Future Skills Centre | Centre des Compétences futures

Project Insights Report

Digital Fluency for the Workforce

PARTNERS
Humber College

LOCATIONS
Across Canada

INVESTMENT
$912,422

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Executive Summary

The Digital Fluency for the Workforce project, conducted at Humber College, addressed a critical gap in Canada's labour market that has been exacerbated by rapid technological changes. This project aimed to enhance digital fluency among under-represented groups, including youth, newcomers, racialized individuals and people with essential skills gaps. To that end, the project developed a series of free, stackable digital fluency micro-credentials to better equip these groups to transition to and within the workforce and to provide employers with the ability to recruit and retain digitally fluent workers in a timely and cost-effective manner.

A dual delivery model was deployed: one was fully online and another was blended. This was key to the program's ability to cater to diverse learning preferences and led to increased accessibility and participant engagement. The initiative successfully engaged 315 learners, surpassing its target, and issued 566 micro-credentials, demonstrating a scalable model for workforce development.

The project's prior learning assessment and recognition (PLAR) system was notably effective, as it created a pathway to upskill. Learners started at the most appropriate level of training, which saved time for those learners who were advanced but provided supportive learning for those needing to develop more foundational skills. This approach recognized prior skills and accelerated the learning process for many participants.

Feedback from participants emphasized the value of the stackable nature of microcredentials and the importance of additional wraparound support for those seeking employment. Additionally, the findings from the project highlighted the importance of friendly, approachable and knowledgeable facilitators and program staff to the success of the learners and the program. Overall, the project demonstrates the effectiveness of micro-credentials and PLAR in closing the digital skills gap and provides insights on how similar educational models could be adapted to other sectors to support rapid upskilling. Moreover, the project highlighted the importance of flexible learning options and the integration of supportive services to help participants transition into employment. These lessons are invaluable for policy-makers, educators and industry leaders in refining and expanding workforce training programs to meet the demands of a rapidly evolving labour market.

KEY INSIGHTS

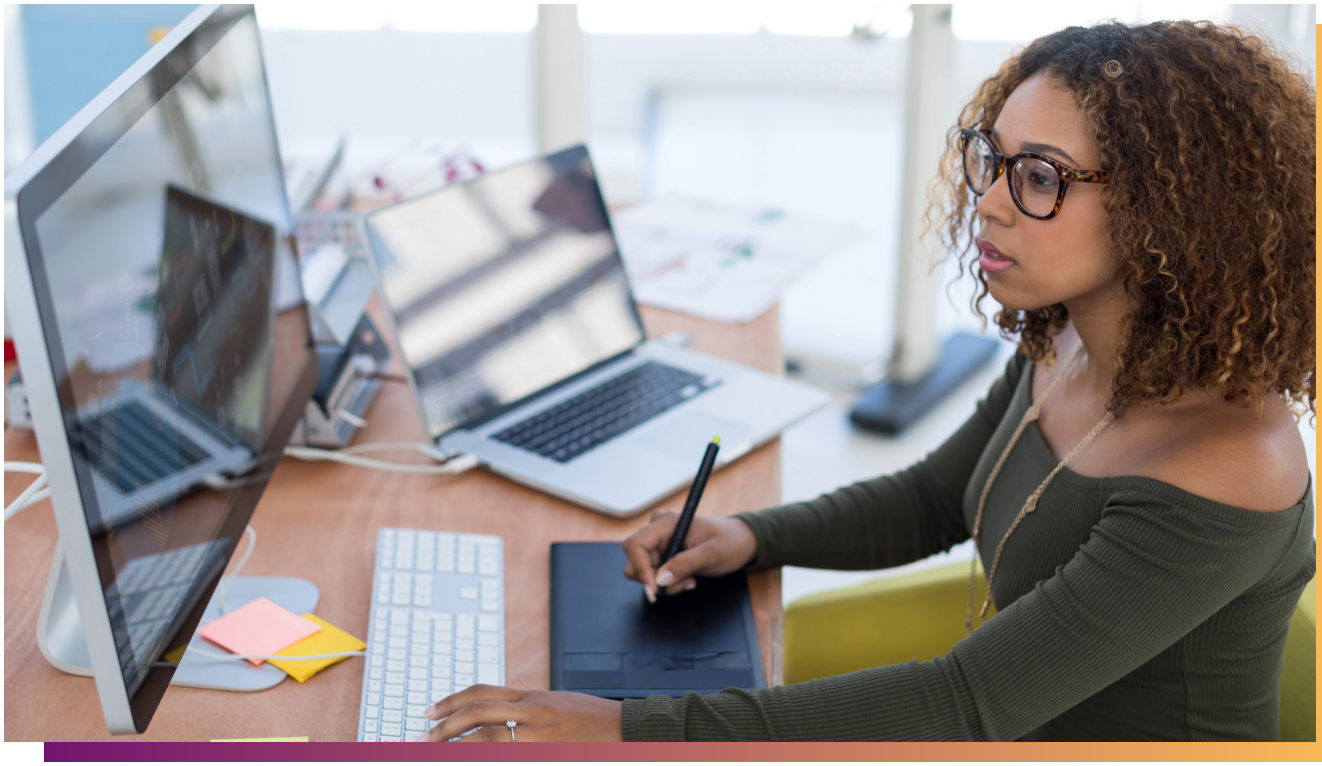
1. Three hundred and fifteen learners received digital fluency training, and more than 566 micro-credentials were issued.
2. The emphasis on PLAR helped create individual pathways to upskilling, enabled learners from diverse backgrounds to begin their training at the most appropriate level, and accelerated the learning process for many participants.
3. The project's dual delivery model, which included a mix of fully online and blended learning, proved effective in catering to diverse learning needs and preferences, enhancing accessibility and engagement.

The Issue

In recent years, Canada has faced a significant challenge in its labour market due to rapid technological advancements. This situation has exacerbated the difficulties employers experience in finding adequately skilled workers, particularly those proficient in digital technologies. Concurrently, individuals lacking foundational digital fluency skills are severely disadvantaged, struggling to secure employment in an increasingly digital economy. This issue was particularly pronounced among youth, newcomers, individuals with essential skills gaps, and racialized communities, who often face additional barriers to employment and training opportunities.

Before launching the Digital Fluency for the Workforce project, the available educational and training systems were not fully meeting the pressing need for digital fluency. Traditional programs are often lengthy and financially prohibitive for many individuals, notably those from equity-seeking groups. Furthermore, these programs frequently failed to meet the immediate, practical needs of employers or to keep pace with the rapidly evolving digital landscape.

This project was developed in response to this critical need for scalable, accessible and effective training solutions that could swiftly enhance the digital competencies of individuals, enabling them to secure and maintain employment across various sectors.



What We Investigated

The investigation explored key research questions to improve digital fluency across multiple sectors. The questions focused on defining digital fluency, understanding how it can be learned and assessed, and exploring the feasibility of creating cross-sectoral training programs. These inquiries shaped the project's strategic and methodological approach.

Humber College, industry partners, community organizations, and Employment Ontario were the main stakeholders in this initiative. The project's goals were twofold: (1) to create and pilot stackable digital fluency microcredentials designed to prepare under-represented groups for workforce transitions, and (2) to help employers attract and retain digitally skilled employees.

This project utilized a PLAR-informed micro-credential strategy. Coordinators tested this strategy through the curriculum development, participant involvement and employer feedback stages. The project also experimented with two instructional models: fully online and a blended format combining synchronous and asynchronous online learning. This approach was intended to meet varied learning styles needs and increase participation and accessibility. Throughout the project, continual feedback from participants and employers was integral to refining the training content and delivery methods.

What We're Learning

A key feature of the initiative was the implementation of a PLAR system, which expedited the learning process for 98 participants by acknowledging their existing skills, allowing them to skip Level 1. Of these, 80 began at Level 2, while 18 started directly at Level 3. Apart from accelerating the learning process, this approach was also critical to the overall success of the training, given that 74% of participants were first-generation learners. This underscores the value of the training for those pursuing education post-high school for the first time.

The initiative attracted a diverse group of participants, although fewer younger individuals participated than coordinators had anticipated. Participants predominantly fell within the 40–59 age range (with the majority being women), which reflects the program's appeal to older individuals seeking to re-enter the workforce.

Project coordinators found that participants, notably those among the first cohort of learners, required one-on-one guidance above and beyond the curriculum content support provided by the facilitators leading the synchronous/asynchronous sessions. This emphasized the importance of providing stronger support systems for these learners.

Despite these hurdles, the feedback regarding the PLAR process was overwhelmingly positive, which emphasizes the process's effectiveness in recognizing prior knowledge and accelerating the educational journey for many participants. Collaboration with employment services proved beneficial, as they offered essential support that facilitated participants' transitions into employment.

In conclusion, the Digital Fluency for the Workforce project met and exceeded its participation goals, providing valuable training and credentials. However, it also highlighted the need for enhanced support for participants. These insights are crucial for refining future iterations of the program and could benefit similar initiatives elsewhere.

Why It Matters

Digital fluency is increasingly crucial for both individuals and economies in the context of the future of work. At the individual level, digital fluency empowers people to navigate the complex digital landscape with confidence and efficiency, enabling them to access future learning opportunities and improve their employment prospects. In this way, it helps to close the digital divide. At the societal level, it promotes inclusion, notably for many of the groups this project aimed to serve, and digital fluency drives innovation, productivity and competitiveness.

However, the prevailing educational approach presents a number of barriers to closing the digital divide among equity-seeking groups, including the often-lengthy, in-person and financially prohibitive nature of courses related to digital fluency. As such, a key takeaway from the project is the effectiveness of stackable micro-credentials. These credentials offer flexible, targeted educational opportunities that align with industry demands, support rapid upskilling and allow learners to start training at levels that match their existing skills.

State of Skills:
Better labour market transitions for mid-career workers

There is considerable promise in the role digital tools and virtual career services can play in improving access to training and career development, particularly for those with geographic barriers or constraints such as family care or other work responsibilities

The project also explored a dual delivery model—online and blended learning—which offers insights into the future of educational delivery. Providing various learning modes meets diverse learner needs and could increase participation and completion rates in training programs. This flexibility is increasingly relevant in a world where remote and hybrid work settings are prevalent.

Read Thematic Report

Additionally, the project emphasized the importance of supportive learning environments that extend beyond traditional educational frameworks. Integrating employment services and providing wraparound support proved essential in helping participants not only learn new skills but also apply them effectively to secure and retain employment. This holistic approach could guide broader policies to improve employment outcomes for under-represented groups.

By adopting flexible, inclusive and industry-aligned educational models, it is possible to tackle the challenges of a rapidly evolving work environment more effectively and ensure that all workers possess the skills necessary to thrive.

What's Next

Humber College has scaled the Digital Fluency for the Workforce program across the institution.

Have questions about our work? Do you need access to a report in English or French? Please contact communications@fsc-ccf.ca.

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