

University Continuing Education in Canada



An Overview of Micro-Credentials and the Adult Learning Ecosystem in Canada's Universities

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April 2021

The Voice of Canada's Universities



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Introduction and purpose

COVID-19 is causing significant shifts in the labour force. Some are new, brought about by the unpredictable tides of the global pandemic. Others, such as job loss to automation, were underway long before the pandemic, but have been accelerated by the circumstances of the last year. The pandemic has forced sectors to fundamentally reimagine their future. The “future of work,” characterized by a transformation in the types of jobs available and the competencies required to do them, has arrived.

Employment and Social Development Canada commissioned this report to provide a snapshot of university continuing education and extension units (UCEEUs) programming activities across Canada during this exceptional time. It comes as interest in micro-credentials — seen as an emerging trend and potentially disruptive to traditional post-secondary education — increases.

Although the term micro-credential has only been in use since approximately 2014, the characteristics of micro-credentials have been developed and delivered by UCEEUs in Canada for decades. Our institutions have long offered programs that address skills gaps to Canadians. This report illustrates how UCEEUs have been critical players in the history of adult and continuing education in Canada. The expertise of UCEEUs is exemplified in the diverse range of courses and programs offered, many of which are targeted to address societal priorities (e.g., Indigenous community-based programs) or meet labour market needs in the form of just-in-time upskilling or reskilling programs.

The adaptable nature of UCEEUs, as well as their extensive track record of success, makes them an ideal vehicle to upskill and reskill Canadians in response to labour market disruptions such as those experienced in the past year. During this time of unprecedented disruption, UCEEUs have emerged as critical assets to universities, provincial governments and industry.

In early 2021, Universities Canada and the Canadian Association for University Continuing Education (CAUCE) partnered to conduct a comprehensive and geographically diverse scan of the university continuing education ecosystem in nearly 100 universities across Canada. This project provides an initial and informative overview of the Canadian university continuing education/extension landscape.

A number of processes and data collection instruments were used to source information for this report, including:

- Multiple surveys of the Canadian Association for University Continuing Education (CAUCE) membership
- A survey of non-CAUCE universities
- An open source scan of institutions' website data
- Detailed interviews with institutional leads

Summary of findings

Canada's universities have been upskilling and reskilling Canadians for more than a hundred years. UCEEs were originally established to extend access to non-traditional learner groups, whether through regional location campuses, evening and weekend courses, developing and offering different course styles (correspondence, distance and distributed learning), or offering flexible schedules such as part-time degree studies. Over the decades UCEEs have adapted their focus in response to social, economic, technological, and political trends.

Continuing education and extension programs are an important component of the scholarly mission of universities. While they are typically not involved in discovery and research, UCEEs in Canada integrate university scholarship with industry content expertise in the design and delivery of upskilling and reskilling programs. This enables facilitation of knowledge for students, and the application of knowledge by students in their personal and professional lives.

Canadian universities' continuing education and extension efforts are an important means of broadening access to education and post-secondary credentials to people who would otherwise not have such access. These same groups are also disproportionately impacted by the pandemic: low-income women; Indigenous peoples; Black Canadians; people with disabilities; and people who continue to face exclusion and discrimination. Most contemporary UCEEs focus on both inclusive education and workforce development training.

Online education, open admissions policies, literacy and numeracy upgrading programs, English as a second language programs, and programs designed for part-time learners are common means through which UCEEs support such access.

Types of courses offered by UCEEU's

Institutions with UCEEU's are found in every province across Canada, and most operate online, reaching Canadians from coast to coast to coast. At least 55% of Canada's universities offer continuing education courses.¹

These courses cover a wide variety of areas including:

- Professional development short-courses, and certificates
- English language programming
- Part-time degree programming
- Online course development and administration
- Non-credit programming and workshops
- Academic preparation and upgrading courses
- Access and transition to degree programs
- Tailored corporate training programs
- International educational exchange programs and international workforce development programs

The focus of UCEEU's has changed over the years and now include a greater emphasis on workforce development, international programming, and inclusive access programming.

As much of the work of UCEEU's sits outside provincial post-secondary qualifications frameworks, UCEEU's are unique assets on university campuses. UCEEU's often have the ability to both rapidly create and take down courses in a period of months, as well as amend courses quickly to make them more responsive to employers' current needs. The unique position of UCEEU's has led universities to increasingly expect them to be financially self-sustaining or, in many cases, to produce financial surpluses.

Nomenclature

One of the challenges faced throughout the upskilling and reskilling ecosystem is a lack of agreement on the definition of terms. Labels like "micro-credentials,"

¹ Fifty-four of the 98 surveyed universities in Canada reported they currently have a UCEEU, twenty-five institutions did not respond to the survey, it is unknown if they have a UCEEU.

“certificates” and “badges” have no authoritative definition in use across universities, colleges and the private sector. This challenge has become more acute by the growth of private sector micro-credential offerings. While many private sector offerings are legitimate and valuable to learners, others can suffer from a lack of pedagogical rigor, offering non-assessed courses in pursuit of profit. Without oversight, there is increased risk of the establishment of so-called micro-credential mills which, at their worst, sell false or misrepresentative credentials, often to vulnerable populations.

To address this situation, Universities Canada supports efforts to align terminology and principles across Canada’s post-secondary education sector. The value of upskilling and reskilling programs will be determined by how broadly the learning outcomes are recognized. Now more than ever, knowledge mobilization (i.e., transferability and portability of non-degree credentials) will be a critical value-added component in an increasingly global digital and technical economy. In order to accomplish this, efforts to develop a national qualification framework and digital credential repositories will be essential for the viability of future skills and competencies education.² More information on the work to define micro-credentials is available in [Addendum 3](#).

Practices and challenges in supporting adult learning and student diversity

UCEEUs across Canada are instrumental to adult Canadians accessing high-quality upskilling and reskilling. They employ a number of practices designed to support adult learner access and success. These practices include open enrolment and direct admissions; recognition of prior learning as advanced standing towards workforce development credentials; flexible scheduling; and multiple modalities for learning, and most provide some learner supports.

Open enrolment and direct admissions

The vast majority of university continuing education workforce development programs offer open enrolment with direct admissions. Some specialized or more advanced programming may have an admissions process; however, competitive application processes are rare in UCEEUs.

² While CICan’s [recently published national framework](#) cannot be transposed to the university sector, we share the broad desire for a national framework.

While UCEEU have more flexible and open enrolment policies than traditional post-secondary education courses, the same social and economic barriers to accessing education that exist broadly across the Canadian landscape also impact those seeking to access university continuing education. These barriers are often specific to a particular ethnic, racial or social group, or for people with disabilities.

As an example, barriers for Indigenous learners include:

- Inadequate funding for community based secondary schools
- An absence of broadband connectivity within rural and remote communities
- A scarcity of train-the-trainer programs that enable the establishment of community program facilities
- Limited post-secondary funding models

While comprehensively addressing many of these barriers will take action on the part of multiple levels of government, universities and UCEEU have been working to close gaps and ensure the widest possible cross-section of learners have access.

Course design and delivery approaches

Industry plays a key role in the development of most UCEEU programming, which are, predominately, developed in consultation with — and taught by — industry practitioners. UCEEU provide quality assurance structures and supports to ensure practitioners and experts are able to share their knowledge, skills and abilities in a pedagogically sound manner. University continuing education also takes a more applied approach to learning. To quote one continuing education leader, “we flip the typical academic learning model around, from a 2/3rd content, 1/3rd application of content model to a 1/3rd content, 2/3rd application model.”

Flexible scheduling and multiple modalities for learning

To suit their learner audiences’ unique needs, UCEEU reported regularly scheduling classes during the weekends or evenings, providing intensive short-term workshops, boot camps and summer courses, and/or adapting the modality of learning (face-to-face, online, blended, etc.). Even prior to

the pandemic, UCEEUs were already offering a significant amount of their programming online. From our survey data:

- **Six out of 10**, CAUCE UCEEUs that offer non-degree credit courses indicated they offered 76-100% of their courses online.
- More than half (**55%**) of CAUCE UCEEUs that deliver non-credit courses, indicated they offered 76-100% of their courses online.
- Of university continuing education units that indicated they offer degree credit courses, **43%** offered 76-100% of their courses online.

Prior Learning Assessment and Recognition (PLAR)

PLAR is the “process designed to honor learners’ past learning and to expedite them through training periods or educational programs in light of their already held knowledge or skill.”³ Through the PLAR process it is determined whether an individual's level of skill and competency achieved through non-formal (learning acquired through non-accredited training), or informal (learning acquired through life/work experience) learning experience is the same as that gained through successful completion of a course or program (i.e., formal learning).

UCEEU leaders indicate prior learning recognition is often more liberal and likely to be granted in non-degree credit/workforce development programs. While there is still much opportunity for expansion and systemization of prior learning recognition, this creates greater opportunities for learners with a diverse array of non-academic experiences and competencies, as well as recently arrived immigrants and new Canadians with international credentials.

Student learning supports

University continuing education and extension units provide access to numerous learning supports for adults. However, as the current economic transformation drives more Canadians toward upskilling and reskilling,

³ Conrad, D. (2013). Revisiting the recognition of prior learning (RPL): A reflective inquiry into RPL practice in Canada. *Canadian Journal of University Continuing Education*, 34(2), 3.

thought must be given to how wraparound services can best meet the needs of students.

Generally, supports for continuing education learners tend to be less available and less fulsome than those provided to traditional degree students. This may be attributed to two factors. First, that the majority of continuing education learners were historically part-time learners who were often working or not seeking services on campus. And second, that UCEEU stand outside the traditional structure and funding models of conventional post-secondary education.

However, both prior to the COVID-19 pandemic and even more important after is the need to democratization of access to upskilling and reskilling education. This is particularly true for those who come from marginalized populations and often engage as first-generation "non-traditional" students. To do this, will require the expansion of support services to students. More detailed information on student supports provided through UCEEU is found in [Addendum 4](#).

The current federal approach to incenting upskilling and reskilling is largely focused on providing tax credits for training and is therefore not optimal for supporting the provision of wrap around services. Looking forward, as the federal government considers how it can support upskilling and reskilling, it should not only provide support for institutions to develop upskilling and reskilling programs but also provide funding for integrated wraparound supports that are critical for student success.

Types, variety and volume of UCEEU program offerings across Canada

A list of more than 1,000 different programs offered was collected from CAUCE member institutions in July 2020.⁴ This list illustrates the diversity of UCEEU programming offered in all regions across Canada.

⁴ See [Appendix D](#)

In contrast to the “credit hour” or “full-time equivalent” student measures for traditional degree programming volume, there are no consistent units of measure for volume of UCEEU programming. In the absence of a standard measure, enrolment counts and instructional contact hours are used as a (less than perfect) proxy. In 2019, the annual total national enrolment of CAUCE member UCEEUs was estimated at over 500,000.⁵ While this number is significant, it is important to note that not all enrolments are equal. One enrolment may represent an individual’s registration in a three-hour workshop, where a second enrolment represents registration in an 11-week full-time technology bootcamp. Annual contact/instructional hours from just the 25 UCEEUs that collect this data totaled a whopping 4,701,600 contact hours in 2020 alone.

UCEEUs regularly collaborate with industry, professional associations and professional orders to create workforce development programming. From our recent survey, UCEEUs reported working with 150 professional associations and orders⁶. They also reported high levels of employer and practitioner input in the development of programs and high level of student satisfaction with their personal learning.

UCEEUs are increasingly seeking to strengthen the feedback loop between employers, institutions and students. This has created an increasing need for detailed data gathering on employment outcome and employer perceptions — data which isn’t currently collected.

Types of adult learners

UCEEU courses and programs serve learning needs at various stages throughout individuals’ lifelong learning journeys. Due to the diverse nature of UCEEUs, the wide range of programming offered, and the vast variety of learners served, it has become common practice for UCEEUs to create student profiles or personas based on actual students. This allows them to identify and categorize learner groups more efficiently and precisely. Information gathered to create student profiles includes student interests; learning preferences and styles; differences related to gender, culture and personality; student learning strengths; student needs; and types of supports that have been successful in the past.

⁵ CAUCE, 2019

⁶ A listing can be found in [Table 19C](#)

As part of this project, actual student examples were gathered from 15 UCEEU across the country. From the data analysis, we identified eight unique student profiles. Each exemplifies a UCEEU student segment attending continuing education programs:

Entry-level career builder: This group typically has a high school diploma and is working in an entry level position. They are adults looking for career-building education programs or considering specific knowledge and skills to build a foundational skillset.



[Example](#)



[Example](#)

Mid-life career changer: These are mid-career adults searching for new opportunities. Typically, they have a diploma or degree, as well as several years of experience in an established career.

Workforce re-enterer: These are adult students re-entering the workforce after spending time focused on other priorities. Typically, they are looking to upgrade their skills, as they feel their knowledge area is in need of updating or seeking additional education as a foundation for a new career.



[Example](#)



[Example](#)

Career enhancer: Many learners who participate in continuing education are established and happy in their field. These are individuals who enter continuing education as lifelong learners looking for career enhancement, perhaps seeking to expand their knowledge base or position themselves for a promotion.

Equity seeker: These are learners facing challenges around equity, diversity and inclusion. They look to universities to assist them in meeting those challenges through the various adult learner-centered practices and equity balanced programs offered.



[Example](#)



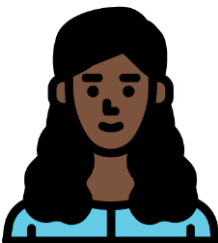
Part-timer: These are adults looking to obtain a degree or other credential in a flexible way. They seek continuing education and extension programs that offer credit and non-degree credit credentials, where the courses are adaptable to their particular needs.

[Example](#)

New Canadians: Newcomers to Canada, often arriving with credentials earned in a different country or having come from a nation where education wasn't accessible. Some have several years of experience and are currently unemployed or underemployed due to their credentials not being recognized.



[Example](#)



[Example](#)

Displaced/Unemployed Job Seeker: These are the adults that come to us to reskill or upskill due to displacement or unemployment, this includes many of the Canadians impacted by the pandemic. They are looking for key or specialized knowledge or education with which to build a new career. For displaced workers, pursuing upskilling and reskilling by enrolling in post-secondary education is a common strategy. This approach is most popular among women, who pursue post-

secondary education in the first year after a job-loss more often than men.⁷

Student profiles to exemplify each persona are shared in [Addendum 6](#).

Conclusion

Since the 1950s, Canadian universities have come together to promote the importance of adult learning, reskilling and upskilling. Every year, there are more than 500,000 enrollments in our continuing education system, which result in millions of instructional hours.

Carved out of the traditional university degree accreditation system, UCEEU's have flown under policymakers' radar and evolved distinctly from conventional post-secondary educational systems. UCEEU's have forged deep relationships with employers and industry out of a need to have their offerings validated in the marketplace. They have also been on the leading edge of digital and flexible education.

Over the last decade, buoyed by digital innovation, we've seen an explosion in interest in micro-credentials. The Canadian Training Benefit (CTB) announced in Budget 2019 presented an enormous opportunity to recognize and cement the role of micro-credentials as a foundational part of Canada's education and training ecosystem. However, before the CTB could be fully realized, COVID-19 struck, immediately altering labour market dynamics, and creating many more acute issues and greater reskilling need.

The current moment provides an opportunity to ensure existing programs like the CTB, alongside other federal and provincial initiatives, are effectively administered and delivered to provide direct supports to people. It is particularly important that those most adversely impacted by the pandemic and groups traditionally underrepresented in the labour market can access the training needed to contribute to Canada's recovery.

⁷ Morissette, R., Qiu, T.H., (2021). Adjusting to job loss when times are tough. Institute for Research on Public Policy. Retrieved April 10, 2021 from: <https://irpp.org/wp-content/uploads/2021/02/Adjusting-to-Job-Loss-When-Times-Are-Tough.pdf>

We also have a chance to ensure the country has a strong lifelong learning system to help Canadians be more resilient in a complex and ever evolving labour market. Immediate investments in skills and training opportunities at Canada's universities will accelerate Canada's economic recovery, guaranteeing Canadians have the skills to match emerging economic opportunities.

Beyond the pandemic, Industry 4.0⁸ has already brought about — and will continue to bring about — significant changes to the prerequisite skills and competencies of the 21st century workforce.

It is time to rethink the ecosystem that supports workforce development and lifelong learning in Canada, and to create one that supports the continuous cycles and overlap between learning and work. Over the next five years, government, industry and the post-secondary sector will need to work together to create a responsive workforce development system to ensure Canada's continued economic success and growth.⁹ In taking those next steps, we would advise a three pronged approach:

Recommendation 1: Create or rework funding models

Develop innovative student funding models or expanding existing eligibility could provide learners with tuition vouchers, grants, or access to student loans for short-term programs that align with current labour market needs. This would reduce financial access barriers and improve learner uptake, particularly during challenging economic times.

Recommendation 2: Engage workplaces

Create and expand financial supports for student work integrated learning (WIL) placements, particularly in relation to university upskilling and reskilling opportunities. Based on collective experience, we believe that employer incentives are needed to better support mid-career transitioning workers.

Recommendation 3: Support curriculum development and distribution

⁸ Industry 4.0, or the fourth industrial revolution, is seen to be characterised by the increasing prevalence of advanced technology and automation

⁹ A number of barriers to creating a future focused workforce development ecosystem and key considerations in creating the ecosystem are discussed in [Addendum 7](#).

Provide funding to institutions for the development of accessible and in-demand short courses or micro-credentials. This funding should support not only course development and delivery but also the wrap around services required for student success. This curriculum could be developed cost-effectively through competitive requests for proposals, with the curriculum made widely available to university upskilling and reskilling programs and across the entire Canadian upskilling and reskilling ecosystem. This approach would allow the federal government to bolster national upskilling and reskilling for in-demand fields and reduce capital costs for institutions.

Acknowledgements

We'd like to thank all of those who contributed to this report including the Project Research Lead, Dr. Sheila LeBlanc (Director, Continuing Education, University of Calgary), Dr. Rod Lastra (Associate Dean, Division of Extended Education, University of Manitoba), Dr. Christina White (Research Coordinator, Continuing Education, University of Calgary), the staff at Universities Canada and all the participating University Continuing Education and Extension teams across Canada.

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University Continuing Education in Canada

Addendums



The Voice of Canada's Universities

Addendum 1 – Methods

Project Overview

Information related to the function of university continuing education/extension units (UCEEUs) across Canada was gathered using a mixed model approach. This included the use of questionnaire-based surveys, data compiled from websites, as well as interviews conducted across 97 Canadian universities (response rate = 49%). This was the first study of its kind. This section provides an overview of the methods used.

Objectives of Data Collection

The objective of this study was to gather comprehensive and geographically diverse data from universities that have continuing education courses and programs, with a particular focus on workforce development micro-credentials, for adults who seek to reskill or upskill. Three methods of data collection were used: surveys, website scans and interviews. Further, the three writers involved have contributed their insights, perspectives and practitioner experiences as part of the report creation. All are or have been UCEEU leaders with a combined experience of 51 years across 11 institutions. With permission, additional data was provided from the July 2020 CAUCE Program Survey.

Surveys were an efficient means of gathering information from a large number of respondents about UCEEU function, program offerings, student profiles, and relationships with industry. Interviews provided qualitative information on student outcomes for employment, accessibility initiatives, student demographic data, and practices/initiatives that support student success.

Report Generation Process

The project included many steps in order to plan, obtain data, and write a report. Below is a brief review of the actions taken to complete the project.

- 1. Gathering of contact information for universities that are not members of CAUCE**
 - a. Identified universities that are not CAUCE members
 - b. Identified key contacts which liaised with the project team members
- 2. Deploy survey to all CAUCE member universities**
 - a. Developed introduction and instruction message
 - b. Sent out link via email to designated contacts
- 3. Scan CAUCE Non-Members continuing education/extension programs website for data**
 - a. Reviewed website to scan and record data points
- 4. Analyze survey, website and interview data**
 - a. Developed a google drive folder to track acquired data
 - b. Create an appendix of certificates and other micro-credentials offered by all 97 Canadian universities

- c. Extrapolated the volume of adult learning occurring through the review of enrollment and instructional hours
- d. Listed the learning modalities of the programs/offerings
- 5. Submitted the project report outline to the ESDC**
 - a. Included an index of proposed elements based on data collection to date
 - b. Included a brief description of the final report structure
- 6. Developed literature review section for specific topics**
 - a. Developed a brief literature review on the history and evolution of university continuing education in Canada
 - b. Developed a brief literature review on nomenclature surrounding micro-credentials
 - c. Developed a brief literature review on what is published on key accessibility issues for underrepresented populations
- 7. Consolidate analysis, organize findings and literature reviews, and write Report Draft**
- 8. Submit the final Report to the ESDC**
 - a. Developed a report summarizing the finding and highlighting the key finding from appendices
 - b. Created supporting appendices including 6 miniature reports covering the following topics:
 - i. University Continuing Education (UCE) History and Structures
 - ii. UCE Practices to Support Adult Learning
 - iii. Types and Volume of UCE Program offerings across Canada
 - iv. Types of Adult Learners served by UCE (Personas)
 - v. UCE Engagement with Employers and Meeting Industry Learning Needs
 - vi. Supporting Workforce Development over a Lifetime: Ecosystem Considerations

Participant Description

The participants that provided data for the project included UCEEUs from across Canada. Generally, there were two large participant groups. One group consisted of the universities belonging to the Canadian Association of University Continuing Education (CAUCE). These universities all have continuing education and extension units. The other group is universities that do not belong to CAUCE and responded to a participation call out from Universities Canada. This group consists of universities with centralized, de-centralized university and continuing education units, or do not currently have continuing education units.

Data Sources

There are 97 universities in Canada. 46 universities participated in this study. Response rates and data sources are provided below:

Table 1 UCEEU Study Response Rate and Data Sources

Data Source	Date Collected	# of Members	# of Responses	Purpose/Objectives/Description
CAUCE Member Programming Survey	July 2020	43	25	This survey was distributed during the summer of 2020. The main purpose was to understand the breadth and depth of short-term programming of member universities. Using Credential Transparency Description Language (CTDL) as a foundation, a database spreadsheet including program title, description, duration, delivery, cost, capacity and information on programs offered in defined industry sectors was created and distributed via email to all CAUCE members to complete. The CAUCE Secretariat consolidated responses into a master database.
CAUCE (English) Annual Survey	February 2021	43	30	The purpose of this survey was to understand the depth and breadth of administrative processes, reporting, delivery modalities and student access strategies in UCEEU's. The main data collected included Equity, Diversity and Inclusion (EDI) workforce development initiatives, collection of student demographic data, program contact hours, UCEEU provincial data reporting practices, collection of graduate employment outcomes, partnerships with professional associations/orders, unit structure, size and governance,

				instruction modality, the quantity of degree credit, non-degree credit, and credit-free courses offered, and range of student learning supports, This survey was offered in English. This survey was sent via email with a link to a Survey Monkey questionnaire. Data was collected and consolidated by the CAUCE Secretariat.
CAUCE (French) Annual Survey	February 2021	3	2	This survey was an exact replication of the CAUCE English Survey, just provided in French.
Non-CAUCE Programming Website Data Scan	February/March 2021	52 Institutional Websites reviewed	16 Websites that promoted continuing education programming	The main purpose was to understand the breadth and depth of continuing education programming at non-CAUCE member universities. The main data was collected by scanning university websites to identify continuing education units and /or programming.
University Interview Questions for ESDC Report	February/March 2021	25 Institutions invited to participate	11 participated in interviews	The purpose of this interview was to validate the previous program (Summer 2020) survey data and ask follow-up questions on certain subjects associated with the CAUCE 2021 Survey. For example, detail regarding student outcomes for employment, accessibility initiatives, student demographic data, and practices that support student success. This data was collected through a 30-minute Zoom interview.
University Interview	February/March 2021	17 Institutions requested	11 Participated in interviews	The purpose of this interview was to validate the website scan survey data and ask

Questions for ESDC Report		to participate in follow up interviews		follow-up questions. Questions asked included, volume and delivery, modality of UCEEU activity, information related to student outcomes for employment, accessibility initiatives, student demographic data, and practices that support student success. This data was collected through a 30-45 minute Zoom interview.
Student Profile/Persona Data provided by Individual Universities	February/March 2021	Requested profiles from all 43 CAUCE Members	14 Institutions provided multiple profile examples	<p>The purpose of this work was to identify the characteristics of UCEEU students. Profiles/persona samples include information about UCEEU student goals, previous education and work experience, and current personal and professional commitments.</p> <p>An email request was sent to universities that belong to CAUCE asking for student profiles or personas that they had created. The structure of the profiles provided includes magazine profiles, word documents, videos, and web profiles.</p>
Google Survey – Sent to both CAUCE and non-CAUCE individuals who were interviewed	March 2021	22 Institutions sent survey	11 Responded to the survey	The purpose of this activity was to collect information about prior learning assessment and transfer credit practices, program advisory connections, and student recruitment/selection processes.

Addendum 2 – University Extension and the History of Continuing Education

[I]t continues to be the case that the higher one's educational level, the more likely one is to continue participating in education. (Draper & English, 2016)

Introduction

University continuing education (UCE) was historically referred to as university extension and has its roots at Cambridge university in the mid-19th century (i.e., the Cambridge extension model and Great Britain's Workers' Educational Association; Selman & Selman, 2009). University extension units were established to extend access to non-traditional learner groups, whether that be through regional location campuses, evening and weekend courses, developing and offering multiple modalities (correspondence, distance and distributed learning) or offering varied schedules such as part-time degree studies.

As the work of extension units, or as we know them today, continuing education units, evolved overtime, it has grown to include substantial workforce development training, such as short-cycle skills programming and micro-credentialing. Over the past century, the overarching purpose of university extension and continuing education appears to have stayed consistent, to develop adults' capabilities to undertake productive roles in a changing economy and society. The unique focus, claims and narratives associated with this purpose has evolved throughout the years and, in light of current social, technical, and economic trends, most contemporary university continuing education units focus on both inclusive education and workforce development training.¹⁰

History, Definition and Purpose of Continuing Education

University continuing education refers to various activities through which universities provide educational programs and services to those not enrolled in traditional on-campus degree study. Virtually every major university in North America has a continuing education unit, responsible for organizing initiatives such as non-degree credit courses, non-credit courses, micro-credentials, certificate programs, diploma programs, customized training, outreach activities, and degree-credit classes. The modality of these courses includes synchronous and asynchronous eLearning, classroom based and off-campus. Generally, courses are scheduled during evening and weekends, during spring and summer terms, or offered as intensive or concentrated block sessions.

¹⁰ Although these two areas are a focus of most UCEEUs, this is not an exclusive focus. Many continuing education units provide significant personal interest programming, or have extended their mission into social impact programs, teaching and learning through faculty development work, or are supporting online learning development for all faculties, etc.

The main audience for continuing education is adult learners. Often referred to as adult education (i.e., based on androgogy and heutagogy 'self-directive learning' theory), this type of learning is typically a program, a movement, a subject matter and sometimes, a method. "In particular, it reflects a specific philosophy about learning and teaching based on the assumption that adults can and want to learn, that they are able and willing to take responsibility for that learning, and that the learning itself should respond to their needs." (Draper & English, 2016) Adult learning approaches often include curriculum which is theory-informed practice, experiential learning, reflective exercises, and practical assessments. The programs are administered with student centric policies including flexible scheduling, latitude for assignment due dates, and considerations for students who are typically balancing multiple priorities. Instructors for continuing education courses generally possess a balance of academic and professional experience, as well as knowledge of adult learning principles (androgogy).

Adult Education in universities has a long and robust history in Canada. Before Confederation in 1867, Queen's University engaged in extramural or extension work by offering public lectures; and the YMCA offered night classes for adults and educational programs for the military (Draper & English, 2016). The Antigonish Movement (Groen & Kawallak, 2014) in the late 1920's and the efforts of St Francis Xavier University in Antigonish, Nova Scotia, assisted people affected by the Great Depression, through the establishment of an extensive cooperative learning movement. Later the Coady International Institute was established to provide training for representatives from developing countries. As Western Canada developed, universities delivered learning opportunities to rural and remote communities by means of lectures, debating competitions, musical concerts and motion pictures. The University of Alberta, University of Manitoba, and University of Saskatchewan were all originally set up to offer extension courses. The University of Alberta model was critical to informing the development of extension activities in Manitoba (c.f. Department of University Extension and Adult Education, 1953). In the mid-1920s the University of Alberta used radio for Educational Broadcasting and established the Banff School of Drama, now called the Banff Centre, in the early 1930s (Draper & English, 2016).

Since the early 20th century, university extension and continuing education units have played an important role in developing course and program offers that enhance adults' capabilities to undertake productive roles in a changing economy and society. Prior to 1940, universities claimed that extension and continuing education units extended the resources of the university for the benefit of citizens not enrolled as full-time students. In the 1940s and 1950s, universities claimed that such units fostered social and economic progress in the post war years. Since the 1960s, universities have claimed that such units existed to meet the lifelong learning needs of individuals (McLean, 2008). McLean (2008) demonstrates these changes in claim or narrative regarding the purpose of university extension. Continuing education/extension programs have consistently been linked to social and economic changes over time. For example, in the 1960's and 1970's, as capitalism matured and wage labour became the primary means of earning a living in Canada the focus on individual learning became the primary purpose and claim. In light

of current social and economic trends, the focus and claim of purpose for university extension and continuing education has shifted again.

A 4th industrial revolution is driving significant social, economic and political change in Canada and beyond. Advances in science and technology (e.g., artificial intelligence, automation and big data analytics) have created unprecedented economic disruptions which have shortened the half-life of critical skills and competencies. This shift is similar to that experienced following World War II. Lifelong learning has become more than a social good, it is key, as it provides relevant skills for work and allow youth and adults to actively participate in the labour force, remaining relevant and responsive to technological and macroeconomic change (Ensuring inclusive and equitable quality education: Sustainable development goal 4 in Canada, 2020, p.25). Equity, diversity and inclusion (EDI), has become one of the key pillars of universities as they define their mission and vision for the early half of the 21st century. EDI not only informs efforts to diversify faculty and staff hires, it is also beginning to challenge traditional institutional governance structures, based on the concept of knowledge democracy. EDI is also beginning to inform how continuing education social impact programming is to be developed and delivered. University continuing education and extension units (UCEEUs) are now beginning to focus on activities and programming designed to support inclusive access to education and upskilling and reskilling training for both individuals and in partnership with employers.

Associations and Supporting Organizations

Efforts to begin to define policy priorities related to the function of continuing education units started in 1935, in the midst of the Great Depression, with the establishment of the Canadian Association for Adult Education (CAAE; Draper & English, 2016). CAAE's mandate, as articulated by its first executive director Ned Corbett, was to create innovative and imaginative educational training for citizenship. Although CAAE was considered a national flagship in continuing and adult education its activities declined by the end of the 1980's, it is now non-operational (Selman and Selman 2009). Three other major national adult education associations were established in Canada: the Institut canadien d'éducation des adultes (ICEA, 1952), which primarily serves the French-language sectors of adult education in Canada; the Canadian Association for University Continuing Education (CAUCE, 1954); and the Canadian Association for the Study of Adult Education (CASAE, 1981), which publishes the Canadian Journal for the Study of Adult Education.

CAUCE currently represents nearly fifty universities having significant continuing education activities. Members typically endeavour to meet the needs or goals of learners seeking professional development, personal enrichment, or the furthering of knowledge and skills. They deliver programs and services that promote lifelong learning, whether as individuals or as members of communities and organizations. These programs and services enable access to quality education in flexible and innovative ways. The work of continuing education links

universities with communities, and external agencies such as businesses, not-for-profit organizations, governments, and professional associations.

Contribution of UCEEUs

University continuing education and extension units contribute to individuals, communities and our universities in a variety of ways.

Strengthening Individuals and Communities

Universities provide high-quality lifelong learning opportunities that help people develop the full range of their human potential: their knowledge, their skills, their self-awareness, and their understanding of others. Fostering the practice of lifelong learning is vital to ensure individuals maintain competencies, attitudes, skills, strategies, and knowledge that they will need to succeed throughout their life. When people take adult and continuing education courses, they become better able to contribute to the families, organizations, and communities in which they live and work. In this way, UCEEUs strengthen the economic, cultural, and social fabric of the community.

Strengthening Universities

Continuing education programs extend the scholarly mission of universities. Universities are dedicated to discovering, integrating, teaching, and applying knowledge. While UCEEUs in Canada are typically not involved in the scholarship of discovery and research, such units are very active in the integration of scholarship and knowledge in the design of programs and the development of course content (i.e., competencies/skills). This results in programs/curriculum that uniquely interweaves university and industry content expertise. In addition to this core scholarly contribution, continuing education strengthens universities by fostering positive public relations, developing governmental relationships through federal, provincial, and municipal sponsored projects/programs, leveraging financial resources from non-traditional sources, and delivering high-profile services to the community.

Broadening Access to Education and Learning

In Canada, traditional programming in universities does not have the capacity to adequately serve non-traditional learners. Barriers such as, lack of funding opportunities, lack of post-secondary transition programs, lack of flexible programming (e.g., expectation of meeting minimum full time enrolment requirement), as well as lack of diverse modality of course offers, prevent non-traditional learners from participating in traditional university programs. (Draper & English, 2016). The continuing education efforts of Canadian universities are an important means of extending

access to education and to post-secondary credentials, to people who would otherwise not have such access. Online education, open admissions policies, literacy and numeracy upgrading programs, English as a second language programs, and programs designed for part-time learners are common means through which such access is supported by continuing education units.

As noted above, equity is becoming one of the key pillars of strategic priorities among universities and in particular university continuing education and extension units. This term broadly refers to different concepts related to fairness and compensatory actions that recognize disadvantage. To achieve inclusive education, policies should aim to transform education systems so they can better respond to learners' diversity and needs. (Ensuring inclusive and equitable quality education: Sustainable development goal 4 in Canada, 2020, p.33) This is key to fulfilling the right to education. Equity is related not only to access, but also to participation and achievement of all students, with special attention to those who are excluded, vulnerable, or at risk of being marginalized.

Building Profitable Businesses and Good Jobs

For many years now, international organizations, governments, and educational institutions have stated that lifelong learning is the key to success for countries, businesses, and individuals. Tony Blair, former Prime Minister of the United Kingdom, is well-known for saying: "Education is the best economic policy we have." University continuing education helps individuals perform better in their jobs, helps businesses achieve better results, and ultimately helps countries become better places to live and work.

A highly skilled workforce is also essential to help businesses grow and compete in an increasingly knowledge-based economy and to secure Canada's economic future. (Ensuring inclusive and equitable quality education: Sustainable development goal 4 in Canada, 2020, p. 25). The link between a well-educated population, a socially progressive society and vibrant knowledge-based economy is becoming clear as we look to curated programming, like micro-credentials, to upskill and reskill our underemployed or unemployed adult population. (Adult Learning and Education, 2012)

Addendum 3 – Diversity in UCCEUs: Mandate, Organizational Structures and Nomenclature for Learning Programs

Diversity in UCCEUs' mandate and areas of responsibility

Based on the outreach and data collection completed for this project, it appears 54 of the 97 Universities in Canada currently have a UCCEU. UCCEUs vary substantially in their mandate and associated areas of responsibility. Areas of focus often found in contemporary UCCEUs include: professional development short-courses courses and certificates (non-degree credit), English language programming, personal interest courses, part-time degree programming, online course development and administration, non-credit programming/ workshops, academic preparation/upgrading courses and access/transition to degree programs, tailored corporate training programs, international educational exchange programs and international workforce development programs. This is not a comprehensive list, but it does represent the most common mandates. No two UCCEUs have the same combination of areas of offer and responsibility.

In parallel with the changing focus on workforce development, international programming and inclusive access programming an additional related trend has emerged. Universities increasingly expect that UCCEUs be financially self-sustaining or, in many cases, expect UCCEUs to produce financial surpluses.

Diversity in UCCEU organizational structures

The reporting and organizational structure of UCCEUs also varies substantially. A few continuing education and extension units are considered Faculties, led by a Dean who reports to the Provost and Vice-President Academic, although this number has been decreasing in the last decade. Most UCCEUs are led by a senior administrator with the title of Director, Executive Director or Associate Vice President, reporting to either the Provost/Vice-President Academic or a Deputy/Vice-Provost.

The degree of centralization of continuing education functions also varies across institutions. The 2021 CAUCE survey data (Q.34) indicates 60% of member continuing education units are structured as a stand-alone faculty/school or unit, 20% are structured as a central shared service unit, the remaining 20% vary in other mixed structures. However, even when a continuing education unit is structured as a stand-alone faculty/school there are typically one or more other faculty/school that provides continuing education type programming for their specific disciplinary students.

The data set from our surveys provide a more detailed look at the organizational diversity.

Table 2 Q. 15 CAUCE (English) Annual Survey

How is your unit structured within the institution?		
Answer Choices	Responses	
A stand-alone faculty/school	60.00%	18
A unit within another faculty/school	0.00%	0
A central division	20.00%	6
Other (please specify)	20.00%	6
	Answered	30
	Skipped	0

Table 3 Q. 16 CAUCE (English) Annual Survey

To whom does the head of the unit report?		
Answer Choices	Responses	
Provost	37.93%	11
Academic VP (Vice-President or Vice-Provost)	34.48%	10
Associate Provost	6.90%	2
Other (please specify)	20.69%	6
	Answered	29
	Skipped	1

Table 4 Q. 17 CAUCE (English) Annual Survey

What is the title of the head of your unit?		
Answer Choices	Responses	
Dean	36.67%	11
Director	30.00%	9
Executive Director	20.00%	6
Other (please specify)	13.33%	4
	Answered	30
	Skipped	0

Table 5 Q. 18 CAUCE (English) Annual Survey

How many years has the head of the unit held his/her position?		
Answer Choices	Responses	
0-2	30.00%	9
3-5	33.33%	10
6-9	26.67%	8

10-15	10.00%	3
	Answered	30
	Skipped	0

Table 6 Q. 19 CAUCE (English) Annual Survey

What is the title of the second-ranking administrator in your unit?		
Answer Choices	Responses	
Director	10.00%	3
Associate Dean	33.33%	10
Associate/Assistant Director	20.00%	6
Manager	26.67%	8
Other (please specify)	10.00%	3
	Answered	30
	Skipped	0

Table 7 Q. 20 CAUCE (English) Annual Survey

What is the size of your full-time staffing complement (non-instructional)?		
Answer Choices	Responses	
0-15	26.67%	8
16-30	16.67%	5
31-50	20.00%	6
51-75	26.67%	8
	Answered	30
	Skipped	0

Table 8 Q. 21 CAUCE (English) Annual Survey

What is the size of your part-time or temporary staffing complement (non-instructional)?		
Answer Choices	Responses	
0-5	56.67%	17
6-10	23.33%	7
11-15	10.00%	3
More than 15	10.00%	3
	Answered	30
	Skipped	0

Table 9 Q. 22 CAUCE (English) Annual Survey

How many faculty and instructors taught courses (all kinds) through your unit during the most recent 12-month period for which you have data?		
Answer Choices	Responses	
0-25	20.00%	6
26-50	10.00%	3
51-100	6.67%	2
101-250	33.33%	10
more than 250	30.00%	9
	Answered	30
	Skipped	0

Table 10 Q. 36 CAUCE (English) Annual Survey

Indicate the areas for which your unit has institutional responsibility (check all that apply).		
Answer Choices	Responses	
Continuing education	93.10%	27
Online education	34.48%	10
Online teaching and learning technologies	13.79%	4
Classroom technologies	3.45%	1
Faculty development	3.45%	1
English/French language development programs	48.28%	14
Corporate training	58.62%	17
Community engagement initiatives	31.03%	9
None of the above	3.45%	1
Other (please specify)	24.14%	7
	Answered	29
	Skipped	1

Table 11 Q. 37 CAUCE (English) Annual Survey

To what extent is your unit financially self-supporting (including recovery of salaries and operational costs)?		
Answer Choices	Responses	
0	0.00%	0
1-25%	0.00%	0
26-50%	25.00%	7
51-75%	3.57%	1

76-100%	71.43%	20
	Answered	28
	Skipped	2

Diversity in Programming Nomenclature: an overview of non-credit, non-degree credit and micro-credentials

As stated previously, UCEEs have been offering educational training opportunities to Canadian's for nearly a century. Efforts to formalize educational training offered to adult learners emerged in the early 1900s with the focus on extending liberal arts education. The development of what is known as non-degree credentials arose out of a need to recognize and categorize the vast diversity of non-standard educational activities adult and continuing education units were involved with. By definition non-degree refers to all educational training which does not directly lead to a university degree. Non-degree can include either assessed learning (i.e., credit) or non-assessed learning (i.e., non-credit).

Assessed learning for credit can include unit or university approved credential programs such as citations, letters of accomplishment, certificates, diplomas and post-baccalaureate certificates/diplomas. It should be noted that certificates and diplomas are normally approved by the university and as such have well defined academic governance structures. Non-degree credit credentials often vary among institutions in terms of contact/learning hours and structure. Certificates are typically composed of certificate credit courses while a preponderance of diplomas are composed mostly of degree credit courses. Certificates have historically and continue to be the primary credential associated the upskilling and reskilling non-degree programs. Non-degree credit activity can also include non-credentialed programming, examples include Open Studies (e.g., University of Alberta and University of Calgary) and General Studies (e.g., Royal Roads and University of Manitoba) which provide students the ability to register in university course(s) without having to enroll in a degree program of study. Lastly one of the challenges most university continuing education and extension units is the lack of internal agreement on the use of terms. Only a handful of universities have Senate approved non-degree taxonomies (e.g., University of Calgary and the University of Manitoba). The lack of uniform definition creates issues in distinguishing university certificates from certificates of completion, which are non-assessed non-credit activities.

Non-assessed learning (i.e., non-degree non-credit) activities are often delivered in the form workshop training or short seminars/webinars. Completion and recognition can be in the form a unit/university approved non-credit parchment (e.g., letter of participation) or an informal recognition of completion (e.g., certificate of completion).

Within this complex non-degree ecosystem, the emergence of micro-credentials has spurred a great deal of discussion and debate in terms of what they are and where they fit. There currently

does not exist a national framework for micro-credentials although the development of provincial frameworks within Ontario and a move to align and develop frameworks in other provinces is progressing quickly. The national consensus that is forming (partly informed by international frameworks) has identified a number of characteristics that partly define a micro-credential, they include:

- Non-degree credit program
 - There is currently no consensus on what constitutes the duration of a micro-credential
- Skills and competency focussed: programming with direct links to the labour market
- Upskilling/reskilling: Have value for those in mid-career in order to provide pivoting towards other skills
- Clear learning outcomes: must be stated in terms of skills and competencies
 - Requires validation and recognition
- Transferability/portability: this requires broad level endorsement that is not limited to industry
- Structure: Micro-credentials can be stand alone, stackable, or ladder in or be nested in a macro-credential (e.g., degree program)
 - The latter has important implications for marginalized populations being able to access post-secondary credentials

Broadly speaking, although micro-credentials are emerging as a new disruption to post-secondary education, the identified characteristics define a function that has been developed and delivered for decades by university continuing education and extension units.

The lack of a standardized definition is not a problem if we assert that the sum is greater than the parts. In other words, if the intent of a micro-credential is to deliver responsive 'just-in-time' programming that bridges critical skills gaps, then the lack of standards (e.g., the size of the modular unit of learning) is less significant compared to the pragmatic outcomes. That said, lack of standards undermines the currency and employer understanding of any credential. This, in small part, is the reason institutions adopt non-degree credentialing nomenclature and taxonomies as a means of at least ensuring intra-institutional consistency. While there is no universal definition of what is meant by a certificate, Canadian and US colleges and universities do adhere to general guiding principles in their development and implementation.

Regardless if a unit offers a certificate, diploma and/or micro-credential, the value in these types of upskilling and reskilling programs will be determined on how broadly the learning outcomes are recognized. Now more than ever knowledge mobilization (i.e., transferability and portability of non-degree credentials) will be a critical value-added component in an increasingly global digital and technical economy. In order to accomplish this, efforts to develop a national qualification framework and digital credential repositories will be essential for the viability of future skills and competencies education.

Addendum 4 – University Continuing Education: Practices and Challenges in Supporting Adult Learning and Student Diversity

Introduction

University continuing education and extension units have a number of practices designed to support adult learner success and support access. These practices include open enrolment and direct admissions, recognition of prior learning as advanced standing towards workforce development credentials, flexible scheduling and multiple modalities for learning plus provide some learner supports. While these practices are helpful, there are significant opportunities to increase the amount of Prior Learning Recognition and there are still numerous barriers to education in particular for Canadian Indigenous peoples. To support a better understanding of barrier to education for Indigenous peoples, a literature review and associated practices of UCEEU are provided.

Open Enrolment and Direct Admissions

In contrast to traditional degree admissions at universities, the vast majority of university continuing education workforce development programs are open enrollment with direct admissions. Student services advisors provide guidance and answer questions regarding program learning outcome levels and suggested prerequisites. Some specialized or more advanced programming may have an admissions process, however competitive application processes (selecting candidates based on previous grade point averages or competitive test scores) is rare in UCEEU. The majority of UCEEU use an application form or online registration form to facilitate a straightforward and quick registration.

Prior Learning Assessment and Recognition

Prior Learning Assessment and Recognition (PLAR) was first developed by the Council for Adult and Experiential Learning (CAEL) in 1974 and over the course of the next 45 years became widely implemented in many colleges and universities throughout the United States. Investments into PLAR strategies in Canada started in the early 1990s mainly in community colleges. PLAR is defined as the “process designed to honor learners’ past learning and to expedite them through training periods or educational programs in light of their already held knowledge or skill” (Conrad, 2013, p. 3). Through the PLAR process it is determined whether an individual’s level of skill and competency achieved through non-formal (learning acquired through non-accredited training)

and/or informal (learning acquired through life/work experience) learning experience is the same as that gained through successful completion of a course or program (i.e., formal learning).

The process often involves:

- The mapping of skills/competencies (formal learning outcomes) associated with a program
- Proof of acquired relevant skills/competencies (non-formal and in-formal learning) of the applicant seeking PLAR (this is often done in the form of a portfolio submission)
- Assessment and validation of non-formal and in-formal learning by one or more a content expert(s)
- Academic credit can be granted if equivalency of skill and competency can be demonstrated and verified

Several UCEEUs reported providing opportunities for prior learning assessment, recognition and transfer credit to their students. Of the 11 interviewed CAUCE institutions, 8 institutions indicated they recognize non-formal learning to provide advanced standing in their continuing education programs of study. Of those same 11 interviewed CAUCE member institutions, 10 indicated faculties in their institution would recognize transfer credit from specific non-credit programs to credit programs. No UCCEUs reported processes to recognize informal learning (learning acquired through life/work experience). It should be noted that the Division of Extended Education (University of Manitoba) is expected to approve a PLAR policy (April 2021) that does recognize informal learning.

Although there is no Canadian federal legislation to support PLAR (Morrissey, Myers, Bélanger, Robitaille, Davison, Van Kleef, & Williams, 2008), on an institution level, some Canadian institutions have adopted a very elaborate PLAR strategy, such as Thompson Rivers University, Athabasca University, Ryerson University, University of New Brunswick, and Fraser Valley University. Several initiatives such as, The Recognition for Learning, Canadian Information Centre for International Credentials (CICIC), Ontario Institute for Studies in Education (OISE), and Manitoba Advanced Education and Training, Workplace Prior Learning Assessment and Recognition, and Manitoba Prior Learning Assessment Network (MPLAN) are also laying the ground work for a nationwide PLAR framework. Despite the fact that some universities have started implementing PLAR, these universities must gain other institutions' acceptance of their PLAR-awarded credit which results in many colleges and universities practicing PLAR in isolated, ad hoc, and situation-dependent ways (Conrad, 2013).

Overall, Canada has been slow to implement recognition of prior learning and slow to adopt learning outcomes in the academic credential assessment process (Academic Credential Assessment in Canada: Implementation of the Lisbon Recognition Convention and Preparation for the UNESCO Global Convention, 2020). Anecdotal comments from continuing education leaders indicate prior learning recognition is often more liberal and likely to be granted in non-degree credit/workforce development programs versus traditional degree programs. However, the

lack of overarching pan-Canadian qualifications frameworks and lack of credentials recognition processes were noted as requirements to substantially increase the application of PLAR.

Flexible Scheduling and Multiple Modalities for Learning

The historical roots and underlying values of UCEEU, to extend learning access to non-traditional learners, and the more recent commercial nature of continuing education programming, have resulted in a new shared narrative within continuing education. Many leaders in continuing education describe themselves as leading responsive educational units. Units that respond to the needs of the various non-traditional learners they serve. That responsiveness manifests itself in a variety of ways. Such as providing additional supports to assist learners in meeting admissions requirements, or scheduling classes during the weekends or evenings, intensive short term workshops, boot camps and summer and/or adapting the modality of learning (face-to face, blended, online, etc.) to suit the learner audience needs.

University continuing education and extension units offer their programming in multiple modalities in order to accommodate lifelong learners including: online synchronous/asynchronous, blended, and face-to-face delivery methods. In response to COVID-19 health measures imposed by provinces, nearly 100% of face-to-face courses offered by continuing education pivoted to remote delivery. There were no significant changes to online courses/programs. It should be noted that university continuing education and extension's vast experience and expertise with online programming helped inform the strategic pivot towards remote delivery that university degree programs adopted. Many UCEEU's provided technological as well a teaching and learning supports during the 2020 transition period.

UCEEU's offer a significant amount of their programming online. Of the 20 CAUCE member UCEEU that reported offering non-degree credit courses, 12 indicated they offered 76-100% of their courses online. Of the 38 CAUCE member universities continuing education units that offer non-credit courses, 21 indicated they offered 76-100% of their courses online. Finally, of the 14 university continuing education units that indicated they offer degree credit courses, 6 offered 76-100% of their courses online.

Course Design and Delivery Approaches

Industry plays a key role in the development of most continuing education programming. Continuing education non-credit and non-degree credit courses and programs are, predominately, developed in consultation with and taught by industry practitioners. Interviewees described that continuing education units provide the quality assurance structures and support of an instructional design team to ensure practicing subject matter experts are able to organize and share their knowledge, skills and abilities in a pedagogically sound manner. Moreover, many

UCEEUs reported having program advisory committees consisting of industry partners and educational/academic leaders that drive continuous evolution of their workforce development curriculum.

University continuing education interviewees further described the more applied approach to learning, to quote one continuing education leader, “we flip the typical academic learning model around, from a 2/3rds content, 1/3rd application of content model to a 1/3 content, 2/3rds application model.” Application approaches described included capstones and projects, leveraging job aids and templates, case-based assignments, breakout group activities, community participation activities, and roleplays/enacting solutions. Interviewees also described the value of small classroom maximums (typically under 30) and well-designed physical classrooms with movable furniture designed to facilitate greater learner engagement. Such approaches are ideally suited for lifelong learners as it integrates their experience into the curriculum.

Program Learning Supports

University continuing education and extension units provide access to several learning supports for adults. However, these supports tend to be less available and less fulsome than those provided to traditional degree students. This was attributed to two factors, first that the majority of continuing education learners were historically part-time learners who were often working or not on campus seeking services and second, due to the cost-recovery nature of continuing education programming, there were limited funds available to offer additional supports to continuing education learners. Interviewees also indicated that they were seeing an increased demand for career services, such as job search skills and job placement supports. Also, in some universities, award regulations (defined by Senate approved eligibility requirements) for bursaries and scholarships often require students to be continuing and meet minimum full-time requirements as determined by the institution. This can create financial barriers for non-sponsored students seeking upskilling and reskilling.

Table 12 The Types of Learner Supports Provided by UCEEUs

Types of Learner Supports	# of UCEEUs /38 Respondents	% offering the Support
Writing supports/Writing Centre	25	66%
Numeracy supports	14	37%
General study and learning skills	20	53%
Language Skills training	21	55%

Employment readiness and job search skills	17	45%
Job Placement Services	1	3%
Mental health supports	17	45%
Skills for adapting to a new culture	18	48%
Financing of Studies	1	3%
Learning commons	8	21%
Other	10	26%
None	6	16%

There appears to be a correlation between the programming offered by a UCEEU unit and the types of learner supports most needed and provided. For example, UCEEUs that provided international student programs, in particular English language programs were more likely to provide writing supports and skills for adapting to a new culture. Further, UCEEUs that provide academic upgrading/preparation courses, are also more likely to provide writing supports and tend to provide numeracy supports. Finally, as seen across almost all campuses, and shared by interviewees, there has been an increase in the demand for mental health supports for learners. It is interesting to note, 6 of the 38 UCEEUs that replied to this survey question indicated they still provide no supports for their learners.

Barriers to Access for Upskilling and Reskilling training for Indigenous Peoples

Understanding the barriers to access upskilling and reskilling education of marginalized populations has been the focus of numerous studies over the past 40 years (e.g., Tinto 1975; Rickson and Rutherford 1996; Ozga and Sukhnandan 1998; York and Thomas 2003). In particular, within Canada, the challenges facing Indigenous communities are complex and multifaceted. According to Statistics Canada (2020), the population growth rate of Indigenous People is four times that of non-Indigenous Canadians; with those 21 years of age or younger making up the highest rate of growth. By 2026, approximately 350,000 new Indigenous Canadians will be entering the labour market. This is a sobering fact given that in 2016 unemployment rates among Indigenous Canadians was more than double that of non-Indigenous (15.3% compared to 7.4% respectively; OECD 2018). In addition, post-secondary attainment in Canada is also the lowest among First Nations and Inuit youth (Kunz et al 2000; Gordon and White 2014; OECD 2018). The situation is even more precarious for those that do not have status. Despite efforts to better understand and collectively respond (e.g., Indigenous Skills and Employment Training Strategies) many of these challenges and significant issues of access remain (Gibbons and Vignoles 2009; Schuetze and Archer 2019). The past 12-months has fundamentally transformed the pace of change related to the future of work. COVID-19 has accelerated the rate of globalization and the magnitude and meaning of a distributed workforce. The expected transition towards a digital, green and automated economy could very well reach a plateau by 2026. Unless there is a change in strategy related to the development and funding of

upskilling and reskilling programs, many Indigenous youth will find themselves in the middle of an ever-widening skills gap chasm.

Many of the challenges currently facing Indigenous People are a direct result of the long-term impacts of failed government policies and practises. The result is that Indigenous communities face a trifecta of issues: i) Increasing economic, educational, and health care inequality (e.g., Neeganagwedgin 2011), ii) legacy of colonialism (e.g., sixties scoop, residential schools) which has burdened communities dealing with raising rates of mental health issues, substance abuse, and suicide, iii) a rapidly growing population below the age of 21 living at or below the poverty line (Kirkup 2016). Collectively these issues bring urgency to the calls-to-action identified in the Truth and Reconciliation report (TRC 2015). Now more than ever there is a need to invest in initiatives that improve on post-secondary attainment rates particularly those focused on upskilling and reskilling (e.g., Day and Newburger 2002). The idea of the democratization of access to upskilling and reskilling education has been identified as a front and centre issue (e.g., Liu 2007) particularly for those who come from marginalized populations and often engage as first-generation "non-traditional" students.

Eligibility for Band sponsorship for those seeking a university credential is often based on full-time undergraduate degree studies. Most sponsorship models do not normally enable a student to enroll in transition programs (which are often non-degree) or in upskill/reskilling certificate programs.

University continuing education programs have a long history of developing robust upskilling/reskilling programs, which have been developed in consultation with communities. Examples include, the Aboriginal Community Wellness Diploma Program (ACWD), which has been a successful partnership between the First Nations Inuit Health and the University of Manitoba's Division of Extended Education. Programs like these try to address many of the barriers to access by providing secure funding as well as imbedded train-the-trainer programs. These programs are also focused on upskilling working professions and as such have a positive impact on needed community-based services while fostering economic sustainability. Lastly, programs such as ACWD can serve as a model for future initiatives.

Addendum 5 – Types and Volume of UCEEU Program Offerings across Canada

Overview

The purpose of the section is to provide an overview of the volume of UCEEU programs offered across Canada and the credential types and the program topic areas. It is demonstrated that data associated with UCEE volume is difficult to quantify and is not collected consistently by UCEEUUs. However, the data collected does indicate a significant volume of activity in UCEEUUs. To further unpack the types of offerings and the alignment to both the inclusive education and workforce development mandates of UCEEUUs, data regarding the types of Equity, Diversity and Inclusion (EDI) initiatives and programming offered and data demonstrating the alignment of UCEEU programming to a wide range of Professional Associations/Orders is provided. A discussion reflecting upon industry involvement in UCEEU programming and a gap in the data regarding employment outcomes and employer graduate perceptions is also shared.

The volume of UCE Program offerings across Canada

In contrast to the “credit hour” or “full-time equivalent” student measures for traditional degree programming volume, there are no consistent units of measure for volume of UCEEU programming. In 2019, the annual total national enrolment of CAUCE member UCEEUUs was estimated at over 500,000 (CAUCE, 2019). While this number is significant, it is important to note that not all enrolments are equal. One enrolment may represent an individuals’ registration in a 3-hour workshop, where a second enrolment represents registration in an 11-week full-time technology bootcamp. Further, this data represents information collected from UCEEUUs only. In many cases, continuing education work is decentralised, with multiple faculties and units offering additional continuing education and extension programming.

In the 2021 CAUCE data collection survey, respondents were asked if they collected either instructional hours or course/program contact hours. Twenty-one of 30 UCEEUUs that completed the CAUCE Survey reported that they do track course/program contact hours and provided them. Of the non-CAUCE institutions interviewed, four of the 11 institutions reported that they do track course/program instructional hours and provided them. The number instructional hours reported by these UCEEUUs ranged from 5,834 to 2.9 million hours annually. Annual 2020 contact/instructional hours from just the 25 UCEEUUs that collect this data totaled 4,701,600 contact hours.

The CAUCE Annual Survey data and the CAUCE/Non-CAUCE Interviews reveal that this data is inconsistently collected. Anecdotally, UCEEUUs reported that they did not have the financial

resources or the IT systems to gather and report on this data. This information gap makes it challenging to fully analyse the scope and volume of enrolment and teaching activity in UCEEU. Students enrolled in non-degree UCEEU programs are excluded from university's head count given that most of these programs are exempt from provincial grants. As a result, data on non-degree enrolled is often decentralized (i.e., not maintained by university institutional analysis), with most UCEEU not required to report on these numbers.

Credential Types and Programs Areas

Based on the data collected through the CAUCE Member Programming Survey (see Appendix C) and the Non-CAUCE Programming Website Data Scan, UCEEU offer a wide variety of programs. There is no consistency in nomenclature for the various types of programs and the non-credit and non-degree credit programs are not typically under the purview of the provincial ministries responsible for post-secondary education.

The array of credential names and descriptions speaks to the grassroots approach that universities have taken as they develop and offer programs to meet community needs. A list of over 1000 different programs offered was collected from CAUCE member institutions in July 2020 and is found in Appendix D. This list illustrates the diversity of programming offered across Canada by UCEEU.

Programs vary in length, credential awarded, course title, course objectives, fees, schedule and modality of learning. For example, program length ranges from 3 days for a short intensive program to 8-12 months full-time or even longer for part-time programs.¹¹ This variation can signal market responsiveness; however, it also reveals the lack of consistency found in UCEEU programs offered throughout the country.

Programming Areas/Fields of Training Programs and Geographic Region Significance

To serve the needs of individuals who work in a variety of industries, UCEEU develop each course or program in response to a gap identified. Gaps are identified based on, research on labour market trends, analysis of labour market data, consultation with industry partners, feedback from alumni as well as consultation with academic content experts within the institution.

¹¹ There are shorter learning opportunities, ranging from very short micro-credential that may take an hour to complete or a ½ day workshop; however, these are not captured in this list, as they are individual courses, not programs of study.

Data was collected regarding programs offered, length of program, tuition fee costs, duration/length of program, modality and schedule in the CAUCE Member Programming Survey (July 2020). This data is attached in Appendix D and has been further supplemented by data collected on the websites of non-CAUCE member Canadian universities. Although this is not a complete listing of Canadian university continuing education and extension programming and the data format was reported inconsistently, the program listing does provide a good indication of the depth, breadth, availability and cost of UCEEU programming across the country.

As a sample, the table below provides an overview of the breadth of programming areas/fields of study.

Table 13 Sample Programing Areas/Fields of Study at UCEEUs

<ul style="list-style-type: none"> • .net Application Development • Academic Upgrading (Math, Science, English, etc.) • Adult & Community Education • Agriculture • Art • Business Analysis • Business Intelligence • Business Process • Business & Management (Professional Management) • Career Development & Academic Advising • Change Management • Computer & Business Technology • Conflict Resolution • Database Administration • Design Technologies • E-Learning 	<ul style="list-style-type: none"> • Educational Studies in Psychology • Engineering • English as a Second Language • Environmental Management • Film Industry • French as a Second Language • Graphic Design • Human Resources Management for Non-Profit • Human Resources Management • IT Fundamentals • IT Service Management (ITIL) • Interior Design • Languages of the World • Leadership and Coaching • Manufacturing • Marketing • Mental Health & Psychology 	<ul style="list-style-type: none"> • Occupational Health & Safety • Office Applications • Project Management • Public Management (Government) • Public Relations Management • Real Estate Development • Risk Management • School Leadership Quality Standards • Security Management • Sign Language • Software Development • Strategic Management • Sustainability • Teaching Second Languages • Tourism • Visual Design • Web Development • Workplace Learning • World Language Learning • Writing
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Consistent with the history of UCEEUs and their tie to regional learning needs, programs emerging due to needs in the geographic regions provide a unique and vital skillset to adult students. Often, the programs are developed and offered in collaboration with industry or associations. For example, the agricultural programs offered in the Western region of Canada are

reflective of the large industries which includes cultivation of the soil for the growing of crops and the rearing of animals to provide food, wool, and other products. The manufacturing programs in the Central region of Canada represent the large-scale industrial production that occurs in Ontario. The Film Industry program's niche programming represents a unique need to meet a robust and growing Vancouver market. Additionally, the Public Management Program, a specialized program developed to meet the province of Quebec's needs (including programs in Montreal, Quebec City, Gatineau, Saguenay), represents the high number of government employees needed provincially.

Equity, Diversity, and Inclusion (EDI) in UCEEU's and Related Workforce Development Initiatives

The needs of individuals and communities that lack access to education and skill development have been and continue to be a key focus of UCEEU's. In the surveys, CAUCE members and non-CAUCE members were asked if their unit had any EDI initiatives (which include Indigenous engagement initiatives). A second survey question asked this same group if their unit had any programs or initiatives targeted to support Indigenous learners. For those answering "Yes" to one or both of those questions, an additional question was presented requesting a contact who could provide additional detail in a follow up interview.

Twenty-four of the 41 UCEEU's that responded indicated they have EDI initiatives. Twenty-two of the institutions reporting they have EDI initiatives and/or initiatives were interviewed. The following workforce development initiatives data was collected through those interviews. Consistent with the barriers to learning access for Indigenous learners literature review provided in Addendum 2, interviewees identified the similar accessibility gaps for under-represented learners as well as a few additional challenges were noted.

Interviewees shared that in some remote Indigenous communities, poor internet connectivity and lack of community's trained educational facilitators create barriers to accessing online or blended programs. Additionally, interviewees described the challenge of recruiting instructors who can offer programs in remote locations. They also shared that once the technical accessibility issues are solved (high-speed internet and a device), there are still challenges in teaching the students and instructional teams how to use the technology. Further, finding the expertise and funding to re-deploy their classroom-based curriculum as online education was reported as difficult. Other concerns related by the interviewees include the lack of sufficient financial support for adult learners' course fees to participate in class, balancing work and family priorities (e.g., childcare), transportation issues and English language literacy limitations for immigrants.

To demonstrate the EDI focus of UCEEU's and share the range of activity, the following tables' list examples of initiatives reported.

Table 14 EDI Initiatives & Strategies Occurring Internally For Employees

EDI Initiative	Institution Name
Internal Workshop: Inventory for Diversity	St. Boniface University
Course: EDI in the Workplace	Guelph University
Micro-credential: Identity and Unconscious Bias at Work	Guelph University
Implementing diversification strategies for instructor pool, employees, advisory council, and leadership team. E.g. Women in tech.	York University

Table 15 Indigenous Initiatives & Strategies Occurring Internally for Employees

Indigenous Initiative	Institution Name
Ensuring Indigenous peoples are represented on the University board.	Kings University
Ensuring yearly internal reconciliation exercises that recommitment the University and their employees are committed to Truth and Reconciliation calls to action.	Kings University
Providing internal monthly talking circle to employees. This is meant to explore EDI in the community. Staff have pre-reading then participate in a zoom session, which consists of sharing, listening, and small breakout groups.	Simon Fraser University

Table 16 Indigenous Initiatives & Strategies Occurring Externally

Indigenous Initiative	Institution Name
Unamagi College: A unit within the University dedicated to indigenous members education.	Cape Breton University
Offer a course on Truth and Reconciliation yearly to the public	Kings University
Course revitalization strategy designed to decolonize the current curriculum, indigenize the curriculum, support the incorporation of Indigenous content in general courses and programs.	University of Victoria
Offer bridging programs, which provide access for Indigenous students who are not traditionally admissible. These special entrance pathways are part of partnerships with local Indigenous communities.	Trent University
Offer an upgrading math micro-credential pathway for Indigenous students as part of an Indigenous geology certificate	Lakehead University
Offer programming specific to women and indigenous populations.	Royal Roads University
Offer a program focused on indigenous vitalizing and preservation of local Indigenous language groups, funded through local indigenous groups.	University of Victoria
Develop a partnership with an Arts centre in Penticton to offer Fine Arts programs for Indigenous learners.	University of Victoria

Public Administration for Indigenous Context Program. This program focuses on working together with Indigenous communities. Offers two separate streams: one for Indigenous people and one for non-Indigenous people. This is a short program which ladders into grad studies	École Nationale D'administration Publique
Indigenous Women Project Management Corporate Training Program	Mount Royal University
Offer access strategies for Indigenous students not traditionally admissible.	Trent University

Table 17 EDI External Initiatives & Programs

EDI Initiative and Programs	Institution Name
A variety of public short lectures offered to increase awareness of EDI in the community	Capilano University
New Canadians Entrepreneurship Program	Mount Royal University
Humanities 101: An access program for non-traditional learners	Lakehead University
Respond to EDI issues within the faith-based/Christian community by offering programming and access.	Kings University
Identity and Unconscious Bias at Work (corporate training micro-credential). This was specifically offered to Guard-me Insurance company who provides insurance for the Universities International students.	Guelph University
Community Capacity Building certificate. University funded initiative to assist individuals in moving from volunteers to paid employment.	Simon Fraser University
Math courses specifically to assist African immigrants access desired programs.	École Nationale D'administration Publique
Transitional Vocational Program: an employability program for adults with developmental disabilities	Mount Royal University
Cultivating Diversity in the Workplace (assessed professional development course)	University of Calgary
Diversity in Adult Learning (assessed professional development course)	University of Calgary
I'm Biased and So Are you: Exploring Unconscious Bias (Day @ the U general interest lecture)	University of Calgary
Women in Technology program	York University

Table 18 General Educational Accessibility Programs

Accessibility Program	Institution Name
Universal design principles embedded within the instructional design process, online course development, and instructional design practices.	Trinity Western University

Open Education Resource (OER) initiative: Moving towards zero cost course materials for the student, which decreases overall education costs and increases access.	University of Regina
Instilled principles of access across the whole unit. Every system, process and service are offered with the purpose of adult learning access.	Guelph University
Offering online courses to increase access to students.	All Universities
Hired a student support coordinator, which focuses on supporting online learning students. This is in addition to on-campus supports available to students.	University of Victoria
Ministry funded programming as a response to COVID providing access for rural communities to access courses online.	Simon Fraser University
Specially designed classroom speaker system assists older learners access professional and community programs.	University of Victoria
Specifically scheduled daytime course for large populations of students that are unable to drive at night due to lighting issues.	University of Victoria

Professional Designations/Professional Association/Orders and their alignment of UCEEU programs

In recent decades there has been a emergence of regional, national and international Professional Associations (sometimes called Orders), that have been and are developing occupational standards associated with the knowledge, skills, competencies and experience required to be awarded a Professional Designation, recognized within a field of practice. The creation of these standards for learning are typically documented in a “book of knowledge” or a competency framework.

UCEEUs regularly partner with professional associations to ensure learning outcomes and competencies are aligned to meet the Professional Association requirements. This partnership provides great benefits not only to the association but also to the learner and the university. Ensuring that the learning outcomes of a course/program address the skills gap defined by the industry significantly increase the credentials transferability and value upon completion. This partnership brings greater awareness of what skills and competencies students have acquired. Additionally, as a university, it is beneficial to work with instructors and associations to ensure that appropriate topics, depth of knowledge and breadth of learning are offered in each program. Student satisfaction, reputation and service are all key considerations when universities offer their programs. Partnering with reputable associations provides additional assurances that the curriculum is appropriate and effective.

Based on the information provided in the 2021 CAUCE Annual Survey (English & French), the Non-CAUCE Programming Website Data Scan, and the Non-CAUCE Interview Data, there are 150 professional associations/orders partnering with the UCEEUs. For ease of review, the

partnering associations/orders have sorted into seven categories: Business Management, Health & Human Services, Education, Finance, Occupational Health & Safety, Human Resources and Other. The most prevalent of the association partnerships among the UCEEU's surveyed include Project Management Institute (PMI), International Institute of Business Analysis (IIBA®), CPA (Chartered Professional Accountant), and CPHR (Chartered Professionals in Human Resources).

The list of professional associations/orders indicates the regional diversity and jurisdictional nature of many professions. UCEEU's must work with local employers, professional associations/orders and learners to evaluate and determine if a professional association/order affiliation will provide value to both learners and the organizations those learners hope to work at.

Table 19 UCEEU Partner Professional Associations/Order by Area

Business Management
Association of Administrative Assistants
Association of Administrative Professionals (AAP)
Association of Business Process Management Professionals (ABPMP)
Canadian Association of Management Consultants (CMC – Canada)
Canadian Institute of Management (CIM)
Canadian Institute of Management (CIM), Calgary Chapter
Canadian Institute of Marketing
Canadian Institute of Traffic and Transportation (CITT)
Canadian Public Relations Society (CPRS)
Canadian Risk Management (CRM)
Certified Associate in Project Management (CAPM)
Certified in Project Management
Certified in Project Management
Certified Marketing Management Professional
Chartered Institute of Logistics and Transport
CHIMA - Canadian Health Information Management Association
CSCM - Canadian Society of Club Managers
Digital Marketing Institute
Economic Developers Alberta
Human Resources Professionals Association (HRPA)
Institute of Certified Records Managers (ICRM)
International Association for Six Sigma Certification (IASSC)

International Institute of Business Analysis (IIBA®)
Justice Institute of British Columbia
Planning Institute of BC (PIBC)
PMI-ACP (Agile Certified Practitioner)
PMP (Project Management Professional)
Procept Associates Ltd
Project Management Association of Canada (PMAC)
Project Management Institute (PMI)
Project Management Institute-Professional Business Analyst (PMI-PBA)
SCMA AB (Supply Chain Management Association of Alberta)
Six Sigma
Six Sigma Green Belt Attestation
Supply Chain Canada (SCML)
Supply Chain Management Professional (SCMP)
Health & Human Services
American Association of Sexuality Educators, Counselors and Therapists (AASECT)
BACB (Behavior Analysis Certification Board)
Board of Examiners in Sex Therapy and Counselling in Ontario (BESTCO)
British Columbia Association of Kinesiologists (BCAK)
CACCF - Canadian Addiction Counsellor
Canadian Association for Marriage and Family Therapy (CAMFT)
Canadian Council on Continuing Education in Pharmacy (CCCEP)
Canadian Counselling and Psychotherapy Association
Canadian Pharmacists Association (CPhA)
Certification Federation
College of Family Physicians of Canada
College of Podiatrists of Canada
College of Physicians of Quebec
College of Vocational Rehabilitation Professionals (CVRP)
Continuing Medical Education Accreditation Council
Council on Optometric Practitioner Education (COPE)
New Brunswick Child & Youth Advocate
New Brunswick Department of Health
Occupational Health Nursing Association
Order of guidance counselors of Quebec
Order of occupational therapists of Quebec

Order of psychoeducators and psychoeducating of Quebec (OPPQ)
Order of Social Workers and Marriage and Family Therapists of Quebec (OTSTCFQ)
Pedorthic Association of Canada
Royal College of Dental Surgeons of Ontario
The Canadian Council on Continuing Education in Pharmacy
The College of Family Physicians of Canada (CFPC)
Vocational Rehabilitation Association of Canada (VRAC)
Education
Alberta Ministry of Education
Apprenticeship and Industry Training board
Association of Municipal Administrators of New Brunswick (AMANB)
British Columbia Career Development Association (BCCDA)
Career Development Association (CDA)
Career Development Association of Alberta (CDAA)
Career Development Practitioner Certification Board of Ontario (CDPCBO)
Languages Canada
Society of Translators and Interpreters of BC (STIBC)
TESL Canada
Other
(ISC)2
Association of Architectural Technologists of Ontario
Association of Professional Engineers and Geoscientists of Alberta (APEGA)
British Columbia Society of Landscape Architects (BCSLA)
Building Science Specialist Board of Canada (BSSB)
Canadian Construction Association (CCA)
Canadian Construction Association Gold Seal
Canadian Golf Superintendents Association (CGSA)
Canadian Home Builder's Association— Calgary Region
Canadian Institute of Quantity Surveyors (CIQS)
Canadian Institute of Traffic and Transportation (CITT)
Certified Fundraising Executives
Decorators and Designers Association of Canada (DDA)
Economic Developers Council of Ontario
Economic Development Association of Canada
Equine Canada
Golf Course Superintendents Association of America (GCSAA)

IIAP
Institute for Operations Research and the Management Sciences
IPM Council of Canada
MTAA
National Association for Industrial and Office Parks (NAIOP)
Ontario Association of Architects (OAA)
Ontario Association of Veterinary Technicians (OAVT)
Order of Architects of Quebec
PGAC - Professional Golf Association of Canada
Quebec Institute of Mediation and Arbitration (IMAQ)
Royal Conservatory of Music
Service Alberta
SIEMENS Mechatronic
Society for Technical Communication (STC)
SOCRA - Society of Clinical Research Associates
The Organization of Women in PR
Finance
Alberta Insurance Council (AIC)
Canadian Payroll Association (CPA)
CFA (Chartered Financial Analyst) Charterholder
Chartered Professional Accountants of Ontario (CPA Ontario)
CPA (Chartered Professional Accountant)
Credit Institute of Canada (CIC)
Credit Union Institute of Canada (CUIC)
F. Pl. (Financial Planner)
Insurance Institute of Canada
ISACA
ISACA Toronto Chapter Audit
Risk and Insurance Management Society, Inc. (RIMS)
Surety Association of Canada
Occupational Health & Safety
Board of Canadian Registered Safety
Canadian Registered Safety Professional (CRSP®)
Canadian Society of Safety Engineers
Industrial Accident Prevention Association (IAPA)
Professionals (BCRSP)

Human Resources
Chartered Professionals in Human Resources of Alberta (CPHR Alberta)
Chartered Professionals in Human Resources Saskatchewan (CPHR)
CPHR (Chartered Professionals in Human Resources)
CRHA (Conseillers en ressources humaines agréés)
Human Resources Professionals Association of Ontario
Institute for Performance and Learning, formerly Canadian Society for Training and Development (CSTD)

Employer Recognition and Involvement with UCEEU Programs

Ensuring programs are providing adult students with the skills and competencies needed to contribute in the workplace and that programs meet the requirements of industry is a vital part of UCE fulfilling its mandate. Identifying workforce development needs, then building responsive short-cycle programming that is research informed and leverages industry practitioner/professional association accreditor input is part of the core work of UCEEUs. UCEEUs reported high levels of employer and practitioner input in the development of programs and high level of student satisfaction with their personal learning. However, very few UCEEUs gather post-program completion data regarding employment outcomes or data regarding employer perceptions of programs graduates.

Advisory groups are the most common practice used by UCEEUs to align curriculum with industry needs. Advisory groups are comprised of industry practitioners, professional association representatives and academic experts that are brought together to build and maintain UCEEU workforce development programs. Through direct input UCEEU ensures the curriculum provides the knowledge, skills and competencies required by industry.

All the 22 universities that interviewed indicated they have formal or informal connections to the community and that they consulted to provide advice on program curriculum, student recruitment, and industry practices. Moreover, 11 of those institutions specifically reported in the Google survey that they collaborated with industries and organizations to ensure the programs were aligned with industry expectations.

Tailored corporate training offerings were provided as an example of how UCEEUs collaborate more directly with organizations to both design, deliver and measure the success of workforce development programs.

While many UCEEUs reports higher than institutional average student satisfaction surveys, there appears to be little data available to support the belief that UCEEU courses and programs assist

students in acquiring the skills employers want and that the credentials and competencies learned assist employees in gaining and keeping employment.

It was hoped that most UCEEU performed graduate surveys and that this data could inform our understanding of employer perceptions of UCEEU programming and their support of students who completed UCEEU programs. The survey data collected from the CAUCE UCEEU indicates only nine of the 30, collect graduate surveys. Further, due to constraints of time, the nine institutions that indicated they do collect graduate survey data were not interviewed to collect specific results of their graduate data survey results.

CAUCE UCEEU were asked if they provided graduate surveys to their students. For those that responded, “Yes”, they were further asked if, (1) were students asked if their training helped them get a job in a related field, (2) if their training helped them upskill to maintain their job and (3) whether the student employer had paid for their training.

Of the nine UCEEU that indicated they do issue a graduation survey, 100% asked students if their training helped them get a job in a related field, 67% asked if their training helped them upskill to maintain their job, and 44% asked whether the student employer had paid for their training. There is clearly an opportunity to both establish a set of common questions for UCEEU program graduates and to collect data regarding employer perceptions and student employment outcomes.

During the 22 interviews, several universities related anecdotal experiences with collecting information detailing student employment outcomes. Their comments are shared below.

Table 20 Anecdotal labour market outcomes and employer data collected through the interviews:

Did their training help them get a job in a related field?
Most students who come into the program are working in their field, but want to become managers (HR, Finance, etc.) They may be technicians who wish to advance in their organization.
Many immigrants who attend programs indicate that they want to find a job in public management.
The adult students indicate that they are upskilling to keep their jobs, change roles, or find a new job.
Did their employer pay for their training?
Many Universities reported that they are unaware of any employers paying for the students' training/education.
We cannot tell from our systems unless the employer pays directly to the institution, then the University can see this through the tuition/registration fee.

There are a few Universities that reported agreements with organizations exist. For example, in the Master of Nursing program at Trinity University, the Fraser Health Authority supports students in the 4th year of the Nursing leadership program.

Addendum 6 – Adult Learners Served by University Continuing Education and Extension

As part of this project, actual student examples were gathered from 15 UCEEU across the country. These students have provided releases to their respective institutions to use their pictures, stories, video, etc. for promotional purposes. Based on the experience of the writers and the samples provided, we identified eight unique student profiles, as indicated in the table below.

Table 21 Adult Learner Personas

Entry-Level Career Builder	Mid-life Career Changer	Workforce Re-enterrer	Career Enhancer	Equity Seeker	Part-Timer	New Canadians	Displaced/ Unemployed
<ul style="list-style-type: none"> Typically have high school diploma Working in a part-time or entry level job Looking for key or specialised knowledge or education to build a career around Looking for a flexible program that works around their schedule Goals include a specific role or dream job Challenges include confidence, resources, work schedules <p>Examples below include:</p> <ul style="list-style-type: none"> Olivier Legault Trish Ashbee 	<ul style="list-style-type: none"> Typically have a diploma or degree in current career Have several years experience in an established career Currently working full time Looking to switch to a different career, explore a new career goal through a short but practical program Goals include establishing a new alternate career Challenged include work schedule, resources, possibly family obligations <p>Examples below include:</p> <ul style="list-style-type: none"> Paul O'Connor Sarah Bannerman Mike Lynne Kaine Salwa El Alaoui Edward Moore Rod (McGill Video) Niki (McGill Video) 	<ul style="list-style-type: none"> Typically have previous education post secondary or a high school diploma, but feel this education is outdated May have entry level work experience or work experience from many years ago Looking for key or specialised knowledge or education to build a career around Goals include establishing a career Challenges include work schedule, resources, possibly family obligations <p>Examples below include:</p> <ul style="list-style-type: none"> Erin Williamson Jaime Wiebe Kateryna (McGill Video) 	<ul style="list-style-type: none"> Typically have diploma or degree in current career Is established and happy in their current field Looking for new knowledge or skills to advance their work outcomes and perhaps position them for a promotion Challenges include work schedule <p>Examples below include:</p> <ul style="list-style-type: none"> Veronique Carbonneau Jonathan Howly Elizabeth Manafio Tyrell Jake Sinclair Tanya Boteju Henry Saavedra Colleen Houston Samantha Sadler Tariq Ali Paula Shaver Stacie Laurencelle Shirin Divanbeihui Jamie Anderson Rosalina (McGill Video) 	<ul style="list-style-type: none"> May have some high school or high school diploma Some entry level work experience Looking for academic upgrading and key or specialised knowledge or education to build a career around Goals include a specific role or dream job Challenges include program prerequisites, confidence, resources, work schedules, possible family obligations <p>Examples below include:</p> <ul style="list-style-type: none"> Tyrell Jake Sinclair 	<ul style="list-style-type: none"> Typically have previous education post secondary or a high school diploma, but feel this education is outdated Currently working full time Have several years experience Looking to advance their education and career Challenges include confidence, resources, work schedules, possible family obligations <p>Examples below include:</p> <ul style="list-style-type: none"> Lynne Kaine Agata Nowak 	<ul style="list-style-type: none"> Typically have diploma or degree from another Country Have several years experience Currently unemployed Looking for key or specialised knowledge or education to build a new career around Goals include establishing a career again Challenges include language, resources, family obligations, culturally differences <p>Examples below include:</p> <ul style="list-style-type: none"> Virginie NDouke Ahmad Al Shanani Sammie Maria Nour Odetalla Tyson Dimayuga Jenny (McGill Video) Sanaz (McGill Video) 	<ul style="list-style-type: none"> Typically have diploma or degree Have several years experience Currently unemployed due to workforce changes Looking for key or specialised knowledge or education to build a new career around Goals include establishing a career again Challenges include confidence, resources, understanding transferable skills <p>Examples below include:</p> <ul style="list-style-type: none"> Gerald Kuipers Victor (McGill Video)

Entry Level Career Builder

Olivier Legault

After completing his secondary 5, Olivier Legault did a CEGEP session before taking a break from his studies. He was tempted to travel around the world in a backpack afterwards but chose instead to return to class. A choice he doesn't regret.

To study at the University without graduating from CEGEP, Olivier Legault completed the ACCES-FEP program. This personalized program offered to the FEP allows you to acquire academic skills and then go to study in the program of your choice in our Faculty. "There is no single way to achieve your goals and it is quite appropriate to do otherwise. At that time, I didn't have much academic experience, the ACCESS-FEP program is extremely well done and reassuring. The teachers were clear, precise; there was no grey area in the teaching," says Olivier Legault.



Working full-time during his studies in the Access-FEP program, Olivier discovers that it is possible for him to take five courses per term. "I would get up early in the morning to work in a garage and during my breaks I would read. When I arrived home, everything was already organized when the organization had never been my greatest quality! Full-time studies forced me to organize myself to succeed. I found a lot of stuff, it also taught me to eat better, to manage my sleep better. I wanted to be successful. For me, it was like a chance to be there, I wanted to grab it and not miss it. »

"The ACCES-FEP courses brought me to the right place to pass the certificate of my choice. They allowed me to develop the skills required to continue my university studies. This program prepared me well to return to the certificate, but it was mainly the proximity to the people that I liked. In this program, I felt at home, in the right place, with people who had different lives. And I really took advantage of the fact that professors were accessible to ask them multiple questions, to ask them what they expected of me and how to succeed in university. »

After his successful studies in the ACCES-FEP program, Olivier entered the certificate in international cooperation. Interested in helping others, he chose this certificate that will lead him to find a job that meets his aspirations. "It made me feel like I was going to be useful and that's really what I was looking for. I felt like I could do the right thing and be able to help."

Olivier is currently completing his certificate. "I really enjoyed my program, when I came back in cooperation, I was looking for myself. With the teachers and the material I learned, it showed me that I was in the right place and that I knew what role I wanted to play as a cooperator and what I

wanted to do next.” says the student who will be going on an internship this summer in Africa with Quebec Sans Frontieres. This will allow him to have practical experience based on his theoretical experience.

What's next? Olivier Legault has just been accepted to the major in geography where he will continue his studies to obtain a baccalaureate by cumulative. After this successful return to school, he would like to pursue a master's degree in sustainable development. "Now I would like to study as much as possible. The work that the program requires through readings is exciting, both in what is mandatory and in what is not. It's all that side that I didn't think I liked and that in the end interests me the most, that is to say to discover and enrich myself as much as possible."

Trish Ashbee

For 22 years, she'd thrived in the bustling world of bars and restaurants, first as a server and bartender, and later as a senior manager.

"I never thought I'd leave the hospitality industry," she says. "It was all I'd ever known and the only thing I'd ever done."

But inevitably, life changed: Trish married and had a baby. "The hours were just not conducive to work-life balance," she explains. "As my daughter got older and had more things going on, I noticed I was missing out on more. I decided I needed to make a change."



Today, she works in the human resources department at Fraser Health Authority, supporting managers across the organization with staffing needs. She credits her smooth career transition to completing the Human Resources Management Certificate program: "It opened so many doors I didn't even know were possible. I wouldn't have these opportunities if I hadn't done the program."

Mid-Life Career Changers

Paul O'Connor

"A lack of formal education haunted me throughout my professional life. To advance my education, a new supervisory officer suggested that I take the OASBO Information and Communication Technology certificate program through the University of Guelph."

After completing the certificate, the program manager suggested that I would be a perfect fit for the diploma in School Board Administration program.

Paul Completed an additional six online courses and earned his diploma.

"When I started this journey, I doubted myself, didn't think I could do it. Well, I did it and doing it has given me the confidence to keep going.

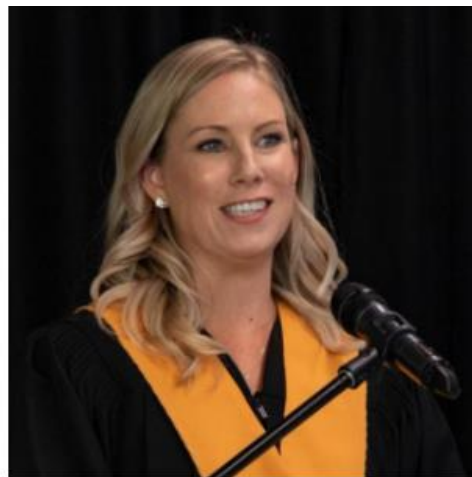
Paul is currently working towards earning a degree.



Sarah Bannerman

Sarah Bannerman graduated with a Diploma in Human Resources Management and aspires to be a supervisor or manager.

A single mother, the flexibility of Open Ed's courses allowed her to maintain a steady day job while pursuing a university education. "When I saw that I could attend university in the evenings, I took up the challenge," says Bannerman. "In a way, I wanted to show myself that I was capable of any goal, but also to show others that it can be done when you want it badly enough."



Mike

Michael has enrolled in Mount Royal University's cannabis education program. He is an English-speaking (92.3%), Canadian (91.3%), male (61.5%), and in his 30s (43.6%).

Mike is currently employed in the energy sector (16.3%). He has a high-school diploma (46.2%) and is self-funding his education (85.4%).

This is Mike's first course with MRU (84.2%). He discovered the cannabis program by conducting an internet search (62%) and then learned specific details about the program through MRU's website (40%).

MRU's reputation was a significant factor in Mike's decision to register in the cannabis education program (30.4%). However, the flexibility of the course offerings/online delivery was his primary reason for choosing MRU (42.4%) because he does not live in Calgary (66.67%).

Salwa El Alaoui

Salwa El Alaoui is a busy wife and mother of three who operates a licensed daycare from her home. Salwa is from Morocco, was once a ballerina, has a double master's degree in marketing and human resources, and worked in the corporate world until 2011 when she and her family moved to Canada. A few months after, her world was turned upside down when she learned that her 20-month-old son was on the Autism Spectrum.

She began her quest to find help and solutions to give her youngest son as close to normal life as possible. She discovered the University of New Brunswick's Autism Intervention Training Program (AITP). AITP is online, making it accessible and convenient for her to learn from her home.

The program teaches Applied Behaviour Analysis (ABA) effective treatment for individuals on the autism spectrum. "ABA is really about learning how to teach skills to be able to function in everyday life."

Today, Salwa is thrilled to share that her son is learning new skills. They continue to work on communication skills. He has learned to use a tablet with software to help him communicate when and what he wants to eat and when he needs to go to the toilet.

"After taking the course, I only see myself working with people on the autism spectrum."

Salwa plans to write the Registered Behaviour Technician (RBT) exam, so she has the certification to help others. Long term, she wants to help as many people as possible – no matter where they are in the world.

Edward Moore

"I am a geotechnical engineer. At OCAD U I got to interact and collaborate with my classmates and the professor constantly. It was great to have that dialogue going all the time and being able to learn from each other. When I'm being creative and doing art, I really feel like I'm 100% myself. I wish I could do that all day, every day. If someone was on the fence about taking a class, I would definitely encourage them to do so. I think it's a really inviting environment. There's no pressure. You can go at your own pace and it's a really great way to just test the waters and try out something that you've been interested in without the commitment of a university degree. I chose OCAD U because of their reputation for art and creativity."



Rod

[Click here](#) to hear Rod talk how he took his career to the next level.

Niki

[Click here](#) to hear Niki talk about how she achieved her personal goals and the goals of her clients.

Workplace Re-enterer

Erin Williamson

Ten years ago, Erin Williamson was a stay-at-home mom studying bookkeeping when her life abruptly changed. Her husband was involved in a tragic accident that left him emotionally paralyzed and diagnosed with PTSD. Williamson realized her husband would no longer provide for their family, so she immediately began looking for employment. Knowing she would only earn half the wage her husband had been making, it was what she had to do to get her family through the dark times ahead.

Williamson found a bookkeeper/controller position at an acid hauling company. The company was in the middle of a Certificate of Recognition audit with Energy Safety Canada and was in jeopardy of losing its certification. "I muddled through the audit and managed to demonstrate that the company was compliant with its health and safety management system and relevant legislation."



"My employer recognized my passion for workers' health and safety and offered to assist me in continuing my education. I chose UNB and enrolled in the online Certificate in Occupational Health & Safety (OHS)."

"While working full time and taking care of the needs of my husband and three children, I was able to work through the program and finish in good time."

Williamson went on to earn her Diploma in Occupational Health and Safety from UNB and took the Canadian Registered Safety Professional (CRSP) exam preparation course.

"On September 16, 2020, I took the hardest, most anxiety-driven [CRSF] arm of my life and passed with the help of the education I received through the University of New Brunswick."

Without her OHS education, Williamson says her employment and career would have been affected much more by the current economic climate and public health emergency (COVID 19)

"Over the last 10 years, my dreams in respect to my career have come true. I earn an excellent living at a Health and Safety professional employed full time, with many contracts on the side through my sole proprietorship. I hope my story is an inspiration to another who is facing challenges and looking for quality education to start or continue a career."

Jaime Wiebe

Jaime Wiebe Certificate in Adult Education Jaime Wiebe worked in finance and accounting. After having her first child, she realized she wanted to reinvent herself by exploring a more rewarding and fulfilling career.

Wiebe was passionate about teaching and helping others, so when the opportunity to work as a General Education Development (GED) instructor at a Women's Correctional Centre, she decided to go for it.

To enhance her skill set, she enrolled in the Certificate in Adult Education offered online through the University of New Brunswick (UNB). Although Wiebe considers herself a lifelong learner, she was a bit apprehensive when she started the program.

"I was concerned about being a little rusty. I feared that I wouldn't have the same experiences or the same freshness to academics as some of my fellow classmates," she explained. "On day one, that was all changed. I felt so welcomed."

Wiebe takes her courses online, and despite not being physically on the campus, she still feels part of the UNB family.

"I've made friends with people in the class. The professors have been remarkable," says Wiebe.

Wiebe acknowledges that the biggest challenge in taking online courses is the lack of face-to-face interaction with others, but at the same time believes this can be beneficial.

"It can also allow you to be open. Especially when you're touching challenging topic which may be difficult discussing in a face-to-face environment," she explains.

Learning online also gives her the flexibility she needs to work around her busy schedule as a full-time employee and a mother, wife, and homeowner.

"The flexibility of online learning allows me to advance my career and improve the experience of the students I work with. And because it's online, I work at my own pace and can give 100%.

She also urges other students not to be afraid of online learning.

"I would absolutely recommend online learning because it offers flexibility-you can work at your own pace on your schedule."

Thanks to the Adult Education program, Wiebe has gained valuable knowledge and applicable skills crucial in her daily interactions at work "The course has helped me understand the unique circumstances and situations of others. There are a lot of complexities, it can take an emotional toll, but this program has helped me to be better at what I do," she explains.

Wiebe also notes how the program has had an impact on some of her personal goals.

"I've learned more about myself, which has made me more confident.

"Returning to school is not as scary and intimidating as it seems. I know at first it can seem like a big step. but the hardest step is actually applying."

Kateryna

[Click here](#) to hear Kateryna talk about being a role model for her kids and showing them how important continuing education is.

Career Enhancer

Veronique Carbonneau

Véronique Carbonneau had specific professional ambitions, the FEP allowed her to realize them. Véronique Carbonneau had a specific project in mind: to help the children of the Lucien-Guilbault School for which she was a speaker. She coordinated the school's many activities. As a project to build a new school was coming, Véronique realized that eventually the school would need more material and financial resources in order to carry out all its projects. There was no one in the school to deal with the philanthropic side. Don't let that hold you back! Véronique took matters into her own hands and looked at how she could contribute to it. With a degree in psychoeducational intervention, she realized that in order to work effectively in search of grants, she would need to acquire new tools.



After researching the web, she realized that the certificate in philanthropic management was exactly what she needed. In this certificate, she took courses "that spoke as much about communication as positioning, project planning to make major campaigns."

Veronique had a very specific position in mind. To keep her busy, she was convinced that she could be even more effective in equipping herself to provide more creative, more innovative solutions. So she studied the different courses offered in our Faculty and chose one by one the courses that best met her professional ambitions. Véronique has built a tailor-made program in the certificate of individualized studies, with a profile in creativity and innovation. She took courses not only in creativity and innovation, but also in public relations and communication. She took advantage of the flexibility of the courses offered at the Faculty to build a certificate in her image.

Véronique also took advantage of the flexibility of the FEP's schedules to balance work and studies with other professionals. By day, Véronique was a specialist educator at the Lucien-Guilbault School. In the evening, she took practical courses at the FEP that allowed her to get a little closer to her final goal every day. Véronique "wasn't there to shovel clouds" and enjoyed taking practical courses that were well-established in reality. "This program allowed me to reflect on the different issues I encountered during the day at school and to work on it in the evening concretely in progress." By day, at school, she had no one to talk to about the various issues she faced. In the evening, in class, she could discuss it openly with her co-workers and benefit from fruitful exchanges with professionals in the field. She was also able to benefit from the support of the program manager Caroline Bergeron "very present with her students."

With her certificate in philanthropic management in her pocket, Véronique applied for a position as philanthropic director on the school's board of directors and "it worked really well because they preferred to have someone who knew the community and the young people well." For three years now, Véronique has held this position created especially by her and for her. "The certificate allowed me to get to where I am now, create a network and apply what I saw in class in my daily life." Soon, Véronique will graduate from a bachelor's degree by cumulative that she has built in her image to meet her professional goals.

Jonathan Howley

"I saw a large incoming wave of retirements and wanted to position myself as best I could for a promotion... I felt that taking (OASBO programs) demonstrated my commitment to professional development and my desire to be an effective leader at the TCDSB."

"I began this journey when my first daughter was just two weeks old. It was a challenge to get back into the school mindset while also raising my two girls. When my second daughter had health complications, the programs was able to accommodate and move some due dates without any issues. I am grateful for the support and understanding of my professors through these part four years."

"I began the sources as an officer and am now a senior manager. I have these courses in part to thank for that, as well as some amazing mentors from the TCDSB. These courses have given me insight into how all of our departments work together to provide the best learning environments for our students."



Elizabeth Manafo

“The Certificate in Knowledge Mobilization is an innovative program that has advanced my knowledge and skills as a modern-day social researcher.

I finished my Graduate degree nearly 10 years ago and was looking for a way to update and fine tune my skills, while building competence in the ever-novel areas of knowledge translation and mobilization. Each of the three courses presented material in an interactive format, making my learning experience tangible and engaging. The assignments were also based on the individual work I was already completing, which made the feedback and dialogue with instructors that much more useful. Through this Certificate I learned how to work better with other health professionals in promoting meaningful utilization of research findings.



As a self-employed individual, this Certificate is critical in keeping me competitive and up to date in the research world.”

Tanya Boteju

Vancouver high school teacher Tanya Boteju never imagined she'd become a published author so quickly. Just months after completing the Writer's Studio creative writing program at SFU, a major publishers snapped up her deputy young adult novel.

Released by Simon and Schuster in 2019, the novel tells the story of a queer teen who stumbles into the world of drag and unexpectedly finds a sense of belonging. It's received high praise from the likes of the American Booksellers Association and Ms. Magazine.

When Boteju began writing the book, she recalls that she found herself struggling to complete it. “I knew if I wanted to finish it any time soon, or be able to write consistently, I'd need some sort of structure. And I needed motivation.”



She chose the online version of the Writer's Studio so she could study and write on her own schedule while continuing to teach full time. Boteju says she also appreciated the program's lessons on the business side of publishing.

"I didn't know where I was supposed to go after I'd finished my manuscript. The Writer's Studio takes you through all that – and it worked for me, of course!"

Henry Saavedra

"I decided to start the certificate I had been thinking about it for months but due to I was busy at work I did not have the chance to start in winter. So I took the decision and I spoke with my boss that I will need some time to attend classes after work (By that time I was always working overtime, majority of time came back to home after 7 pm)." "During my enrollment in the construction management certificate was very motivated because all knowledge were applied on my work place, now I am waiting for answer of my APEGA application and the professional certificate will be part of this application and help me to become a P. Eng." "I was looking for a program that would bring me more knowledge and build a better skill into my career, as well have better opportunities in the Canadian workforce as overseas Civil Engineer"



Colleen Houston

Colleen Houston had already worked in communications for more than five years when she turned to UCalgary Continuing Education for professional development. She began by choosing courses from the Public Relations Certificate program, but soon discovered that she was more drawn to the marketing side of the field. That's when she transferred programs. As she was doing the certificate, in the various courses she was able to take existing projects from work and bring them to the course work, or vice versa, bring her course work to her existing projects. "For many reasons, I think this program has been more applicable to my day-to-day than my undergrad degree." "I would say to my instructors, 'what do you think about this?'... We'd go back and forth on it, and then I'd take that learning back to work, apply it to projects and have success.



Samantha Sadler

Samantha Sadler graduated from university with honours in psychology and has worked as a behaviour consultant for over ten years. Her work involves intensive behaviour intervention for high-risk individuals. She is passionate about Applied Behaviour Analysis (ABA) and how it can make a difference in her clients' lives.

"My first employer after university was not supportive of ABA. The population that I worked with was highly aggressive, and I knew ABA could help. I was young, new to the field, and not certified, and my employer disregarded my suggestions."



It was at this point that she realized she needed more education.

"My biggest challenge was finding a course that fit my needs. I did not want to take courses that were not relevant to my field. I was all about Behaviour Intervention, and that is what I wanted to learn."

When working with highly aggressive youth and adults, things come up, and your schedule changes every day. Samantha knew that having to go to class would not work, so she needed an online course.

"Hands down, the number one reason I chose UNB was because the course is flexible. I love that I can do the classes whenever I want. When things get busy and chaotic, I can pause my course, as long as I complete it by the end of the term."

Samantha says that since starting the program, she has gained so much knowledge and can apply the techniques she learns in class to her work.

"The program has helped me to build a network of professionals. If I am stuck on a case, I can reach out to others to ask if they have any insight. In the ABA field, no two cases are the same, so the more people you have that you can reach out to, the more likely you'll find a solution. ABA is all about helping people. We want to enrich the lives of others. If I can't do it, and my team can't do it, then you find somebody who can. It is a team effort."

"All the instructors have been supportive, especially through COVID. They know that I'm working in the field and understand there are times I need to prioritize my work. At UNB, they know the challenges of a mature student. And that is important."

Tariq Ali

Tariq Ali is a problem solver. It's both the thing he like most about his job and what made him excited about the courses in the Lean Six Sigma certificate he completed at SCS.

"What I realized after taking this continuing studies course is that if you're going to do problem-solving in an engineering role, you've got to do it scientifically: observe, create a hypothesis, design an experiment," he says.

The Lean Six Sigma courses were instrumental in helping Ali apply the knowledge he gained in his engineering undergraduate courses to his job as a quality assurance engineer. Their focus on using the scientific method also helped him avoid relying too much on potentially outdated information at work.

"You have people who are working in a company with 23 years of experience, which is great, but instead of just relying on them, you can come up with your own solutions because you have that scientific problem-solving mentality," he says.

Ali plans to continue to add to his education and skill set to help him prepare for whatever might come his way. "Things do evolve quickly, and your job might change. Learning new skills helps you with your own job and makes you better equipped in case you need to find another job late on," he explains.

Ali's next continuing education goal is to earn his Lean Six Sigma Green Belt.



Paula Shaver

With several professional certifications in her pocket, including a Lean Sigma Yellow Belt Certification, Paula Shaver is always keen to broaden her skill set, to advance her career, and to pursue opportunities that open additional doors for career - which lead her to UWinnipeg PACE.

Paula completed PACE's Management Certificate in 2018. Paula is a Client Account Manager at Manitoba Liquor and Lotteries, where she has worked for the past 26 years. She has been in her current position for the last two years.

Juggling a full-time job, small business, being a wife, the mother of three children between the ages of 9 and 19, and making time for the cottage and travelling with her family, meant Paula Shaver was looking for a program that met her needs when she decided to upgrade her skills.

"I loved the online PACE courses where I could work at a pace that suited my busy life 24/7 no matter where I was," she says. "My PACE experience gave me 'skills with oral and written communication and organizational behaviour; skills I could put to use every day."

"The best advice I can give others who are interested in PACE programs is just do it, take the plunge, you won't regret it. If you try to wait for a time in your life that you think will accommodate school, life will pass you by and you'll never reach your goals. PACE enables you to do it all."



Stacie Laurencelle

Stacie Laurencelle was looking for a competitive edge to enhance and align her wide-ranging experience when she took her Canadian Risk Management (CRM) designation at PACE in 2009.

"The small class size and the diverse perspectives and experiences of students enrolled in the program provided for meaningful discussions and understanding of risk," says Stacie, who has been the Manager, Insurance at Richardson International for the past five years.

In her role, Stacie manages, designs, and implements all lines of commercial insurance coverage for Richardson International and each of its subsidiaries. Putting the knowledge she learned at PACE to the test, Stacie also proactively assesses potential and emerging risks, by informing loss control activities, building risk awareness amongst staff through accountability, and providing support and training.



Aside from her duties at Richardson International, Stacie is a Director on the board of the Manitoba chapter of the Risk and Insurance Management Society, Inc. as well as the Manitoba chapter representative of the RIMS Canada Council, a standing committee of the Risk and Insurance Management Society, Inc. (RIMS).

"As a result of enrolling in the program, I have formed lasting friendships with classmates and experiences received mentorship from the instructors," says Stacie. "The learnings from our shared demonstrated that you're never too young or old to cultivate a meaningful career in Risk and Insurance. Risk Management practice is relevant to every position and organization."

Shirin Divanbeihui

"I'm a visual artist working in Toronto. I am also a museum educator at the Aga Khan Museum. I try different mediums. Currently, I'm working with needle felt techniques that I turn into stop motion animation. My education in visual arts was not very formal or academic, so I really needed to fill that void but in a more casual way and I found out about the Continuing Studies program at OCAD U. So far, I have taken Feminist Art Workshop, Writing Skills for Creative Professionals, and Collecting Contemporary Art. I was very satisfied. They were exactly what I was looking for, very academic, full of lectures, lots of readings, really exactly what I needed in an informal setting. The instructor for the Collecting Contemporary Art course was very resourceful, very informative, and she worked as a consultant, so she was really in the field."



Jamie Anderson

[Click here](#) for a Q & A with Jamie Anderson and see how investing in her education will continue to be a part of her journey.

Rosalia

[Click here](#) to hear Rosalia talk about how she took her skills and confidence to the next level.

Equity Seeker

Tyrell Jake Sinclair

"The skills I've learned allowed me to train my successor in my management role as well as lead my new organization. It also helped me in the other work that I do for my communities. I sit on several boards that serve the best interest of my First Nation and the City of Regina. I have gained the confidence to share my thoughts on what is the best direction for the long-term sustainability of the community. I continue to educate myself with class offerings and programs at CCE because you get a lot of people skills that you don't always get a chance to develop."



Part-timer

Lynne Kaine

The inspiration for Lynne Kaine to go back to university started because she was working with the City of Saint John for 20 years in a variety of roles and believed it was time to advance her career, but needed more education.

In the fall of 2014 she enrolled in the Bachelor of Integrated Studies (BIS) program at the University of New Brunswick (UNB). She learned about the BIS through her HR manager, who thought it would be a perfect fit for her.

"I knew this was the best way to advance my career and was determined not to let doubt or fear stand in the way."

For Lynne, it took a tremendous amount of courage to overcome the challenges associated with returning to school as an adult learner, but what was more laudable was the strength she found in her family and support at her organization.

One major challenge Lynne encountered during her first year was the thought of going back to school after 30 years and having to sacrifice family time for her academic studies.

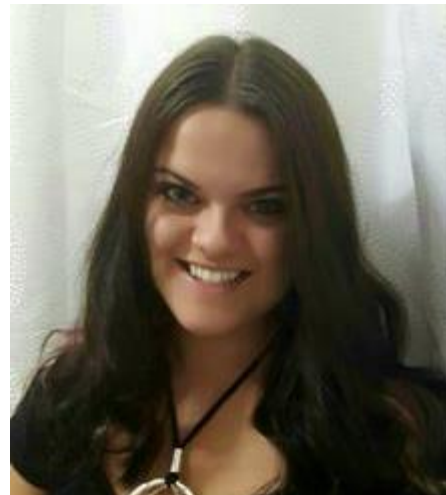


"I talked to my family, I said there was going to be a serious imbalance when I go back to school, and that's just the way it has to be because the way that I study is all or nothing. If a class were in the daytime, my boss would allow me to go and take the course and then come back to work and then make up the time at the end of the day."

Regardless of the challenges faced with pursuing an education while working full-time and being a single parent, Lynne was very thankful for the guidance from her UNB academic advisor the UNB resources that were available to assist her in completing her program.

Agata Nowak

At the Faculty of Arts Convocation Ceremony on October 26, 2019, Agata Nowak was "thrilled" to receive the J.D. Leslie award, while her husband and young daughter looked on proudly and her fellow graduates applauded her inspiring journey. The Prize represents outstanding achievement in an undergraduate degree earned primarily through online courses. This year's winner is many things: new Canadian, wife, mother, full-time worker, housekeeper, gardener, half-marathon runner, weightlifter and now a University of Waterloo Graduate.



Her journey truly demonstrates a dedication for lifelong learning. When Aga (as she prefers to be called) left her native Poland to move to Canada at the age of 20, she thought she had to give up her dream of getting a degree. In 2010, newly pregnant and working full-time, she decided to once again pursue that dream, determined to be a better role model for her daughter, and make her parents proud. Aga believes "they were always secretly skeptical about my chances of graduating from university after moving to a different continent."

She found the opportunity at the University of Waterloo – in her words "the most prestigious university that offered entirely online degrees" – and began her part-time studies, studying mostly at night, after the rest of the family had gone to bed.

Despite the language, economic, and cultural barriers she faced as a new immigrant, she was determined not only to succeed, but excel, and she did, completing her Honours Bachelor of Arts degree in English Literature, and graduating in Winter 2019, on the Dean's Honours List with a 90.35 average.

When asked about her favourite courses she says "My two absolute favourites were American Lit and Popular Potter – the latter was my very last course, an elective that I took for the sheer pleasure of it. As a lifelong Harry Potter fan, I loved being Sorted into Houses and finally finding out what my Patronus was. And the exam was the best. I took it at one of UW's exam centres, so

the students were all from different disciplines. Depending on the course, some of us were allowed to bring aids. My aids were all seven Harry Potter novels, which I meticulously lined up on my desk. There wasn't one person who didn't do a double take as they walked past me. Before I knew it, the whole room was engaged in a lively discussion about Harry, which completely eradicated my pre-exam jitters."

Aga firmly believes studying online was the only way she was able to reach her dream of earning a University Degree. It requires self-discipline, but "online education lets you work toward a better future while keeping up with the present."

Over the 9 years it took to complete her degree, the support of her family and friends was crucial. "I was fortunate enough to have Canadian friends who refused to listen to my 'English-is-not-my-first-language' excuses" she explains "they encouraged me to apply and cheered me on through the years."

Aga would also like to thank those who were instrumental in her academic success, in particular Professors Jay Dolmage, Victoria Lamont, and Jennifer Harris, for their support and guidance, and whose connection as advisors and instructors transcended what she thought possible online.

Her advice to other people who are considering going back to school: "If you want a degree, you can absolutely get it. No matter how many conflicting responsibilities you have, you can make it work. You can overcome any obstacles in your way. How do I know? Because if I can do it – a new Canadian, wife, mother, full-time worker, housekeeper, gardener, half-marathon runner, weightlifter – then you can do it too!"

New Canadians

Virginie NDouke

Virginie Ndouke dreams of opening her own daycare and for this she chose to study at the FEP.

In another life, Virginie Ndouke worked in the field of business management and accounting in Cameroon. Two years ago, Virginie moved to Quebec with her husband and granddaughter. She then chose to change her career path and turn her love for children into a profession. To acquire practical skills, she enrolled in the certificate in early childhood and family: education and early intervention.

His dream is to one day open his own daycare. And before that, to gain experience, she would like to work in a CPE.



When Virginia came to THE FEP, she enrolled in full-time courses. During the certificate, she became pregnant. The flexibility of the FEP's schedules has allowed it to easily adjust its number of courses. She reduced the number of her courses and took only two. This session, she completes her certificate which she was able to spread over 2 years. During the day, she takes care of her two daughters and works a little in accounting. Virginia chose the FEP to be able to "have time during the day for family life."

Virginia describes her time at the FEP as a "very good experience." "I really enjoyed my certificate courses and especially the ones we did on child development, on observation, on intervention. Even did not have to work in the field of early childhood, I would have been very happy to have had that training. Many of my friends are mothers and have questions. Now I can give them many more theoretical advice following my training".

Within the FEP, Virginia "particularly appreciated the availability of teachers, and the fact that this training is very practical." She will be able to apply her skills directly. "Now I feel able to sit with children and practice concretely." In addition, she tells us, "I am proud of this training which has also allowed me to better understand myself."

Virginia would recommend the certificate for someone who wants to work and study with fairly flexible schedules. She particularly recommends it to women who have children: during the day they will be able to take care of their children and in the evening they will be able to attend classes. "When you want to balance work and family, that's what the FEP is for!"

Ahmad Al Shanani

“My name is Ahmad Al Shanani. I am from Syria. It was very hard and painful to leave the country that we were born in and grew up in.”

Ahmad is currently studying English as an additional language at MacEwan SCE.

“One day in November 2015, my family and I were at the lunch table having lunch together. My father’s phone rang, and a woman on the other side said, I am from the UN and I have your file. I am calling to let you know that you are eligible to travel to Canada.”

A call that would change their lives. Ahmad and his family traveled almost 10,000 kilometers to Canada and arrived in Edmonton on February 15, 2016.

After completing additional high school courses, Ahmad knew he wanted to continue his education. Learning English and adapting to a new country is no easy feat, but with the support of his family and new friends in the community, Ahmad came to MacEwan and is working to complete his English studies.

What’s next for Ahmad? “After I finish EAL, I will do my upgrading here. I am also thinking about studying business at MacEwan University. I am happy to be a MacEwan student and am looking forward to my dreams coming true”. Ahmed plans to one day publish his story to inspire others to pursue their educational goals.



Sammie

My name is Sammie, I completed the university preparation program in MacEwan university in Winter 2018. I'm an international graduate in Business Administration with years of experience in pharmacy and health care market sector. However, after moving to Canada in 2016, I decided to change my major and set a new goal for myself to achieve academically and ultimately as a professional in the Canadian work force market. The new path forward I chose is in Healthcare science and is pretty different from my business background. That's why I needed to take preparation courses as prerequisites of the science program.



What helped me the most is that MacEwan university had some sort of alignment with the universities who offer undergraduate and graduate degree programs in different majors in Alberta and provided the list of pre-req courses you needed to take in order to apply for those programs or universities. I'm so glad that I could learn about the university preparation program offered by MacEwan university and that I could get full benefits of this program. I'm on my way to pursue my exciting plans for entering to a professional Healthcare program.

One great thing about the MacEwan Preparation program for me was that It gave me a chance to get involved in an environment with different ethnicity and nationalities that myself and as I was learning my academic subjects and English skills I also could learn about the value of an inclusive community.

Maria

Leaving a life behind and starting from scratch almost a new life in a different place, where we need to adapt to a new culture, language, customs, etc., is one of the biggest challenges most immigrants face every day. Nevertheless, this can also be an opportunity to show ourselves what we are made of.

Canada has too many things to offer us, and to move forward. The best start is to learn the language if we already do not speak it, which was my case, which in some ways puts us at the bottom of the ladder before we have a chance to even venture out into our new world. Learning a new language not an easy road, but not impossible to walk either. Lots of patience, discipline and support are required through the process, but especially at the beginning. Fortunately, I found lots of support with the MacEwan University ESL Program.



I started my English program in 2016 and completed it in 2018, mostly studying on a part-time basis while looking after my family and navigating my new world, Canada. Throughout my ESL program I met wonderful, caring, and highly qualified ESL instructors. In 2018, once the ESL portion was completed, I started looking for the next chapter of my life which turns out I got accepted into the paralegal studies program at MacEwan. Why Paralegal Studies? Because it is related to my previous professional background, Law. Additionally, paralegal studies are highly competitive and though it I hope to gain more insight into Canadian laws and hopefully be able to contribute and give back to my new community, my new home and my new society. I am also hoping to be able to help new immigrants, who like me, one day arrived into a new world: the immigrant world. I am a wife, mother, worker, and a student and throughout this process, like many others we go through ups and downs. One day wanting to eat the whole world and other just wanting to give everything up.

Finally, I can feel and see the light out of the tunnel, reaching the next step of completing some schooling in my new home is within reach and hope to tap into the opportunities Canada has to offer to new Canadian. Many thanks to MacEwan and all the wonderful people I found through my journey, teachers, support workers, front desk, career advisors, etc. I can see a brighter future in Canada thanks to all the sacrifices I have made and the support I have received from MacEwan University.

Nour Odetalla

When former IT professional Nour Odetalla and her young family immigrated to Canada, she knew relaunching her career would be a challenge.

“I wanted to go back to work but all my IT experience was outdated,” she explains. “So, I thought about my skills, background, and schooling. It all directed me towards data analytics.”



Setting her sights on data analytics was a start, but Odetalla still struggled to get her foot in the door. “I didn’t have any Canadian references and my resume was outdated. I started applying for jobs, but I never even got called for an interview,” she says.

Eventually, she secured a co-op with Staples Business Advantage through a newcomer program. When that opportunity turned into a contract Odetalla knew she was on the right track. She looked for more opportunities to strengthen her knowledge and found the School of Continuing Studies’ Data Science Program.

During her second SCS course, Odetalla asked her employers if she could apply an idea she had for her final course project to their data. “That little idea that I had is now a standard marketing strategy,” Odetalla says. “I went from a temporary contract to being a full-time employee and from being an analyst to a senior analyst on the team. So it just paid off really well,” she says.

Odetalla’s advice to anyone on a similar journey is to be persistent. “As a newcomer, you always get to tell your own story. Never give up.”

Tyson Dimayuga

I was an experienced banking professional in Manila before moving to Toronto in the summer of 2016. In September 2016, I started my Certificate in Business Administration part-time online program with McMaster Continuing Education. Later that year, I landed a full-time job in one of the major banks.

Like most newcomers, I had my fair share of challenges settling in. At that point, I was juggling studies, work, and adapting to my new home. Initially, I found online learning more challenging. As an adult student, I was more accustomed to an in-person, more traditional teaching style. However, my instructors and the user-friendly online platform helped me adjust to this new learning approach.



The program gave me an understanding of the Canadian business landscape and organizational structures. I also credit my course work with improving my analytical and communication skills, which I applied in the workplace. When I finished my Certificate program in 2020, I reassessed my professional goals and decided to further my studies to earn a Diploma in Business Administration – Marketing, again with McMaster Continuing Education.

While studying, I took on the role of a digital content volunteer at the YMCA in the Greater Toronto Area where I currently develop blogs and online posts focused on newcomer settlement and job search strategies. My volunteer work allows me to apply the practical, real-world knowledge I learned from my strategic marketing communications and social media marketing courses. I can proudly say that my McMaster Continuing Education programs have helped me to excel professionally and contribute to community building.

I wanted to share my story with aspiring adult learners, especially newcomers wanting to pursue continuing education, to show them how learning and career goals can align with each other. You can connect with academic advisors and people working in your desired field which helps you gain insights into your targeted professional roles.

McMaster Continuing Education programs deliver quality courses and offer flexibility. The programs allow you to expand your knowledge and skills while enriching your personal and professional development. The instructors' real-life teachings and experiences equip you with relevant and up-to-date learnings. The flexibility in schedule and program delivery enables you to balance your personal, social, and professional responsibilities without sacrificing your continuing education goal.

This year, I am graduating from my second McMaster Continuing Education program; this is a testament to the idea that continuing education is attainable by establishing goals and perseverance. If I can do it, so can you. The lifelong learning journey is challenging yet rewarding.

Jenny

[Click here](#) to hear Jenny talk about how she built a successful career after moving halfway across the world.

Sanaz

[Click here](#) to hear how Sanaz used her background in IT and software engineering to add even more knowledge and experience to her toolkit.

Displayed/Unemployed

Gerald Kuipers

[Click here](#) to read how Gerald incorporated continuing education throughout different stages of his career.

Victor

[Click here](#) to hear how Victor transferred his skills and reimaged his career.

Addendum 7– Supporting Workforce Development over a Lifetime: Ecosystem Considerations

Industry 4.0 has and will bring about significant changes to the prerequisite skills and competencies of the 21st century workforce. The pandemic has fast tracked the move towards a more distributed global workplace. The adoption of digital technologies, artificial intelligence, machine learning, and big data in sectors like Advanced Manufacturing will further revolutionize production/design efficiencies while vastly improving environmental sustainability goals (Pitsis et al 2020; Krafft et al 2020). These advancements do come at a cost; the rate of change is outpacing the rate of education skills training being offered by colleges and universities, resulting in an ever-widening skills gap. Global events over the past 12 months (i.e., since March 2020) have accentuated this trend.

It is time to rethink the ecosystem that supports workforce development and lifelong learning in Canada and to create an ecosystem that supports the continuous cycles and overlap between learning and work. Over the next 5 years government, industry, and the post-secondary sector will need to work together in order to create a responsive workforce development system to ensure Canada's continued economic success and growth.

The 4th Industrial revolution will redefine the nature of work through radical digital innovation across multiple sectors (Przybilla et al 2020). With it comes a shift in towards a knowledge economy where innovation will need to be balanced with thoughtful policies and investments. 21st century changes to the future of work and skills development include:

- Greater dependency on a **global economy**
- Move towards a more **distributed (remote) workforce**
- An increase towards **greater knowledge sharing** among sectors and disciplines
- Dependency on a **mobile and skilled workforce**
- **Reduced half-life** of skills and competencies requiring:
 - Clear articulation of skills and competencies
 - Greater access to **short and affordable upskilling and reskilling** programs
- Renewed commitment to principles of **lifelong learning**

Key Considerations in the Creation of a Robust Workforce Development Ecosystem

Call for a National Qualification Framework (inclusive of short-cycle micro-credential and non-degree programs)

There is a pressing need for greater standardization of practise and greater consensus on the use of terms. In many international jurisdictions, this has been accomplished through the creation of a national qualification framework (e.g. Australia, Singapore, New Zealand, and UK). In Canada, a qualification framework for degrees was completed in 2007. The 2007 Canadian Degree Qualification Framework outlined national academic standards that permit the assessment and cross comparison of undergraduate and graduate degree programs across Canada. The framework has enabled improvements to academic quality assurance by facilitating a pan-Canadian alignment of degree programs among various provincial jurisdictions. Currently no national qualification framework exists for non-traditional (e.g., micro-credentials and non-degree credit certificates) programs.

Given that a preponderance of upskilling and reskilling programs are non-degree, with a majority being issued as certificates, the need to develop a consensus on the use of terms, with the aim of working towards a national framework, is critical. The lack of a national consensus of what defines a non-traditional credential (e.g., contact hours of instruction/learning or the clear articulation of skills and competencies) reduces the value of currency for a credential earned, particularly outside of the jurisdiction where it was developed. This loss of national currency impacts the portability of learning outcomes associated with the credential. This lack of consensus in taxonomy also impacts the effective rollout of micro-credentials, given that most are

currently being developed using provincial frameworks and funding models. This is posed to limit access to upskilling and reskilling programs. There is growing recognition that a non-degree/micro-credential national framework is needed. The development of a national framework would also improve quality assurance related to the coupling of university academic standards with the required skills and competencies defined by industry.

Need for a Technology Infrastructure to support Digital Transcripts and Digital Credentials

One of the implicit outcomes of the 4th Industrial 'knowledge based' revolution is the need to develop short-cycle skills training programs that address the ever-evolving needs of a digital economy.

The value of these upskilling and reskilling programs will be determined on how relevant, recognized, and portable they are across multiple sectors and jurisdictions. In order to achieve this, programs will need to define attained skills and competencies (i.e., level of proficiency) upon completion. In addition, the learner will need to have a detailed record of their achieved outcomes. This type of detailed record goes beyond the traditional university parchment or transcript by verifying and validating skills and competencies achieved by the learner. Currently many student record systems in use do not have the ability to provide this level of detail to learners. There are currently two examples of technologies, that when used together could enable the creation of portable and verifiable official transcripts, credentials and micro-credentials:

- **Digital badge applications:** Digital badges are used to verify, recognize, and document the successful completion of a micro-credential. One of the most critical aspects of digital badges, and what distinguishes them from traditional transcripts, is their ability to store secure metadata pertaining to verified learning outcomes in a manner that enables portability and transferability. In 2019, the International Council for Open and Distance Education (ICDE) established guidelines and recommendations for creating and issuing digital badges (Matkin 2019). Part of the recommendations called for the mindful and conservative use of digital credentials in order not to devalue the concept of badging. This is particularly important given the scale of digital badges can range from recognizing learning outcomes attained from a micro-course to recognizing learning outcomes attained in a complete program of study. Digital information embedded in the metadata of a badge, which represents the attained competencies, and can be used by employers and automated search systems. Although, the efficacy of digital badges as a means of transforming recognition of learning in higher education is still too early to determine (Roy and Clark 2019).
- **Block-chaining technology:** The use of block-chaining in the credentialing ecosystem has been proposed as a means of democratizing formal learning. Specifically block chaining can provide a secure digital record of all accredited learning across a multiple providers (i.e., colleges and universities). As a digital management system, it enables the portability of articulated earned skills and competencies by the learner in a manner that is secure. In recent years, there have been a number of attempts to use block chain technology (e.g., McMaster's MacChangers engineer program) however, wide spread adoption has not occurred mainly due to system and resource concerns.

Interestingly, the Association of Registrars of the Universities and Colleges of Canada (ARUCC) announced in December 2020, the official launch of a national, bilingual credential wallet to be offered on the MyCreds platform (retrieved from www.mycreds.ca/news/, March 29, 2021). Their website claims, MyCreds uses block-chain technology to verify transcripts and credentials and as a built in digital badging application. Further, with the support of over 30+ Canadian institutions already committed to implementing the platform, the importance of defining a qualifications framework and nomenclature for non-degree learning is even more pressing.

Triangulation of Processes, Policies and Funding

Three of the barriers to creating an agile workforce development ecosystem, that supports the upskilling of individuals within their fields and reskilling of individuals as they pivot or change careers, include:

1. Limited access to responsive “just in time”, quick to market programming. Individual post secondary institutions (PSI’s) including universities, colleges, polytechnics and CEGEPs, typically create their own short-cycle programs in a cost-recovery or revenue generation model. The model is not efficient and benefits learners in urban areas with access to PSI learning. PSI’s will often develop the programming for online learning, however the marketing and promotion costs to recruit students to from regions beyond their brick and mortar locations is often cost prohibitive.
2. Lack of funding models for students. Non-degree programs often have limited funding opportunities based on the programs being defined as part-time or not leading to a degree.
3. Employers are often cautious when asked to accept work placement students or to hire a mid-career worker who is displaced and transitioning between fields of practice. Employer identify this as a risk and often as “extra work”. This barrier is more significant for small/medium sized organizations.

A trifecta of initiatives, working in tandem to address these barriers, are being tested and explored through supporting projects with the Future Skills Centre, various Federal and Provincial government agencies and post-secondary institutions. These include:

1. Publicly funded initiatives, which would draw upon the collective expertise of all publicly funded post-secondary institutions in the development of upskilling and reskilling programs. This has been implemented in a number of provincial jurisdictions, with funding support to create workforce development micro-credentials. It is suggested that there may be an opportunity to set expectations through this

competitive proposal process that the curriculum created with targeted public funds would be shared by publicly funded institutions.

2. Student funding models could provide learners with tuition vouchers, grants, or access to student loans for short-term programs that align with current labour market needs.
3. Financial supports that support student work integrated learning placements, reducing the cost to employers who accept student workers have been expanded significantly in the past year. Based on collective experience supporting and working with transitioning individuals, it is strongly suggested that additional employer incentives are needed to change paradigms and recruitment behaviour associated with mid-career transitioning workers.

Federal Public Policy Considerations

The federal government has a significant potential role in the workforce development ecosystem. Governmental investment in upskilling and reskilling Canadians — similar to those in post-secondary education — involves investing in the upfront costs. These investments bring net-economic benefits over a medium and long-term. By spending now to reverse trends in unemployment and underemployment, governments reduce long-term reliance on social supports, boost productivity, raise future wages and, by extension, generate increased tax revenue.¹² In addition, there are numerous non-economic social benefits arising from developing a strong, stable, future-proof workforce.

Post-secondary education is an area of overlapping jurisdictions in Canada. And while education is seen primarily as provincial jurisdiction, workforce development is a shared responsibility with the federal government. One key mechanism of inter-governmental cooperation on workforce development is the federal-provincial Workforce Development Agreements (WDAs). In addition to WDAs, both provincial and federal governments pursue their own programs to support workforce development, often tailored to the outcomes or groups they judge warrant additional support.

Investments in workforce development from both levels of government are desirable and beneficial, but they are subject to jurisdictional limitations. For instance, provincial funding is inherently limited in its ability to respond uniformly to national events, such as economic depressions and recessions (pandemic related or otherwise). Provincial funding is also generally limited in its ability to incentivize inter-provincial cooperation between institutions.

¹² World Economic Forum (2019). Towards a reskilling revolution. From http://www3.weforum.org/docs/WEF_Towards_a_Reskilling_Revolution.pdf

As an example, consider the development of upskilling and reskilling curricula. Creating new curriculum is one of the most significant capital costs for UCEEU. While the same skills (e.g. HTML) may be taught across the country, absent cooperation, each UCEEU independently develops similar course materials. This duplication further creates obstacles for employers recognizing and validating credentials from institutions they may be less familiar or experienced with.

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Appendices

Appendix A – CAUCE 2021 Annual Survey Results



Appendix B – UCEEs in Canadian Universities

University Name	CAUCE/ NON-CAUCE	Continuing Education Unit Yes/No/Unknown	Centralized, decentralized, or unknown – CE units
British Columbia			
Vancouver Island University	Non-CAUCE	Yes	Unknown
Capilano University	NON-CAUCE	Yes	Unknown
Royal Roads University	CAUCE	Yes	Decentralized
Simon Fraser University	CAUCE	Yes	Centralized
Trinity Western University	NON-CAUCE	No	N/A
Thompson River University	NON-CAUCE	Yes	Unknown
University of the Fraser Valley	NON-CAUCE	Yes	Unknown
University of British Columbia	CAUCE	Yes	Unknown
University of Northern British Columbia	CAUCE	Yes	Decentralized
University of Victoria	CAUCE	Yes	Decentralized
Saskatchewan			
First Nations University of Canada	NON-CAUCE	Unknown	Unknown
University of Regina	CAUCE	Yes	Decentralized
University of Saskatchewan	CAUCE	Yes	Unknown
Alberta			
Athabasca University	CAUCE	No	N/A
Augustana University College	NON-CAUCE	No	N/A
Concordia University College of Alberta	CAUCE	Yes	Unknown
The King's University College	NON-CAUCE	No	N/A
University of Alberta	CAUCE	Yes	Centralized
University of Calgary	CAUCE	Yes	Hybrid

University of Lethbridge	CAUCE	Yes	Centralized
MacEwan University	CAUCE	Yes	Centralized
Mount Royal University	CAUCE	Yes	Centralized
Manitoba			
Brandon University	NON-CAUCE	No	N/A
University of Manitoba	CAUCE	Yes	Centralized
University of Winnipeg	CAUCE	Yes	Decentralized
Canadian Mennonite University	NON-CAUCE	Unknown	Unknown
St. Paul's College	NON-CAUCE	Unknown	Unknown
Université de Saint-Boniface	CAUCE	Yes	Decentralized
Ontario			
Algoma University	NON-CAUCE	No	N/A
Brescia University College	NON-CAUCE	Unknown	Unknown
Brock University	NON-CAUCE	Yes	Unknown
Carleton University	NON-CAUCE	Yes	Unknown
Dominican University College	NON-CAUCE	Unknown	Unknown
Huron University College	NON-CAUCE	Unknown	Unknown
King's University College at Western University	NON-CAUCE	No	N/A
Lakehead University	NON-CAUCE	No	N/A
Laurentian University	NON-CAUCE	Unknown	Unknown
McMaster University	CAUCE	Yes	Centralized
Nipissing University	NON-CAUCE	Unknown	Unknown
OCAD University	CAUCE	Yes	Decentralized
Queen's University	CAUCE	Yes	Unknown
Redeemer University College	NON-CAUCE	No	N/A
Royal Military College of Canada	CAUCE	Yes	Centralized
Ryerson University	CAUCE	Yes	Decentralized
Saint Paul University	NON-CAUCE	Unknown	Unknown
St. Jerome's University	NON-CAUCE	Unknown	Unknown
Trent University	NON-CAUCE	No	N/A
University of Guelph	CAUCE	Yes	Decentralized
University of Ontario Institute of Technology	NON-CAUCE	Unknown	Unknown
University of Ottawa	NON-CAUCE	No	N/A
University of St. Michael's College	NON-CAUCE	Unknown	Unknown
University of Sudbury	NON-CAUCE	Unknown	Unknown
University of Toronto	CAUCE	Yes	Decentralized
University of Trinity College	NON-CAUCE	No	N/A
University of Waterloo	CAUCE	Yes	Centralized

University of Western Ontario	CAUCE	Yes	Centralized
University of Windsor	CAUCE	Yes	Centralized
Victoria University	NON-CAUCE	Unknown	
Wilfrid Laurier University	CAUCE	Yes	Unknown
York University	CAUCE	Yes	Decentralized
Québec			
Bishop's University	CAUCE	Yes	Decentralized
Concordia University	NON-CAUCE	Yes	Centralized
École de technologie supérieur	NON-CAUCE	Yes	Unknown
École nationale d'administration publique	NON-CAUCE	Yes	Unknown
École Polytechnique de Montréal	NON-CAUCE	Unknown	Unknown
HEC Montréal	NON-CAUCE	Yes	Unknown
Institut national de la recherche scientifique	NON-CAUCE	Unknown	Unknown
McGill University	CAUCE	Yes	Decentralized
TÉLUQ	NON-CAUCE	Yes	Unknown
Université de Montréal	CAUCE	Yes	Decentralized
Université de Sherbrooke	NON-CAUCE	Yes	Unknown
Université de Québec	NON-CAUCE	Unknown	Unknown
Université du Québec à Chicoutimi (UQAC)	NON-CAUCE	No	N/A
Université du Québec à Montréal (UQAM)	NON-CAUCE	Unknown	Unknown
Université du Québec à Rimouski (UQAR)	NON-CAUCE	Unknown	Unknown
Université du Québec à Trois-Rivières (UQTR)	NON-CAUCE	Yes	Unknown
Université du Québec en Abitibi-Témiscamingue (UQAT)	NON-CAUCE	Yes	Unknown
Université du Québec en Outaouais	NON-CAUCE	Yes	Unknown
Université de Laval	NON-CAUCE	Yes	Unknown
P.E.I.			
University of Prince Edward Island	CAUCE	Yes	Unknown
Nova Scotia			
Acadia University	CAUCE	Yes	Centralized
Cape Breton University	NON-CAUCE	No	N/A
Dalhousie University	CAUCE	Yes	Decentralized
Mount Saint Vincent University	CAUCE	Unknown	Unknown
NSCAD University	CAUCE	Unknown	Unknown

Saint Mary's University	NON-CAUCE	Unknown	Unknown
St. Francis Xavier University	CAUCE	Yes	Centralized
Université Sainte-Anne	NON-CAUCE	Yes	Unknown
University of King's College	NON-CAUCE	Unknown	Unknown
New Brunswick			
Mount Allison University	NON-CAUCE	Unknown	Unknown
St. Thomas University	NON-CAUCE	Unknown	Unknown
Université de Moncton	CAUCE	Yes	Centralized
University of New Brunswick	CAUCE	Yes	Decentralized
Newfoundland and Labrador			
Memorial University of Newfoundland	NON-CAUCE	No	N/A

Appendix C – Data Collection Instruments

List of Data Collection Instruments Included in Appendix C	
I.	CAUCE Member Programming Survey
II.	CAUCE (English) Annual Survey
III.	CAUCE (French) Annual Survey
IV.	CAUCE University Interview Questions for ESDC Report
V.	Non CAUCE University Interview Questions for ESDC Report
VI.	Google Survey – Sent to both CAUCE and non-CAUCE individuals who were interviewed

I. CAUCE Member Programming Survey – July 2020

Subject	Questions
1. Credential Name	What is the official name of the credential (e.g. computer networking specialist certificate)?
2. Credential Type	What type of credential is associated with the program? For a list of credential types, please view the variable definitions cells below.
3. Program Description	A brief description to help better detail the program. Be sure to include if this is a boot camp, webinar, seminar, etc. or any other pieces of information that inform. Example: The computer networking specialist certificate program is delivered online over a three day period through a webinar. The program costs \$750 and results in a certificate.
4. Program Website	A direct link to the program website.
5. Typical Program Duration	How long do students typically spend in the program? Time to complete as well as instructional hours (if appropriate) If the program is new or you are unsure of the average length, please estimate.
6. Program Sector	In what sector is the program offered? Potential sectors include healthcare, advanced manufacturing, and technology, among others.
7. Program Location	Where is the program offered? If offered online, where is the institution located?
8. Delivery	How is the program delivered? If the program is delivered in multiple formats (e.g. online

	and in-person) please input the program for each delivery type
9. Program Cost	Please provide all detailed costs for students associated with the program. This would include, but not be limited to, registration fees, application fees, and any materials a student may need to buy, among others.
10. Frequency of Offering	How often is the program offered?
11. Next Start Date	What is the calendar date of the next program offering?
12. Capacity	Capacity refers to the total capacity for each offering series or cohort, rather than over a specific span of time
13. Contact Person Name	The name of the best contact for the program.
14. Contact Person Email	The email of the contact person previously listed.

II. CAUCE (English) Annual Survey



III. CAUCE (French) Annual Survey



IV. CAUCE University Interview Questions for ESDC Report

Project Background

To support the evolving need of adult learners as they navigate their careers and the changing workplace, federal leaders have prioritized the development of job transitioning programs and funding opportunities. This need has been amplified by the significant increase in unemployment due to COVID. To ensure the best cost performance and provision of current and predicted skills to learners, a better understanding is needed of the adult learning programming offered at Universities. A comprehensive and geographically diverse scan of the adult learning ecosystem in close to one hundred Universities across Canada, this research project will provide an inaugural and informative overview of the Canadian University Continuing Education/Extension landscape.

Knowledge Gaps:

1. Canadian Universities role in adult Upskilling and Reskilling
2. The breadth of short-cycle courses and micro-credentials available at Canadian Universities
3. Canadian Universities role in providing flexible and accessible options to underrepresented and equity-seeking adult learners

Audience: Employment and Social Development Canada (ESDC)

As requested in the recent CAUCE annual survey, additional information to support our action above will be beneficial.

Validate Survey Data

1. What is being offered today by your University Continuing Education/Extension Department (s)?
 - a. Types of offerings
 - b. Nomenclature (Certificate/diplomas of achievement, extension, attendance etc.)
 - c. Programming areas/field of training programs by institution/geography
 - i. certificates, other micro-credentials
2. Volume and delivery modality of University Continuing Education activity
 - a. # of enrollments
 - b. Total instructional hours or course/program contact hours (estimated learning hours)
 - c. Is your non-degree credit enrolment data reported to your provincial government?
 - d. Is your non-credit enrolment data reported to your provincial government?
 - e. Delivery modality

- i. What percentage of your non-credit courses are delivered in the following formats? (25%, 50%, 75%, 100%)
 - Face to face, classroom participation?
 - Fully online education?
 - Blended or hybrid (between 50% and 80% of the course is delivered completely online)
3. What amount of training offered is recognized by professional associations/ accreditation bodies?
4. Are there ways in which you address key accessibility issues for adult learners?
 - a. Access to supports examples
 - i. Writing supports
 - ii. Numeracy supports
 - iii. General study and learning skills
 - iv. Employment readiness and job search skills
 - v. Mental health supports
 - vi. Language training
 - vii. Skills for adapting to a new culture
 - viii. Other

Questions

1. We are exploring employer and student perceptions and outcomes for employment and how it is associated with University Continuing Education/Extension training? Do you collect any of the following data through Continuing Education/Extension graduation surveys or other data collection tools?
 - Did their training help them get a job in a related field?
 - Did their training help keep them current for their job?
 - Did their employer pay for their training?
2. Do you have any Equity, Diversity and Inclusion (EDI) workforce development initiatives, projects, programs, training, etc. specifically designed to serve underrepresented populations (e.g. lack of science and math options in Indigenous communities, access to technology and high-speed internet)
 - a. What are accessibility issues that you feel are particular to your region (geographical or other)?
3. What do you know about who is taking your University Continuing Education/Extension courses? We are hoping to develop relevant adult learner student personas. These are semi-fictional representations of your ideal student, and they are a key part of inbound marketing for higher education institutions.

- Developed through the use of student demographic data available.
 - i. Do you collect student demographic data?
 - ii. Would you share this with us?
 - Have you tracked learning behaviours, registration behaviours, employment, goals, challenges?
 - Do you have any student profiles / persona's created that you can share with us?
4. What practices do you have that supports adult learner success?
- Scheduling
 - Modality
 - Pedagogical approaches (e.g. less theory, more application – the 1/3, 2/3rds flip from a traditional undergraduate class)
 - Instructor selection and support
 - Student Centric policies (time is flexible, quality is not), more latitude for late assignments, respect for students balancing multiple priorities, etc.

5. Canadian CE Ecosystem

As the evolution of the Continuing Education/Extension continues there may be benefits to reviewing and contributing to a shared Ecosystem. This might include a common language and taxonomy for micro-credentials/non-traditional credentials, associated quality assurance structures, technology infrastructure, and funding mechanisms.

Would you like to explore the below possibilities associated with collaborative effort of all Canadian Continuing Education/ Extension units?

- collective language and taxonomy,
- relationships with industry,
- quality assurance,
- technology infrastructure,
- prior learning recognition, and
- funding structures

V. Non-CAUCE University Interview Questions for ESDC Report

Project Background

To support the evolving need of adult learners as they navigate their careers and the changing workplace, federal leaders have prioritized the development of job transitioning programs and funding opportunities. This need has been amplified by the significant increase in unemployment due to COVID. To ensure the best cost performance and provision of current and predicted skills to learners, a better understanding is needed of the adult learning programming offered at Universities. A comprehensive and geographically diverse scan of the adult learning ecosystem in

close to one hundred Universities across Canada, this research project will provide an inaugural and informative overview of the Canadian University Continuing Education/Extension landscape.

Knowledge Gaps:

1. Canadian Universities role in adult **Upskilling and Reskilling**
2. The breadth of **short-cycle courses and micro-credentials** available at Canadian Universities
3. Canadian Universities role in providing **flexible and accessible options to underrepresented and equity-seeking adult learners**

Audience: Employment and Social Development Canada (ESDC)

Questions

1. What is being offered today by your University Continuing Education/Extension Department (s)?
Please validate the website data previously collected that is attached to this email.
 - Types of offerings:
 - Nomenclature (Certificate/diplomas of achievement, extension, attendance etc.):
 - Programming areas/field of training programs by institution/geography
 - certificates, other micro-credentials
2. Volume and delivery modality of University Continuing Education activity
 - # of enrollments?
 - Total instructional hours or course/program contact hours (estimated learning hours)?
 - Is your non-degree credit enrolment data reported to your provincial government?
 - Is your non-credit enrolment data reported to your provincial government?
 - Delivery modality
 - What percentage of your non-credit courses are delivered in the following formats? (25%, 50%, 75%, 100%)
 - Face to face, classroom participation?
 - Fully online education?
 - Blended or hybrid (between 50% and 80% of the course is delivered completely online)
3. We are exploring employer and student perceptions and outcomes for employment and how it is associated with University Continuing Education/Extension training? Do you collect any of the following data through Continuing Education/Extension graduation surveys or other data collection tools? For example:
 - Did their training help them get a job in a related field?

- Did their training help keep them current for their job?
 - Did their employer pay for their training?
4. Do you have professional associations (or professional orders) that recognize one or more of your workforce development courses and/or programs of study? What are they?
5. Accessibility
- a. Are there ways in which you address key accessibility issues for adult learners?
 - i. Access to supports
 - Writing supports
 - Numeracy supports
 - General study and learning skills
 - Employment readiness and job search skills
 - Mental health supports
 - Language training
 - Skills for adapting to a new culture
 - b. Do you have any Equity, Diversity and Inclusion (EDI) workforce development initiatives projects, programs, training, etc. specifically designed to serve underrepresented populations (e.g. lack of science and math options in Indigenous communities)?
 - i. Would you be able to share any website links with us?
 - c. What are accessibility and access issues that you feel are particular to your region (geographical or other)?
6. What do you know about who is taking your University Continuing Education/Extension courses? We are hoping to develop relevant adult learner student personas. These are semi-fictional/actual representations of the type's students, and they are a key part of inbound marketing for higher education institutions. Have you tracked learning behaviours, registration behaviours, employment, goals, challenges?
- a. Do you have any student profiles or personas developed through the use of student demographic data available?
 - i. Do you have any sample student persona's created that you can share with us?
 - b. Do you collect student demographic data? Would you share this with us?
7. What of these best practices do you utilize in support of adult learner success?
- Scheduling
 - Modality
 - Pedagogical approaches (e.g. less theory, more application – the 1/3, 2/3rds flip from a traditional undergraduate class)
 - Instructor selection and support
 - Student Centric policies (time is flexible, quality is not), more latitude for late assignments, respect for students balancing multiple priorities, etc.

7. As the evolution of the Continuing Education/Extension continues there may be benefits to reviewing and contributing to a shared **Ecosystem**. This might include a common language and taxonomy for micro-credentials/non-traditional credentials, associated quality assurance structures, technology infrastructure, and funding mechanisms.

Would you like to explore the possibilities associated with collaborative effort of all Canadian Continuing Education/ Extension units?

VI. Google Survey

ESDC - PLAR & Recruitment & Selection
Processes

Continuing Education, Extension, or Microcredential students (or similar)

*Required

1. Email address *

2. Do you offer a Prior Learning Assessment and Recognition (PLAR) process where you assign credit for prior learning (recognition) based on an individual's skills and knowledge achieved through work, life, and non-formal educational experience? *

Mark only one oval.

☐ Yes

☐ No

3. Do you offer Credit transfer where credit (courses previously taken (successfully) at other universities or colleges are recognized)? *

Mark only one oval.

☐ Yes

☐ No

Appendix D – Comprehensive List of University Programs

This appendix is included as a separate document.