



MALATEST



Future Skills Centre

Evaluation of eCampusOntario's Micro-credentials: Connecting Employers to Micro-credential Graduates

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FSC is a forward-thinking centre for research and collaboration dedicated to preparing Canadians for employment success. We believe Canadians should feel confident about the skills they have to succeed in a changing workforce. As a pan-Canadian community, we are collaborating to rigorously identify, test, measure, and share innovative approaches to assessing and developing the skills Canadians need to thrive in the days and years ahead. The Future Skills Centre was founded by a consortium whose members are Toronto Metropolitan University, Blueprint ADE, and The Conference Board of Canada

The opinions and interpretations in this publication are those of the author(s) and do not necessarily reflect those of the Future Skills Centre or the Government of Canada.



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Executive Summary

Background

In 2020, Ontario implemented a Micro-Credentials Strategy to assist Ontarians with retraining and upgrading their skills to improve their re-entry into the labour market or upskill for success in their current job. Funding was provided through the Ontario Micro-credentials Challenge Fund to speed the development of micro-credentials and increase the number of programs offered in the province. eCampusOntario launched the Micro-credentials Portal in December 2021 to improve access to information and registration to program offerings. The Portal was enhanced through the inclusion of labour market information (LMI), pre-existing lists of credentials relevant to specific industries, and program recommendations to learners based on their current or past job titles. The Future Skills Centre (FSC) provided funding to eCampusOntario's Micro-credentials: Connecting Employers to Micro-credential Graduates project. The project sought to:

- Engage employers, postsecondary institutions, representatives from associations or non-profit organizations, and learners via knowledge mobilization events;
- Expand the number of programs on the Portal tagged with LMI data;
- Enable employers to search for micro-credential programs on the Portal linked to specific skills, job titles, and technologies;
- Create and implement a workflow on the Portal to support employers;
- Generate 10,000 micro-credential recommendations to learners on the Portal; and,
- Support employers to address skill gaps and connect with postsecondary institutions and skilled graduates.

Evaluation Context

R. A. Malatest & Associates conducted an independent rapid evaluation of the project to assess the extent to which project objectives were met and, where possible, to assess the impact of project activities on the short-term outcomes associated with the project. This evaluation collected data through a survey of visitors to the Micro-credentials Portal (Portal survey), a survey of knowledge mobilization event participants and webinar participants, Micro-credentials Portal tracking data, semi-structured interviews with staff, employers, and project partners, and a review of literature, data, and documentation.

Key Findings

There is a continued need to support workers in acquiring the skills needed to respond to and align with current and anticipated labour market demands and needs. Employers report that employees have skill gaps that hinder their job performance as well as challenges hiring staff with the necessary skills. Workers and jobseekers labour market attachment is enhanced when they have in-demand skills. Skill gaps harm workers ability to secure and maintain employment and advance their careers. Canada

spends less private and public funds on adult skills training and education than other countries. This leaves Canadian workers predominantly responsible for their skill development. Employers should be encouraged to invest in reskilling and upskilling employees. While training is a commonly used strategy to overcome skill shortages, training from educational institutions is underutilized by employers for reskilling and upskilling employees. Micro-credentials allow institutions to meet the growing demand for new skills and competencies in the workforce. Employers face barriers upskilling or reskilling employees including identifying and accessing training, limited time and capacity to develop and maintain relationships with post-secondary institutions, limited training budgets, and insufficient tools to assess the applicability of training to their skill requirements. Employers need support to find and use relevant training programs. There is a lack of awareness among employers and employees of the value-add of micro-credentials in overcoming skill gaps and of the existence of the Micro-credentials Portal.

eCampusOntario successfully engaged employers, postsecondary institutions, representatives from associations or non-profit organizations, and learners via knowledge mobilization events. They held eight online or in-person knowledge mobilization events and conducted post-event surveys. Knowledge mobilization events increased employer understanding of opportunities to upskill or reskill employees through micro-credentials, provided deeper insights on skill development priorities and opportunities in their industry, and informed them how to better connect with qualified candidates to fill labour gaps in their company. Employers may benefit from having regular knowledge mobilization events.

eCampusOntario also developed a working group comprised of 12 post-secondary institution partners. From these consultations, eCampusOntario learned that the Portal could contribute to meeting employer training needs by enabling access to local training, supporting employers to build connections with post-secondary institutions who offer this training, and enabling employers to recruit skilled micro-credentialed program graduates.

The inclusion of LMI data in the Portal is intended to help guide decision-making. There was an increase in the number of programs tagged with LMI data. During the project, 579 additional micro-credential programs were tagged with LMI data, exceeding the target of 400 additional programs tagged, for a total of 2,181 programs with LMI data which represents 85% of Portal listings. Post-secondary institution administrators face challenges with LMI tagging. The Portal design considered the needs of post-secondary institutions by implementing AI tools to assist with LMI data tagging and processes that have low administrative burden. However, findings suggest that Portal users may lack of experience with LMI data which may limit the Portal's utility to workers and employers. There is a need to ensure employers and learners understand how to leverage the LMI data.

The Portal seeks to support employers to overcome skill gaps and maintain or secure skilled workers. It was updated to enable employers to search for micro-credential programs linked to specific skills, job titles, and technologies. Employers in healthcare and life sciences, manufacturing, information technology, hospitality and tourism, construction, and transportation and warehousing benefit from pre-existing lists of micro-credentials relevant to their industry. By enabling employers to identify relevant low-cost training opportunities, the modified Portal has or will contribute to overcoming barriers

employers face in upskilling or reskilling employees. For example, in the Portal, they can filter by program location, duration, industry, skill, and LMI data.

As not all Portal features had been fully launched prior to the completion of several data collection activities,¹ there was insufficient evidence to assess the extent to which the Portal is relevant and useful to employers and educators as well as its effectiveness at connecting them to each other. The Portal design allowed employers to engage with multiple institutions quickly through a contact interface and to indicate if they are seeking to upskill existing employees or recruit skilled graduates. Post-secondary institutions can direct emails from the Portal to specific staff inboxes and provides the institutions with the employers' contact information. The knowledge mobilization event survey suggests that the project enhanced employer knowledge of how to connect with post-secondary institutions. However, low employer knowledge of micro-credentials, their value-add, and the Portal, the lack of transparency on how the contact interface works, and the reliance on employers to reach out limit the extent to which employers use the Portal to connect with institutions to upskill existing or recruit new employees. Currently, post-secondary institutions cannot reach out independently to employers via the Portal. It was suggested that there may be benefits to enabling them to do so.

The Portal seeks to provide learners with career guidance which can support individuals to make well-informed educational, training, and occupational choices. eCampusOntario sought to increase learner engagement with the Portal, including by updating the learner homepage and advertisements to priority industry segments in regions with higher job vacancy rates. To guide learners, it provides program recommendations based on an individual's current or past job title. In total, 14,843 personalized recommendations have been generated by the Portal, exceeding the 10,000 target set for the project. Generally, learners engaged with the Portal to upskill their careers, explore new career paths, broaden their learning, and learn more about micro-credential programs. Half of learner Portal survey respondents agreed that personalized micro-credential program recommendations were aligned with their needs and 46% were likely to register for recommended programs. Learners who were likely to register primarily wanted programs delivered synchronously in-person and aligned with their previous experience and career aspirations. Learners who were unlikely to register primarily wanted programs delivered asynchronous online and aligned with their skill development goals. Interviewees from postsecondary institutions indicated they received few inquiries from Portal viewers which suggests that recommendations are not leading to inquiries from learners to postsecondary institutions. It was suggested that recommendations could be improved by accounting for more than simply current and past job titles, such as by expanding to align with interests, existing strengths, existing and desired skillsets, previous educational achievement, and budget considerations. In addition, employment agencies could be encouraged to use the Portal to upskill their clients.

¹ Most notably survey feedback from six of eight events and three of five interviews with employers and postsecondary institutions occurred prior to September 25, the date by which all Portal features had been completed.

Many Portal improvements were suggested by interviewees, event and Portal survey respondents, including:

- Increasing the variety of programs on the Portal to include such offerings as free courses, additional topic areas (e.g., artificial intelligence, manufacturing equipment), courses offered by non-postsecondary institutions, courses that offer experiential or work integrated learning opportunities, and international programming.
- Increasing the extent to which search filters narrow down the relevant program offerings for users.
- Search filters could be enhanced to include cost, funding eligibility, previous educational achievements, a larger variety of past and current job titles, and college or university departments.
- Including cost, location, program content, language of instruction, duration, start dates, employment information, and course sequencing in the program information. It is important to note that language of instruction, duration, and start dates were addressed after this information was collected, which demonstrated eCampusOntario's responsiveness to desired features they had learned about during project implementation.
- Improving the Portal functionality by reducing lag, enhancing navigation, improving the mobile version, and enabling the ability to revisit a previous search.

Recommendations

To strengthen the eCampusOntario's Micro-credentials Portal contribution to career guidance, labour market attachment, and workers' ability to secure, maintain, and advance their employment, the evaluation proposes that eCampusOntario carry out the following four recommendations:²

- Assess and enhance the usefulness of labour market information for Portal users and ensure postsecondary institutions are supported in accurately tagging their programs.
- Conduct user testing of the Portal to determine content clarity and usability and ease of navigation.
- Expand the scope of course offerings on the Portal.
- Seek to increase the awareness of the value-add of micro-credentials in overcoming skill gaps and the existence of the Portal.

² It is important to note that these recommendations may have been implemented by eCampusOntario as part of continuing work following the conclusion of the evaluated funding period. However, data to suggest that these activities were underway during the data collection phase of the evaluation were not available.

1. Project Objectives, Activities, and Anticipated Outcomes

1.1 Background

In 2020, Ontario implemented a Micro-Credentials Strategy to assist Ontarians with retraining and upgrading their skills, contributing to career advancement in an individual's current job or improving their re-entry into the labour market. The Strategy encouraged post-secondary institutions to develop rapid training programs designed to teach skills that match employers' needs. Input from business sectors often informed program development. Additional funding was provided in April 2021 through the Ontario Micro-credentials Challenge Fund Round 1 and Round 2 in the Fall of 2023 to speed the development of micro-credentials and increase the number of programs offered in the province.

The Ontario Online Learning Consortium (eCampusOntario) was commissioned by the Government of Ontario to develop and the Micro-credentials Portal (Portal) which was launched in December 2021. The Portal improved access to information and registration through an online Portal with a searchable database of program offerings and has undergone several iterations. From February 2023 to December 2023, a pilot project was launched for the Portal designed to link Labour Market Information (LMI) with the micro-credential programs. The pilot focused on three sectors: manufacturing, healthcare, and information technology. It worked with institutions offering programs in these areas. The pilot created a new workflow in the Micro-credentials Portal to make personalized micro-credential program recommendations based on an individual's current or past job title. A new interface was developed for post-secondary institutions to tag their micro-credential offerings with LMI data. Between April and December 2023, 1,267 micro-credential programs were tagged with LMI data and 5,273 personalized micro-credential programs recommendations were generated.³ This resulted in a 4% increase in inquiries to institutions.

eCampusOntario received funding from the Future Skills Centre for the *Micro-credentials: Connecting Employers to Micro-credential Graduates* project to explore how eCampusOntario's Micro-credentials Portal could better connect employers with institutions that offered micro-credentials and with workers who had attained in-demand skills through micro-credentials.

Specifically, the project looked to:

- Engage employers, postsecondary institutions, representatives from an association or not for profit organization, and learners through a series of knowledge mobilization events to generate awareness of the Micro-credentials Portal and understanding of outcomes of the 2023 pilot project which linked LMI data to programs. As well, the engagement was designed to improve understanding of employers' top labour market skill gaps and their previous experience connecting with post-secondary institutions for employee upskilling and graduate recruitment.

³ Source: eCampusOntario Portal Listing and Traffic Data.

- Increase by 400 the number of active programs tagged with labour market information (LMI).
- Design, develop, and deploy a new workflow in the Micro-credentials Portal to support employers to search for micro-credential programs that are linked to specific skills, tools, technologies, or job titles and enable them to connect with post-secondary institutions via the Portal.
- Generate 10,000 micro-credential recommendations to learners through the Portal.

This continuation project had two goals: close employer demand gaps by helping employers find micro-credential programs linked to the skill gaps they are experiencing; and allow employers to access talent by creating a pathway for employers to connect with institutions that are producing graduates with the skill sets they need.

1.2 Rationale

There is a need for upskilling in specialized, in-demand areas to respond to the ever-evolving needs of the labour market and the skill requirements for sustained economic productivity.⁴ Micro-credentials are an innovative way to demonstrate proficiency in skills and competencies and offer a potentially transformative strategy to address both skills gaps in Canada's labour market and future skills needs for sustained economic productivity. Linking labour market information to micro-credential programs can help employers and workers make informed learning and training decisions to respond to industry needs and demands for a skilled workforce.

1.3 Theory of Change and Logic Model

This project explored how enhancements to eCampusOntario's Micro-credentials Portal (Portal) could help employers make informed decisions on where to access training and talent to meet their labour needs and address skills gaps through a series of engagement events, feedback surveys from event participants and individuals accessing the Portal, and interviews with eCampusOntario staff, postsecondary institution partners and employers.

Proposed Theory of Change:

If employers can access the eCampusOntario Micro-credentials Portal to search for micro-credentials that are linked to specific skills, tools, and technologies they need in their workforce,

Then employers will be better informed about how to close their workforce gaps,

Resulting in more employer traffic to institutions' websites for additional program information and connections to micro-credential graduates with the required skills,

Contributing to more users registering in micro-credential programs that lead them to jobs that match skill sets employers are seeking.

⁴ (World Economic Forum, 2023; Council, 2020; Denison, 2023)

A complete logic model, which describes the program's activities, outputs, and anticipated outcomes, can be found in Appendix B: Logic Model. Although the logic model specifies intended short-term, intermediate-term, and long-term outcomes, only short-term outcomes are evaluated in this report as intermediate and long-term outcomes will take more time to be realized. The anticipated short-term outcomes included:

- Labour market data helps drive demand for micro-credential programs.
- Labour market data helps to recruit individuals with in-demand labour market skill sets obtained through micro-credential programs.
- Labour market data helps to increase employers' ability to connect with educators toward upskilling/reskilling.
- Users better understand the labour market outlook for careers associated with micro-credential programs.

These short-term outcomes are based on the assumptions that up-to-date labour market information is available for the micro-credential programs targeted to address in-demand skills, and that employers and learners are aware of micro-credential programs.

2. Evaluation Context and Background

2.1 Key Evaluation Questions

Three project specific evaluation questions were developed in collaboration with eCampusOntario (see **Figure 2.1**). The key evaluation questions were also aligned to questions developed by the Future Skills Centre which focus on the thematic priority area for Pathways to Jobs (see **Figure 2.2**). These questions guided the evaluation data collection activities, analysis, and reporting.

Figure 2.1: Project Specific Evaluation Questions and Sub-Questions

Project Specific Evaluation Questions	Sub-questions
1) Labour Market Data, Employee Skills, and Recruitment How does labour market data help to increase employers' ability to upskill/reskill employees or find and recruit individuals with in-demand labour market skill sets obtained through micro-credentials?	<ul style="list-style-type: none"> • In what ways did the project increase employers' ability to upskill/reskill employees? • In what ways did the project increase employers' ability to recruit individuals with in-demand labour market skill sets obtained through micro-credentials? • To what extent does the eCampusOntario Micro-credentials Portal help individuals engage in career guidance? • To what extent does the eCampusOntario Micro-credentials Portal's enhanced workflow support employers and learners?
2) Labour Market Data & Connecting Employers and Institutions How can labour market data help to make more connections between employers and post-secondary institutions?	<ul style="list-style-type: none"> • In what ways did the project increase employers' ability to connect with institutions? • To what extent did employers and educators find the Portal relevant/useful for connecting with each other?
3) Demand for Micro-Credential Programming How can labour market data help drive demand for micro-credential programs?	<ul style="list-style-type: none"> • To what extent did postsecondary institutions tag an additional 400 programs with labour market information? • To what extent does the project meet employer workforce training and recruiting needs? • To what extent did the project engage more learners for personalized micro-credential program recommendations? • To what extent did learners act on the personalized micro-credential program recommendations? • To what extent does the eCampusOntario Micro-credentials Portal support those transitioning to a new sector of employment?

Figure 2.2: FSC Thematic Questions and Alignment with Project Specific Evaluation Questions

FSC's Thematic Table Questions: Pathway to Jobs	Alignment with Project Specific Evaluation Questions		
	Question 1) Labour Market Data, Employee Skills, and Recruitment	Question 2) Labour Market Data & Connecting Employers and Institutions	Question 3) Demand for Micro-Credential Programming
1. How can the delivery of engaging career guidance remote services be refined (e.g., new tech tools, information and communications technology (ICT) capacity training)?	X		
2. What interventions best help workers develop stronger labour market attachment (e.g., pre-employment, wrap-around supports)?	X		X
3. What do workers and jobseekers need to know to better manage their careers into the 4th Industrial Revolution, the Green Economy, or other major transformation affecting employment in Canada?	X		X

2.2 Lines of Evidence

Data collection methods used to answer the evaluation and learning questions for this project included a literature, data and document review, review of data tracking analytics, user experience surveys and key informant interviews. This information was also assessed for its contribution to FSC's thematic priority of pathways to jobs. The data collection methods are summarized in the figure below by line of evidence.

Figure 2

Evidence	Respondents	Information Collected	Sources or Sampling
Literature, data and document review	Not applicable	Malatest reviewed previous studies, evaluations and reports to find appropriate contextual information and data on the need for micro-credentials, and the use and effectiveness of methods to inform employers and learners of micro-credentials that could be used to provide comparative	Information was sourced from documents and reports provided by eCampusOntario and online search of related documentation from other jurisdictions conducted by Malatest.

		information to address the evaluation questions.	
Review of data tracking analytics	Not applicable	Data examined included information on reach, unique users, page visits, click-throughs to postsecondary institutions offering micro-credential programs, and number of personal recommendations generated.	eCampusOntario Portal data tracking analytics from portal users were reviewed.
Survey of knowledge mobilization event participants	n=48: Wave 1; n=29: Aug. 2 to Oct. 5 covered 7 events. Wave 2; n=19: Dec. 12-20 covered 1 event. 52% employers, 25% learners, 13% association or not for profit, 8% postsecondary institutions, and 2% did not specify	5-7 minute surveys collected feedback on extent the event increased understanding of the benefits of micro-credentials; awareness of the Portal and how to connect employers with postsecondary institutions, and likelihood of exploring the Portal. See Appendix D for the survey instrument. Respondents were entered into a draw for a \$250 e-gift. A total of 4 e-gift cards were provided.	Virtual participants were provided a link to the online survey. In person participants were asked to provide feedback through an online survey accessible with a QR code. Aligning with informed consent, the survey introduction described the purpose, and voluntary nature of the survey, and that responses would remain confidential.
Survey of visitors to the Micro-Credentials Portal	n=141: Wave 1; n=89: Sept. 11 to Oct. 7 Wave 2; n=52: Nov. 13 to Dec. 8 95% learners, 5% employers	A 1-2-minute online survey was deployed on the Portal to collect feedback on the effectiveness of the portal from users. See Appendix D for the survey instrument. Respondents were entered into a draw for a \$250 e-gift. A total of 2 e-gift cards were provided.	Portal users received a pop up while in the Portal, inviting them to complete the survey. Aligning with informed consent, the survey introduction described the purpose, and voluntary nature of the survey, and that response would remain confidential.
Key Informant Interviews	n=7 One-hour virtual interviews with: 2 eCampusOntario staff,	Interviewees provided feedback on the extent to which labour market data help drive demand for micro-credential programs; whether micro-credential	eCampusOntario provided contact information for staff, employers, labour market associations, and post-secondary institutions. An

	2 post-secondary education partners, 1 employer, 2 interviewees were both employers and post-secondary education partners	programs tagged with labour market data can help employers upskill/reskill employees or find individuals with in-demand labour market skill sets; how eCampusOntario's Micro-credentials Portal helps to connect employers and postsecondary institutions; and eCampusOntario's efforts to engage employers, postsecondary institutions, and learners.	email invitation was sent to all contacts inviting them to participate in an interview, explaining the purpose of the interview, how data would be kept confidential and secure, and that participation was voluntary.
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2.3 Benchmarking

The project used the following information for contextual analysis and benchmarking:

- eCampusOntario portal data tracking analytics to determine the increase in traffic to the Micro-Credentials Portal for learners compared to the same time period in 2023.
- Relevant recent studies related to the need and demand for micro-credentials to address industry skills and training challenges.

2.4 Equity, Diversity, Inclusion, and Reconciliation

Malatest evaluated the extent to which the project incorporated an equity, diversity, inclusion, and reconciliation (EDI&R) perspective through:

- Assessing the extent to which the Micro-credentials Portal has features that make relevant programs easier to find by underrepresented groups.
- Assessing the extent to which the project helps to lower barriers for underrepresented individuals looking to find micro-credential programs.

2.5 Research Ethics

To ensure the study followed best practices in ethical research, the following elements were implemented:

- All data from the survey and interviews were aggregated and reported anonymously.
- To ensure informed consent all respondents were provided with information on how:
 - Their data would be collected and securely stored on servers,
 - Their privacy would be protected according to applicable legislation, and

- Participation was voluntary, and they could skip any questions they felt uncomfortable answering.

2.6 Limitations

Although work was completed to mitigate the limitations of the evaluation were possible, the following limitations should be considered when interpreting the findings.

- **Timelines:** Data collection timelines were short. To mitigate short timelines data were collected through multiple lines of evidence (i.e., surveys, interviews, data tracking) to increase response rates and efficiencies where possible. An incentive was offered to encourage participation in the event feedback and Portal user experience surveys. In addition, time constraints led to not all workflow enhancements being completed during the evaluation period, which limited the extent to which effectiveness of employer-institution connections and how the Portal met user needs could be measured.
- **Connecting with employer representatives:** eCampusOntario used its existing partnerships with postsecondary institutions and the Conference Board of Canada to recruit employers for the knowledge mobilization events. However, not all employers invited to participate attended the knowledge mobilization events led by eCampusOntario. To increase survey participation in the evaluation, a prize incentive was used to encourage event participants to provide feedback through the online survey.
- **Portal user engagement:** Individuals who accessed the Portal showed limited willingness to participate in the survey. A prize incentive was therefore offered to encourage participation.
- **Selection bias:** Participation in data collection activities was voluntary. This may have resulted in a selection bias where those who hold particularly strong views about the topic (whether positive or negative) may have been more likely to participate in the evaluation than those who were neutral or had no opinion. For example, interested individuals that were already engaged and invested in eCampusOntario's activities likely held positive views about the Micro-credentials Portal.

3. Findings around Project Relevance

Finding: There is a continued need to support workers in acquiring the skills needed to respond to and align with current and anticipated labour market demands and needs.

The 2021 Survey of Employers on Workers' Skills reported that 56% of employers had employees that were unable to perform their job at the required level due to skill gaps. Just over half (57%) of these skill gaps were technical or job specific, with just under half having gaps in problem solving skills (46%). Skill gaps in the current workforce are in part attributed to the aging workforce and higher retirement rates, technological changes and evolving marketplace demand. Size of a business impacts the rate at which they report skill gaps with small (74%), medium (90%) and large business (93%) all reporting skill gaps, while micro businesses only report skill gaps at a rate of 33%. Furthermore, 45% of all businesses, regardless of size, were unable to hire staff with the necessary skills to fulfill their job requirements.⁵ The Skills Council of Canada reports that skill gaps impact an organization's ability to grow and remain competitive; suggesting reskilling and upskilling as the best solution to these skill gaps.⁶

In response to skill gaps, employers are attempting to train their staff. The 2022 Survey of Innovation and Business Strategy reported that 53% of employers train staff to overcome skills shortages.⁷ However, Canada lags behind global peers in public and private spending and the delivery of skills training and education for working age adults.⁸ Workers are primarily responsible for their skill development.⁹ In addition, the World Economic Forum's 2023 Future of Jobs report noted that training from universities and other educational institutions was the least prioritized training type for future reskilling and upskilling¹⁰ (See **Error! Reference source not found.**). This suggests that employers are underinvesting in the skill development of their employees and underutilizing the available programming from educational institutions. Thus, there is a continued need to encourage employer investment in and demonstrate the value-add of reskilling and upskilling employees as well as connect employers with programming relevant to their workforces. Furthermore, evidence suggests that the current models of education will not be able to meet the growing demand for new skills, competences, and reskilling.¹¹ Micro-credentials play an important role in equipping educational institutes to meet this need.¹²

⁵ (Fissuh, Gbenyo, & Ogilvie, 2022)

⁶ (Skills Council of Canada, 2024)

⁷ (Statistics Canada, 2024)

⁸ (White & Wolfe, 2021)

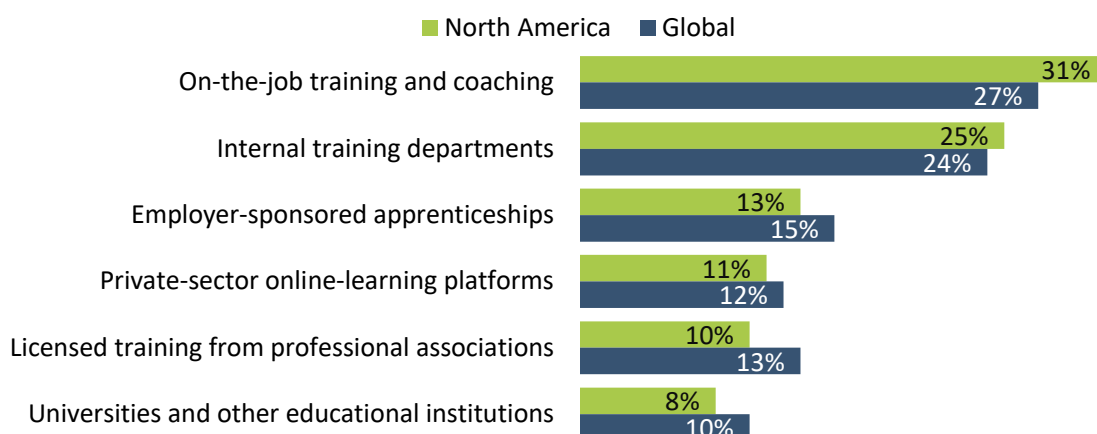
⁹ (White & Wolfe, 2021)

¹⁰ (World Economic Forum, 2023)

¹¹ (Shanahan & Organ, 2022)

¹² (Shanahan & Organ, 2022)

Figure 3.1: Types of training prioritized by organizations surveyed for future reskilling and upskilling (share of organizations surveyed)



Source: (World Economic Forum, 2023)

4. Evaluation FindingsError! Reference source not found.

4.1 Summary of Impacts and OutcomesError! Reference source not found.

eCampusOntario exceeded project targets for the number of additional programs tagged with labour market data (579 vs. 400 target), number of active programs with employer partner listed (156 vs. 50 target), and number of personalized micro-credential program recommendations (14,843 vs. 10,000 target). However, not all short-term outcomes were fully achieved. While the project increased employers' ability to recruit individuals with in-demand labour market skill sets and enhanced employer knowledge of how to connect with post-secondary institutions through knowledge mobilization events and the Portal design, evidence suggests that employers could increase the extent to which they use the Portal to connect with institutions. Evidence also suggests that there is a continued need to increase the understanding of employers and learners of the value of micro-credentials in meeting skill gaps. Findings also suggest that the relevance of personalized micro-credential program recommendations could be improved to increase the extent to which learners act on the recommendations. Figure 4.1 provides a summary assessment of the project's short-term outcomes.

Figure 4.1: Summary Assessment of Intended vs. Actual Outcomes

Anticipated Short-term Outcome	Actual Short-term Outcome	Achievement Status
Labour market data helps to recruit individuals with in-demand labour market skill sets	60% of employers (n=32) who completed Q2_B of the knowledge mobilization event survey agreed or strongly	Achieved The project increased employers' ability to recruit individuals with in-demand

obtained through micro-credentials	agreed that they now have information to better connect with qualified candidates to fill labour gaps in their company	labour market skill sets through knowledge mobilization events.
Labour market data helps to increase employers' ability to connect with educators toward upskilling/reskilling	75% of employers (n=44) who completed question Q2_C of the knowledge mobilization event survey agreed or strongly agreed that they now have information to better connect with post-secondary institutions	Achieved The project enhanced employer knowledge of how to connect with post-secondary institutions via the Portal.
Labour market data helps drive demand for micro-credential programs	47% of learners (n=134) who completed the portal survey agreed or strongly agreed labour market data was useful to help them decide if they would register for a program. Employers were generally satisfied with the Portal's ability to meet their workforce training and recruiting needs, including the use of labour market data on programs searched in the Portal. ¹³	Achieved There is sufficient evidence to indicate that labour market data helped learners decide if they would register for a program. However, more data should be collected to understand how LMI drives demand in non-learner groups such as employers.
Users better understand the labour market outlook for careers associated with micro-credentials	None of the learners who indicated through the portal survey that they were likely to register for a recommended program (n=61) said that they would do so because of the labour market information. Only 25% of the learners who indicated through the portal survey that they <i>may</i> register for a recommended program (n=75) would do so because of the labour market information.	Achieved only a small proportion of survey respondents noted they may register for a listed program because of the LMI. More work is needed to explore how labour market data can be used to encourage those who are undecided to register for a program.

4.2 Project Implementation

Finding: Consultations contributed to eCampusOntario's ability to gather insights on how the Portal could support employer training needs. Specifically, the Portal could provide access to

¹³ The number of employers responding to the Portal survey were too low to report results.

local training aligned with company operations, building connections with post-secondary institutions who may offer this training, and support recruitment of skilled workers such as credentialed program graduates.

eCampusOntario held eight knowledge mobilization events, four online and four in-person, through which they engaged 230 attendees. The figure below shows the date, location, group types, number of registrants and attendees per event. During these events, eCampusOntario sought feedback on what was needed to address skill gaps among workers to meet evolving labour market needs. Participants of the events were also provided information about the 2023 pilot Portal which linked LMI data to micro-credential programs aimed at three sectors: manufacturing, healthcare, and information technology.

Figure 4.2: Summary of Knowledge Mobilization Events

Event Date	Location	Group Type	Registrants	Attendees
June 24	Online	Postsecondary Institutions	23	23
August 2	Online	Employers	18	14
August 21	Online	Employers	91	54
September 17	In Person	Employers	37	33
September 17	In Person	Employers	12	11
September 23	In Person	Employers	25	24
September 27	In Person	Employers	8	6
December 12	Online	Employers, representatives from an association or not for profit organization, and learners	133	65
Total		Target of 180 registrants across all events	347	230

eCampusOntario relied on existing and new partnerships with organizations across Canada who facilitated outreach to employers. Partners included the Conference Board of Canada (their OpportuNext platform), Newfoundland and Labrador Rural and Economic Development, and Bow Valley College. Similarly, eCampusOntario worked with employer partners of micro-credential programs and the Ontario Collaborative Innovation Platform (OCIP) Team, a branch of eCampusOntario, to engage employers. A working group comprised of 12 eCampusOntario's post-secondary institution partners was developed to guide the initial knowledge mobilization events and gather insights to develop the Portal priorities.

Following the knowledge mobilization events, participants were invited to answer a survey. Using the information gathered through the events and the post-event survey, eCampusOntario determined that employers are seeking training opportunities that are local to their operations, including training for technical and soft skills, and are challenged to build connections with post-secondary institutions.

Thinking about lessons learned from the project eCampusOntario staff noted that:

- Partnerships are essential in engaging the audience of interest, in this case employers.

- Gathering data from employers is time consuming and incentives are required to increase participation.
- Smaller engagement sessions segmented by industry sector may more effectively generate feedback from employer and industry participants.
- Post-secondary institutions are well versed in metadata tagging and are interested in tagging their courses.
- Existing relationships and partnerships with post-secondary institutions made it easy to engage this group in the project. Previous work with eCampusOntario, the Portal, and an understanding of tagging, meant institutions understood and saw value in the project.
- Leveraging existing industry partnerships and working groups may help increase awareness and utilization of the Portal.
- Staff shortages in post-secondary institutions can be overcome through automated workflow tools.
- Tool needs to be positioned correctly in order to reach the intended audience, which for this project meant ensuring advertising and Portal landing pages included the correct call to action to learners.
- Creating a tool like the Portal is a never-ending process as evolving industry priorities require the Portal to be re-defined and refined to meet these changing priorities.

As a result of this consultation (knowledge mobilization events, post-event survey and the Working Group), eCampusOntario developed a workflow to allow employers to search for training opportunities by skill needed (linked to LMI data) on the Micro-credentials Portal. At the time of the evaluation, not all the employer features had been fully launched on the Portal. Portal modifications, planned or implemented, were anticipated to have the following impacts:

- Increased employer ability to upskill and reskill their employees.
- Enhanced provision of career guidance.
- Enhanced workflow for employers.
- Increased employer ability to connect with institutions.
- Creation of a tool that had the potential to increase employer ability to connect with institutions.
- Enabling post-secondary institutions to tag LMI data to their program offerings posted on the Portal.
- Helping to meet employer workforce training and recruiting needs.
- Engaging learners through the provision of personalized micro-credential program recommendations.

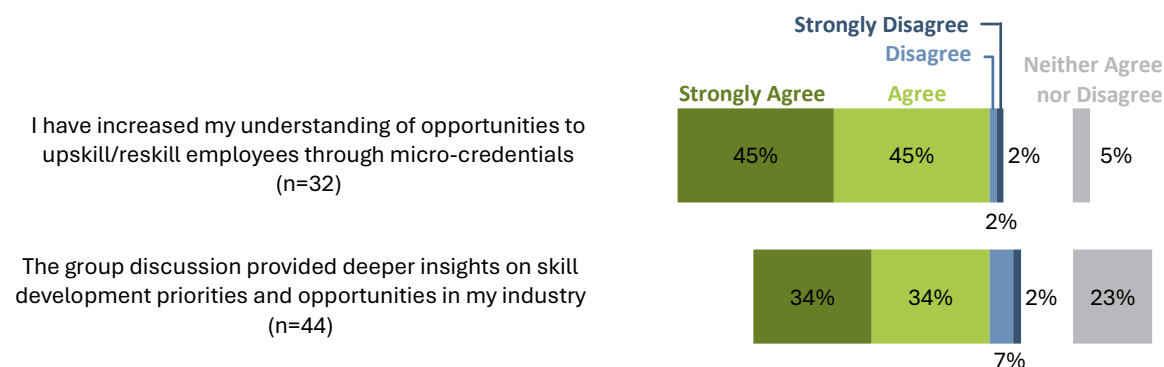
4.3 Labour Market Data, Employee Skills, and Recruitment

4.3.1 Employer Ability to Upskill and Reskill Employees

Finding: The project increased employers' ability to upskill/reskill employees by increasing their understanding of how micro-credentials can contribute to employee skill and their ability to find low-cost local programs that meet their needs. The Portal could be enhanced through the inclusion of price information and funding eligibility within program descriptions, enabling post-secondary institutions to reach out to employers, and ensuring employers understand how to leverage the LMI data included in the Portal.

The majority (91%) of knowledge mobilization event survey respondents agreed or strongly agreed that, following the event, they had an increased understanding of opportunities to upskill/reskill employees through micro-credentials and 68% agreed or strongly agreed that group discussion at the event provided deeper insights on skill development priorities and opportunities in their industry (See **Figure 4.3**).

Figure 4.3: Utility of knowledge mobilization events



Source: Source: Event Survey Q2a & Q02D

Note: Totals may not add up due to rounding.

Employers participating in the events stressed that they required a way to quickly upskill or reskill existing staff or new staff recently onboarded, particularly given the number of barriers they face identifying and accessing training. Barriers included limited time and capacity to develop and maintain relationships with post-secondary institutions, limited training budgets, and insufficient tools to assess the applicability of training to their unique skill requirements.

eCampusOntario staff noted that the modified Portal addresses these barriers, thus increasing employers' ability to upskill and reskill employees in several ways:

- By allowing employers to filter training opportunities listed on the Portal by program title, duration, industry of relevance, location of training, tools and technology, skill shortages, and LMI data, they can more easily find local programs that match their needs and the needs of their employees.

- Tagging micro-credential programs aimed at both technical and interpersonal skills to LMI data allows employers to quickly identify programming that focuses on improving employee interpersonal or social/emotional skills which is typically difficult to find.
- The Portal's focus on micro-credentials, which are low-cost, reduces a common barrier to employee upskilling faced by employers, program cost. To further address this challenge Portal staff were adding a field that would allow institutional administrators to include price information to program descriptions.

While post-secondary institution interviewees agreed with staff that the Portal provides employers with a tool to upskill employees, they stressed that employers are not sending their employees to sign up for micro credentials. It was suggested this was not occurring because employers did not fully understand the value and applicability of such credentials and that there was an opportunity for eCampusOntario to conduct online sessions with employers to increase their awareness and understanding of micro-credentials. One post-secondary institution also suggested that the institutions themselves should more actively be reaching out to employers to increase understanding of micro-credentialing opportunities. Thus, program advisory committees could be leveraged to increase employer awareness of and buy in for micro-credentialing by either including the staff responsible for micro-credential program development on the committee or working directly with employers/groups of employers to develop micro-credentials that fulfill industry need.

Employers interviewed agreed that the Portal equips employers with a tool that efficiently identifies relevant local post-secondary institutions offering the necessary micro-skills to allow employee upskilling. Similarly, 80% of knowledge mobilization event survey respondents reported that they were likely or very likely to explore MicroLearnOntario.ca (i.e., the Portal) to learn more about short-duration training programs.¹⁴ When thinking about the usability of the Portal specifically, employers observed that the extent to which labour market information is attached to micro-credential programs varies and that the need for such linkages varies based on employers' understanding of the labour market. Employers with a less seasoned understanding of the labour market may find the linkages to be critical in their assessment of the program's relevance to their training needs.

Interviewed employers perceived such linkages as very important for learners as they enable them to easily assess the relevance and applicability to their upskilling requirements. However, about the same percentage of learner portal survey respondents reported agreeing or strongly agreeing that labour market information was useful to help them decide which programs to register for (47%) as was the percentage reporting that the information had no impact, was not noticed, or could not be used (45%).¹⁵ This suggests that both employers and learners could benefit from an increased understanding of how to leverage the LMI data included in the Portal.

¹⁴ Source: Knowledge Mobilization Event Survey Q5 (n=44)

¹⁵ Source: Survey of visitors to the Micro-Credentials Portal QA6_1 (n=134).

While employers were satisfied with the program descriptions found on the Portal, it was suggested that the Portal could also provide information on whether specific programs were eligible for the Canada Ontario Job Grant. Having this information would increase an employers' ability to upskill employees given that cost could be a prohibitive factor in supporting employees to obtain micro-credentials.

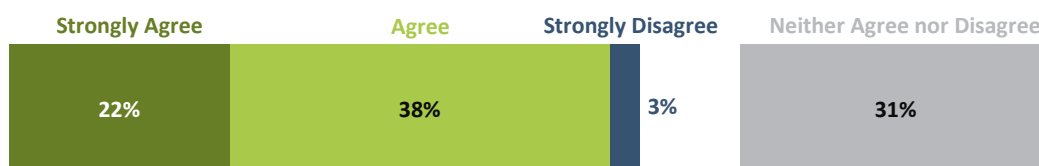
4.3.2 Recruitment

Finding: The project increased employers' ability to recruit individuals with in-demand labour market skill sets through knowledge mobilization events.

The majority (60%) of knowledge mobilization event survey respondents agreed or strongly agreed that they acquired information that would allow them to better connect with qualified candidates to fill labour gaps in their company (See **Figure**). Open-text respondents to question seven of the knowledge mobilization event survey provided feedback on the Portal, including its usefulness for employer recruitment and challenges connecting or partnering with employers, PSEs, and/or graduates. This suggests that the project positively contributed to the ability of employers to recruit individuals with in-demand labour market skill sets obtained through micro-credentials.

Figure 4.4: Knowledge Mobilization Events & Portal Utility for Recruitment

I have information to better connect with qualified candidates to fill labour gaps in my company



Source: Survey of knowledge mobilization event participants Q02D (n=44).

Note: Totals may not add up due to rounding.

Interviewed employers reported using a variety of methods to recruit individuals with in-demand market skill sets. These methods included participating in apprenticeship programs offered through high schools, such as the Ontario Youth Apprenticeship Program, or alternately they sometimes looked to local post-secondary institutions for program graduates. It was suggested that organizations such as Employment Ontario could be using the Portal to find upskilling courses for their clients therefore making those clients more hireable among employers.

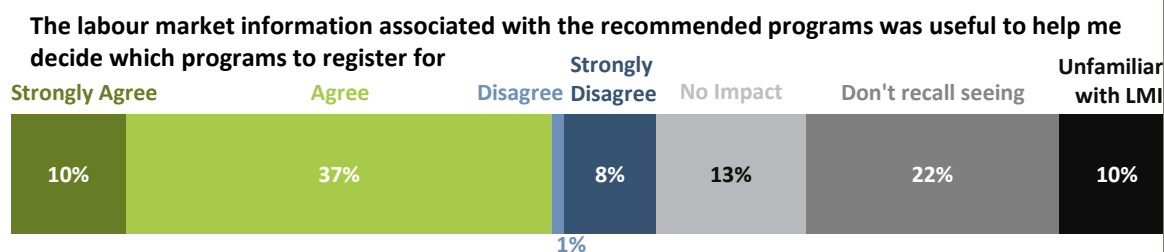
4.3.3 Engagement in Career Guidance

Finding: The inclusion of LMI data into the eCampusOntario Portal is effective in engaging learners in career guidance when they perceive the information as useful, are able to find the information, and understand how to use the information to inform their decision-making.

All interviewee groups reported that the inclusion of LMI data in the generation of personalized recommendations helped ensure their alignment with labour force needs thus helping guide individuals

in their career evolution. However, as noted previously, 45% of learner portal survey respondents reported that the LMI data had no impact, was not noticed, or could not be used, and only 47% agreed or strongly agreed that the LMI data was useful to help them decide which programs to register for (See **Figure 4.5**). This suggests that to maximize the value-add of the inclusion of LMI data in the Portal, learners need to perceive the LMI data as useful, easily find the information on the Portal, and understand how to use the information to inform their decision-making.

Figure 4.5: Usefulness of LMI data



Source: Survey of visitors to the Micro-Credentials Portal QA6_1 (n=134)

Note: Totals may not add up due to rounding.

4.3.4 Workflow

Finding: The design of the eCampusOntario Micro-credential Portal's enhanced workflow for employers considered:

- **Employers' need to identify relevant low-cost training opportunities, connect with post-secondary institutions, and have multiple ways to search the Portal.**
- **Post-secondary institutions' need for an artificial intelligence tool to assist them with LMI data tagging, and their familiarity with 2021 National Occupancy Classification codes.**
- **The inclusion of registration and start date information through processes with low administrative burden.**

The Portal, at its core, was designed as a comprehensive centralized place for learners to find information about upskilling and reskilling. By creating customized workflows for employers based on feedback from employers and post-secondary institutions, eCampusOntario staff felt the Portal addressed employer needs including the need to locate programs for upskilling and connecting with post-secondary institutions. The newly created Micro-credentials Portal workflow was believed by eCampusOntario staff to allow small, medium, and large employers to find micro-credential programs based on skill needs and linked to LMI data.

In designing the workflow for employers, eCampusOntario staff considered the following feedback from postsecondary institutions:

- *Employers can be unfamiliar with micro credentials:* The Portal's key messaging therefore articulated the value proposition of micro-credentials to employers.

- *Upskilling costs are a barrier:* The Portal focused on the value propositions of short duration and low-cost training meaning that employers can upskill staff with a low time/cost commitment.
- *Matching training to needs is difficult:* Given employers may find it difficult to find programs that meet their needs, providing multiple ways to search the Portal was an important workflow Portal enhancement.
- *Post-secondary institutions have insufficient staff:* A lack of staff made it difficult for post-secondary institutions to keep up with metadata tagging since it required a review of all LMI data to determine which should be selected for tagging for a specific program. eCampusOntario staff noted the integration of an artificial intelligence tool into the Portal which generates a unique list of recommended LMI data for tagging for each program. This will speed up the tagging process since institution staff will only need to review and approve the list rather than generate it themselves.
- *Familiarity with National Occupancy Classification (NOC) codes:* Institution staff were more familiar with 2021 NOC than the 2017 codes used on the Portal. Updating the Portal with the 2021 NOC codes made it more straightforward for institutions to tag programs with LMI data.
- *Accuracy of program start dates is critical:* Institutions can now distinguish whether a program is always open for enrollment, such as a self-paced program where someone can start any time. They can also add multiple start dates. That takes the burden off administrators to continuously refresh the program start dates. Employers and learners now have the range of program start dates available to them without having to search the institution's website.

4.4 Labour Market Data & Connecting Employers and Institutions

4.4.1 Connections

Finding: Despite the project enhancing employer knowledge of how to connect with post-secondary institutions and the Portal design enables them to do so, evidence suggests that employers could increase the extent to which they use the Portal to connect with institutions.

Two-thirds (75%) of knowledge mobilization event survey respondents agreed or strongly agreed that they had information to better connect with post-secondary institutions and 75% agreed or strongly agreed that the group discussion addressed some of the challenges they faced connecting with post-secondary institutions (See **Figure**). Employers at these events indicated that contacting post-secondary institutions was time consuming and difficult since they were unfamiliar with and unable to find who to contact within the institution.

Figure 4.6: Connecting with Post-Secondary Institutions



Source: Knowledge Mobilization Event Survey Q2c (n=44) and Q2e (n=44)

Note: Totals may not add up due to rounding.

The Portal allowed an employer to engage with multiple institutions quickly and efficiently through the contact interface which provides the option of selecting multiple institutions on the contact form. On the form, employers could also indicate if they were seeking information about upskilling or hiring a skilled graduate. Post-secondary institutions were able to direct emails from the Portal to specific staff inboxes ensuring requests were not lost. Additionally, employer contact information was included in the data transferred to the post-secondary institutions. Despite this, when considering whether the Portal helped them better connect with post-secondary institutions, an interviewed employer indicated this was difficult to assess because it was not clear where emails were sent within an institution through the contact submission form and thus, they could not comment on whether this was an appropriate contact who could action the submission. This suggests that the process used to connect employers to institutions may benefit from being shared and advertised. In addition, employer interviewees noted that established relationships with post-secondary institutions were commonly disrupted by staff turn-over within the institution. It was suggested that having new institutional representatives reach out directly to the employer would be helpful.

During the project period, as reported by staff, eCampusOntario saw a 3% increase in referrals of employers to post-secondary institutions, as compared to the six months period before the Portal programs were tagged. Among knowledge mobilization event survey respondents, 41% noted that their organization was likely or very likely to connect with postsecondary institutions to recruit individuals with micro-credential training and 39% of respondents to upskill their current employees. In addition, 22% of respondents noted that their organization was already connected with one or more of these institutions to upskill current employees and 19% to recruit individuals with micro-credential training. However, it is important to note that more than one quarter of respondents indicated that they did not know or preferred not to say whether or not they would be likely to connect with postsecondary institutions (See Figure 4.7).

Figure 4.7: Likelihood of Connecting with Post-Secondary Institutions



Source: Knowledge Mobilization Event Survey Q3 (n=32) and Q4 (n=32)

Note: Totals may not add up due to rounding.

Interviewed eCampusOntario staff indicated that the Portal provided a solution to the challenges employers experienced when trying to connect with post-secondary institutions to learn about training opportunities for employees. They perceived the Portal to be particularly relevant and useful for small and medium sized businesses which constitute most Canadian enterprises but may lack the capacity to develop training courses internally or have fewer opportunities to work with post-secondary institutions or government and thus influence programs or services. However, the post-secondary institutions interviewed did not report that the LMI data tagging had led to more employers connecting with their institutions. This was thought to be due to a lack of employer familiarity with the Portal, as well as a lack of understanding among employers of what micro-credentials are, how micro-credentials support upskilling, and the need for the programs the institution offers (e.g., the need for training to meet governance and regulatory compliance in the industry). eCampusOntario ran a digital advertising campaign during the project period (October – December, 2024) to promote the Portal and its newly launched features (deployed in September, 2024) to employers, however the impact of this advertising campaign on employer knowledge was not measured as part of this evaluation.

Features of the Portal that connect employers with institutions might benefit from enhancements to increase the likelihood of utilization by employers and to leverage and enhance the existing relationships between employers and institutions.

4.4.2 Relevance and Usefulness of Portal

Finding: Additional time is needed to fully assess the relevance and usefulness of the Portal to employers, educators, and creating connections. The Portal could be improved by reducing the number of programs suggested to a user, enhancing search filters, program information, and Portal functionality, increasing the number of programs listed, and including other service offerings.

There were mixed perceptions from interviewees regarding the extent to which the Portal assists employers and educators to connect with each other. eCampusOntario staff reported that it was too early to assess as the full range of employer features had not yet been fully launched. This activity was taking place at the time of the evaluation. Among post-secondary institutions there were mixed views as to whether the Portal had assisted employers and educators to connect. They therefore denoted a variety of ways in which the Portal could be improved to better support the ability of employers and educators to connect with each other. These suggestions and those provided by survey respondents to improve the Portal are provided in Figure 4.8.

Figure 4.8: Suggested Portal Improvements

Suggested Portal Improvement	Description
The number of programs suggested to a user should be decreased. (Reported by post-secondary institution interviewees)	The Portal did not sufficiently narrow the program offerings for employers through the LMI data. In addition, it provided too many course options which was said to be overwhelming to the person searching, be it an employer or learners. For example, one interviewee noted that tagging a program to “technology” is not specific enough given the range of technology programming and although some courses cut across multiple industries that is not accurately reflected in the tagging.
The Portal search filters should be improved. (Reported by post-secondary institution interviewees and survey respondents ¹⁶)	Search filters would benefit from enhancements such as by including filters relating to cost, previous educational achievement, a larger variety of past and current job titles, and colleges or university departments. In addition, despite institutions tagging their programs, interviewees reported that these programs do not always appear in the results to searches that included tagging categories.
The program information in the Portal should be enhanced. (Reported by post-secondary institution interviewees and survey respondents ¹⁷)	Program information should have included: <ul style="list-style-type: none"> • Program cost; • Program content; and • Language of instruction; • A time or duration; • Start date(s);¹⁸ • Employment information such as employer partnerships, detailed, up-to-date, and forward-looking labour market information, and examples of job opportunities; and, • The order in which a series of courses should be taken to obtain credentialing.
The Portal functionality could be improved.	Positive aspects of the Portal were noted including its user friendliness and usefulness for employer recruitment. It was noted that other

¹⁶ Source: Survey of visitors to the Micro-Credentials Portal QA8 open-text responses analysis

¹⁷ Source: Survey of visitors to the Micro-Credentials Portal QA8 open-text responses analysis

¹⁸ It is important to note that language of instruction, duration, and start dates were addressed after this information was collected, which demonstrated eCampusOntario’s responsiveness to desired features they had learned about during project implementation.

(Reported by survey respondents ¹⁹)	jurisdictions could create similar portals. However, the Portal performance could have been improved such as by reducing lag, enhancing navigation, improving the mobile version, and enabling searchers to return to previously found information.
The number of programs listed in the Portal should be increased. (Reported by survey respondents ²⁰)	Respondents would have liked the Portal to include a larger number of programs such as free courses or programs, in specific topic areas (e.g., Artificial Intelligence, health care), from specific institutions (including non-post-secondary institutions), hands-on learning, and international programming.
The Portal could be part of broader service offerings. (Reported by survey respondents ²¹)	Respondents noted needs for support that exceed what the Portal currently provides. For example, a need for wrap around services to find students, for a review the quality and relevance of training opportunities, and access to funding for or free training or courses.

4.5 Demand for Micro-Credential Programming

4.5.1 Programs and Labour Market Information

Finding: There was an increase in the number of programs tagged with labour market information. Tagging requires familiarity with NOC codes, drop-down menus, and sector specific expertise.

According to eCampusOntario staff, post-secondary institutions were very interested in the metadata tagging. Most institutions were well versed in metadata tagging and one institution had nearly 100% of their programs tagged with LMI metadata. Other institutions, however required more direct support. Existing relationships with the institutions improved the process and helped the project meet its goals. During the project an additional 579 additional micro-credential programs were tagged with LMI data, exceeding the target of 400. This represents a 72% increase in the number of active programs tagged with labour market information (from 1,267 to 2,181).²² Total active programs tagged with LMI data exceeded 2,181 at the time of the evaluation.

The representatives interviewed from post-secondary institutions for the evaluation generally had no experience with the tagging of their programs on the Portal or were early in the process of tagging. Thus, they could not comment on its utility. While one institution planned to tag additional programs, they experienced challenges due to unfamiliarity with NOC codes and the vast number of options in the drop-

¹⁹ Source: Open-text responses analysis from Survey of visitors to the Micro-Credentials Portal QA8 & Knowledge Mobilization Event Survey Q7

²⁰ Source: Open-text responses analysis from Survey of visitors to the Micro-Credentials Portal QA8 & Knowledge Mobilization Event Survey Q7

²¹ Source: Open-text responses analysis from Knowledge Mobilization Event Survey Q7

²² Source: eCampusOntario Portal Listing and Traffic Data. This increase is based on a comparison between the period following the addition of the labour market information (April to December 2024) to the same period the previous year (April to December 2023).

down menus. The interviewee stressed that tagging required a great deal of expertise in a specific sector to ensure projects are accurately tagged, which was not something that all administrators responsible for tagging had.

4.5.2 Employer Training and Recruitment Needs

Finding: Employers were generally satisfied with the Portal's ability to meet their workforce training and recruiting needs. There is a need to increase the understanding of employers and learners of the value of micro-credentials in meeting skill gaps. The Portal could be enhanced through:

- **increased awareness of the Portal, including of the alignment of available programs with skill gaps;**
- **increasing the number of programs tagged with industry codes;**
- **adding program location and start date information; and,**
- **continue expanding the array of courses.**

To ensure that the micro-credentialing programs meet employer needs, programs develop employer partners who provide advice on industry need. During the project a total of 156 micro-credential programs had employer partners, exceeding the target of 50 employer endorsements profiled in the Micro-credentials Portal.²³

While the employers interviewed were generally satisfied with the Portal's role in meeting employers workforce training and recruiting needs, there were some suggestions on how to improve the service. Thinking about the Portal's role in increasing employers' understanding of micro credentialing opportunities, it was mentioned that there was some difficulty finding programs because the industry codes were not appropriately linked to all relevant programs. Additionally, when a program was found, the location where the course was offered was not always clear. With respect to employers increased ability to find relevant short duration training opportunities, it was observed that lack of program start-dates on the Portal made it difficult to plan future employee training that fit within company workflow. Without such information employers needed to take a second step of searching the post-secondary institution's website for course information including course offering dates.

It was also noted that the array of micro credentialing courses could be expanded. Specifically, there was a need for micro-credentials in specific equipment training since such training was not universally offered by the equipment manufacturer. Making this training available would increase the attractiveness of program graduates as these were common skill gaps.

In alignment with what was suggested by employers, post-secondary institution representatives expressed concerns that uptake of micro credential programs through the Portal is dependent upon many factors, including:

²³ Source: eCampusOntario Portal Listing and Traffic Data.

- *Employer and learner understanding of the value of micro-credentials in meeting skill gaps:* Interviewees noted that there is industry preference for traditional credentials such as a diploma or degree and while micro credential certificates have been around for many years, they are still relatively new and may have not yet demonstrated value to the marketplace. To enhance the value proposition of micro credential certificates it was suggested that messaging should emphasize that courses are developed in consultation with industry experts and are up to date. Additionally, it was suggested that institutions integrate micro-credential courses into traditional programs to increase learner exposure to such courses.
- *Demonstrating the match between labour force skill requirements and micro-credentialing programs offered:* While post-secondary institutions agreed linking LMI data to courses is important many felt that the Portal still required refinement in this regard. For example, post-secondary institutions may not be familiar with the NOC codes, with the Portal drop-down menus, or may find the process administratively burdensome.
- *Employer and learner awareness of tools such as the Portal to source programming:* Interviewees suggested that awareness of the tool among employers and learners was low and there was a role for post-secondary institutions in promoting the tool.

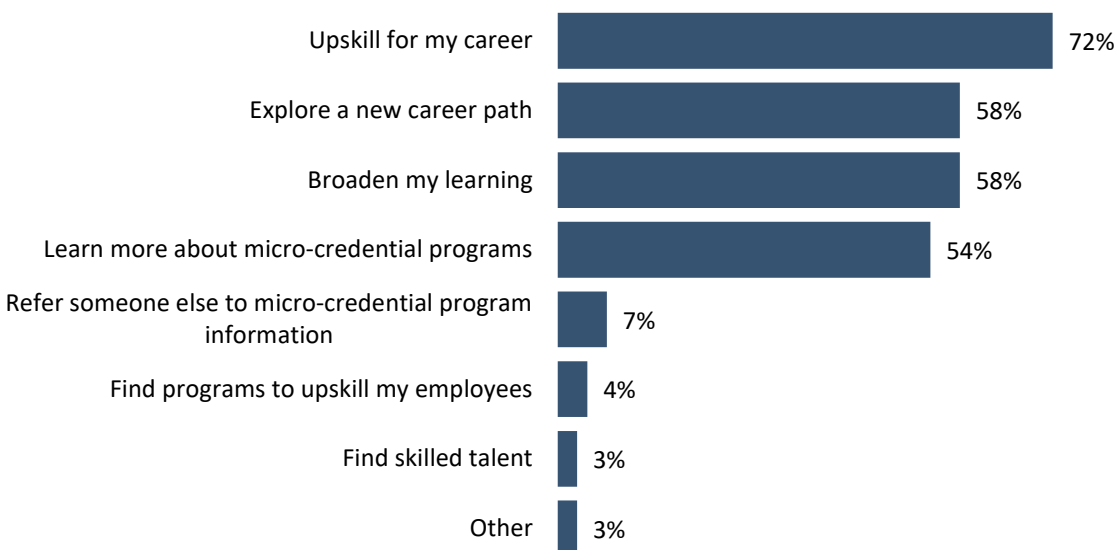
4.5.3 Learner Engagement

Finding: Learner engagement was enhanced through learner homepage updates, targeted advertisements, and personalized recommendations. Learners sought to upskill their careers, explore new career paths, broaden their learning, and learn more about micro-credential programs.

The project had a goal of 10,000 learners receiving personalized recommendations based on labour market information. Between April 2024 and December 2024, 14,843 recommendations were generated. Knowledge mobilization events were also intended to increase engagement. Survey respondents who were asked (n=12) primarily participated in these events to learn more about micro-credential programs and to broaden their learning.²⁴ This aligns with the primary reasons portal survey respondents reported visiting the Portal which were to upskill for their careers, explore a new career path, broaden their learning, and learn more about micro-credential programs (See **Figure**).

²⁴ Source Knowledge Mobilization Event Survey Q11b (n=12).

Figure 4.9: Reasons why Portal Users Visited



Source: Survey of visitors to the Micro-Credentials Portal QA1 (n=141)

Note: Percentages exceed 100% as respondents could select multiple answers.

eCampusOntario staff noted that the FSC funding helped the project update the learner homepage and advertise to priority industry segments, which led to greater learner engagement. Based on click through rates and the traffic reaching the Portal, program staff ascertained there was a mismatch between who was reached through advertising and who came and used to the Portal. The call-to-action language on the front end of the Portal was updated to make it easier for learners to see themselves in the Portal and understand the value of micro credentials. In total, the headline, copy, and imagery of the learner home page were modified. The image was updated from an individual sitting at a computer to individuals shaking hands at an interview. The headline was changed from “Fast, affordable, flexible training opportunities” to “Unlock your potential. Elevate your career.” Finally, the instructions were changed from “Where can micro-credentials take you? Enter your job title to receive personalized program recommendations.” To “Enter your job title to explore rapid training programs that can help you develop in-demand skills employers need.”.

Social media post messaging was also refined to highlight how the Portal services could be used to advance one’s career. eCampusOntario staff stated that advertising focused on occupational areas which have the highest jobs vacancy rates according to Statistics Canada: construction, hospitality and tourism, transportation and warehousing, healthcare, manufacturing and information technology. Additionally, social media posting was focused on regions with higher job vacancy rates.

The impact of the updates and targeted advertising was demonstrated in the proportion of personalized program recommendations. As noted by eCampusOntario’s staff interviewees, over the six months of the project compared to the previous six months, eCampusOntario Micro-credentials Portal had a 27%

increase in the number of unique users who received personalized program recommendations. The frequency of general browse or keyword search remained relatively constant, however there was a 25% increase in overall page views, which eCampusOntario staff noted indicated more learners were engaging with LMI data and the personalized recommendations. eCampusOntario staff suggested learners were using the new feature because the recommendations are now more relevant to where they are at in their career journey. Additionally, eCampusOntario staff reported the Portal is continuously monitored and updated to better shape the user experience to how users are interacting with the Portal organically.

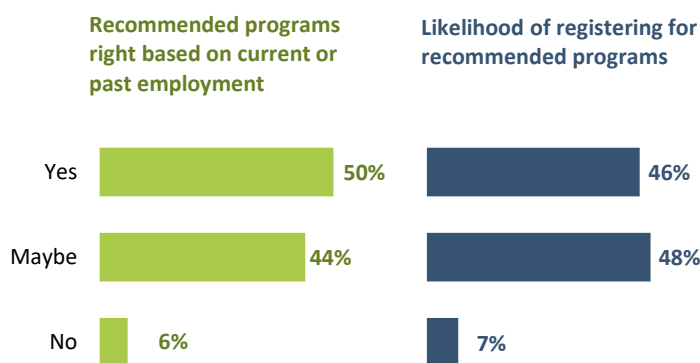
4.5.4 Personalized Learner Recommendations

Finding: The relevance of personalized micro-credential program recommendations could be improved to increase the extent to which learners act on the recommendations.

Since the onset of the project the Portal has generated 14,843 learner personalized recommendations for training courses designed to upskill and re-train workers. Between April 2023 and December 2024, the number of personalized recommendations increased by 181% from 5,273 to 14,843.²⁵

When asked if the recommended programs were right for them based on their current or past employment, 50% of learner portal respondents indicated that they were, 44% indicated that they might be, and 6% indicated that they weren't.²⁶ When asked if they would register for any of the recommended programs, 46% of learner portal survey respondents reported that they would, 48% that they might, and 7% that they would not (See Figure 4.10).²⁷

Figure 4.10: Likelihood to Register for Recommended Programs



²⁵ Source: eCampusOntario Portal Listing and Traffic Data. This increase is based on a comparison between the period following the addition of the labour market information (April to December 2024) to the same period the previous year (April to December 2023).

²⁶ Source: Survey of visitors to the Micro-Credentials Portal QA2_1 (n=134)

²⁷ Source: Survey of visitors to the Micro-Credentials Portal QA3_1 (n=134). Note: Totals may not add up due to rounding.

Source: Survey of visitors to the Micro-Credentials Portal QA2_1 & QA2_3 (n=134)

The reasons to register for recommended programs differ between learners who are likely and learners who are uncertain or unlikely to register. Learners who were likely to register primarily indicated wanting programs which are delivered synchronously in-person and aligned with their previous experience and career aspirations. Learners who indicated that they were unlikely to register reported being more likely to register for programs which are delivered asynchronously online and aligned with their skill development goals (See **Figure** . In addition, some respondents (n=4) to the survey of visitors to the Micro-credentials Portal noted that program recommendations could be improved through the inclusion of a quiz to help inform recommendations which should include interest, existing strengths, existing and desired skillsets, previous educational achievement, and budget considerations. This suggests that the personalized recommendations should include these aspects in the variables they factor into the recommendations made to learners.

Interviewed post-secondary institution's representatives indicated that they were not receiving many inquiries from learners arising from recommendations from the Portal. One interviewee noted that there had only been one to two inquiries monthly to the institution as a result of the Portal. Indeed, the number of click-throughs to institution websites decreased by 4% from 11,324 to 10,916.²⁸ This suggests that personalized micro-credential program recommendations could be enhanced to improve their effectiveness in getting learners to act on recommendations and reach out to post-secondary institutions.

²⁸ This decrease is based on a comparison between the period following the addition of the labour market information (April to December 2024) to the same period the previous year (April to December 2023).

Figure 4.11: Reasons to Register for Recommended Programs



Source: Survey of visitors to the Micro-Credentials Portal QA_4A (n=73) & QA_5A (n=61)

Note: Percentages exceed 100% as respondents could select multiple answers.

4.5.5 Employment Transitions

The evaluation was unable to obtain any information that would answer the evaluation sub-question: “To what extent does the eCampusOntario Micro-credentials Portal support those transitioning to a new sector of employment?”.

4.6 Findings Related to EDI&R

The evaluation was unable to obtain sufficient data to assess the extent to which the Portal has features that make relevant programs easier to find by underrepresented groups, or the extent to which the project helps to lower barriers for underrepresented individuals looking to find micro-credential programs. It is recommended that future work focus on piloting the Portal with underrepresented groups to examine whether the Portal offerings are helping underrepresented groups looking for micro-credentials.

5. Findings by FSC Thematic Question

eCampusOntario’s project, *Micro-Credentials: Connecting Employers to Micro-Credential Graduates*, aligns with FSC’s Pathways to Jobs theme by promoting the use of the Portal to support career guidance, develop stronger labour market attachment, and help workers and jobseekers to better manage their careers.

Figure 5.1: Project Alignment with FSC Thematic Areas

Pathways to Jobs Thematic Area Questions	Project Alignment
1. How can the delivery of engaging career guidance remote services be refined (e.g., new tech tools, information and communications technology (ICT) capacity training)?	The Portal supports delivery of career guidance services to search for and access micro-credentials for skill development. Micro-credentials tagged with LMI data can help to inform career decision-making.
2. What interventions best help workers develop stronger labour market attachment (e.g., pre-employment, wrap-around supports)?	Labour market attachment requires having in-demand skills which micro-credentials can contribute to acquiring.
3. What do workers and jobseekers need to know to better manage their careers into the 4th Industrial Revolution, the Green Economy, or other major transformation affecting employment in Canada?	Workers and jobseekers should take action to address existing and anticipated skill gaps to strengthen their labour market attachment, including by accessing career guidance and using available training such as micro-credentials.

5.1 Remote Career Guidance

Finding: The delivery of career guidance services can be refined by:

- **Increasing awareness of the value of micro-credentials for skill development;**
- **Increasing understanding of how to interpret and use LMI data to inform career decision-making; and,**
- **Further tailoring personalized recommendations on the Portal.**

Career guidance supports individuals to make well-informed educational, training, and occupational choices.²⁹ The most common providers of adult career services in Canada are government-run employment services and private career guidance providers.³⁰ Employed Canadian adults underuse career guidance services to choose a study or training program or to progress in their current job generally because they do not deem it necessary or lacked time due to work or family responsibilities.³¹ They also underinvest in skills training and education.³² As previously noted, the Portal seeks to assist Ontarians with retraining and upgrading their skills. For learners, it uses personalized program recommendations based on an individual's current or past job title. For employers, it uses search filters related to a skill, job title, or technology and provides employers in healthcare and life sciences,

²⁹ (OECD, 2022)

³⁰ (OECD, 2022)

³¹ (OECD, 2022)

³² (White & Wolfe, 2021)

manufacturing, information technology, hospitality and tourism, construction, and transportation and warehousing with access to a pre-existing list of relevant micro-credentials. In addition, to help guide decision-making, some of the programs in the Portal include LMI data which denotes the 5-year outlook and the extent to which the credentials are related to a job that had high demand over the past 12 months.

Learners primarily seek programs which align with their previous experience, career aspirations, and skill development goals.³³ It was noted that it would be beneficial if the Portal enhanced its learner recommendation system to expand beyond current and past job titles and include interests, existing strengths, existing and desired skillsets, previous educational achievement, and budget considerations. Some of these features, such as skills, exist within the employer search tool which suggests these could be easily added to the learner search tool. Increasing the number of programs tagged with LMI data, improving the ability for Portal users to use LMI data to guide decision making, and further tailoring the Portal recommendations would enhance the Portal's delivery of career guidance.

5.2 Labour Market Attachment

Finding: Labour market attachment requires having in-demand skills which micro-credentials can contribute to acquiring.

Employers report that technical and job specific skills gaps prevent employees from being able to perform their job at the required level.³⁴ In addition, they face challenges hiring staff with the necessary skills to fulfill their job requirements.³⁵ While employers seek to train staff in order to overcome skill shortages, there is insufficient investment in Canada in skills training and education for working age adults.³⁶ Evidence suggest that skill gaps negatively impact the ability of workers to secure and maintain employment as well as to advance their careers. Thus, skill gaps harm workers labour market attachment.

Micro-credentials play an important role in enabling educational institutions to meet the growing demand for new skills and competencies.³⁷ Interviews revealed that employers and workers are insufficiently aware of the existence and the value-add of micro-credentials. Increasing the engagement of employers and workers in micro-credentials would strengthen labour market attachment by reducing or removing skill gaps. Knowledge mobilization events, enhancing existing or creating new connections between employers, workers, graduates, and educational institutions, and ensuring micro-credentials are aligned with the needs of employers and workers and easy to identify would positively contribute to increasing their use.

³³ Source: Survey of visitors to the Micro-Credentials Portal QA_4A (n=73) & QA_5A (n=61)

³⁴ (Fissuh, Gbenyo, & Ogilvie, 2022)

³⁵ (Fissuh, Gbenyo, & Ogilvie, 2022)

³⁶ (Statistics Canada, 2024) (White & Wolfe, 2021)

³⁷ (Shanahan & Organ, 2022)

5.3 Employment Transformation

Finding: To manage their careers, workers and jobseekers need to be aware of existing and anticipated skill gaps and take action to address gaps including by seeking career guidance and using available training.

As previously noted, many Canadians have existing skill gaps and evidence suggest that there is growing demand for new skills, competencies, and reskilling.³⁸ They underinvest in skills training and education in their working years.³⁹ This suggests that workers and jobseekers need to be aware of their existing skill gaps and invest in training and education during their working years. Employers are well placed to support their employees in identifying these gaps.⁴⁰ Career guidance is underutilized by employed Canadians despite its ability to support individuals to make well-informed educational, training, and occupational choices.⁴¹ Workers and jobseekers should take action to address existing and anticipated skill gaps to strengthen their labour market attachment, including by accessing career guidance and using available training such as micro-credentials.

³⁸ (Fissuh, Gbenyo, & Ogilvie, 2022) (Shanahan & Organ, 2022)

³⁹ (White & Wolfe, 2021)

⁴⁰ (Fissuh, Gbenyo, & Ogilvie, 2022)

⁴¹ (OECD, 2022)

6. Suggestions, Recommendations and Implications

6.1 Stakeholder Suggestions

Evaluation participants suggested several Portal improvements, including:

- Increasing the variety of programs on the Portal to include such offerings as free courses, additional topic areas (e.g., artificial intelligence, manufacturing equipment), courses offered by non-postsecondary institutions, hand-on courses, and international programming.
- Increasing the extent to which search filters narrow down the relevant program offerings for users. Search filters could be enhanced to include cost, funding eligibility, previous educational achievements, a larger variety of past and current job titles, and college or university departments.
- Including cost, location, program content, language of instruction, duration, start dates, employment information, and course sequencing in the program information. It is important to note that language of instruction, duration, and start dates were addressed after this information was collected, which demonstrated eCampusOntario's responsiveness to desired features they had learned about during project implementation.
- Improving the Portal functionality by reducing lag, enhancing navigation, improving the mobile version, and enabling the ability to revisit a previous search.

6.2 Recommendations

The evaluation proposes the following recommendations which should be carried out sequentially.

Recommendation 1: Assess and enhance the usefulness of labour market information for Portal users and ensure postsecondary institutions are supported in accurately tagging their programs to strengthen its contribution to career guidance and ultimately labour market attachment.

The project expanded the number of programs with LMI data for a total of 2,181 programs tagged. LMI data can support individuals in making well-informed educational, training, and occupational choices by assisting them with identifying the alignment of credentials with their skill development and career aspirations. Earning credentials can also help strengthen their labour market attachment by reducing or removing skill gaps. Learners and employers reported that the LMI data is beneficial when they understand how to use the information, are able to find the information, and if they perceive it as useful to their decision-making. The limited understanding and knowledge of LMI data by some employers and learners limits their ability to use this information. It is recommended that the usefulness of LMI data to Portal users be assessed and enhanced.

Postsecondary institution administrators may face resources constraints that limit their ability to maintain metadata tagging and need to be familiar with NOC codes and Portal drop down menus to

accurately tag programs. LMI data did not increase the number of employers connecting with their institutions which may suggest a lack of understanding or utility of the LMI data tags currently used. It was reported that they may benefit from the integration of artificial intelligence tools or other modifications to continue to reduce the administrative burden of updating the Portal. It is recommended to ensure that postsecondary institutions have appropriate support to accurately tag programs.

Recommendation 2: Conduct user testing of the Portal to determine content clarity and usability and ease of navigation to refine career guidance remote services for workers and employee upskilling and reskilling for employers.

Portal content would benefit from increased clarity and usability. For example, program descriptions would benefit from including information relating to cost, location, program content, language of instruction, duration, start dates, employment information, and course sequencing.⁴² In addition, Portal users reported being uncertain about how to use LMI data. Recommendations to learners were currently limited to current and past job titles and it was recommended this be expanded to align them with interests, existing strengths, existing and desired skillsets, previous educational achievement, and budget considerations.

Portal navigation was also a concern. The search filters could be enhanced to include cost, funding eligibility, previous educational achievements, a larger variety of past and current job titles, and college or university departments. Searches also resulted in an overwhelming number of course options. The limited transparency of the postsecondary institution contact interface limited its use by employers. Portal navigation was also impacted by functionality concerns such as lag, negative experiences with the mobile version, and an inability to revisit a previous search. It is recommended to conduct user testing of the Portal to determine content clarity and usability as well as ease of navigation to ensure the Portal is providing high quality career guidance to learners and relevant training recommendations to employers. User testing could also reveal portal enhancements that may increase the extent to which the employers use the Portal to connect with institutions. Such testing could also include underrepresented groups to reduce barriers to accessing the Portal and ensure ease of use for these groups.

Recommendation 3: Expand the scope of course offerings on the Portal to increase its contribution to supporting workers in developing strong labour market attachment.

The Portal could include a larger number of programs. For example, it was noted that free courses, courses covering additional topic areas such as artificial intelligence, healthcare, and manufacturing equipment, and courses offered by non-postsecondary training institutions and international institutions could be beneficial to include. This would enable the Portal to enhance its contribution to Ontario's

⁴² The reader is reminded that language of instruction, duration, and start dates were addressed after this information was collected.

overarching Micro-Credentials Strategy goal of assisting Ontarians with retraining and upgrading their skills and improving their re-entry into the labour market by increasing the number of learners and workers who can leverage the Portal to identify relevant training that supports skill development, employment security, and career advancement. It is recommended to expand the scope of course offerings on the Portal.

Recommendation 4: Seek to increase the awareness of the value-add of micro-credentials in overcoming skill gaps and the existence of the Portal.

There is a lack of awareness of value-add of micro-credentials in contributing to skill development and of the existence of the Micro-credentials Portal. Personalized recommendations enable learners to identify credentials aligned with their skill development goals and career aspirations. Knowledge Mobilization Events conducted for the project were successful in increasing employer understanding of opportunities to upskill and reskill employees through micro-credentials. There may be benefits in having regular events. In addition, it was noted that postsecondary institutions could play a role in promoting the Portal. Broader use of the Portal by career guidance initiatives and programming could also be beneficial. For example, employment agencies could be encouraged to use the Portal to identify training that would upskill their clients and whose successful completion could increase their likelihood of securing or maintaining employment or advancing their careers. Building on the Portal's success in developing a working group of postsecondary institution partners and enabling employer partners who endorse course offerings to be listed, additional partnerships could be built to grow awareness and use of the Portal. It is recommended to increase the awareness of learners, employers, and career guidance initiatives and programming of the value-add of micro-credentials and the existence of the Portal to increase its ability to contribute to worker labour market attachment and career management.

6.3 Implications for FSC and Other Funding Organizations

Longer-term projects such as eCampusOntario's Connecting Employers to Micro-Credential Graduates need clearly defined short-term outcomes for successful implementation over short grant periods.

eCampusOntario's *Connecting Employers to Micro-Credential Graduates* project has the ultimate goals of having individuals with in-demand labour market skills obtained through micro-credentials secure in demand jobs, and employers filling labour gaps with employees that have needed skill sets. As this project was a continuation of previously funded projects, it suggests that long-term funding is needed to achieve these goals. Given that a longer funding period was not possible in this case, the project aims needed to be achieved through smaller steps. The project had successfully implemented all its planned activities and achieved its intended short-term outcomes. . However, due to the short timeframe for the funding period, some implementation elements such as updates to the Portal occurred after evaluation data were collected. This impacted the extent to which the impact of achieved outcomes could be robustly assessed. It would be prudent for funding organizations to require a detailed timeline outlining

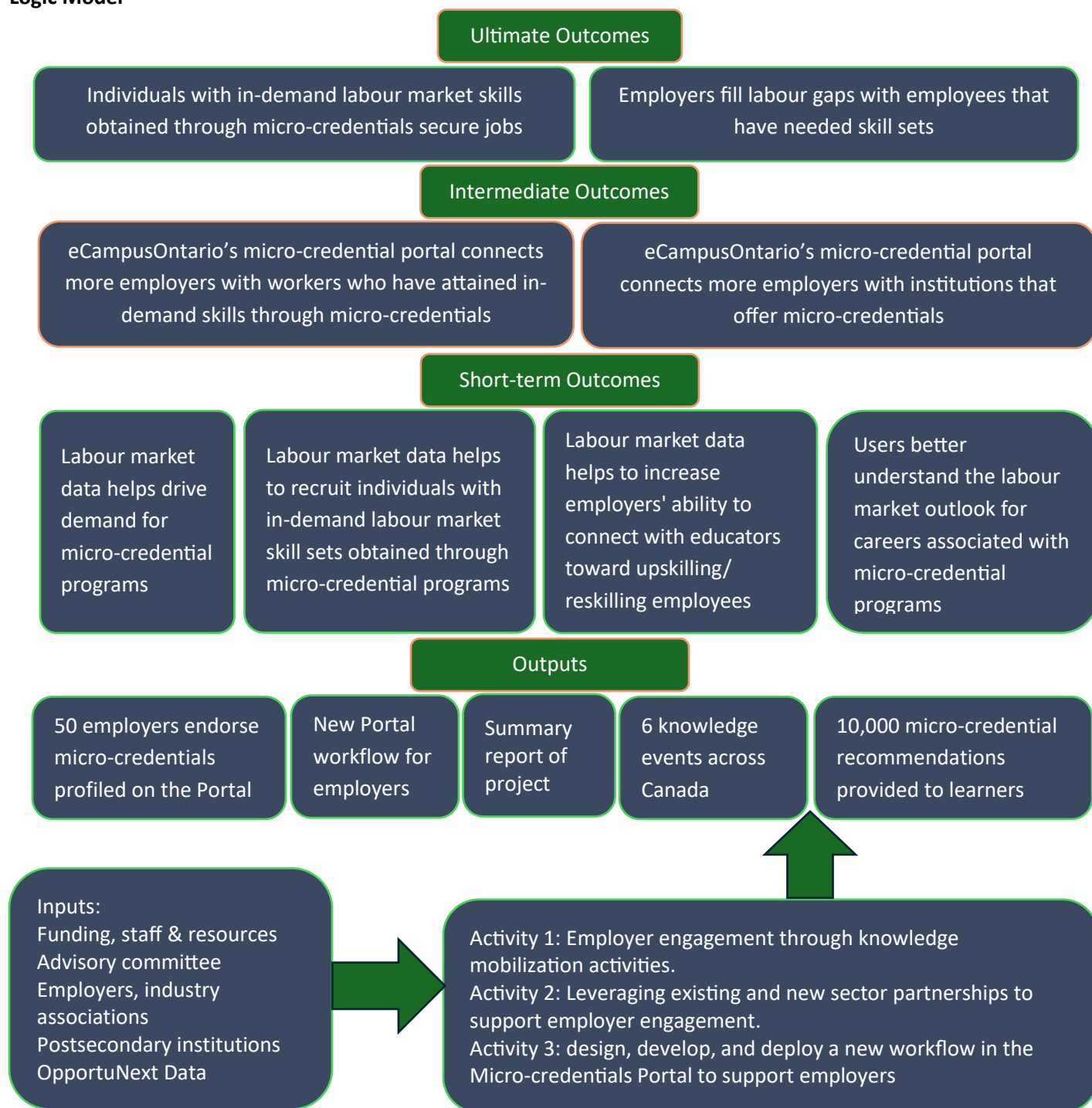
a realistic implementation of activities, clearly distinguishing between the smaller tasks implemented by the specific grant, and the larger long-term project.

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Appendix B: Logic Model

Figure B.1: eCampusOntario Micro-Credentials: Connecting Employers to Micro-Credential Graduates Logic Model



Appendix C: Evaluation Matrix

The following evaluation matrix details the evaluation questions, sub-questions, key metrics and data collection methods and sources.

Figure C.1: eCampusOntario Evaluation Matrix

Key Learning Questions and FSC Strategic Questions	Sub-questions	Key Metrics	Data Collection Methods & Sources
<p>Project Specific:</p> <p>1) How does labour market data help to increase employers' ability to upskill/reskill employees or find and recruit individuals with in-demand labour market skill sets obtained through micro-credentials?</p> <p>Pathways to Jobs #1: How can the delivery of engaging career guidance remote services be refined (e.g., new tech tools, ICT capacity training)?</p> <p>Pathways to Jobs #2: What interventions best help workers develop stronger labour market attachment (e.g., pre-employment, wrap-around supports)?</p> <p>Pathways to Jobs #2: What do workers and jobseekers need to</p>	<p>In what ways did the project increase employers' ability to upskill/reskill employees?</p> <p>In what ways did the project increase employers' ability to recruit individuals with in-demand labour market skill sets obtained through micro-credentials?</p> <p>To what extent does the eCampusOntario Micro-credentials Portal help individuals engage in career guidance?</p> <p>To what extent does the eCampusOntario Micro-credentials Portal's enhanced workflow support for employers and learners?</p>	<p># of employers reaching out to PSEs</p> <p># of employers looking to find micro-credential programs to upskill/reskill employees</p> <p>Perceptions on the extent to which employers have recruited graduates of micro-credential programs</p> <p># of personalized micro-credential program recommendations</p> <p>Perceptions on the extent to which employers find LMI data tagged programs useful in helping them connect with PSEs and program graduates and increase ability to upskill/reskill employees</p>	<p>Tracking analytics</p> <p>Survey with event attendees</p> <p>Interviews with employers and PSEs</p> <p>Survey with portal users</p> <p>Data and literature review</p>

know to better manage their careers into the 4th Industrial Revolution, the Green Economy, or other major transformation affecting employment in Canada?			
Project Specific: 2) How can labour market data help to make more connections between employers and post-secondary institutions?	In what ways did the project increase employers' ability to connect with institutions? To what extent did employers and educators find the Portal relevant/useful for connecting with each other?	Identification & # of PSEs tagging programs with LMI data # of programs tagged with LMI data (Target is 400) # of employers reaching out to PSEs Perceptions on the extent to which employers find LMI data tagged programs useful in helping them connect with PSEs	Tracking analytics Survey with event attendees Interviews with employers and PSEs Data and literature review
Project Specific: 3) How can labour market data help drive demand for micro-credential programs? Pathways to Jobs #2 Pathways to Jobs #3 (See above for questions)	To what extent did postsecondary institutions tag an additional 400 programs with labour market information? To what extent does the project meet employer workforce training and recruiting needs? To what extent did the project engage more learners for personalized micro-credential program recommendations? To what extent did learners act on the personalized micro-credential program	# of programs tagged with LMI data (Target is 400) # of employers accessing Portal Perceptions on the extent to which employers and learners find LMI data useful for the tagged programs # of personalized micro-credential program recommendations for learners (target is 10,000) Demographics of learners receiving personalized micro-credential program recommendations Demographics of learners	Tracking analytics Survey with event attendees Interviews and focus groups with employers Interviews with PSEs Survey with portal users Data and literature review

	<p>recommendations?</p> <p>To what extent does the eCampusOntario Micro-credentials Portal support those transitioning to a new sector of employment?</p>	<p>accessing the tagged programs</p>	
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Appendix D: Data Collection Instruments

eCampusOntario Portal Survey

Thank you for participating in a brief survey about your experience with eCampusOntario's Micro-credentials Portal! We want to understand how the Portal is helping you find appropriate short duration training programs.

To thank you for your time, you will be offered the chance to win a \$250 gift certificate at the end of the survey.

We look forward to your feedback!

The survey will take approximately 1 to 2 minutes depending on your responses. Your participation is voluntary and the information you provide will be confidential. The results will be summarized in aggregate only.

A0. Please tell us about yourself.

- [1] I am looking for a course for myself.
- [2] I am looking for a course for my employees or information for my organization.

A1. I visited eCampusOntario's Micro-credentials Portal to:

- [1] Upskill for my career
- [2] Explore a new career path
- [3] Broaden my learning
- [4] Learn more about micro-credential programs
- [5] Refer someone else to micro-credential program information
- [6] Find programs to upskill my employees
- [7] Find skilled talent
- [8] Other – please specify [Open response]

A2. [Ask if A0=1 Learner] Do you think eCampusOntario's Micro-credentials Portal recommended programs are right for you, based on your current or past job?

[Ask if A0=2 Employer] Do you think eCampusOntario's Micro-credentials Portal recommended programs are right for your organization's needs?

- [1] Yes
- [2] Maybe
- [3] No

A3. [Ask if A0= 1 Learner] Do you think you will register for any of the recommended programs?

- [1] Yes [Go to A5]
- [2] Maybe [go to A4]
- [3] No [Go to A4]

[Ask if A0=2 Employer] Do you think your organization will register your staff or inquire about any of the recommended programs?

- [1] Yes, we will register staff for the recommended programs [Go to A5]
- [2] Yes, we will inquire about the recommended programs [Go to A5]
- [3] Maybe [go to A4]
- [4] No [Go to A4]

A4. [Ask if A0=1 Learner] I would be more likely to register if the recommended programs if they: [please check all that apply]

- [1] were more related to my previous experience and career aspirations
- [2] included labour market information with a more positive outlook
- [3] better reflected the skills I want to develop
- [4] were delivered asynchronously (e.g., learn at their own pace on their own time)
- [5] were delivered synchronously (e.g., learn in real time)
- [6] were offered as online programs
- [7] were offered as hybrid programs (e.g., combination of online and in person)
- [8] were offered as in-person programs
- [9] took less time to complete
- [10] had an employer partner or industry endorsement
- [11] Other – please specify [Open response]

[Ask if A0=2 Employer] I would be more likely to register staff for or inquire about the recommended programs if they: [please check all that apply]

- [1] were more related to my organization's needs for training employees
- [2] were more related to my organization's needs for hiring skilled talent
- [3] better reflected the skills my employees need to have
- [4] better reflected the tools and technologies my employees use
- [5] were delivered asynchronously (e.g., learn at their own pace on their own time)
- [6] were delivered synchronously (e.g., learn in real time)
- [7] were offered as online programs
- [8] were offered as hybrid programs (e.g., combination of online and in person)
- [9] were offered as in-person programs
- [10] took less time for staff to complete
- [11] had an employer partner or industry endorsement
- [12] Other – please specify [Open response]

A5. [Ask if A0= 1 Learner] I am likely to register for the recommended programs because: [please check all that apply]

- [1] they are aligned with my previous experience and career aspirations
- [2] the labour market information makes me feel more informed about my career planning decisions

- [3] they reflect the skills I want to develop
- [4] they are delivered asynchronously
- [5] they are delivered synchronously
- [6] they are offered as online programs
- [7] they are offered as hybrid programs
- [8] they are offered as in-person programs
- [9] they do not take too much time to complete
- [10] they had an employer partner
- [11] Other – please specify [Open response]

[Ask if A0= 2 Employer] I am likely to register staff for or inquire about the recommended programs because they: [please check all that apply]

- [1] are related to my organization's needs for training employees
- [2] are related to my organization's needs for hiring skilled talent
- [3] reflect the skills my employees need to have
- [4] reflect the tools and technologies my employees use
- [5] are delivered asynchronously
- [6] are delivered synchronously
- [7] are offered as online programs
- [8] are offered as hybrid programs
- [9] are offered as in-person programs
- [10] do not take too much time for staff to complete
- [11] had an employer partner
- [12] Other – please specify [Open response]

A6. [Ask if learner] Please indicate your level of agreement with the following statement.

The labour market information (e.g., 5-year outlook, related careers, associated skills, tools and technologies) associated with the recommended programs was useful to help me decide which programs to register for.

- [1] Strongly Disagree
- [2] Disagree
- [3] Labour market information did not positively or negatively influence which programs to register for
- [4] Agree
- [5] Strongly Agree
- [6] I don't recall seeing labour market information associated with the recommended programs
- [99] I don't know how to use labour market information

[Ask if A0=2 Employer] Please indicate your level of agreement with the following statement. The labour market information (e.g., 5-year outlook, related careers, associated skills, tools and technologies) associated with the recommended programs was useful to help me decide how to upskill/reskill my employees or decide which schools to connect with to find skilled talent.

- [1] Strongly Disagree
- [2] Disagree
- [3] Labour market information did not positively or negatively influence my decision to upskill/reskill my employees or choose which schools to connect with to find skilled talent
- [4] Agree
- [5] Strongly Agree
- [6] I don't recall seeing labour market information associated with the recommended programs
- [99] I don't know how to use labour market information

A7. [Ask all] How satisfied were you with your eCampusOntario's Micro-credentials Portal experience today? Please rate your level of satisfaction on a scale of 1 to 10, where 1 means you were extremely unsatisfied, and 10 means you were extremely satisfied.

[insert selection bar of values 1 to 10]

[Ask all] Do you have any recommendations on how we can better suggest programs to you, or share labour market information related to programs?

[Open response]

AFIN. Thank you for taking the time to fill out this questionnaire. **Would you like to enter a draw for a chance to win a \$250 e-gift certificate?**

[1] Yes

[2] No

QCONTACT_INFO. [If AFIN = 1]

Please provide your contact information below. The information provided will be used for the sole purpose of the prize draw.

- First name (mandatory)
- Last name (optional)
- Email (mandatory)
- Confirm email address (mandatory)
- Phone (optional)

Thank you for taking the time to complete this survey!

[<Submit>](#)

eCampusOntario Event Survey

Thank you for participating in a brief survey about your experience with eCampusOntario's Micro-credentials Portal webinar!

Malatest, an independent third-party evaluator, is supporting eCampusOntario in understanding how eCampusOntario's Micro-credentials Portal can support employer demand for skilled workers. The findings of this survey will be used to guide decision-making and enhance the effectiveness of eCampusOntario's Micro-credentials Portal. The survey will take approximately 8 minutes depending on your responses.

In appreciation of your time, you'll be entered for a chance to win a \$250 e-gift certificate. Please click [here](#) for the prize draw rules.

To complete this survey over the phone or to ask questions about this survey, e-mail fscevaluations@malatest.com or call us toll-free at 1-855-688-1131.

If you have questions about this research or want to confirm its validity, please contact Michael Chrobok, Micro-credentials Program Lead, mchrobok@ecampusontario.ca.

More about this study:

eCampusOntario's project is funded by the Future Skills Centre. The Future Skills Centre has contracted R.A. Malatest & Associates, an external and independent research firm, to conduct an evaluation in collaboration with eCampusOntario. During this evaluation, Malatest will hear from event participants such as yourself.

Your participation is voluntary. Your information will be kept private. The results will be summarized in aggregate only. No individuals will be reported. Your responses will be protected *as per* [Canada's Privacy Act](#). Management of the information collected through this study will be compliant with Government of Canada's [Policy on Service and Digital](#). For Malatest's privacy policy, please visit: www.malatest.com/privacy-policy/

Please click on 'Continue' to begin

- ☐ Continue

Q1. What eCampusOntario Micro-credentials Portal webinar did you attend?

1. June 24, 2024 (virtual) (**Includes July meeting alternative for June 24th event invitees unable to attend synchronously*).
2. August 2, 2024 (virtual)
3. August 21, 2024 (virtual)
4. September 17, 2024 (St. John's, NL)
5. September 17, 2024 (Kanata, ON)
6. September 23, 2024 (Calgary, AB)
7. September 27, 2024 (Thunder Bay, ON)
8. December 12, 2024 (virtual)

99. Prefer not to answer > [Terminate: “Thank you for your time. Unfortunately, only those that attended the webinar are able to participate in this survey.”]

Q1B. Did you attend the webinar as: (Please select one option)

1. An employer
2. A representative from an association or not for profit organization
3. An individual
99. Prefer not to say

Q2. Please indicate your level of agreement with the following statements:

	Strongly Disagree	Disagree	Neither Agree Nor Disagree	Agree	Strongly Agree	Don't know
Q2_a. [Ask if Q1= 2, 3, 4, 5, 6, 7] [For event 8: Ask if Q1B= 1, 2, 3, 99] I have increased my understanding of opportunities to upskill/reskill employees, clients, or myself through micro-credentials.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>
Q2_b. [Ask if Q1= 2, 3, 4, 5, 6, 7] [For event 8: Ask if Q1B= 1, 2, 99] I have information to better connect with qualified candidates to fill labour gaps in my company or organization.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>
Q2_c. [Ask if Q1= 2, 3, 4, 5, 6, 7] [For event 8: Ask if Q1B= 1, 2, 3, 99] I have information to better connect with post-secondary institutions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>
Q2_d. [Ask if Q1= 2, 3, 4, 5, 6, 7] [For event 8: Ask if Q1B= 1, 2, 3, 99] The webinar provided deeper insights on skill development priorities and opportunities in my industry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>
Q2_e. [Ask if Q1= 2, 3, 4, 5, 6, 7] [For event 8: Ask if Q1B= 1, 2, 3, 99] The webinar addressed some of the challenges connecting with post-secondary institutions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>
Q2_f. [Ask if Q1= 1] The group discussion addressed some of the	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>

challenges connecting micro-credential earners and employers.						
Q2_g. [Ask if Q1= 1] I have increased my understanding of opportunities to connect employers to my institution's micro-credential earners	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>
Q2_h. [Ask if Q1= 1] I have information to promote my institution's micro-credential programs and earners to employers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>		<input type="radio"/>	<input type="radio"/>

Q3. [Ask if Q1= 2, 3, 4, 5, 6, 7] [For event 8: Ask if Q1B= 1, 2, 99] How likely would your company or organization be to connect with colleges, universities, or Indigenous institutes to recruit individuals with micro-credential training?

1. Not at all likely
- 2.
3. Somewhat likely
- 4.
5. Very likely
6. Unsure
7. My company or organization is currently connected with one or more colleges, universities, or Indigenous Institutes to recruit individuals with micro-credential training
99. Prefer not to answer.

Q4. [Ask if Q1= 2, 3, 4, 5, 6, 7] [For event 8: Ask if Q1B = 1, 2, 99] How likely would your company or organization be to connect with colleges, universities, or Indigenous Institutes to upskill your current employees or clients? *Upskill means to provide staff with a short duration learning opportunity to learn a specific skill or competency.*

[Ask if Q1= 1] How likely would you be to connect prospective employers to your institution's micro-credential earners?

1. Not at all likely
- 2.
3. Somewhat likely
- 4.
5. Very likely
6. **[Display if Q1= 2, 3, 4, 5, 6, 7, 8]** My company or organization is currently connected with one or more colleges, universities, or Indigenous Institutes to upskill our current employees or clients.
7. **[Display if Q1= 1]** My institution is currently connected with one or more employer(s) to hire micro-credential earners

- 8. Unsure
- 99. Prefer not to answer.

Q5. [Ask if Q1= 2, 3, 4, 5, 6, 7] [For event 8: Ask if Q1B = 1, 2, 3, 99] How likely would you be to explore MicroLearnOntario.ca to learn more about short-duration training programs?

- 1. Not at all likely
- 2.
- 3. Somewhat likely
- 4.
- 5. Very likely
- 6. Unsure
- 99. Prefer not to answer.

Q11. [Ask if Q1= 1] How likely would you be to tag the program(s) you currently have listed in eCampusOntario's Micro-credentials Portal with labour market information metadata?

- 1. Not at all likely
- 2.
- 3. Somewhat likely
- 4.
- 5. Very likely
- 6. Unsure
- 99. Prefer not to answer.

Q12. [Ask if Q1= 1] How likely would you be to list additional program(s) in eCampusOntario's Micro-credentials Portal and tag these programs with labour market information metadata?

- 1. Not at all likely
- 2.
- 3. Somewhat likely
- 4.
- 5. Very likely
- 6. Unsure
- 99. Prefer not to answer.

Q6. [Ask if Q1= 1, 2, 3, 4, 5, 6, 7] How satisfied were you with the engagement session?
[For event 8: Ask if Q1B = 1, 2, 3, 99] How satisfied were you with the webinar? Please rate your level of satisfaction on a scale of 1 to 10, where 1 means you were extremely unsatisfied, and 10 means you were extremely satisfied.

[insert slide bar of 1 to 10]

Q7. [Ask if Q1= 2, 3, 4, 5, 6, 7] [For event 8: Ask if Q1B = 1, 2, 99] Is there anything you would like to share about your company's or organization's experiences with skill development priorities, ability to connect with individuals with in-demand skills for your company, or challenges connecting with post-secondary institutions or program graduates?

[Ask if Q1= 1] Is there anything you would like to share about your institution's challenges and experiences connecting micro-credential program graduates to employers, and promoting programs to employers?

[For event 8: Ask if Q1B = 3] Is there anything you would like to share about your experiences connecting to micro-credential programs?

1. [\[Open text – 1,000 character limit\]](#)
2. No thanks

Q8. [Ask if Q1= 2, 3, 4, 5, 6, 7] [For event 8: Ask if Q1B = 1, 2, 99] What size is your business or organization?

1. Small (1-50 employees)
2. Medium (51-100 employees)
3. Large (101+ employees)
4. Prefer not to say

Q9. [Ask if Q1= 2, 3, 4, 5, 6, 7] [For event 8: Ask if Q1B = 1, 2, 99] In what industry does your business or organization operate?

1. Construction
2. Education Technology
3. Healthcare
4. Hospitality and Tourism
5. Information Communication Technology
6. Manufacturing
7. Post-secondary Institution (College, University, or Indigenous Institute)
8. Transportation & Warehousing
9. Other, please specify
10. Prefer not to say [99]

Q11B. [For event 8: Ask if Q1B=3] We are interested in understanding some of the reasons why you participated in the webinar. Was it to (Select all that apply):

- [1] Upskill for my career
- [2] Explore a new career path
- [3] Broaden my learning
- [4] Learn more about micro-credential programs
- [5] Other – please specify [Open response]
- [99] Prefer not to answer

Q10. [Ask All] Thank you for taking the time to fill out this questionnaire. **Would you like to enter a draw for a chance to win a \$250 e-gift card? For full rules and entry details click here.**

1. Yes
2. No

[If Q10=yes]

- First name (mandatory)
- Last name (optional)
- Email (mandatory)
- Confirm email address (mandatory)
- Phone (optional)

Thank you for taking the time to complete this survey!

[<Submit>](#) [<Exit to: >](#)

eCampusOntario Master Interview Guide

Thank you for agreeing to participate in an interview about your engagement with eCampusOntario. The interview will take approximately 30-45 minutes depending on your answers.

More about this study:

eCampusOntario's Micro-credentials Portal engagement has been funded by The Future Skills Centre. The Future Skills Centre has contracted R.A. Malatest & Associates, an external and independent research firm, to conduct an evaluation of funded activities in collaboration with eCampusOntario. The evaluation will allow us to learn about:

- The extent to which labour market data help drive demand for micro-credential programs;
- Whether micro-credential programs tagged with labour market data can help employers upskill/reskill employees or find individuals with in-demand labour market skill sets;
- How eCampusOntario's Micro-credentials Portal helps to connect employers and postsecondary institutions; and
- eCampusOntario's efforts to engage employers, postsecondary institutions, and learners.

The findings will be shared with The Future Skills Centre and eCampusOntario in an evaluation report and will be used to guide decision-making and enhance the effectiveness of eCampusOntario's Micro-Credentials Portal.

Confidentiality, Anonymity and Privacy:	<p>No one other than Malatest researchers will have access to any <u>identifying information</u> from this interview. Your responses to interview questions will be <u>anonymized</u> (that is, reported without your name or any identifying information attached). In some cases, we may use anonymized quotations that exemplify a trend among interviewees' responses; in this case, we will make sure that the quote does not contain any information that could be used to identify you. All identifying data will be destroyed by Malatest when the report provided to FSC and eCampusOntario is finalized. Note that the report or portions of the report may be made available to the public in which case all responses will be anonymized.</p> <p>Your responses will be protected <i>as per</i> Canada's Privacy Act. The information you provide will not be used for any purposes except those described above. Management of the information collected through this study will be compliant with Government of Canada's Policy on Service and Digital. For Malatest's privacy policy, please visit: https://www.malatest.com/Privacy.htm.</p>
Informed Consent:	<p>Your participation is <u>voluntary</u>, and you may end participation at any time. You can also skip any question that you do not want to answer, or that is not applicable to you.</p> <p>With your permission, we will audio record this interview, for Malatest's notetaking and quality assurance purposes only. This recording will be destroyed once the interview notes have been verified and completed. Do I have your <u>permission to audio record</u> the interview?</p>
Questions:	<p>If you have any questions about this interview or this project, please feel free to contact April Balunda, Senior Research Analyst, R.A. Malatest & Associates Ltd., via email at a.balunda@malatest.com.</p>

This master interview guide has been developed for the following, question is labeled by group.

- *eCampusOntario staff*
- *Employers, labour market associations*
- *Postsecondary institutions*

Background information

Ask all

1. Can you tell me about yourself:
 - a. Please describe your role and responsibilities.

Ask if Employers, labour market associations, postsecondary institutions

- b. How did you and your organization learn about eCampusOntario's engagement project?

Ask if eCampusOntario staff

- c. How were you involved in the knowledge mobilization events and/or Micro-credentials Portal enhancements?

Engaging Employers

Ask if Employers, labour market associations

2. What are the specific occupational demands and labour market skills needs for companies/ organizations in your sector ?
 - a. Are you looking to upskill/reskill employees, recruit individuals with essential skills or a combination of both?
3. To what extent do you think micro-credentials or similar short-term training can help meet workforce training and recruiting needs for your sector?
 - a. Have you explored eCampusOntario's Micro-credentials Portal? Tell us your initial thoughts on the Portal.
4. In what ways, if any, does having labour market information (e.g., 5-year outlook, related careers, associated skills, tools and technologies) included in the information about micro-credential programs help companies/ organizations in your sector to:
 - a. upskill/reskill employees?
 - b. connect with institutions for more information about their programs?
 - c. connect with institutions to find skilled talent?
 - d. Are there any additional information needs to help you search for micro-credential or similar short-term training programs to upskill/reskill employees or search for skilled talent?
5. How has eCampusOntario's Micro-credentials Portal engagement helped to support your company or companies in your sector to meet its workforce training and recruiting needs? Probe for:

- a. Increased understanding of opportunities to upskill/reskill employees through micro-credentials; increased understanding of the value of upskilling/reskilling employees
- b. Increased ability to find relevant short duration training opportunities
- c. Received sufficient information to better connect with qualified candidates to fill labour gaps in company
- d. Have information to better connect with post-secondary institutions
- e. Is there any additional information you would like to have received during the engagement session?

Ask if eCampusOntario staff

2. What have been some of the successes with reaching out and engaging employers for this project?
 - a. In what ways did labour market data help drive employer demand for micro-credential programs?
 - b. How did feedback from employers support the design and development of enhancements to the Micro-credentials Portal?
 - c. Was there anything that turned out better than expected?
3. What have been some of the challenges with reaching out and engaging employers for this project?
 - a. How have you mitigated these challenges?
 - b. Is there anything you would have done differently?

Engaging Postsecondary institutions

Ask if Postsecondary institutions

2. In what ways, if any, does tagging your programs with labour market information (e.g., NOC and/or NAICS codes) help your institution connect with and promote your programs to employers?
 - a. Has tagging programs with labour market information led to more employers connecting with your institution to find skilled talent?
 - b. Has tagging programs with labour market information led to more employers connecting with your institution to upskill/reskill their employees?
 - c. Do you plan on tagging more of your micro-credential/ short term training programs with labour market information? Please explain why or why not. If not, please explain any challenges experienced or other reasons why you would not tag more of your programs.
3. How has eCampusOntario's Micro-credentials Portal engagement helped your institution connect to employers? Probe for:
 - a. Increased understanding of opportunities to connect employers to my institution's micro-credential earners

- b. Received sufficient information to promote my institution's micro-credential programs and earners to employers.
- c. Is there any additional information you would like to have received during the engagement session?

Ask if eCampusOntario staff

- 2. What have been some of the successes with reaching out and engaging postsecondary institutions for this project?
 - a. Where they supportive of tagging their programs with labour market information?
 - b. How did feedback from postsecondary institutions support the design and development of a new workflow in the Micro-credentials Portal?
 - c. To what extent did eCampusOntario's efforts help to connect employers and postsecondary institutions?
 - d. Was there anything that turned out better than expected?
- 3. What have been some of the challenges with reaching out and engaging postsecondary institutions for this project?
 - a. How have you mitigated these challenges?
 - b. Is there anything you would have done differently?

Engaging Learners

Ask if eCampusOntario staff

- 2. What have been some of the successes with reaching out and engaging learners for this project?
 - a. In what ways did labour market information help drive learner demand for micro-credential programs?
 - b. To what extent has eCampusOntario's efforts engaged more learners for personalized micro-credential program recommendations?
 - c. Was there anything that turned out better than expected?
- 3. What have been some of the challenges with reaching out and engaging learners for this project?
 - a. How have you mitigated these challenges?
 - b. Is there anything you would have done differently?

Wrap up

Ask all

- 2. Do you have anything else to add, or any questions for me?