dividing line between non-credit ABE courses and credit post-secondary courses. This division potentially inhibits the transition of ABE students into undergraduate or career programs. An example of how to address this division may be the curriculum for the BC Adult Dogwood Diploma which now includes some secondary school courses, some ABE upgrading courses, and some regular post-secondary courses.
- 4) There is increasing enrolment in ABE programs by students seeking to develop academic English language skills (e.g. ESL/ELL/EAL students). Consideration should be given to the most effective ways of preparing this group of ABE students for credit courses in academic and career programs.
- 5) The BC government's block funding model for BC public post-secondary institutions supports institutional autonomy in program planning and delivery. But government has also established institutional performance targets in core areas, including Developmental Education. These expectations create a tension in institutions' resource allocations, since ABE delivery is generally more expensive than other types of post-secondary programming. When ABE upgrading has been designated as tuition-free by the provincial government, the funding tension is exacerbated by institutions' financial loss of tuition revenue, unless these losses are reimbursed by government as they occasionally have been in the past. Further discussion of the structure and funding model for ABE upgrading programs may assist in ensuring that these programs receive appropriate allocations of institutional resources.
- 6) ABE curriculum could potentially be integrated with undergraduate degree curriculum. For example, upper-level ABE courses could be offered by undergraduate program departments. Supporting these types of integrations may facilitate transitions for upgrading students into further education.

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APPENDIX A. Current ABE Upgrading Programs at BC Post-Secondary Institutions

Program Name	Program Description	Course and Delivery Mode Options	Concurrent Enrolment	Additional Information
BRITISH COLUMBIA INSTITUTE OF TECHNOLOGY				
Upgrading	Designed for students who are missing one or more courses required for entrance into a BCIT program, or for students who have the required course but whose grade is not high enough to meet the entrance requirements.	Part-time upgrading courses in English, math, physics, biology, and psychology.		Several courses at BCIT are accepted as meeting Grade 12 program entry requirements for Grade 11 and 12 English, Math, Science and ESL
		Health prerequisite courses through Basic Health Sciences Flexible Learning (Part-time).		
		Technology Entry (TE) program (full-time) to upgrade several courses.		If a student's midterm grade in an upgrading course meets a program entrance requirement, students can apply for program entry using the midterm grade.
		Professional English Language Development (PELD)		
		International Student Entry Program (ISEP)		
		Trades Learning Centre -- trades access courses online or through distance education to prepare for BCIT Trades Entry Assessment.		
		PLAR assessment tests current knowledge and skills to see if these meet the entrance requirements for BCIT programs.		
CAMOSUN COLLEGE				
Academic Upgrading	Basic literacy through high school upgrading. Credentials offered include	Upgrading (college prep) courses in English, mathematics, biology, chemistry, and physics to prepare students to enter trades, career programs or college and university programs. Courses are also available to help students gain admission requirements or finish Grade 12.	Can take upgrading courses at the same time as university transfer courses (program electives).	
College preparatory	Foundations of Academic Upgrading Certificate, Intermediate Academic Upgrading Certificate, and BC Adult Graduation Diploma.	All English and Math upgrading courses are self-paced and continuous entry. Courses are offered in-person and online.		
		Some English and Math Grade 12 level courses are fixed pace: face to face and online.		
		Science courses are fixed pace, with occasional online delivery.		

Program Name	Program Description	Course and Delivery Mode Options	Concurrent Enrolment	Additional Information
		In addition to campus-based courses, some courses are offered with Community Learning Partners.		
Indigenous College Preparatory Certificate	Prepares Indigenous learners to meet the admission requirements for college or university-level studies.	One course is held at Lansdowne campus in the winter semester offering an opportunity to experience college life on campus.		Program is taught at the Saanich Adult Education Centre.
CAPILANO UNIVERSITY				
Adult Basic Education	Grades 10-12 equivalent courses in math, English, biology, chemistry, physics, computers and history.	Online, mixed-mode, in-person, self-paced, and paced.	If the student is already in a degree or diploma program, the student can take upgrading courses.	Some students take ABE courses to finish their high school diploma, some need a prerequisite course like Foundations Math 11 or English 12, and others come to upgrade their GPA (grade point average) or refresh their academics after being out of school for some time.
		Most courses are self-paced. Paced courses have optional lectures at specific times.	Up to 30% of the students enrolled in ABE courses are already studying at the university and are taking a course to meet a prerequisite requirement.	
College & University Preparation (CUP) citation	Gives students the academic skills they need to transition into full-time university programs.			Program permanently discontinued in 2022.
COAST MOUNTAIN COLLEGE				
Upgrading	Allows students to complete Adult Dogwood, prepare for future career opportunities, improve grades in courses already finished, and complete prerequisites for post-secondary programs at the college or elsewhere.	Program length varies.	Includes future post-secondary courses and/or up to two past Grade 12 level secondary courses.	
Adult Graduation Diploma		Intakes in Fall & Winter.		
		Flexible course schedules.		
Pre-program pathways in Applied Coastal Ecology, Business, Education, Engineering, First Nations Arts, Health Care, Social Services, Trades, University Credits, and Upgrading.	Offers students entry pathways into programs at the college in specific fields, leading to various certificates or diplomas.	Program length varies.	Not excluded but also not common.	For students who take upgrading at the college to then take a program somewhere else (e.g. Dental Hygienist at College of New Caledonia).
		Intakes in Fall & Winter.		

Program Name	Program Description	Course and Delivery Mode Options	Concurrent Enrolment	Additional Information
COLLEGE OF NEW CALEDONIA				
Academic Upgrading	To prepare students to meet prerequisites for other college courses and programs, or to obtain a BC Adult Graduation Diploma.	Classroom on campus. Flexible Learning Options with Hyflex (option of attending sessions in the classroom, participating online, or a combination of both).		
	Courses in Biology, Chemistry, College and University Experience, Computer Studies, English, Mathematics, and Physics.			
Access	For students who want to get into a particular college program but need upgrading to meet admission requirements.		Students can take selected college-level courses while still completing upgrading courses, to complete credentials more quickly.	
	The program prepares students for entry into:			
	Accounting & Finance, Associate of Arts Degree (various), Associate of Science Degree (various), Business Management, Civil Engineering Technology, Criminology, Dental Programs, Early Childhood Care and Learning, Fine Arts, Medical Laboratory Technology, Natural Resources and Forestry Technology, Practical Nursing, Social Service Worker, and Web & Graphic Design.			
COLLEGE OF THE ROCKIES				
Upgrading for Academic and Career Entry (UACE)	Designed for students needing to complete prerequisites, finish a high school diploma, or upgrade skills for a job or promotion.	Face-to-face courses delivered at the Cranbrook campus.	For some programs at the college, upgrading courses can be taken while students are already enrolled in the program.	
		Directed Studies – self-paced courses with individual instructor support delivered at all campuses.		
		Online – Self-paced courses with individual instructor support delivered at all campuses.		
		Not all courses are offered at all campuses in all formats.		
DOUGLAS COLLEGE				
English Upgrading	English upgrading (ENGU) courses help upgrade reading and writing skills to increase success in other college classes.	Most ENGU courses are offered face to face.	Students can take ENGU 0455 or 0490 at the same time as regular post-secondary courses.	
	Course options range from basic literacy to college preparatory courses.	A limited number of courses are offered in hybrid mode.		
Math Upgrading	Designed to prepare students for studies in business, nursing, and science & technology. Course options range from numeracy level to algebra level.	All classes are face to face.	Students can take other courses that do not have Math prerequisites.	MATU 0410 and MATU 0411 can be used as equivalents to Douglas' Foundations 11 and Principles of Math 11.

Program Name	Program Description	Course and Delivery Mode Options	Concurrent Enrolment	Additional Information
Introductory Physics	Designed to prepare students for entry into higher-level physics courses. One course (PHYS 1104: Practical Physics)	Face to face	Students can take other courses that do not have PHYS as a prerequisite.	
Introductory Chemistry	Designed to prepare students for entry into higher-level physics courses. One course (CHEM 1104: Preparation for General Chemistry)	Face to face	Students can take other courses that do not have CHEM as a prerequisite.	
KWANTLEN POLYTECHNIC UNIVERSITY				
English Upgrading	Adult upgrading English courses for students looking to complete their Adult Graduation Diploma, get ready for the workforce, or satisfy admission requirements for undergraduate university programs.	Face to face and online		
Pathway to Undergraduate Studies	Students can enrol in several undergraduate classes to while enrolled in English upgrading courses to get a head start on degree completion.		Students can earn up to 12 undergraduate level credits while upgrading, and another 12 credits while transitioning to undergraduate studies.	
	The program has three levels; the level in which a student enrolls depends on their current level of English proficiency, and not all levels are required to be taken. The program is open to English Language Learners through ELST classes and English upgrading students through ENGQ classes.			
Upgrading/ qualifying in Math and Science	For students who want to enrol in a Science program but are missing prerequisite or admission requirements. The Faculty of Science and Horticulture offers Biology, Chemistry, Mathematics and Physics upgrading courses.			
LANGARA COLLEGE				
Access Langara	Designed to support students who are ready to make the transition into university studies.		Term 1: Students taking English 1106 (6 credits) can take one university-transfer course.	
	The program provides enhanced instruction in English language and composition, introduction to area-specific vocabulary, exposure to Langara's academic resources and facilities, and communication tools to succeed in college and university studies.		Term 2: Students taking English 1120 (3 credits) can take two university-transfer courses.	
NICOLA VALLEY INSTITUTE OF TECHNOLOGY				

Program Name	Program Description	Course and Delivery Mode Options	Concurrent Enrolment	Additional Information
Academic/Career Preparation --College Readiness	The program is designed to help adults obtain prerequisite skills for entry to NVIT career/technical and academic programs.	Some courses are offered in the evening.		
	The program is designed for the adult learner who did not complete high school or who needs to review high school level academic skills before advancing to post-secondary study.	The program is delivered at both campuses and in communities in full-time and part-time formats. The start dates are in		
	Courses in the program help learners develop skills in reading, writing, study skills, mathematics and science at fundamental provincial levels (literacy/numeracy through grade 12).	September, January, and May.		
NORTH ISLAND COLLEGE				
Adult Basic Education	Fundamental level to Provincial level.	Scheduled courses meet at the same time every week. Continuous entry courses are offered at Fundamental and Intermediate levels.		
	Courses are offered in English, Mathematics, Sciences (Biology, Chemistry, and Physics) and other areas, such as Foundation Skills for Trades, First Nations Student Skills 1, and First Nations language skill courses.	Continuous entry and online courses are generally self-paced, but must be completed within five months of registering. They all include instructor support and follow-up.		
		Classes are offered in face-to-face, online, and hybrid formats. In addition to virtual support, online classes have flexible in-person meeting times during the day or evening.		
		Individual support and self-paced learning plans are available.		
Engineering Foundations Certificate	Students completing the program can qualify for dual or guaranteed admission to UVic's engineering degree programs, or a general transfer to UBC or SFU. The program offers a solid foundation in computer programming, math, physics and engineering mechanics.		Some courses within the Engineering Foundation Certificate have chemistry and physics prerequisites (C+ in Chemistry 12 or equivalent, and C+ in Physics 12 or equivalent). Students can take upgrading courses to achieve those prerequisites before or after admission into the Certificate program.	
NORTHERN LIGHTS COLLEGE				
Career and College Preparation	Assists students to improve basic literacy in English, math, or computer studies; upgrade to meet prerequisites for trades, vocational or university programs; or finish high school education and earn a diploma.	Part-time or full-time studies. Flexible arrangements for learning guided by instructors. Instructor-led classes		The Adult Learning Centre offers extra help and individualized courses. There are also tutoring services for current students.

Program Name	Program Description	Course and Delivery Mode Options	Concurrent Enrolment	Additional Information
		Face-to-face, online, and video-conference formats are available in Dawson Creek, Chetwynd, Fort Nelson, and Fort St. John. Advanced- and provincial-level courses are delivered online only to Atlin, Dease Lake, and Tumbler Ridge.		
Essential Skills for Trades	This program offers upgrading to students before they start trades training.	Courses offered online and self-paced. Learning help available by appointment or dedicated sessions.		
	The program includes Intermediate-Level Essential Skills for Trades and			
	Advanced-Level Essential Skills for Trades courses.			
OKANAGAN COLLEGE				
Adult Upgrading - Adult Basic Education	Students can complete high school graduation requirements;	In-person in Salmon Arm, Vernon, Kelowna, Penticton and Revelstoke. Courses start September, January, May and July.		
	upgrade high school marks; complete pre-requisites for programs or university courses; and develop reading, writing and math skills.	Fall and Winter semesters are 16 weeks long, while Summer semesters are 8 weeks long		
		Online courses start in September and January, and students need to attend classes on specific days and times.		
Pathways in Trades or Health	Options are Health Care Assistant, Therapist Assistant, Certified Dental Assistant, Practical Nursing, and Pharmacy Technician			
SELKIRK COLLEGE				
Academic Upgrading	High school-level courses (ABE) to improve subject understanding and study skills. Students can complete prerequisite courses in biology, chemistry, English, Indigenous fine arts, math, physics, college success, computer sciences and social studies.	In person and online. All centres (Castlegar, Grand Forks, Kaslo, Nakusp, Nelson, Trail) offer in-person lectures, labs, and one-to-one instruction and support.	A student can take upgrading courses while enrolled in another program or at another institution.	Each campus/centre has an Upgrading Room where students can connect with instructors, study, collaborate with other students, and get advice, guidance, and study support.
	Program offers Fundamental Intermediate, Advanced, and Provincial level courses.	Smaller centres connect students to the current best option, including online and remote courses.		
	Students can complete high school (BC Adult Graduation Diploma) or a grade level credential (Fundamental, Intermediate, or Advanced Certificate of Completion).	Remote courses are synchronously delivered to students across the region while online courses are offered through an online learning management system.		

Program Name	Program Description	Course and Delivery Mode Options	Concurrent Enrolment	Additional Information
Pathway to STEM	STEM pathway prepares student to apply to Selkirk College's Associate of Science, Digital Fabrication & Design, Web Development, Engineering, Rural Pre-Medicine and Nursing programs, or similar programs at other institutions.			
Pathway to Health Care Assistant (HCA)	HCA pathway prepares students to apply to Selkirk College's Health Care Assistant program, or similar programs at other institutions.			
Pathway to Health & Human Services	HHS pathway prepares students apply to Selkirk College's CommunitySupport Worker Associate Certificate, Early Childhood Care & Education, Education Assistant & Community Support Worker, or Social Service Worker program, or similar programs at other institutions.			
THOMPSON RIVERS UNIVERSITY				
Adult Basic Education	Students can earn the BC Adult Graduation Diploma.	On-campus courses delivered at both Kamloops and Williams Lake campuses.		
University and Employment Preparation department (UEPrep)	Program offers Grade 10 equivalent (0400 level courses), Grade 11 equivalent (0500 level courses); and Grade 12 equivalent (0600 level courses).	Online courses delivered via Open Learning.		
	Course topics include, Computing, First Nations Studies, and Student Success.			
UNIVERSITY OF THE FRASER VALLEY				
Adult Basic Education (ABE)	Courses that help students improve basic literacy, numeracy and computer skills; meet ABEUP program requirements; or complete high school equivalent courses to meet university entrance requirements.			
Adult Basic Education -- University Preparation (ABEUP)	Designed to help students complete high school and earn the BC Adult Graduation Diploma (Adult Dogwood).		While taking Adult Basic Education courses, students can enrol in up to three first-year university level courses, which can be used to satisfy the Adult Dogwood requirements and meet post-secondary program requirements.	
VANCOUVER COMMUNITY COLLEGE				
Academic Upgrading	Helps students earn credits needed to complete high school, or enter a career program, or apply to college or university. Courses at Grade 10 to Grade 12 levels.	Class-based, part-time, online, face-to-face, or blended; or self-paced, part-time, online with in-person drop-in support.	Yes, but nothing structured. If students meet prerequisites, any course is open to ABE students.	

Program Name	Program Description	Course and Delivery Mode Options	Concurrent Enrolment	Additional Information
Adult Basic Education	Program for adults who want to improve their reading, writing, or math from beginning levels to grade 9. Includes computer skills courses.	Class-based but individualized learning, part-time, primarily face-to-face with some online components.		
ABE Youth	Program for youth ages 15 - 24 to earn the credits needed for high school graduation or upgrading. Courses at Grade 10 to Grade 12 levels.	Self-paced, blended program offered at the Broadway Youth Resource Centre. Provides flexibility to students to learn in a classroom, online, or a blend of both.	Yes, but nothing structured. If students meet prerequisites, any course is open to ABE students.	
VANCOUVER ISLAND UNIVERSITY				
High School Equivalency/Adult Basic Education	For students missing prerequisites, or wanting to finish high school, or needing to prepare for success in an academic program. Also for students who want to improve prerequisite grades for competitive entry to programs.	Paced and continuous intake courses		ABE learning centres provide support to students.
		Face to face		
		Blended synchronous: scheduled classroom time and a virtual component at a specific time every week		
		Blended asynchronous: scheduled classroom time and a virtual component that students can complete online on their own schedule		
		Online synchronous: online classes at a specific time each week		
		Online asynchronous: online classes that students take on own schedule		
Aboriginal University Bridging Certificate	A customizable program for Indigenous students who want to upgrade their courses and acquire the prerequisites to enter post-secondary education programs. Students take two university courses as part of the program ().	Delivery modes can be mixed depending on which courses students are taking. The Indigenous Learning Recognition Portfolio and Striving and Thriving in Colonial Education courses are always face to face.	Students have the option of taking additional entry-level university courses or orientation to trades programs courses.	
Foundations for Success (FNFS)	Designed for students who want to learn good student skills in the context of a particular subject area, prepare for traditionally difficult first year classes, or want an interesting first-year credit.	Some of the courses are delivered online and some are face to face.	FNFS courses are designed to be taken before, during, or after other university courses.	
	These courses are meant for students who have met pre-requisites for university entry. They are not classified as ABE. They are classified as first year level, but are meant for weaker students.			

Program Name	Program Description	Course and Delivery Mode Options	Concurrent Enrolment	Additional Information
	Courses include Writing for Success; Reading, Speaking, and Presentation Skills; Finding Careers that Fit – Exploring Meaningful Education and Career Paths; Succeeding Online – Tools and Technologies for Learning; Solving Calculus Problems; and Learning Strategies for Success in Health and Life Sciences.			

APPENDIX B. BC Graduate Surveys (BGS) 2018-2022: Number of Credential Graduates who have and have not taken ABE Courses

Baccalaureate Graduates Survey (BGS) ABE 2018 to 2022		Previous Adult Basic Education (ABE) No/Yes		Total
		0 Did not have previous Adult Basic Education (ABE)	1 Had previous Adult Basic Education (ABE)	
2018	Count	9792	716	10508
	% within Year Survey year	93.2%	6.8%	100.0%
2019	Count	9215	596	9811
	% within Year Survey year	93.9%	6.1%	100.0%
2020	Count	9688	600	10288
	% within Year Survey year	94.2%	5.8%	100.0%
2021	Count	8710	617	9327
	% within Year Survey year	93.4%	6.6%	100.0%
2022	Count	8602	598	9200
	% within Year Survey year	93.5%	6.5%	100.0%
Total	Count	46007	3127	49134
	% within Year Survey year	93.6%	6.4%	100.0%

DAC ABE 2018 to 2022				Previous Adult Basic Education (ABE) No/Yes		Total
				0 Did not have previous Adult Basic Education (ABE)	1 Had previous Adult Basic Education (ABE)	
Year	Survey	Year	Year	Year	Year	Year
2018	Credential_Derived	1 Associate degree (includes university transfer)	Count % within Credential_Derived	1432 84.8%	256 15.2%	1688 100.0%
		2 Diploma (includes post-degree and advanced diplomas)	Count % within Credential_Derived	4964 87.0%	743 13.0%	5707 100.0%
		3 Certificate (includes post-degree and advanced certificates)	Count % within Credential_Derived	4259 88.3%	563 11.7%	4822 100.0%
	Total		Count % within Credential_Derived	10655 87.2%	1562 12.8%	12217 100.0%
2019	Credential_Derived	1 Associate degree (includes university transfer)	Count % within Credential_Derived	1336 85.8%	222 14.2%	1558 100.0%
		2 Diploma (includes post-degree and advanced diplomas)	Count % within Credential_Derived	5209 88.5%	675 11.5%	5884 100.0%
		3 Certificate (includes post-degree and advanced certificates)	Count % within Credential_Derived	4386 88.9%	549 11.1%	4935 100.0%
	Total		Count % within Credential_Derived	10931 88.3%	1446 11.7%	12377 100.0%
2020	Credential_Derived	1 Associate degree (includes university transfer)	Count % within Credential_Derived	1341 85.1%	235 14.9%	1576 100.0%
		2 Diploma (includes post-degree and advanced diplomas)	Count % within Credential_Derived	5879 88.9%	733 11.1%	6612 100.0%
		3 Certificate (includes post-degree and advanced certificates)	Count % within Credential_Derived	4201 89.2%	508 10.8%	4709 100.0%
	Total		Count % within Credential_Derived	11421 88.6%	1476 11.4%	12897 100.0%
2021	Credential_Derived	1 Associate degree (includes university transfer)	Count % within Credential_Derived	1530 86.8%	233 13.2%	1763 100.0%
		2 Diploma (includes post-degree and advanced diplomas)	Count % within Credential_Derived	7455 91.5%	696 8.5%	8151 100.0%
		3 Certificate (includes post-degree and advanced certificates)	Count % within Credential_Derived	4361 90.5%	457 9.5%	4818 100.0%
	Total		Count % within Credential_Derived	13346 90.6%	1386 9.4%	14732 100.0%
2022	Credential_Derived	1 Associate degree (includes university transfer)	Count % within Credential_Derived	1614 87.5%	231 12.5%	1845 100.0%
		2 Diploma (includes post-degree and advanced diplomas)	Count % within Credential_Derived	7134 92.4%	584 7.6%	7718 100.0%
		3 Certificate (includes post-degree and advanced certificates)	Count % within Credential_Derived	4452 90.4%	471 9.6%	4923 100.0%
	Total		Count % within Credential_Derived	13200 91.1%	1286 8.9%	14486 100.0%

APPENDIX C. Interview Questions

1. What pathways exist within your institution for people to upgrade their academic skills to gain entry to post-secondary programs/courses at your institution? (ABE? Preparatory Courses? Skills Assessment? Other?)
2. How are those pathways organized? (Separate departments? Fully integrated into regular academic departments? Hybrid?)
3. How are students advised to pursue each pathway?
4. Why does your institution offer these pathways? (Connection with mission?)
5. Has your institution conducted any documented internal review of the effectiveness of these pathways? (Outcomes for students?)
6. What is your assessment of the effectiveness of these pathways? (Successes? Challenges? Solutions?)
7. What information do you have on the future success of ABE upgrading students who pursue academic programs at your institution? (Obtained from where?)
8. What do you know about the challenges these students face in making the transition?
9. Can you identify any best practices for upgrading pathways?
10. What areas of further research on this topic do you think would be valuable?