



The Status of Microcredentials in Canadian Colleges and Institutes

Environmental Scan Report

April 2021



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Executive Summary

In recent years, the Canadian labour market has been defined by technological change, creating the need for employees with new competencies. Numerous studies have documented this transformation. To that situation has been added the job loss caused by the pandemic. The resulting need for upskilling and reskilling has created a trend toward short courses known as microcredentials that focus on specific competencies required by employers. Colleges and institutes have the experience and expertise to offer them.

The definition of microcredentials can vary between jurisdictions and among institutions. For prospective learners to see their usefulness and for employers to recognize their value, an understanding of what are microcredentials is needed. Colleges and Institutes Canada therefore undertook an environmental scan to ascertain how these courses are defined in Canada, what they look like and where they are being offered.

Similar studies of microcredentials have been undertaken in many other countries. To establish this context, the report looks briefly at a sample of the status of microcredentials abroad, as well as at some of the very exciting research and development recently undertaken in Canada.

As there is a good deal of interest among many stakeholders in Canada, CICan collaborated with several partners during the project.

The scan itself consisted of two phases: a survey of CICan members and interviews with institutional representatives from a selected sample covering all regions of Canada and different types of institutions. Resulting data present a varied landscape in which a few institutions have been working on microcredentials for some time and others are just starting.



The study used a working definition of microcredentials created by a national group of vice presidents academic:

“A MicroCredential is a certification of assessed competencies that is additional, alternate, complementary to, or a component of a formal qualification.”

Respondents interviewed agreed with this definition and have found it useful.

The scan showed a great interest in microcredentials across Canada and a degree of agreement on the purpose, characteristics and value of microcredentials. Respondents saw them as an important component of their range of programs and agree that they should be stackable, flexible, validated and accessible to vulnerable populations. All stressed the importance of involving business and industry partners.

The result of the scan gives a starting place for further work seeking consensus on characteristics of microcredentials among CICan members.

Next steps involve encouraging collaboration across Canada to build a national consensus so that microcredentialed learning can become a recognized element in the offerings of colleges and institutes.

1. Introduction: The CIBCan Environmental Scan

Background

For several years, the Canadian labour market, like that of other countries, has been defined by digitization, process automation, increased implementation of artificial intelligence solutions, and other forms of technological change. Numerous studies have documented this tendency, as has the experience of employees and employers in businesses and industry. To these ongoing disruptions must now be added the upheaval of Covid-19 and its longer-term economic effects, which have left workers in numerous sectors vulnerable to job loss and have called into question traditional business practices. The result is that the newly-unemployed will often not be able to return to their former occupations. Many of these people represent already-vulnerable segments of the population such as women, Indigenous peoples, racialized persons, newcomers, and the undereducated. A recent report from CIBC Economics shows that job loss during the pandemic has been higher among lower-income Canadians, that job growth occurred at the higher end of the spectrum. In fact, data from Statistics Canada “shows that all the jobs lost in 2020 were among workers who earned below average wages.”¹ The income gap has significantly broadened during the pandemic.

The dual challenge in the current labour market is that of employers finding appropriately-trained employees for transformed workplaces and workers developing up-to-date competencies through upskilling and reskilling. Because of their important role in competency-based reskilling and upskilling for the workforce and because of their close ties with industry, colleges and institutes – including cégeps and polytechnics – are particularly well placed to lead in the development of such training. These institutions have always played a vital role in providing Canadians with the skills required to find employment and enjoy rewarding careers over the course of their working lives. Such training is most often organized by the Continuing Education and Contract Training sectors of colleges and institutes, which are generally in closer contact with business and industry than other sectors of the institution and, with often fewer administrative hurdles in developing learning activities, are therefore able to respond quickly to employers’ needs, digital disruption, workforce

displacement, and labour market trends, continuously revamping their offerings to meet the current needs of learners and the Canadian economy.

Much has been written about the need for a skilled work force. For example, the document produced by Higher Education Strategy Associates and The Strategic Counsel referenced later in this report includes a good discussion. RBC’s “Humans Wanted,”² published in 2018, has been very influential. This need has been well documented.

Across Canada, colleges and institutes have been stepping up to address the situation. One significant solution has been the development of a greater range of short programs and stand-alone courses that are made to measure for the immediate needs of industry, usually in collaboration with local employers. The designation frequently applied to these programs or courses is “microcredentials,” a term emphasizing that training is of shorter duration than traditional program offerings, does not award a degree or diploma yet is recognized formally by a credible issuer and is pointed quite specifically at particular competencies required by industry: competencies that will equip learners to keep their employment, advance in their organization or find a new type of job. This short-duration, often part-time training awarding microcredentials is emerging as the most nimble and efficient way to achieve the dual goals of creating a “technically skilled, broadly competent, and agile workforce to keep pace with ever-changing demands and opportunities” and enabling workers to “Increase employment security [and] improve career prospects.”³

It is not always clear, however, what the term “microcredential” means in different jurisdictions across the country or even within the same province or territory. In fact, the characteristics of a microcredential can vary even within a college.

This situation can be very confusing for learners and particularly for potential employers. For microcredentialed training to be effective, it must be recognized and valued in the labour market. Potential employers must understand what the credential means and be assured that they can trust the quality of delivery as comparable to that of other programs offered by Canada’s network of colleges and institutes.

¹<https://www.bnnbloomberg.ca/all-the-jobs-lost-in-2020-hit-workers-with-wages-below-canadian-average-cibc-s-tal-1.1566921>. Accessed March 9, 2021

²https://www.rbc.com/dms/enterprise/futurelaunch/_assets-custom/pdf/RBC-Future-Skills-Report-FINAL-Singles.pdf

³<https://higherstrategy.com/wp-content/uploads/2019/05/Microcredentials-Today-A-Proposal.pdf>. Interest and Demand for Microcredentials in the Canadian Marketplace: A Focus on Learners and Employers, May 2019

The Higher Education Quality Council of Ontario (HEQCO), one of CICan's partners in a pan-Canadian survey of post-secondary institutions, initiated a survey in September 2020 of "2,000 working-age Canadians (those 18–64) who are not currently enrolled in a postsecondary program." In her November/December blog post about the survey results, Jackie Pichette of HEQCO reports that, although only one in four Canadians had ever heard of the term "microcredential" and "even fewer are sure what it means," nearly 70 per cent were interested in "the idea of short, skill-focused learning for professional development": the type of learning the term designates.⁴

Environmental Scan

CICan undertook an environmental scan of microcredentials offered in its member institutions in order to document their national presence; to explore the importance of their role; to better understand and elucidate their characteristics, similarities and differences across Canada; and to arrive eventually at a common definition and guiding principles that regional associations can agree upon, with the aim of positioning colleges and institutes to collaborate efficiently in enhancing the offer of microcredentials.

The labour market impacts of the pandemic have added greater urgency to understanding and meeting the training needs of an economy in a state of rapid change. Once the current situation in colleges and institutes is better understood and best practices have been highlighted, the national network can undertake discussions to share challenges and successes, clarify objectives, and enhance offerings with the aim of ensuring that microcredentials are appropriately recognized and valued by potential learners, employers and the general public.

The scan includes both quantitative and qualitative analysis based on two components: a national survey of CICan members and interviews with a regional sampling of members comprising different types of institutions.

Collaborators

In this project, CICan drew on the work of the Group of Vice Presidents Academic (VPAs) convened by Bow Valley College. This group, which included VPAs from most Canadian provinces, developed a definition and guiding principles that have proved very useful as a way of expanding the national discussion on microcredentials.

CICan has used their work as a basis for the environmental scan, adopting the group's formulation as a working definition:

"A microcredential is a certification of assessed competencies that is additional, alternate, complementary to, or a component of a formal qualification."

Now renamed the Pan-Canadian Microcredentials Standards Committee, this group is continuing with a fully national expanded membership planned.

Important collaborators in the project were the Higher Education Quality Council of Ontario (HEQCO) and the Business + Higher Education Roundtable (BHER). These organizations partnered in a previous survey of potential students for microcredential courses, referred to earlier. A study of industry representatives on the same topic is also underway.

CICan's constituent members are aware of the scan and await the outcomes with interest. In particular, the Regional Associations Representatives Group has advised on and provided input on the Definition and Guiding Principles for microcredentials based on the work done by the Pan-Canadian MicroCredentials Standards Committee. The revised principles are as follows:

Guiding Principles:

1. Microcredentials can be a complement to traditional credentials (certificate, diploma, degree or post-graduate certificate) or stand alone.
2. Microcredentials are subject to a robust and rigorous quality assurance process.
3. Micro-credentials may represent competencies identified by employers/industry sectors to meet employer needs.
4. Microcredentials may provide clear and seamless pathways across different credentials (both non-credit and credit) and may be stackable.
5. Microcredentials are based on assessed proficiency in a competency, not on time spent learning.
6. Microcredentials are secure, trackable, portable and competency is documented in students' academic records.
7. Microcredentials are to follow institutional approval processes.

Finally, CICan is grateful for the collaboration, helpful suggestions and support of Employment and Social Development Canada (ESDC) on this environmental scan.

⁴<https://heqco.ca/jackie-pichette-survey-of-canadians-reinforces-need-for-clear-standard-definition-of-microcredential/>

Survey

Development and Distribution

The survey, entitled “Canadian Microcredentials Survey: Postsecondary Perspectives,” was developed in collaboration with HEQCO and BHER. It included both closed-ended (multiple choice; yes/no; rating scale) and open-ended questions. (See Appendix 1.) The survey was translated into French for distribution to francophone member institutions.

Distribution to all 135 CIGan member institutions was carried out via email on November 16, 2020. The deadline for return of completed surveys was December 15, 2020.

Response

Responses were received from sixty-four CIGan member institutions, for a response rate of 47%. The regional distribution is shown in Figures 1 and 1b. At some institutions more than one person replied, for a total of eighty responses; those multiple responses from the same institution were not included in calculations of totals for some questions. Most surveys (79%) were completed by someone in a leadership position at the college or institute (Figure 2).

Figure 1: CIGan Member representation - Regional representation: unique respondents only
(When counting duplicated institutions, there are 80 total responses)

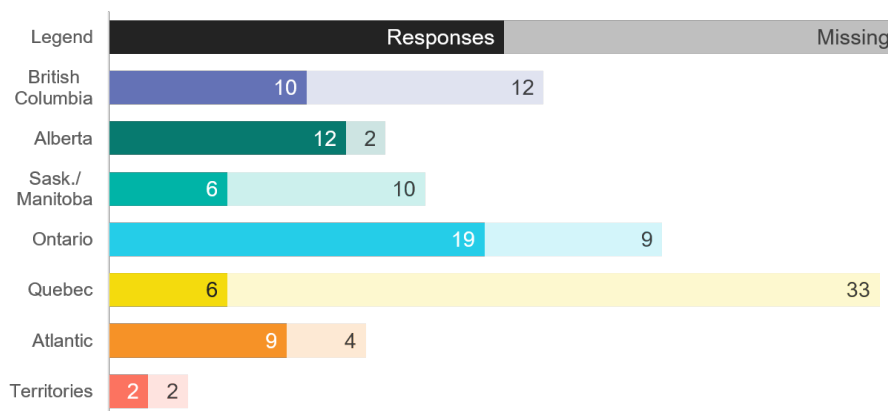


Figure 1b: CIGan Member representation - Proportional Regional representation: unique respondents only

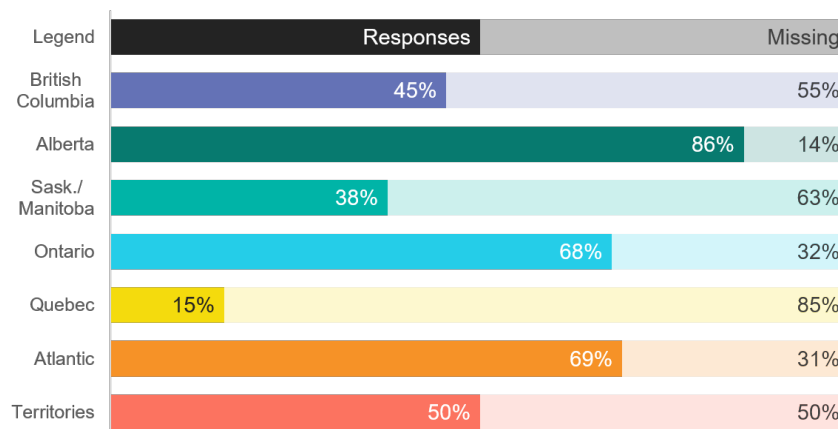
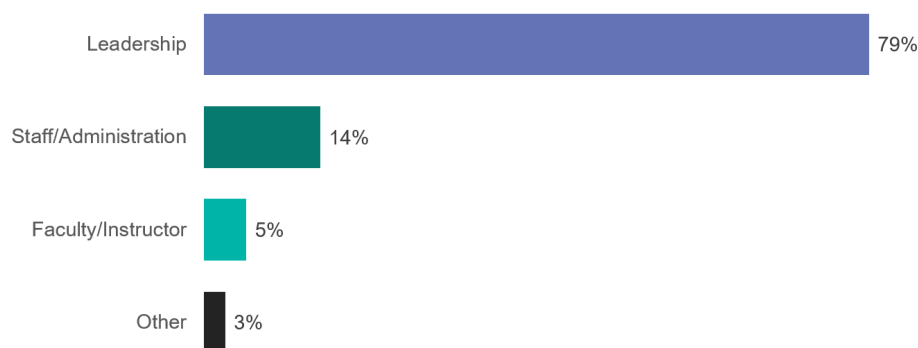


Figure 2: Respondent type

Q: Which of the following best describes your role?



Interviews

Online interviews were organized on a regional basis with survey respondents who indicated a willingness to participate. Representatives from fourteen CICan member institutions, including nine colleges, three polytechnics, and two universities were interviewed during the months of January and February. The sample group included all regions of the country, rural and urban campuses, small and large institutions. (See Appendix 2.) The sessions lasted approximately 30-45 minutes. Some institutions chose to have one spokesperson participate; others had several, representing different sectors of the institution concerned with microcredentials.

2. Literature Review

International Perspectives

A good deal of international work on microcredentials has been done in recent years. It is not the purpose of this document to present a comprehensive report of this work, but a summary of some highlights will help set the context of the Canadian landscape and for CICan's environmental scan.

Australia and New Zealand

Australia and New Zealand are arguably the countries that have been most active in microcredentials. Both have a centralized education system, which aids in rolling out a national plan. Despite this difference from Canada, however, both have been influential in the development of Canadian microcredentials. Humber Institute of Technology and Advanced Learning, for instance, has a partnership with Otago University, one of the main players in the New Zealand microcredential landscape. Otago's very extensive offer of microcredentials is offered under the name "Edubits."⁵

In New Zealand, microcredentials are integrated into the National Qualification System. The central authority therefore recognizes them "as part of New Zealand's regulated education and training system" just as it does any degree, diploma or certificate. The website of the New Zealand Qualifications Authority provides the official definition of a microcredential, plus a detailed explanation of its characteristics, as well as the process for institutions to apply for recognition of a microcredential, and for the registration of a learner's completion of the credential.⁶

New Zealand's definition of microcredentials is in many ways similar to that developed by the Group of VPAs convened by Bow Valley College mentioned earlier, although it does not seem to be explicitly competency-based:

"A micro-credential certifies achievement of a coherent set of skills and knowledge; and is specified by a statement of purpose, learning outcomes, and strong evidence of need by industry, employers, iwi [Maori groups] and/or the community.

They are smaller than a qualification and focus on skill development opportunities not currently catered for in the regulated tertiary education system."

In Australia, as well, post-secondary institutions, both universities and technical and further education providers (TAFEs), have done much work on the implementation of microcredentials. Deakin University stands out as one. Its 2019 document, "Making micro-credentials work for learners, employers and providers,"⁷ is a very thorough examination of various aspects of microcredentials and is referred to frequently as a cornerstone of international discussions. Its analysis of the need for a more standard definition leads to the following proposition:

"A certification of assessed learning that is additional, alternate, complementary to or a formal component of a formal qualification."

Although the term is used in the document, Deakin's definition, like New Zealand's, does not refer directly to "competencies."

Europe

The European Commission views microcredentials as part of its larger plan for a European Education Area,⁸ which it hopes to achieve by 2025.

Part of the work of the European Higher Education Agency (EHEA) and linked with the Erasmus+ program, MICROBOL, which stands for "Micro-credentials linked to the Bologna Key Commitments," is a new EU project. As its name suggests, the main focus of MICROBOL's work is recognition and transferability of microcredentials. The desk research report, a very thorough document focused on Europe but also including international perspectives on microcredentials, states that "the increasing need for upskilling and reskilling the labour force on the one hand, and the emphasis on student-centred learning and need for flexible learning paths on the other, have led to the emergence of and increased attention to new credentials and short study courses, often referred to as microcredentials."⁹ This dual focus of microcredentials is often referred to in Canada as well.

⁵<https://edubits.nz/about/>

⁶<https://www.nzqa.govt.nz/providers-partners/approval-accreditation-and-registration/micro-credentials/>

⁷<https://dteach.deakin.edu.au/2019/08/02/microcredentials/>

⁸https://ec.europa.eu/education/education-in-the-eu/european-education-area_en

⁹<https://microcredentials.eu/wp-content/uploads/sites/20/2020/09/MICROBOL-Desk-Research-Report.pdf>

In autumn 2020 MICROBOL disseminated a survey on microcredentials to members of the Bologna Follow-up Group and MICROBOL working group representatives in EU countries. Although it was aimed at administrative levels rather than post-secondary institutions, many of the concerns of the CIGCan environmental scan are also raised in this European survey. The report on results, entitled “Micro-credentials and Bologna Key Commitments: State of Play in the European Higher Education Area,” was published in February 2021.¹⁰ A useful summary of its results appeared in the March 6, 2021 edition of University World News.¹¹

It is also worth looking at the Common Microcredential Framework developed by the European MOOC¹² and launched in May 2019. In setting out parameters and standards for microcredentials, the document encourages transferability and recognition among European partners. The agreement is quite oriented to university credits; nevertheless, it is possibly a model worth looking at to achieve a similar goal among colleges and institutes in Canada.

Canadian Perspectives

During the past two years, work on microcredentials in Canada has been moving forward rapidly. Some of this work is summarized here.

Institutional and Provincial Groundwork

1. eCampus Ontario has been involved with microcredentials since 2017. In 2019 it oversaw the creation of a Principles and Framework document that has played an important role in microcredential development, having been adopted or adapted by several Ontario colleges.¹³

2. Although, as will be noted later in this document, the majority of publicly-funded Canadian colleges do not yet have a fully-developed framework or strategy for microcredentials in place, several CIGCan members have done a good deal of work to prepare or support their offer of microcredentials.

Two examples follow:

- Seneca College provides an example of a college that seems to have adapted and expanded the eCampus Ontario principles. Its website includes a very impressive presentation of its microcredential framework and its own guiding principles, including some elements additional to those of eCampus Ontario, such as reference to the institution’s strategic plan and to flexibility, innovation, “societal trends” and the diversity of its population.¹⁴ The very attractive and clear format provides prospective learners with helpful, easily accessible information.
- The Algonquin Framework, as well, is particularly noteworthy. Part of their larger Learner-driven Plan, this document provides very thorough and far-reaching preparatory steps to full implementation. Their document includes both opportunities inherent in microcredentials and a realistic look at challenges. Although that college’s planned implementation of a pilot microcredential in September 2020 was delayed due to the pandemic, they are well set up to begin and their work may provide a model for other institutions.¹⁵

3. As will be mentioned later in this document, several provincial governments have been very proactive in supporting the development of microcredentials.

- In late 2020 British Columbia offered a subsidy for development of post-secondary microcredential pilot projects, which have now begun.¹⁶ At least thirteen of these are in CIGCan member institutions.
- In 2019 and again in 2020, eCampus Ontario collaborated with the Government of Ontario to launch and support development of pilot microcredential projects at member institutions.
- In fall 2020 Services-Québec announced funding for twenty-seven microcredential programs in Montreal.

¹⁰https://microcredentials.eu/wp-content/uploads/sites/20/2021/02/Microbol_State-of-play-of-MCs-in-the-EHEA.pdf

¹¹<https://www.universityworldnews.com/post.php?story=20210302104300698>

¹²https://eadtu.eu/documents/News/Press_release_European_MOOC_Consortium_launches_a_Common_Microcredential_Framework.pdf

¹³<https://www.ecampusontario.ca/wp-content/uploads/2020/11/4-Micro-credentials-en.pdf>

¹⁴<http://open2.senecac.on.ca/sites/micro-credentials/>

¹⁵https://www.algonquincollege.com/microcredentials/files/2019/09/Micro-credentials-Framework_final.pdf

¹⁶<https://news.gov.bc.ca/releases/2021AEST0012-000225>

Publications

Across Canada, several important publications on microcredentials have appeared recently; examples of some of the most important ones follow.

1. Published in November 2020, “Micro-Credentials: Trends in Credit Transfer and Credentialing” was commissioned by the British Columbia Council on Admissions and Transfer (BCCAT).¹⁷ As the title suggests, it is mostly concerned with the impact of microcredentials on admissions offices; however, it includes very useful information and analysis of the microcredential landscape both in Canada and abroad. Significant and very thorough research is presented on both the literature on microcredentials and their application, delivery, and foundational framework at various educational institutions in Canada and around the world. The report goes into a good deal of depth on the problem of defining microcredentials, including a variety of definitions and of defining characteristics from the literature and a useful overview of how the term is used in various institutions and jurisdictions. There is also an emphasis on the potential use of digitization in recording and reporting microcredentials.

The report includes the results of a survey conducted earlier last year. Although the project was based in British Columbia, surveys were disseminated nationally to selected post-secondary institutions and other relevant bodies, and elicited a very good response rate, the largest from B.C. and Ontario. Interviews with experts on microcredentials were undertaken as well to take the pulse of the national situation. Twenty-nine or 32% of the 90 responses were from colleges, of which six reported offering microcredentials.

2. The Higher Education Strategy Associates and The Strategic Counsel collaborated on a 2020 report “Micro-credentials: Mainstreaming Mid-Career Skills Development.”¹⁸

It is worth reading this lengthy document in its entirety. The information and analysis presented can contribute to creating a road map for microcredentials development. For the purposes of this report, a couple of particularly relevant points will be noted.

A significant difference in the definition proposed by this paper, as opposed to other definitions, is that microcredentials are “in the main targeted at individuals who already have some experience in post-secondary education.” From the results of CICan’s survey and interviews presented later in this document, such is not necessarily the case in the practice of CICan members.

The document includes some very thorough and interesting data on the kind of training employers and employees are seeking, even while mentioning that at this point the term “microcredential” is not familiar to most. Statistics presented demonstrate, however, that when the concept was explained to employers, the majority responded that such courses would be of value. Moreover, the interest shown in the idea of microcredentials was in the 80% range for both employers and employees.

3. eCampus Ontario recently commissioned research projects on microcredentials: “Micro-certification Business Models in Higher Education,” and “Micro-certifications: Policy and Regulatory Context in Ontario” were both published in early 2020.¹⁹

In March 2021, eCampus Ontario, in collaboration with the Diversity Institute at Ryerson University and the Future Skills Centre, published a study of microcredentials entitled “Is the Future Micro?: Unbundling learning for flexibility and access.”²⁰ A clear and cogent explanation of microcredentials and their connection with virtual learning, this publication provides a good basis for those starting development of these courses, reflecting earlier work by eCampus Ontario and stressing three “key concepts”: trust, value and exchange. The document also emphasizes the importance of lifelong learning and situates microcredentials solidly in this space. The link between microcredentials and digital credentialing also plays a big part in this paper. This connection is not yet on the horizon for many Canadian institutions.

4. In addition, business and public policy groups have emphasized the importance of microcredentials. For example, in a June 2020 task force report, “Skilled by Design: A Blueprint for Alberta’s Future Workforce: Building the Most Adaptable, Innovative & Progressive Workforce in Canada,”²¹ the Business Council of Alberta makes a strong argument for the expansion of microcredentials in order to grow the economy, using the work of Bow Valley College as a model.

¹⁷<https://www.bccat.ca/Search/Publications?q=micro&culture=en-US>

¹⁸<https://files.constantcontact.com/b69f8b4d001/6b2f0e29-5f99-4a55-8f9c-ce2d03cd467a.pdf>

¹⁹<https://www.ecampusontario.ca/publications-reports>

²⁰https://www.ryerson.ca/diversity/reports/Is_the_Future_Micro.pdf ²¹<https://www.bnnbloomberg.ca/all-the-jobs-lost-in-2020-hit-workers-with-wages-below-canadian-average-cibc-s-tal-1.1566921>. Accessed March 9, 2021

²¹https://www.businesscouncilab.com/wp-content/uploads/2020/12/BCA_No-Filter_Skills-Training_TaskForceReport_FINAL.pdf

In its June 2020 white paper, “The Future of Ontario’s Workers,”²² Strategy Corp Institute of Public Policy and Economy argues that the microcredential offer needs to become more “regular and consistent” and suggests its own definition and set of principles. While the authors see a huge amount of potential in microcredentials, the paper continues,

“If the business community does not understand or recognize what a microcredential is, they will not value the credential when making hiring decisions. Employers will not value a microcredential unless they can be assured there has been a standard form of academic rigour and a form of examination included in the student’s achievement of the credential.”

3. Results of the Environmental Scan

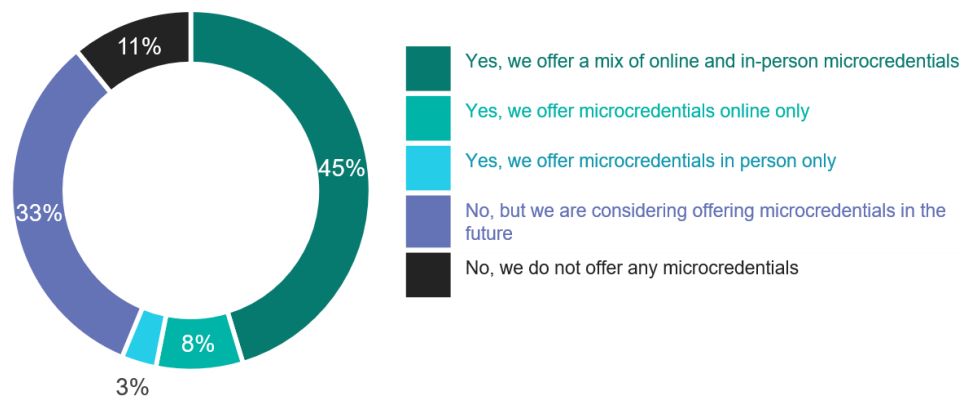
Overview

The results of the survey, as shown in Figure 3, indicate that 56% of responding colleges are offering microcredentials either online, in-person or both, and 33% are planning to or interested in doing so. Regional breakdowns are shown in Figure 3b.

Microcredentials are offered through the Continuing Education sector at 50% of the institutions responding to the question on that topic (Figure 4). This last result reflects that of the 2020 BCCAT survey.

Figure 3: Microcredential availability

Q: Is your institution currently offering any kind of microcredential
(Excludes duplicate mentions from the same institution)



²²<https://strategycorp.com/wp-content/uploads/2020/06/Colleges-Ontario-The-Future-of-Ontarios-Workers-White-Paper-June-2020.pdf>

Figure 3b: Microcredential availability by region

Q: Is your institution currently offering any kind of microcredential
(excludes duplicate mentions from the same institution)

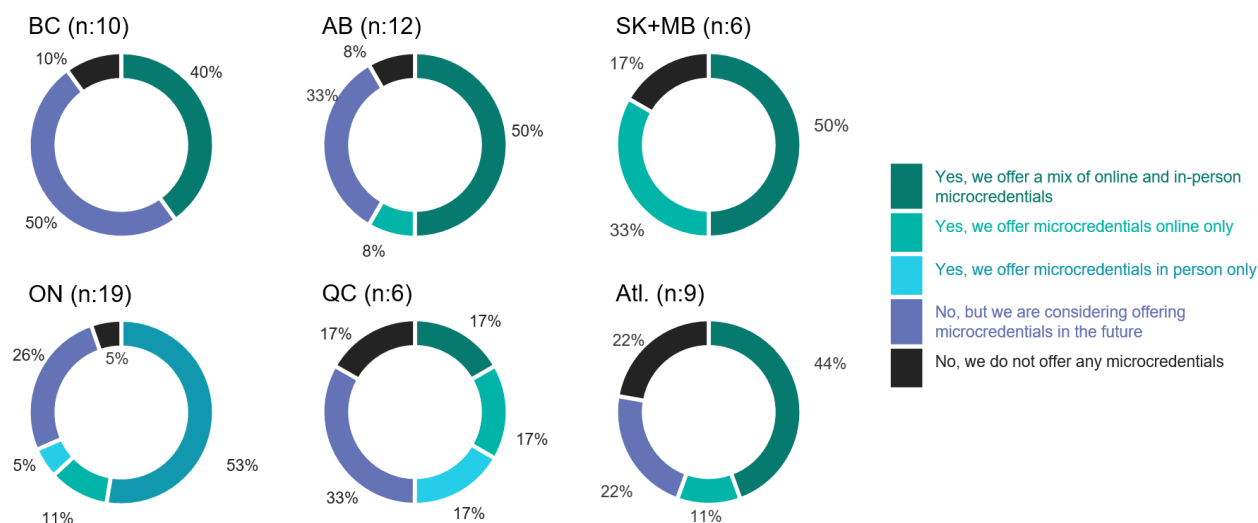
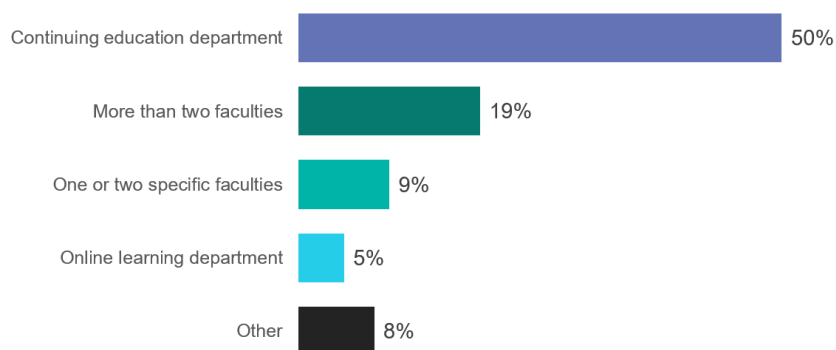


Figure 4: Where are microcredentials offered?

Q: Where are microcredentials currently offered at your institution?
(Select all that apply | Excludes duplicate mentions from the same institution)



Interviews with institutional representatives confirmed the trend indicated by these numbers: all either already offer at least one microcredential, have begun or will soon begin a pilot, or are engaged in preliminary groundwork for a projected offer. In a few cases this involves recasting existing programs as microcredentials rather than developing entirely new courses. Institutions already offering microcredentials are in the process of developing and planning an expanded offer.

As of winter 2021, although all college and institute representatives interviewed are aware of and interested in

microcredentials, the offer is mostly quite new. A few have had microcredentials for a year or more; however, these institutions are in the minority. Some institutions – for instance, SAIT and Algonquin – have been involved in a good deal of preparatory work before launching a pilot microcredential. They are therefore very much engaged in the process but do not yet have students registered in courses. In Algonquin’s case, the pandemic has delayed the launch of courses from its originally planned implementation date of September 2020.

Of those offering microcredentials, some have one microcredential on offer so far; a few have more than one. Several microcredentials have just begun and thus the responses to some of the survey and interview questions were tentative: “I don’t know” or “It’s too early to tell.” Several institutions define their offering as a pilot program, some of which are operating with funding assistance from special provincial or federal programs. Others are hoping to begin a pilot soon.

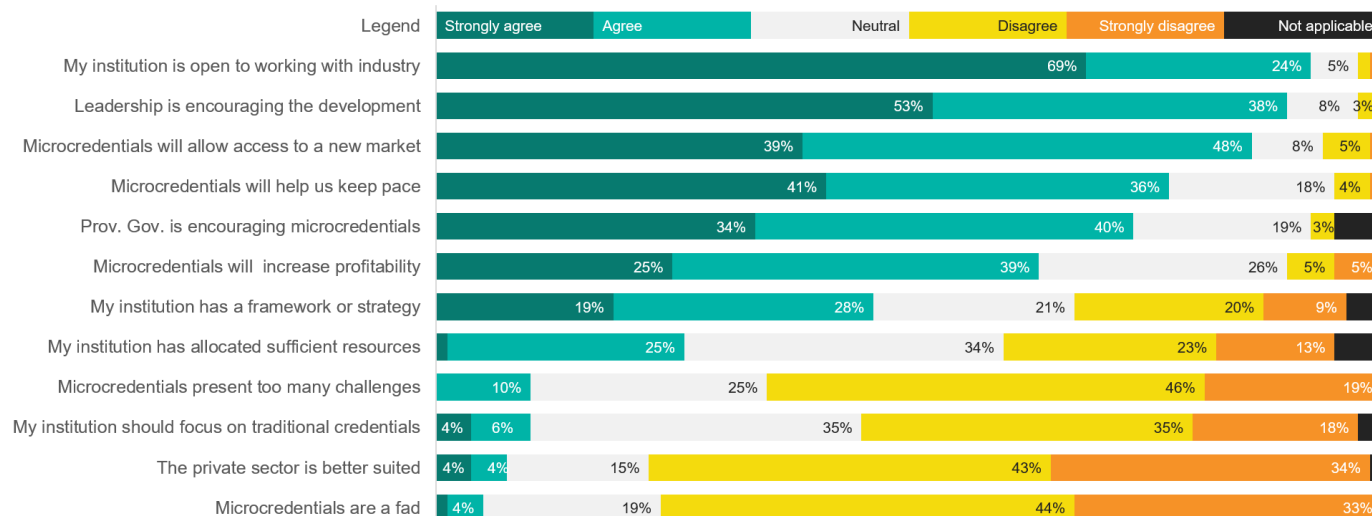
All interviewees see microcredentials as an important component of their institution’s future offerings. Some spoke about the need to recognize the importance of implementing changes in the post-secondary system: to replace outcomes-based with competency-based learning, to move toward options other than the semester system and traditional

approaches to crediting learning, and to give short courses and part-time students equal standing within the institution. Microcredentials are also seen by many as a way of integrating and empowering new populations of learners, while at the same time supporting Canadian business by training people with skills that are needed for innovation, development and commercial success. The majority of the eighty survey responses (91%) indicated institutional support for the development of microcredentials in response to the statement “Leadership is encouraging development,” although only 47% reported that their institution has a “framework or strategy” in place. (Figure 5. The complete wording of legend items can be found in the survey in Appendix 1.) This discrepancy highlights the current situation in which work on microcredentials is at an early stage.

Figure 5: Agreement/Disagreement with statements on respondents’ institutions

Q: How strongly do you agree or disagree with the following statements about microcredentials at your institution?

(Includes responses from duplicated members)



Interviews showed a great interest in collaboration among colleges, including – at some point in the future – a shared platform where faculty and administrators could exchange ideas and where prospective students could peruse courses offered across the country. It should be noted, however, that these results do not mean a movement in favour of standardization. Survey results (Figure 6 below) indicate that only 26% were “highly favourable,” 31% “slightly favourable” to standardization.

We should also mention that a few survey responses indicated some ambivalence about microcredentials:

“Micro credentials started as an idea but remains a solution looking for a problem. It remains an unproven concept for most jurisdictions and institutions. It lacks common understanding and definition ... To be clear, the idea may have merit, but I remain cautious and somewhat skeptical.”

(from a college not yet offering microcredentials but considering doing so)

“Les microtitres existent depuis toujours, c’est simplement un rebranding pour les politiciens.”

(from a college offering microcredentials)

“A Micro-Credential is in essence what Con Ed has been delivering for 40 years across Canada. If the term creates credibility great. If it creates red tape then it will kill our ability to respond quickly to needs.”

(from a college offering microcredentials)

“Degrees and diplomas are designed so that curriculum is scaffolded: every course builds upon previous courses in the program. Learning is achieved not only through “delivering material” but also through sequencing it: giving students more flexibility is good, but too much flexibility leaves too much room for students to randomly develop parts of skills without developing depth of understanding or even context for these skills. If anything, microcredentials will create more knowledge gaps.”

(from a faculty member not involved in their college’s microcredential offerings)

Definition

First, it should be noted that, although the term “microcredential” refers to the credential awarded once the target competency is achieved, in popular parlance it is also often used to refer to the course or series of courses itself. College representatives interviewed agreed with the definition of a microcredential developed by the Group of Vice Presidents Academic now renamed the Pan-Canadian Micro-Credentials Standards Committee. Interviewees also found the Guiding Principles developed by this group quite useful.

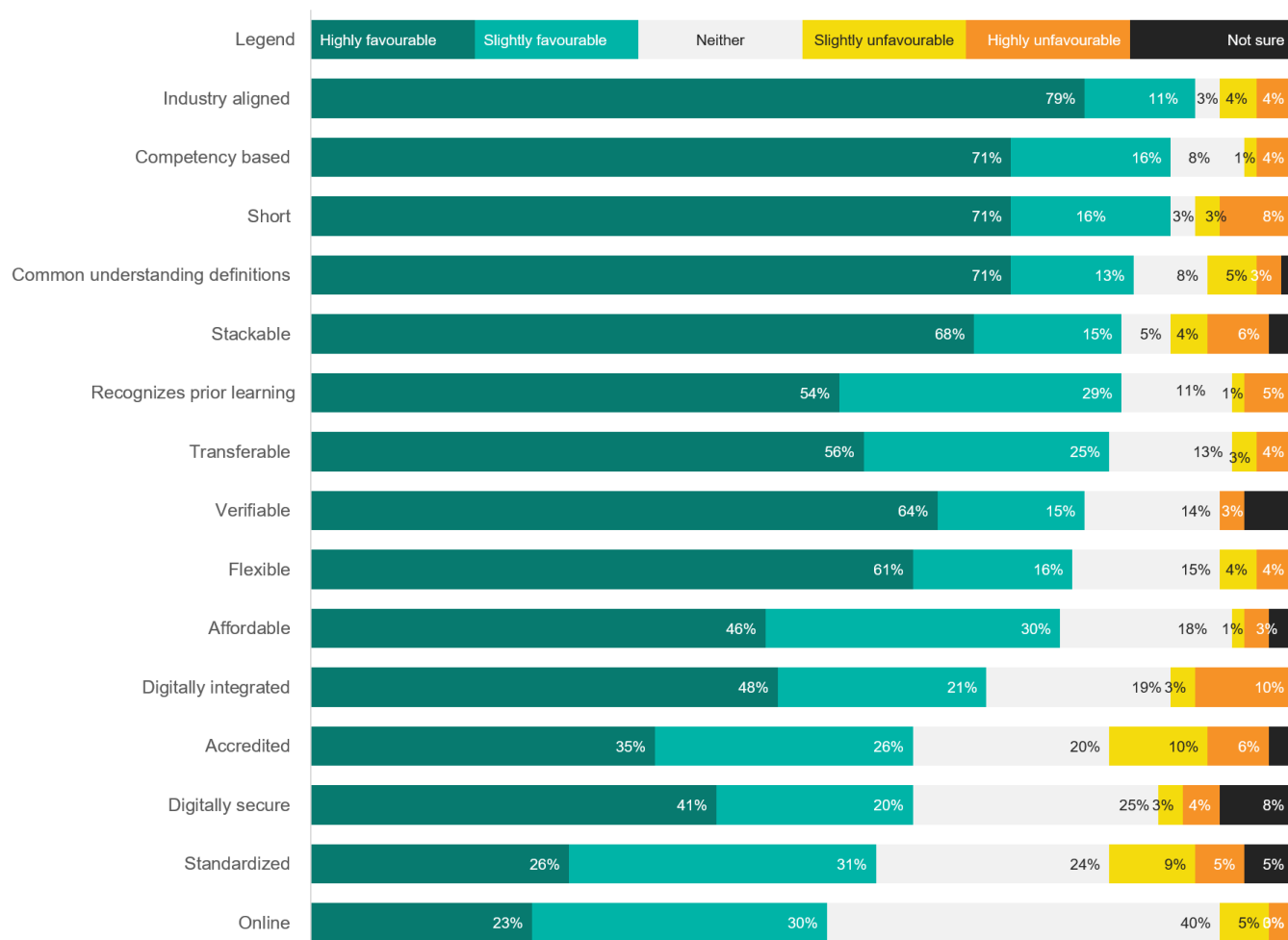
As expected, however, despite this general agreement, a number of different applications of the concept of microcredentials and their actual characteristics and parameters emerged in the study.

All colleges interviewed accepted the terminology “microcredential” and are using that term. Nevertheless, a couple of them indicated a certain degree of discomfort with the word, largely because they see too much discrepancy in its use by different institutions or find that it is not clear enough for prospective students. Several mentioned the need for consistency across Canada as well as the need for industry to understand what are microcredentials. They were almost unanimous in seeing the need for a common understanding of a microcredential, although some emphasized that there could be regional differences, depending on the needs of local communities and industries. These responses reflect those of the survey: one of the features of microcredentials most highly rated, as shown in Figure 6, was “common understanding of definitions,” with 71% identifying themselves as being “highly favourable” and 13% “slightly favourable” to this characteristic.

Figure 6: Microcredential features from favourable to unfavourable

Q: The following questions will ask you to rate potential features of microcredentials to help us understand what you, in your role at a Canadian postsecondary institution, consider important.

(Includes responses from duplicated members)



In Quebec, “microcredential” has been translated as “Perfectionnement crédité” for credited microcredentials such as the twenty-seven programs to be offered shortly in Montreal cégeps through partnership with Services Québec. The provisional term to be used for the non-credit courses being explored by the Commission des Affaires de la Formation Continue will be “certifications collégiales,” pending consultation with labour market partners. The Collège Communautaire du Nouveau-Brunswick reports using the term “microtitres.”

In summary, the following are areas where interviewees agreed on the definition of microcredentials:

- All agreed that microcredentials should be of shorter duration than other programs.
- Most agreed that an assessment should be required at the end of the training. A partial exception to this is an institution where learners who want to receive a credit must take the assessment; those who wish to take the training as non-credit need not.
- All agreed that learners should receive some kind of transcript and/or badge indicating completion of the microcredential and attainment of the targeted competencies.
- All agreed that microcredentials should meet the needs of one or more employers. There were several examples given of how employers might be involved: by initiating demand for training or providing input into what training should be offered; in developing or assisting in development of the program; in a few cases, in determining the assessment to be used. In other instances, the college initiated the training, but based on knowledge of local employment needs through existing connections with industry.

Responses to the survey demonstrated a good deal of agreement on the most important features of microcredentials, with:

- 79% “highly favourable” and 3% “slightly favourable” to their being “industry-aligned”
- 71% “highly favourable,” 16% “slightly favourable” to their being both “competency based” and “short” features such as “stackable,” “recognizes prior learning,” “transferable,” “verifiable” and “flexible” also rated well into the 70% or higher range when both levels of “favourable” were included.

There are differences, however, in how microcredentials are used in different institutions. Based on interviews, these differences in how the term “microcredential” was applied fell under the following categories:

- Awarded for a single course or a series of courses
- Embedded in a program or stand-alone
- Credit or non-credit
- Purchased or commissioned by an employer, industry group or community partner or open to the general public.

Other short courses

Some people interviewed were quite clear on the difference between microcredentials and other short courses (such as workshops, contract training, Associate Certificates, Attestations des Études Collégiales, etcetera) and felt that the Definition and Guiding Principles of the newly-renamed Pan-Canadian Micro-Credentials Standards Committee sum this up quite well; in other cases, representatives signalled that they are still working on clarification of this distinction at their institution. In general, what interviewees saw as distinguishing microcredentials from other short courses includes their being competency-based, the requirement of assessment, the close involvement with industry, and the aim of meeting labour market needs with workplace competencies. In a couple of cases, institutions reclassified short courses as microcredentials, suggesting that these courses already met the definition of a microcredential. Another institution was considering lowering the number of course hours in a particular microcredential because of pushback that it might be in competition with an associate certificate offered by the institution. These situations demonstrate that there can well be a gray area between microcredentials and other existing courses.

Algonquin College’s 2018 document, “The Case for a Micro Academic Currency at Algonquin College,” referenced earlier, offers a very complete tabular presentation of the characteristics of different types of qualifications: from microcredentials to various levels of certificates, diplomas and degrees. Although not primarily focused on the difference with other short courses, these tables could provide useful discussion points for colleges and institutes across Canada.

Skills gaps

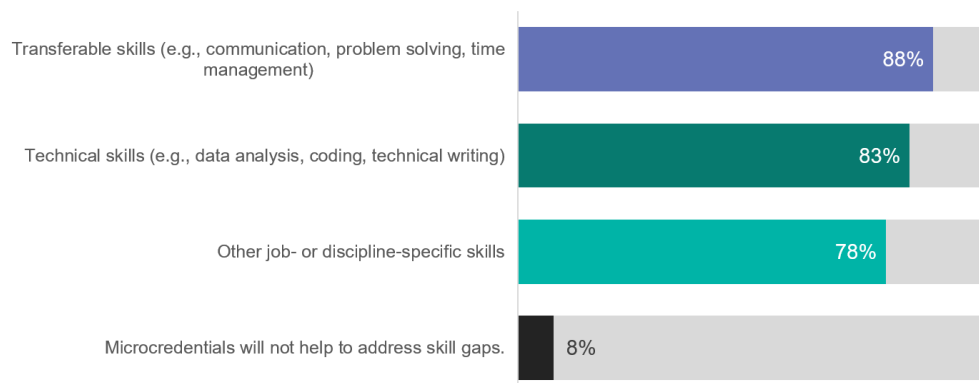
In response to a question about which kinds of skills gaps microcredentials can address, survey results showed all three as nearly equally important: transferable skills were selected by 88% of respondents, technical skills by 83% and “other job- or discipline-related skills” by 78%. (n.b. Respondents were invited to choose all that apply and multiple responses from the same institution were included in calculating totals for this question.)

These results demonstrate that microcredentials are viewed as going beyond strictly technical training. It should also be noted that six respondents did not see microcredentials as helpful in addressing skills gaps. (Figure 7)

Figure 7: What skills gaps do microcredentials address?

Q: In what areas do you think microcredentials could help address skill gaps?

(Select all that apply | Includes responses from duplicated members)



Characteristics

Once again, it should be noted that most Canadian colleges and institutes are in the early days of the microcredentials roll out; therefore, any comments about their offerings are preliminary. Characteristics could change rapidly in the months and years ahead.

So far, relatively few are putting microcredentials on their website for open enrolment. More often, a particular occupational group is targeted through an agreement with either industry or government: for instance, COVID-19 Nasopharyngeal Sample Collection at Red River College. This type of microcredential has a certain resemblance to contract training.

Fields of study

Fields of study are wide-ranging, reflecting local needs: from various programs in information technology, to health professions, to skills for municipal governance, to business-oriented competencies such as accounting, sales or management, to environment and resource protection.

Credits

It is important to note that some microcredentials are credited and some are offered on a non-credit basis. In this early period, it is difficult to allocate a percentage to credit versus non-credit offerings. Moreover, as noted earlier, at least one institution is experimenting with the possibility of allowing learners to take the course on whichever basis they prefer, depending on whether they foresee seeking to use them later as part of another program.

Duration

Although length of study is not seen as the principal characteristic of microcredentials, as noted in Figure 6, referenced earlier, all institutions agree that microcredentials should be shorter than other types of offerings. That said, the duration varies, as does the number of courses required for issuance of a credential. At this point, it would be misleading to cite an average number of courses or length of course; it is more pertinent to look at the range. Some examples from three different institutions include: 20-25 hours; 8-22 hours; 25 to 175 hours.

Structure

The structure of the microcredential also varies. In some cases, a badge is awarded at the end of the microcredential program, in others when individual modules within the program are completed. Thus, one institution reported a microcredential comprising 5 badges in 15 weeks; another requires 9-12 units of 15-hours each to receive a particular microcredential badge. An interesting example is the University of the Fraser Valley, which offers pathways and outcomes depending on the learner's wishes: a badge, a microcredential or credits toward a university diploma.²³

Most microcredentials are completed in a fairly intensive format; in at least one case, however, they stretch over several months: for example, 3-5 courses per microcredential totalling approximately 165-195 hours, one or two evenings a week. At least one institution would like to leave it up to the learner to decide how long to take, perhaps within certain limits or constraints still being considered.

Stackability

As noted earlier, most respondents see stackability toward a diploma, degree or certificate as important, although

procedures for recognition of microcredentials in other programs are not necessarily in place yet at all institutions. The process of implementing stackability may be a challenge. Some student information systems currently in use require that this process be done manually, which is time-consuming and expensive. Arranging the recognition of a non-credit microcredential as part of a diploma or degree was cited as particularly difficult in terms of current systems in place.

The overall orientation is that recognition of a microcredential as part of a certificate, diploma or degree not be dependent upon the learner's undertaking a PLAR process.

A number of different and creative ways of thinking about stackability came to light during the scan. One interviewee, citing a comparison with Lego blocks, suggested "integration" as a more apt word than "stackability." Others mentioned the increasing importance of interdisciplinary programs and multidisciplinary education in the future workplace: credits from various fields could be very advantageous for entrepreneurs, for example. (See, for instance, a BCIT initiative based in their strategic plan.)²⁴ These points suggest a flexibility in learners' choosing their own learning goals and the path to achieving them. Microcredentials fit well into this orientation to future education.

Another approach to microcredentials mentioned by more than one institution was to embed them within an existing program. In this way, the microcredential would be highlighted and stand out more to a prospective employer because the learner would receive some kind of digital or transcript recognition for having achieved each of the targeted competencies.

Documentation

Related to the question of credits and stackability is that of documentation attesting to the validity of the training. There is general agreement that those completing a microcredential should receive a transcript, badge or both. Not all institutions have decided yet on what format this documentation should take; however, some have implemented or are considering a transcript, some a badge, some both, and some a badge with a transcript upon request. The diverse use of badges at different institutions or jurisdictions is another potentially confusing variation in the national offer. The BCCAT report also references these "nomenclature inconsistencies" and notes that sometimes the terms "badges" and "microcredentials" "appear to be used interchangeably."²⁵

²³<https://www.ufv.ca/continuing-education/courses/digital-marketing-microcredential/>

²⁴<https://www.bcit.ca/strategic-plan/posts/outline-plan-for-open-multidisciplinary-credentials/>

²⁵Joanne Duklas, "Micro-Credentials: Trends in Credit Transfer and Credentialing," p. 9

Delivery

Interestingly, as shown in Figure 6, referenced earlier, relatively few respondents to the survey – 53% – emphasized online delivery as an important feature of microcredentials. It should be noted also that 40% were neutral on the subject. During the pandemic, of course, most microcredentials have been offered online. As indicated earlier, flexibility for the learner was seen as an important feature in the survey results and often mentioned as a priority during interviews. In most cases, then, courses are largely asynchronous, with some having synchronous elements as well. At some institutions, material may be made available off-line as well to assist learners in regions with unreliable internet service.

In the long term, some colleges foresee including a certain proportion of in-person elements in their microcredential training, depending on the subject matter of the course. It was noted, however, that there are challenges in providing face-to-face courses for learners who do not live near a branch of the campus and would find it difficult to relocate for even a short period if such a learning activity is required.

Recognition of prior learning (PLAR)

Survey results show 83% of respondents want prior learning to be recognized in microcredentials. The degree to which PLAR has so far been integrated into the offer depends on the institution. In general, however, PLAR offers the potential for prospective learners to skip certain courses or modules of the microcredential and proceed to follow only those for which they cannot prove the attainment of competence from previous education or employment experiences. It is hoped that this process will reduce both costs and the time commitment for adults who might otherwise find participation in training difficult. The prospective learner would thus begin with an assessment of competencies already attained in one way or another, followed by learning activities as required and a final assessment to ensure that the goal of attaining missing competencies has been met.

The integration of a PLAR process could potentially allow microcredential credit to be given for training or courses taken anywhere, including outside of Canada. As will be noted later, respondents unanimously are in favour of intra-Canada recognition of courses. The survey showed 81% seeing “transferability” as a desirable feature of microcredentials.

As indicated earlier, the goal is that microcredentials be stackable and hence accepted as part of certificate, diploma or degree programs at post-secondary institutions. At the very least, it should be possible to leverage them for recognition via a PLAR exercise. It is hoped that improved understanding of microcredentials lead to such pathways becoming automatic.

Assessment of competencies attained

Given that valid assessment is seen as a key characteristic of microcredentials, interviewees indicated that their institution is looking carefully at how it should be carried out. Some see the move toward true competency-based teaching and assessment as a major change and seek to develop new methods of assessment that would clearly reflect this orientation. The assessment is generally viewed as a demonstration of competencies, based on performance in a job-related situation. One college sees it as similar to a capstone project in a work environment. Bow Valley College’s use of scalable AI assessments for demonstration of competencies attained in its PivotEd/Bridging the Gap project is one example of experimentation with competency-based assessment tools in a microcredential context. Obviously, the nature of the assessment depends to some extent on the field of study and the course: in certain cases, for instance, in-person assessments will be required.

Some institutions emphasized the role of the instructor in choosing the method of assessment; others want to see external representatives from industry playing a role. This is already required in the case of a partnership with a private company involving the use of their material to train current or future employees.

Some institutions are interested in eventually incorporating an element of self-assessment within the courses. One aspect of this could involve the assessment being undertaken only when the learner feels ready, allowing a degree of autonomy that represents an empowering of the learner to take some control of his or her learning: an important principle mentioned by some institutions. Others are not prioritizing this element. Some representatives emphasized that if the course has truly been competency-based, the learner should have no difficulty succeeding in the final assessment.

Accessibility

Availability

There are some microcredentials available in every region of Canada but it is too early to comment on whether they are equally available across the country since, as reported in the survey, many colleges are still in the planning stages. Also, as indicated elsewhere, there is a distinction between those open to the general public, who may or may not need to have a certain background, and those earmarked for a particular industry, community or agency. Rural Canadians have access through online learning, often supported by local branch campuses or learning centres; however, there are still challenges involved in this situation.

Cost

The comparative cost for microcredentials is not available at this time. A number of programs are being run with federal or provincial subsidies under the umbrella of a Canadian Future Skills Innovation Project, for instance, or in one of the B.C. colleges chosen competitively for a pilot project funded by the provincial government. Such offerings have minimal, if any, costs to the participant. This situation will change, however, when cost recovery is needed. As well, credited microcredential courses in Quebec might be offered through the provincial Continuing Education funding envelope or, under a new pilot for Montreal colleges beginning in spring 2021, through Services Quebec. In these cases, students have to cover only afferent costs.

Seneca College's response to the survey notes the importance of the Ontario Skills Catalyst Fund in supporting vulnerable populations: for instance, encouraging the participation of more women than otherwise in certain microcredentials.

Figure 6 indicates that affordability is important to survey respondents: the total of those responding highly or slightly favourably to the question of whether this is an important feature of microcredentials was 76%.

For many, one of the aims of developing microcredentials is to make learning accessible to more people, including – perhaps especially – those who might have felt marginalized in the traditional education system. College representatives are very aware that cost can be an issue for learners, and more so in the future as they move away from a pilot phase which might benefit from particular earmarked funding. As noted earlier, receiving PLAR credit can reduce the number of hours required for study and thus the costs. A number of colleges are currently lobbying governments to open eligibility requirements to allow part-time students to receive financial support in some form. This change has already come into effect in Ontario, for instance.²⁶

Some institutional representatives also pointed to the need seen for a new business model for funding microcredentials. Competency-based learning in the microcredential format may involve learners being allowed to move forward at their own pace, as they attain each competency. This more flexible paradigm does not fit well with traditional funding models, which might penalize learners financially because it assumes a semester-based system on fixed enrolment.

²⁶<https://www.collegesontario.org/en/news/new-funding-for-micro-credentials-will-help-more-people-find-employment>

Vulnerable populations

CICan member institutions are aware of vulnerable populations in their regions and of their particular needs. Interviewees highlighted the issues confronting particular groups that are part of their usual student demographic. Some colleges are working actively on these challenges; for others, it is too early in the development of the offer to diagnose problems and develop solutions. This uncertainty is reflected in the survey responses, shown in Figure 8, where 58% of those currently offering microcredentials have in place specific strategies

for underrepresented learners in these programs and 33% indicated that they are not sure. There was, however, a large regional variation, as shown in Figure 8b. One hundred per cent of respondents from British Columbia and the Atlantic region responded that they “have or intend to have specific strategies or resources” for “underrepresented groups of students” enrolled in microcredentials.

Figure 8: Specific strategies

Q: Does your institution have or intend to have specific strategies or resources

(Asked only of those that offer microcredentials -
Excludes duplicate respondent institutions)

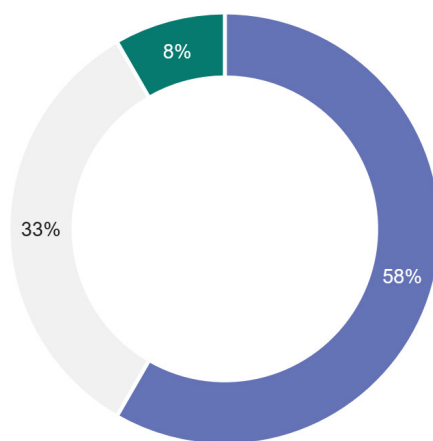
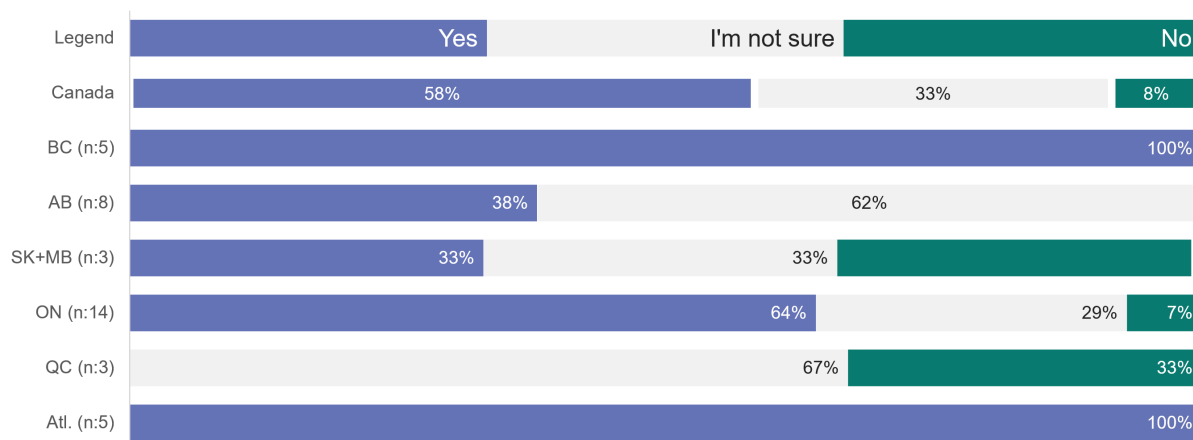


Figure 8b: Specific strategies by region

Q: Does your institution have, or intend to have, specific strategies or resources (e.g. assistance, equipment, student services) to support the accessibility of microcredentials for underrepresented groups of students?

(Excludes duplicate respondent institutions)



Because microcredentials are so new, then, a number of people interviewed responded to questions on this topic with an explanation of their approach to vulnerable populations in other programs. Many of these services would be pertinent to microcredential participants and could be extended to them. The following were mentioned:

- Links with Indigenous groups and allocated seats for Indigenous learners in every program
- Awareness of different needs of urban and band Indigenous students
- Courses offered on reserves; plans to hire facilitators in each community
- Links with newcomers' associations and plans to work on improved services for newcomers
- Pilot for newcomers with no secondary diploma
- AODA (Accessibility for Ontarians with Disabilities Act)
- Front loading of essential skills as needed
- Regional campuses with community services
- Dedicated counselors and other resources for online students

Support

Most colleges report that microcredential learners have access to the same support as students in other programs: e.g., counselling, study skills workshops, tutoring, career advice, etcetera. An exception occurs when these learners are paying lower student fees or have been exempted from student fees. Another exception arises for students enrolled through Ontario Learn. These students can take courses at any college; however, they may not be able to access support at the college where the course is offered if it is not their home institution.

As an adjunct to distance support, institutions serving rural areas may set up a system of facilitators in remote regions.

Internet access

Interviewees agreed that some learners, especially in rural or remote communities, will likely be disadvantaged due to issues with internet access, because of either lack of computers or inadequate bandwidth. Some of the people interviewed reported not yet having seen these problems in microcredentials but realize that they will likely arise as they

have in other programs. One college suspects that a self-selection takes place, whereby prospective students who believe that they might have problems with internet access do not sign up for the courses.

Some innovative solutions have been found. Various strategies involve setting up computers in local community centres or educational institutions. Yukon College pioneered "parking lot wifi" access. As noted earlier, asynchronous learning may help: if internet access fluctuates during the day, learners can choose the best time to access it and some materials may be made accessible offline. Some learners have used work computers after hours if the microcredential is related to their employment. One college noted that improvement to bandwidth throughout the country, including the North, is a much larger issue: one that cannot be addressed or resolved by post-secondary institutions.

Promotion

As indicated elsewhere, some microcredentials are aimed at a specific group, or requested by a particular industry partner or government agency. The participants in these cases are chosen by their employer or professional body. For promotion of other microcredentials, most colleges seem to be using their usual methods, especially social media-based, to publicize and market microcredentials. In some colleges this is through a Continuing Education marketing office, in others through a communications office for the whole college. Word of mouth is also used a good deal, through program advisory committees, local industry groups and faculty industry connections. Outreach to alumni also occurs. Some college presidents have been active in presenting the programs in local media. Most colleges do not seem to be using much paid advertising at this point.

Colleges are trying to develop new strategies, however, to attract a new clientele. A number of colleges are actively looking for new methods of marketing, new branding to target these courses specifically. One college indicated that budget cuts have led to a lack of funding for the marketing office which has required that they look for innovative solutions.

It is also recognized that any promotional material must include some basic information about microcredentials: what they are, who might benefit from enrolling, and what advantages learners might expect after successfully completing them.

There do not seem to be any provincial-level marketing hubs at this point, except in Quebec, where Services Quebec's site promotes all the programs they support, including the microcredential programs recently announced in the Montreal region. Because it has subsidized a number of pilot projects, the British Columbia government lists available

microcredentials in a news release on its website,²⁷ but registrations are not possible from that page. Similarly, eCampus Ontario lists microcredentials for which development has been subsidized in collaboration with the Ontario government.²⁸

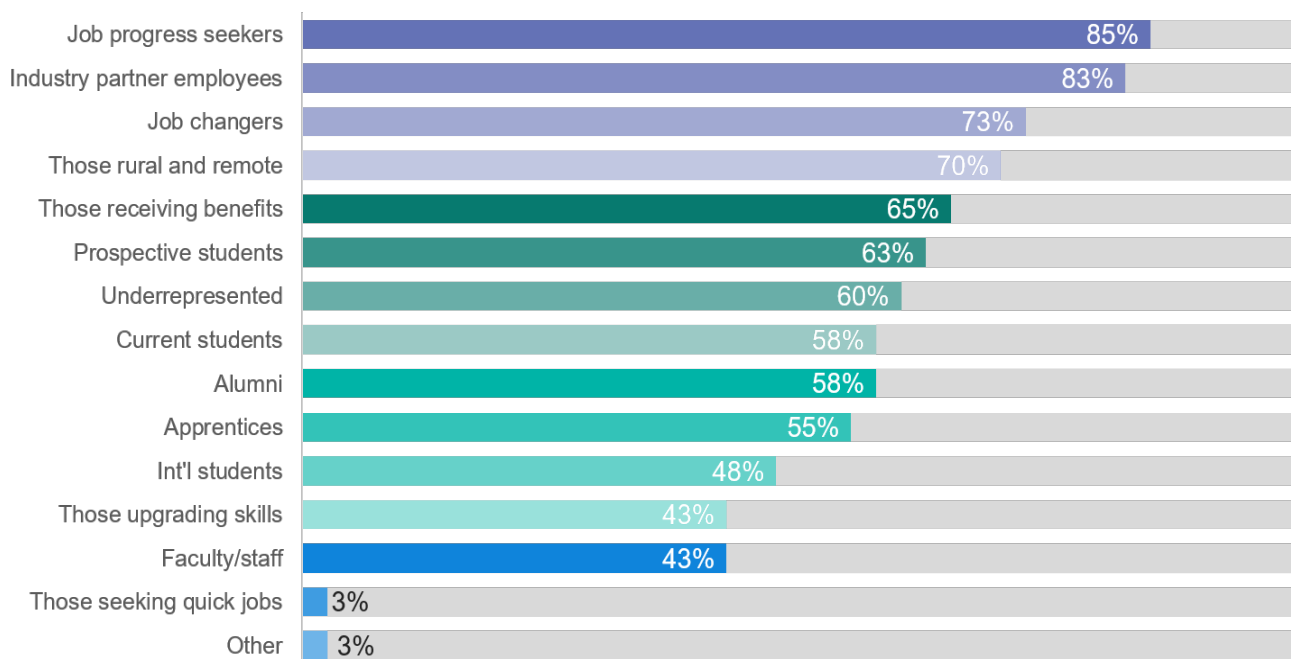
Clientele

Respondents from several colleges mentioned that, because it is still early days for microcredentials, there is not yet much data available and not a large enough enrolment to provide meaningful generalizations about participants. Nevertheless, some interviewees reported that working people who want to upskill are more likely to be attracted to these credentials, usually those already employed in the field targetted by the

microcredential offering. Some also mentioned alumni as actual or potential clients. In other cases, students may have been designated by a particular employer or professional or community group. Generally, impressions to date confirmed that the people who seem most likely to register for microcredentials reflect the target market reported in the survey and presented in Figure 9.

Figure 9: What is the target market for microcredentials?

Q: Who is/would likely be the target market for your institution's microcredentials?



²⁷<https://news.gov.bc.ca/releases/2021AEST0012-000225>

²⁸<https://micro.ecampusontario.ca/pilots/>

Figure 9b: What is the target market for microcredentials? (Top 3 by region)

Q: Who is/would likely be the target market for your institution's microcredentials?

Note the low response numbers for some regions

Region	Top selection	Second selection	Third selection
Canada	Working adults looking to progress in their occupation	Employees or potential employees of industry partners	Adults looking to change their occupation
BC (n:5)	Tie between: Working adults looking to progress in their occupation Employees or potential employees of industry partners Adults looking to change their occupation Apprentices/tradespeople		
AB (n:8)	Tie between: Working adults looking to progress in their occupation Employees or potential employees of industry partners Those in rural and remote communities Current students		
SK+MB (n:3)	Tie between: Working adults looking to progress in their occupation Employees or potential employees of industry partners Those in rural and remote communities		
ON (n:14)	Working adults looking to progress in their occupation	Adults looking to change their occupation	Employees or potential employees of industry partners Prospective students Alumni
QC (n:3)	Working adults looking to progress in their occupation Those needing upgrading of basic skills (e.g., literacy, numeracy)	Tie between: Employees or potential employees of industry partners Adults looking to change their occupation Canadians receiving employment insurance/assistance or other employment-related government benefits Apprentices/tradespeople	
Atl. (n:5)	Employees or potential employees of industry partners	Tie between: Working adults looking to progress in their occupation Adults looking to change their occupation Those in rural and remote communities	

There are some slight regional differences shown in Figure 9b. Most notably, people from rural and remote communities constitute a more important target clientele in the prairie and maritime provinces than they do on the West Coast or in central Canada.

Only Quebec reported a focus on people needing basic skills such as literacy and numeracy in the top three selections; it must be remembered that this result is based on a small response rate of colleges from that province that already offered microcredentials at the time of the survey. Still, an insight into this response may have been provided by an interviewee from Quebec who, mentioning that the microcredential cohort at his college appears to be composed of traditional Continuing Education clients – i.e., the employed, under-employed and unemployed looking for change and new opportunities – also noted that, in the case of his cégep and other metropolitan Montreal institutions, this clientele is composed of a large majority of newcomers. As the offer of microcredentials develops further, it would be interesting to track what proportion of participants are newcomers to Canada.

Unsurprisingly, interviewees reported that non-traditional learners are less likely to pursue the training, as are NEET people (Not in Employment, Education or Training). Financial issues can also be an obstacle, as in most regions it has historically been more difficult for part-time learners to access financial support. In Quebec, part-timers are now eligible to apply for the PARAF grants (Programme d'aide à la relance par l'augmentation de la formation) announced in the fall of 2020.²⁹ Ontario announced last fall that microcredential students could be eligible for assistance and other provinces are also making financial aid more accessible.

An interesting insight on clientele was raised by one interviewee. He noted a generational change that makes microcredentials particularly apt right now. The new generation of students, he reported, is less interested in a two-year or four-year course of study than their parents or even older siblings were. They want skills that will get them jobs and they want to learn these skills in the most efficient way possible. According to the interviewee, this generation thinks in terms of job readiness rather than career readiness; leaving the latter to evolve as they work. Job insecurity during the pandemic may have increased this trend.

Gender

Interviewees were asked about gender disparities or other related issues arising in their microcredential offerings. All responded that they were aware of none to date. The following points were made, however:

- The gender balance is influenced by the types of courses offered: e.g., health professions versus more technology-oriented fields.
- One college representative mentioned an ongoing Women in Trades initiative in their institution. Although this initiative does not apply directly or solely to microcredentials, it may have a positive impact on microcredential learners in the long term.
- Microcredentials are seen as flexible, allowing learners to track their own path: for instance, organizing their schedule to take childcare or eldercare as well as work into account. This flexibility can be advantageous for women learners.
- The influence of the pandemic on women's domestic life and on women's participation in the work force was mentioned. The effect of lockdown, closure of schools and closure of businesses in fields with significant numbers of female employees has been reported widely in the press.

Quality

As in other areas of this scan, some institutions are still in the process of working out all the details of quality assessment. The following points were made during interviews.

Overall, instructors teaching microcredentials are a mix of college instructors and outside experts. This varies with the subject matter, as regular teaching staff do not necessarily have the required expertise or certification demanded. As well, at some colleges, workload parameters in the collective agreement prevent faculty being hired for part-time or Continuing Education courses. Some colleges may have a special agreement with faculty unions and Human Resources Departments; but it is not always possible to override this condition of employment.

²⁹<https://www.quebec.ca/emploi/programme-aide-reliance-augmentation-formation/>

Almost unanimously, interviewees stated that the quality assessment process for microcredentials will be identical or similar to quality assessment procedures already in place for other college programs. Depending on the jurisdiction, these courses may have to be approved by the institution's Senate or equivalent body, be subject to regular program reviews and follow other quality assessment procedures of the college. It was pointed out, however, that such steps may be slow and cumbersome for short-duration courses meant to meet urgent labour market needs, and a more nimble adaptation or approach may need to be developed. It should also be noted that the normal institutional Quality Assessment procedures may not apply to non-credit courses.

In addition to existing practices, some or all of the following quality checks were mentioned for possible implementation:

- Exchanges with teachers and students
- Student evaluation of courses
- Focus groups including external experts
- Contact with corporate training clients
- Looping back with industry regularly

In most cases, people interviewed reported that it is too early to have received much formal feedback from participants, but what has been gleaned informally has been positive so far.

One interviewee noted that students consulted in the planning phase of a microcredential were quite positive about the concept.

Development

Growth

The offer of microcredentials is definitely increasing. Survey and interview results confirm that colleges and institutes are actively planning future offerings. Several provincial governments have indicated support and, in some cases, have put in place funds to fast track the development of microcredentials. Almost all responses to the survey indicate agreement that microcredentials can help address the skills gap. Colleges and institutes are convinced of the importance of microcredentials in labour force development and believe strongly that the offer of these credentials fits their mandate. They foresee a target clientele of lifelong learners that is somewhat similar to their usual Continuing Education cohort

and they expect that with this new group, overall enrolment at their institution will increase. This positive outlook is also reflected in survey results reported in Figure 5 above. Although a minority of survey respondents think that their institution has allocated sufficient funds to develop microcredentials, very few indeed – only 10% – believe that their institution should focus on traditional credentials. The fact that 35% were neutral on this point likely reflects the either/or wording of the question, as well as the fact that microcredentials are still a novelty for much of Canada.

Impetus

The impetus to create micro credentials has come from several directions: industry, students, alumni, faculty and to some extent government. Contact with other institutions offering microcredentials, including through international partnerships and organizations, was also an important factor mentioned as an incentive by one interviewee.

Institutional representatives spoke about their awareness of learners' needs: especially those who have difficulty committing to or finishing longer programs, often because of their financial or personal situation, and their need for flexibility. Microcredentials are viewed as a solution for these and other non-traditional learners to improve their employment prospects but also with the hope that, after a positive and successful experience with the shorter course, some might continue to further education or training. Awareness of the situation of displaced workers in their community was also cited as an important impetus to development.

In summary, colleges' analysis of the needs of their community has been an important incentive for developing microcredentials. Government encouragement or offers of financial support for development was often the catalyst to offering the course.

Specialization

In general, the offer of microcredentials reflects specializations intrinsic to each institution and the needs of the local community and labour market. To the representatives of CICan members interviewed this makes sense: alignment with industry is integral to their offer. At this point, there is no obvious impetus to offer more general or generic courses that might create competition with other institutions.

Evolution and Change

Because microcredentials are still new and people are busy with the initial implementation, it was hard for them to predict an evolution, except to say that the offer is increasing and that a generally agreed-upon definition would be useful. Nevertheless, a few additional points emerged from interviews.

Several institutions are involved in pilot projects and hope that if these are successful, more government support will be forthcoming. However, as Algonquin College points out in its framework document, one of the evolving challenges needing to be prioritized is college infrastructure: issues involving registration, financial aid, business models. In order to maximize flexibility, students should be able to take a longer or shorter time to complete a microcredential, even reregister in the same course. College systems are not currently set up for this type of flexibility. Interviewees agreed that major changes need to be implemented to the education system and some traditional ways of working revised. Microcredentials are just a part, although a key part, of this looked-for revision.

It is hoped that microcredentials will come to be considered an integral part of college offerings and hold a key place in strategic plans. What needs developing is a vision of a continuing learning journey, which may be individualized for each learner. Again, this evolution would involve a rethinking of education and of business models in some very basic but far-reaching ways.

New forms of the offer may also evolve, for example, embedding microcredentials in regular programs. It would also be helpful for there to be provincial or national listings of competencies so that prospective learners can find the courses they need.

All interviewees agreed that it is crucial to stay in alignment with the needs of industry and the labour market, which is expected to trigger the development of most microcredentials. Colleges are committed to checking in with local employers on a regular basis both formally and informally: through program advisory committees; contract training connections; discussions with industrial and commercial organizations as well as municipal and governmental agencies; and through ongoing research. Colleges will be looking for validation of their programs by industry partners, both as they are developed and as they are rolled out and delivered. Quality assessment will include industry in one way or another.

Employers' and participants' perception and outcomes for employability

Interviews confirmed that the response of participants so far seems enthusiastic. Colleges that have offered microcredentials for some time indicate good to excellent enrolment. Colleges just beginning may have lower enrolment, although because some of these programs are for specific groups, recruitment may not be an issue.

Most interviewees indicated that it is still very early to have a meaningful indication of participants' and employers' perceptions of microcredentialed training, and of real outcomes for employability. The 2020 BCCAT research as well reported not enough data to draw valid conclusions on employers' views of microcredentials.

It is clear that, at this point, most employers do not know what a microcredential is. The HESA-STC document referenced earlier also makes this point, although its research shows that 19%, mostly in central Canada, are familiar with the term. Nevertheless, what feedback has come in so far to colleges and institutes is very positive. Interviewees reported that those employers who have been informed about the offer, whether industry members of program advisory committees or employers consulted at the start of the development of a microcredential, were very positive about this new category of offering.

Based on preliminary feedback, then, as well as the fact that the offer is based on confirmed, immediate industry requirements, we can hypothesize that obtaining a microcredential will lead to employment opportunities. One college representative stated that local industries had requested "small, bite sized credentials" and that this is what microcredentials are. Another representative referred to industry partners as "intrigued and interested." The HESA-TSC survey of 300 employers found that, while 38% responded that they don't know, over half of the employers consulted would accept a microcredential in their hiring practices. The only actual obstacle to hiring mentioned was that in some spheres – the public sector, for instance – there is often a fixed educational prerequisite in the job category or job description that, to date, cannot be bypassed.

Clearly, more needs to be done to familiarize employers with microcredentials and inform them about the competencies of graduates. This may take some time. The need for an “awareness campaign” was mentioned during several interviews.

As well, more investigation into employers’ reactions and responses to the offer needs to be undertaken.

Other players

Role of private sector

There are numerous for-profit organizations involved in providing microcredential training especially in the United States but increasingly in Canada and elsewhere: Coursera, LinkedIn Learning and others – as well as sites such as British-based FutureLearn and U.S.-based edX offering courses from a variety of universities. Some of these might arguably be classified as microcredentials, although in some cases industry input would likely be minimal or non-existent. Despite this market presence, however, most interviewees did not see a significant competition at this point; some did not seem aware of such providers having any major place in the landscape. In the survey responses, only 8% of respondents thought that the private sector is “better suited” to offering microcredentials. Most CICan members with whom we met seem quite confident that the advantages of experience and quality offered by public educational institutions will be of primary importance when prospective learners choose a training provider.

For this to be the case, a marketing strategy emphasizing colleges’ and institutes’ track record in applied learning will have to be designed and implemented. It was pointed out by one interviewee that because the private sector is not as regulated, they may be able to move more quickly in developing and mounting courses. Nevertheless, colleges have a certain flexibility too, generally more so in their Continuing Education departments. Importantly, they may have the capacity to be more adaptable to learners’ needs, allowing more flexibility than private providers do, for instance in using some offline material in regions where internet access is sporadic.

One person reported that her college works in partnership with LinkedIn/Lynda.com, using the company’s training materials but within the purview of the institutional structure and processes of the college. This administrator sees a public-private integration for microcredentials as a win-win solution in certain cases.

Role of governments

Seventy-four per cent of survey respondents indicated that their provincial government is encouraging microcredentials. Nineteen per cent responded “neutral” to this question, a response likely suggesting that they do not know.

Interviewees appreciate provincial governments’ general support of microcredential development. It was also pointed out that governments have sometimes initiated training for public sector workers such as health professionals.

In provinces such as British Columbia and Ontario, where government funding has been made available for pilots, this was very much appreciated as a first step. College respondents are hoping for further aid in development and funding of microcredentials and in financial support for students following a successful pilot phase. In November 2020, Ontario included in its budget \$59.5 million to expand microcredential programs. As indicated earlier in this document, accessibility to student assistance for participating learners was also announced. In February of this year, British Columbia confirmed funding for microcredentials as well, based on proposals received from post-secondary institutions.

Some college representatives would also like government’s help in promotion: particularly in explaining to the public what microcredentials are and why they can be a good choice for upskilling and reskilling. In general, however, institutions would prefer that agreement on definitions and possible standardization of the parameters for microcredentials be agreed upon by post-secondary institutions rather than relying on governments for this.

4. Conclusion

The environmental scan demonstrates the interest of Canadian colleges and institutes in offering microcredentials. The definition and guiding principles originally developed by the Pan-Canadian Micro-Credentials Standard Committee are generally agreed upon as a good place to start.

Our institutions have a history of collaboration with their local business and industry community and of providing both initial training to those entering the labour market as well as, increasingly, upskilling and reskilling for those already in the work force. The offer of microcredentials draws upon this experience. In addition to helping industry partners and the Canadian economy recover from the pandemic and respond to the needs of the digital age, CICan members see microcredentials as a way to offer training that is flexible and accessible to vulnerable groups who have been underrepresented in the education system. The survey results illustrate that colleges and institutes do not see microcredentials as a passing fad but as a type of training that can benefit their communities and institutions in the long term. While some institutions already offer microcredentials, others have just welcomed their first cohort or are in the planning stages. The responses collected through the survey and interviews, therefore, are tentative in some cases.

The offer of microcredentials is evolving very rapidly and both quantitative and qualitative data presented in this report will certainly change in the months to come. Although there are some differences in how institutions are approaching the offer of microcredentials, there is also a good deal of agreement around the definition and guiding principles developed by the Pan-Canadian Micro-Credentials Standards Committee. Still, as the training rolls out, the principles are likely to evolve as institutions implement the living framework that will respond to changing conditions, adjusting and altering as experience is assessed, and as conditions change. Microcredentials must be nimble and answer the needs of Canadians; it is therefore inherent in their definition that the framework will not be static.

That said, colleges and institutes across Canada have expressed the need for a common discourse around microcredentials, and are interested in collaboration, while also respecting regional differences and local requirements. This openness to national dialogue bodes well for disseminating clear information about microcredentials to employers and to prospective learners across the country and for establishing a stable space for microcredentials in the panoply of programs offered by Canada's colleges and institutes.

5. Next Steps and Recommendations

Next Steps for CICan

That the CICan Skills Advisory Committee collaborate with the Pan-Canadian Micro-credentials Standards Committee to provide guidance and recommendations on emerging trends in microcredentials related to areas such as the use of badges, digital architecture, registration and record-keeping compatible with microcredential program structures and distinctions between credit and non-credit courses.

Further validate the recommended standard definition and guiding principles with national business and industry partners, including those representing key economic sectors hit hard by the pandemic, to develop sectoral frameworks that define the use and recognition of microcredentials to address skills shortages.

Collaborate with government on projects such as the creation of a data base for microcredential offerings, to be made available to public institutions and education stakeholders; as well as tracking the demographic of the microcredential clientele and the development of national common curricula for microcredentials focused on transferrable or cross-cutting competencies such as those related to essential skills, digital skills and green skills.

Recommendations to Employment and Social Development Canada

Engage provinces and territories and national organizations representing post-secondary education, business and industry in a dialogue on developing a national commitment to recognition and transferability of microcredentials.

Support the creation of a database of the national offer of microcredentials offered by publicly-assisted colleges and institutes.

Support further research to track the demographics of the microcredential clientele and identify best practices to ensure accessibility to microcredentials for underrepresented groups, those in rural and remote regions and people facing barriers to postsecondary education, skills upgrading and employment.

Explore the potential of developing common national curricula for certain microcredentials in areas such as digital skills, green skills, essential skills that could be shared and adapted by postsecondary institutions.

Extend eligibility for student financial assistance offered through the Canada Student Grants and Loans to short-term microcredential learners.

Appendix 1

Canadian Microcredentials Survey: Postsecondary Perspectives

Across Canada, colleges and universities are developing and advertising short, flexible and affordable credentials as opportunities for upskilling or reskilling. As the COVID-19 pandemic continues to disrupt the Canadian labour force, interest in these new learning opportunities is intensifying among governments (municipal, provincial and federal) and citizens. We are interested in learning more about how you view these new and emerging credentials.

This survey of Canadian postsecondary institutions is part of a broader research project that aims to inform the development, understanding and uptake of short and flexible alternative credentials in Canada. It is being conducted by the Higher Education Quality Council of Ontario (HEQCO) and the Business + Higher Education Roundtable (BHER). HEQCO is an agency of the Government of Ontario that brings evidence-based research to the continued improvement of the postsecondary education system in Ontario. BHER is a non-partisan, not-for-profit organization that brings together some of Canada's largest companies and leading postsecondary institutions to drive collaboration and build opportunities for students.

We anticipate this survey will take about **15 minutes** of your time. Your data will be anonymized and securely stored on Canadian servers by HEQCO, and confidentiality will be provided to the fullest extent possible by law. If you agree to be contacted for a follow-up interview, your identity and contact information will only be made available to the research team. Your data will never be sold or shared with parties outside of the partners on this project.

* Is your institution a member of Colleges and Institutes Canada (CICan)?

CICan is partnering with HEQCO and BHER on this project, and their members' responses will be shared with them. No personally identifying information will be shared with CICan without your consent.

- Yes
- No
- I don't know

* What type of higher education institution are you affiliated with?

- University
- College/ Institute/ Polytechnic/ CEGEP

* Please select the province or territory where your institution is based.

The results will be anonymized and information regarding your institution will not be shared publicly.

- Alberta
- British Columbia
- Manitoba
- New Brunswick
- Newfoundland and Labrador
- Northwest Territories
- Nova Scotia
- Nunavut
- Ontario
- Prince Edward Island
- Quebec
- Saskatchewan
- Yukon

What is the name of your institution?

* Which of the following best describes your role?

Select all that apply.

- Faculty/Instructor
- Leadership (e.g., President, Vice Provost, Dean, Director)
- Staff/Administration
- Prefer not to say
- Other, please specify:

For simplicity, we will use the term “**microcredential**” throughout the remainder of this survey to refer to credentials that are tied to ***short, flexible learning opportunities*** and are focused on ***specific skills or knowledge***.

Microcredentials are distinct from more traditional university or college degrees, diplomas and certificates which teach interconnected sets of skills or knowledge over a number of years.

* Is your institution currently offering any kind of microcredential?

- Yes, we offer microcredentials in person only.
- Yes, we offer microcredentials online only.
- No, we do not offer any microcredentials.
- No, but we are considering offering microcredentials in the future.
- I am not sure.
- Yes, we offer a mix of online and in-person microcredentials.

* How does your institution broadly refer to the microcredentials you offer (e.g. “microcredentials”, “micromasters”, “embedded certificates”)?

Please provide one/some examples of the microcredential(s) your institution offers.

* Where are microcredentials currently offered at your institution?

Select all that apply.

- One or two specific faculties/ academic units/ departments
- Library services (or its equivalent)
- Continuing education department (or its equivalent)
- More than two faculties/ academic units/ departments
- Online learning department (or its equivalent)
- Other

Please name the faculties/academic units where microcredentials are currently being offered at your institution.

CICan is creating an inventory of their members' microcredentials. Please list (or provide a link to a list of) the microcredentials at your institution.

How are microcredentials being offered at your institution?

Select all that apply.

- ☐ As stand-alone certifications
- ☐ As part of academic success initiatives, e.g., study skills workshops
- ☐ As part of a degree or diploma program
- ☐ As part of corporate training
- ☐ As stackable certifications that can be combined to earn a certificate, degree or diploma
- ☐ Other

* Please describe the other ways in which microcredentials are being offered at your institution.

Who is/would likely be the target market for your institution's microcredentials?

Select all that apply.

- ☐ Canadians receiving employment insurance/assistance or other employment-related government benefits
- ☐ Faculty/staff at my institution
- ☐ Underrepresented groups (e.g. racialized students, first generation students)
- ☐ Prospective students
- ☐ Current students
- ☐ Working adults looking to progress in their occupation
- ☐ Those in rural and remote communities
- ☐ Apprentices/tradespeople
- ☐ International students
- ☐ Other, please specify:
- ☐ Adults looking to change their occupation
- ☐ Those needing upgrading of basic skills (e.g., literacy, numeracy)
- ☐ Alumni
- ☐ Employees or potential employees of industry partners

Does your institution have, or intend to have, specific strategies or resources (e.g. assistance, equipment, student services) to support the accessibility of microcredentials for underrepresented groups of students?

- ☐ Yes
- ☐ No
- ☐ I'm not sure

Please describe the strategies or resources.

The following questions will ask you to rate potential features of microcredentials to help us understand what you, in your role at a Canadian postsecondary institution, consider important.

***** How favourably would you rate the following features of a microcredential?

	Highly unfavourable	Slightly unfavourable	Neither favourable nor unfavourable	Slightly favourable	Highly favourable	Not sure
Affordable (i.e., the cost for students earning the credential is low relative to traditional programs/credentials)
Verifiable (i.e., embedded with metadata about the issuer and related program)
Digitally secure (i.e., supported by Blockchain or a similar technology)
Accredited (i.e., recognized or issued by a professional accreditation body)
Standardized (i.e., meets a government-set quality standard)
Competency-based (i.e., the learner must demonstrate skills/knowledge to earn the credential)
Stackable (i.e., can be “stacked” or combined in order to lead to a degree, diploma or certificate)

	Highly unfavourable	Slightly unfavourable	Neither favourable nor unfavourable	Slightly favourable	Highly favourable	Not sure
Online (i.e., offered remotely rather than face-to-face)	•	•	•	•	•	•
Industry-aligned (i.e., industry/community partners were involved in the program design)	•	•	•	•	•	•
Transferable (i.e., recognized by other postsecondary institutions)	•	•	•	•	•	•
Recognizes prior learning	•	•	•	•	•	•
Common understanding/definitions (i.e., understanding what the terms mean, and being consistent across institutions)	•	•	•	•	•	•
Flexible (i.e., students can learn on their own time, at their own pace)	•	•	•	•	•	•
Digitally integrated (i.e., learners can display the credential on digital platforms like LinkedIn)	•	•	•	•	•	•
Short (i.e., can be earned quickly, relative to a traditional degree or certificate)	•	•	•	•	•	•

Are there other potential features of microcredentials you would consider important for your institution?

* In what areas do you think microcredentials could help address skill gaps?

Select all that apply.

- ☐ Microcredentials will not help to address skill gaps.
- ☐ Transferable skills (e.g., communication, problem solving, time management)
- ☐ Technical skills (e.g., data analysis, coding, technical writing)
- ☐ Other job- or discipline-specific skills

* How strongly do you agree or disagree with the following statements about microcredentials at your institution?

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Not applicable
Offering microcredentials will position my institution to access a new market of students.	•	•	•	•	•	•
My institutional leadership is encouraging the development of microcredentials.	•	•	•	•	•	•
My institution is open to working with industry/community partners around microcredentials (e.g., to co-develop microcredentials, or to get advice or endorsement).	•	•	•	•	•	•
The private sector is better suited to serving students in the market for microcredentials.	•	•	•	•	•	•
My institution should focus on offering more traditional degrees and diplomas.	•	•	•	•	•	•
My provincial government is encouraging the development of microcredentials.	•	•	•	•	•	•
My institution has a framework or strategy to guide the development and/or delivery of microcredentials.	•	•	•	•	•	•
Microcredentials are a fad that will not last long.	•	•	•	•	•	•
My institution has allocated sufficient funds/resources to offer microcredentials.	•	•	•	•	•	•
Offering microcredentials will help increase revenue/profitability for my institution.	•	•	•	•	•	•
Offering microcredentials will help us keep pace with current trends in higher education.	•	•	•	•	•	•
Microcredentials present too many challenges with implementation.	•	•	•	•	•	•

* Thinking about Canadian students, and society as a whole, how strongly do you agree or disagree with the following statements about microcredentials?

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Not applicable
Microcredentials add diversity to the types of education offerings available to students.
Microcredentials help differentiate job applicants.
Microcredentials offer students flexibility to learn at their own pace.
Microcredentials help meet the demands of a dynamic labour market.
Microcredentials are needed for adult upskilling and reskilling.
Microcredentials are part of an effective lifelong learning system.
Microcredentials facilitate positive collaboration between industry and postsecondary institutions.

* Has the COVID-19 pandemic affected the way your institution is thinking about microcredentials?

- ☐ I am not sure
- ☐ Yes
- ☐ No
- ☐ Not applicable

* How has the COVID-19 pandemic affected the way your institution is thinking about microcredentials?

If you have any further comments or observations about the topic of microcredentials, please elaborate freely in the text box below.

* Are you interested in sharing more thoughts and perspectives on the growing use of microcredentials within your institution through a 40-minute interview?

- ☐ Yes
- ☐ No

* Please enter your email address so that the researchers may contact you about an interview.

Appendix 2

Interviews

CICan Member Institutions

Atlantic:

- College of the North Atlantic
- Holland College
- New Brunswick Community College

Quebec:

- Cégep André Laurendeau

Ontario:

- Algonquin College
- Durham
- Humber Institute of Technology and Advanced Learning
- Northern College

Manitoba:

- Red River College

Alberta:

- Bow Valley College
- Southern Alberta Institute of Technology

British Columbia:

- British Columbia Institute of Technology
- Fraser Valley University

Territories:

- Yukon University

OTHER:

- Fédération des cégeps
- Pan-Canadian Micro-Credentials Standards Committee
- Regional Associations Representatives Group
- Regroupement des cégeps de Montréal

Appendix 3

List of Acronyms

BCCAT: British Columbia Council on Admissions and Transfer

BCIT: British Columbia Institute of Technology

BHER: Business and Higher Education Roundtable

CICan: Colleges and Institutes Canada

ESDC: Employment and Social Development Canada

HEQCO: Higher Education Quality Council of Ontario

HESA: Higher Education Strategy Associates

MICROBOL: Micro-credentials linked to the Bologna Key Commitments

MOOC: Massive Open Online Course

PLAR: Prior Learning Assessment and Recognition

SAIT: Southern Alberta Institute of Technology

TAFE: Technical and Further Education (Australia)

TSE: The Strategic Counsel

VPA: Vice-president Academic

CICan Member Colleges and Institutes in Canada

Yukon

- Yukon University

Northwest Territories

- Aurora College
- Collège Nordique Francophone*

Nunavut

- Nunavut Arctic College

British Columbia

- British Columbia Institute of Technology (BCIT)
- Camosun College
- Capilano University
- Collège Éducentre*
- College of New Caledonia
- College of the Rockies
- Douglas College
- Justice Institute of British Columbia
- Kwantlen Polytechnic University
- Langara College
- Native Education College**
- Nicola Valley Institute of Technology(NVIT) **
- North Island College
- Northern Lights College
- Coast Mountain College
- Okanagan College
- Selkirk College
- Thompson Rivers University
- University of the Fraser Valley
- Vancouver Community College
- Vancouver Island University (VIU)

Alberta

- Bow Valley College
- Centre collégial de l'Alberta*
- Grande Prairie Regional College (GPRC)
- Keyano College
- Lakeland College
- Lethbridge College
- Medicine Hat College
- NorQuest College
- Northern Alberta Institute of Technology (NAIT)
- Northern Lakes College
- Olds College
- Portage College
- Red Deer College
- SAIT

Saskatchewan

- Carlton Trail College
- Collège Mathieu*
- Cumberland College
- Dumont Technical Institute**
- Great Plains College
- North West College
- Northlands College
- Parkland College
- Saskatchewan Indian Institute of Technologies**
- Saskatchewan Polytechnic
- Southeast College

Manitoba

- Assiniboine Community College
- École technique et professionnelle, Université de Saint-Boniface*
- Red River College
- University College of the North
- Manitoba Institute of Trades and Technology

Ontario

- Algonquin College
- Cambrian College
- Canadore College
- Centennial College
- Collège Boréal*
- Conestoga College Institute of Technology and Advanced Learning
- Confederation College
- Durham College
- Fanshawe College
- First Nations Technical Institute**
- Fleming College
- George Brown College
- Georgian College
- Humber College Institute of Technology & Advanced Learning
- Kenjgewin Teg Educational Institute (or KTEI)**
- La Cité*
- Lambton College
- Loyalist College
- The Michener Institute of Education at UHN
- Mohawk College
- Niagara College
- Northern College
- Sault College
- Seneca College
- Sheridan College
- Six Nations Polytechnic**
- St. Clair College
- St. Lawrence College

Quebec

- Cégep André-Laurendeau*
- Cégep de Chicoutimi*
- Cégep de Jonquière*
- Cégep de l'Abitibi-Témiscamingue*
- Cégep de la Gaspésie et des Îles*
- Cégep de La Pocatière*
- Cégep de Matane*
- Cégep de Saint-Félicien*
- Cégep de Sainte-Foy*
- Cégep de Saint-Jérôme*
- Cégep de Saint-Laurent*
- Cégep de Sept-Îles*
- Cégep de Sherbrooke*
- Cégep de Trois-Rivières*
- Cégep du Vieux Montréal*
- Cégep Édouard-Montpetit*
- Cégep Garneau*
- Cégep Limoilou*
- Cégep Marie-Victorin*
- Cégep régional de Lanaudière*
- Cégep Rivière du Loup*
- Cégep Saint-Jean-sur-Richelieu*
- Champlain Regional College
- Collège Ahuntsic*
- Collège André Grasset*
- Collège d'Alma*
- Collège de Bois-de-Boulogne*
- Collège de Maisonneuve *
- Collège de Rosemont*
- Collège LaSalle*
- Collège Montmorency*
- Collège Shawinigan*
- Cégep Heritage College
- Dawson College
- John Abbott College
- Vanier College

* Francophone

** Indigenous

Newfoundland and Labrador

- Centre for Nursing Studies
- College of the North Atlantic
- Fisheries and Marine Institute of Memorial University of Newfoundland

New Brunswick

- Collège communautaire du Nouveau-Brunswick (CCNB)*
- Maritime College Forest Technology
- New Brunswick College of Craft and Design
- New Brunswick Community College (NBCC)

Prince Edward Island

- Collège de l'île*
- Holland College

Nova Scotia

- Cape Breton University
- Dalhousie Agricultural Campus, Dalhousie University
- Nova Scotia Community College
- Université Sainte-Anne*

Associates

- Association des collèges privés du Québec*
- Association québécoise de pédagogie collégiale*
- Atlantic Provinces Community College Consortium (APCCC)
- BC Colleges (BCC)
- Canadian Association of Diploma in Agriculture Programs (CADAP)
- Colleges Ontario
- Fédération des cégeps*
- Forum for International Trade Training (FITT)
- Horatio Alger Association of Canada
- Indigenous Institutes Consortium
- Inter-American Organization for Higher Education (IOHE)
- Regroupement des collèges du Montréal métropolitain (RCMM)
- Synchronex*
- Tra Vinh University



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