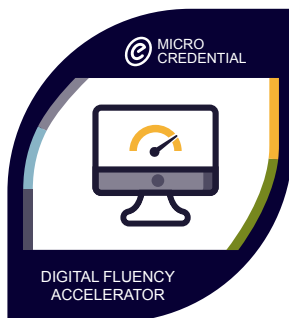# DIGITAL FLUENCY ACCELERATOR
MICRO-CREDENTIAL

Academic success now demands that learners be digitally proficient. We call this digital fluency – having the skills to use digital tools and technologies to learn, explore and create.

MICRO CREDENTIAL

DIGITAL FLUENCY ACCELERATOR

"We are a digital society. Without digital fluency, learners simply cannot realize their full capacity."

Michael Carter, Professor
St. Lawrence College

As part of the third round of the Virtual Learning Strategy (VLS 3.0), eCampusOntario and Contact North | Contact Nord were tasked with producing and piloting a micro-credential to support learner acquisition of digital fluency skills. The resulting product, *The Digital Fluency Accelerator Micro-Credential*, led over 1289 learners and 160 faculty at 15 publicly-assisted Ontario Indigenous Institutes, colleges and universities through the micro-credential. eCampusOntario and Contact North's *Digital Fluency Accelerator Micro-credential* is specifically designed to assist learners in attaining the skills they need to succeed academically and in their future workplace.

The *Digital Fluency Accelerator Micro-credential* has five modules and is asynchronous and suitable for online and hybrid postsecondary learners. Learners will explore digital tools and technologies and gain the necessary sustainable and transferable skills required for effective online learning, such as, managing digital files, digital design creation, safe digital communication, and digital research navigation.

The course, designed in consultation with faculty and learners, resulted in the piloting of a micro-credential that can be delivered by educators through a common cartridge available for download on eCampusOntario's Open Library or through Contact North's Moodle learning management system.

PILOT AT A GLANCE

1051	**160**	**9**	**5**	**1**	**141**
Digital Badges Issued	Faculty Members	Colleges	Universities	Indigenous Institute	Downloads from the Open Library

INTERESTED IN ADAPTING THE MICRO-CREDENTIAL?

The micro-credential is housed as a common cartridge, a package that contains the full learning content and resources, which can be adapted by educators to facilitate the learning of digital fluency skills in their classrooms. The common cartridge can be downloaded into any major learning management system. Housed in eCampusOntario's Open Library, the common cartridge is available for download here .

Accelerating Digital Fluency Skills

Through environmental scans, a literature review, surveys and focus groups with faculty and learners, as well as the assembly of a database of all existing digital fluency programs and supports in the Ontario's postsecondary sector, eCampusOntario and Contact North | Contact Nord discovered that the postsecondary sector lacked a common understanding or definition of digital fluency. Interviews conducted with learners and focus group consultations conduced with faculty resulted in the development of the following shared definition:

> **Digital Fluency:** *the transferable skills for sustainable engagement with digital technologies including operational skills, information-navigation skills, social skills, and creative skills.*

These skills may include using technology; finding, using, and evaluating critical information; curating data and media sources; communicating, collaborating and participating in online environments; managing online identity and personal security; and creating online content. This definition informed the creation of the course modules and content.

> *"The course is easy to access, user-friendly, and I am able to access it on a tablet/mobile device while in between my busy life of daycare and work. I am well-educated in digital media and social media in my day-to-day job but I learned far more practical tools I can use to make things easier, more efficient and time-saving."*
>
> **Ashley**, an Ontario Student and Graduate of the *Digital Fluency Accelerator Micro-credential*

TESTING EMERGING EDTECH

Learners who completed the micro-credential on Contact North's Moodle learning management system were graded by Artificial Intelligence (AI) software created by Artha Learning. The software provided learners with instantaneous feedback to their summative assignments at the end of each module. The AI was trained on a rubric and sample answers created by the same team who designed the micro-credential. Micro-credential learners were exposed to AI as a digital fluency technology and had the experience to interact with this technology through completion of the course.

> *"Many higher-education institutions are now looking into hybrid and online learning. By providing this opportunity for students to gain and practice these digital skills, we are able to support their learning and set them up for success."*
>
> **Dalia Hanna,** Associate Dean, Sheridan College

DIGITAL FLUENCY ACCELERATOR MICRO-CREDENTIAL MODULES

Introduction to Digital Fluency

- ⓘ Interpret digital fluency as a part of a larger spectrum of digital skills.
- ⓘ Identify the sustainable and transferable digital fluency skills required for online and hybrid learning to inform future workplace requirements.
- ⓘ Investigate emerging technologies and concepts within the digital world.

Digital Operational Skills

- ⚙ Employ digital file management and cloud-based storage solutions.
- ⚙ Develop self-reliance skills when operating digital productivity technology to minimize workflow disruptions when problems arise.
- ⚙ Investigate digital safety and privacy best practices to mitigate cyber risks.

Digital Navigation Skills

- Navigate and operate various learning management systems for successful engagement and participation.
- Select and evaluate appropriate digital resources to solve real-world problems.
- Explore digital notetaking and information organization strategies for effective digital research writing and test taking.

Digital Creation Skills

- Construct a list of digital creativity skills.
- Identify design thinking principles for digital projects.
- Explore digital content creation and curation techniques.

Digital Socialization Skills

- Discuss effective digital communication and collaboration techniques.
- Develop engaging digital content for virtual presentations.
- Analyze and interpret social media community participation to ensure data-driven optimization decisions.

DIGITAL FLUENCY ACCELERATOR MICRO-CREDENTIAL

Learner Success:

eCampusOntario surveyed faculty before and after the pilot of the micro-credential to measure learner digital fluency and the skill improvements that came with the micro-credential. This section explores several of these metrics and the success the micro-credential had in improving learner skills.

Chart: Learner Use of Digital Fluency Resources After the Pilot

- 16.67%
- 11.11%
- 72.2%

Legend:
- Significant Increase,
- Some Increase,
- Remains the same as before the micro-credential

Faculty overwhelmingly identified some increase in learners using digital fluency resources to complete coursework after completing the micro-credential
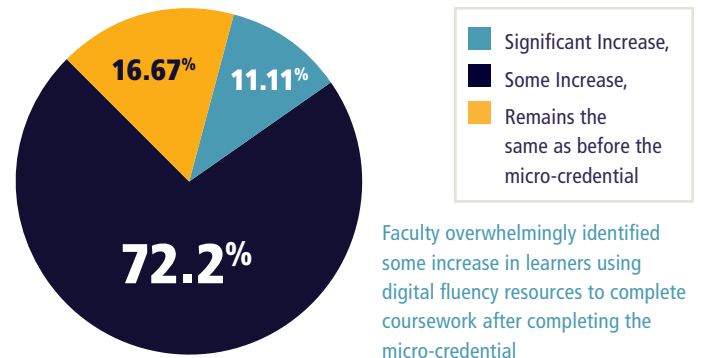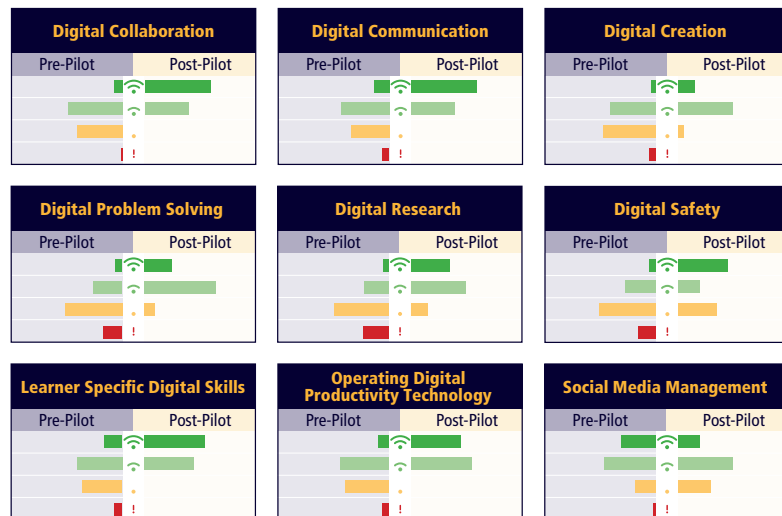
Table: Faculty Ratings of Learner Digital Fluency Skills Pre- and Post-Pilot

Before and after the pilot, we asked faculty to rank their learners' skills in different areas of digital fluency on a four-point scale where:

- 4 **Digitally Fluent**,
- 3 **Moderate Digital Fluency**,
- 2 **Little to No Digital Fluency**, and
- 1 **No Digital Fluency**

Digital Collaboration — Pre-Pilot / Post-Pilot

Digital Communication — Pre-Pilot / Post-Pilot

Digital Creation — Pre-Pilot / Post-Pilot

Digital Problem Solving — Pre-Pilot / Post-Pilot

Digital Research — Pre-Pilot / Post-Pilot

Digital Safety — Pre-Pilot / Post-Pilot

Learner Specific Digital Skills — Pre-Pilot / Post-Pilot

Operating Digital Productivity Technology — Pre-Pilot / Post-Pilot

Social Media Management — Pre-Pilot / Post-Pilot

THE DIGITAL SKILLS SPECTRUM: WHERE IS DIGITAL FLUENCY?

Digital Literacy Digital Fluency Digital Mastery

Digital fluency has often been used as an umbrella term to understand the skills required to use and manipulate digital technologies. However, our research and consultations have revealed that digital fluency is the middle set of skills on a spectrum. Digital literacy encompasses the basic skills required to use digital technologies, while at the high end, digital mastery is the set of skills required to create new digital technologies or manipulate digital technologies in a way for which they were not initially designed. We can also understand this spectrum as digital participation, digital fluency, and digital innovation or disruption.

Digital fluency is required for achieving successful participation in online and hybrid learning at the postsecondary level and entry into the digital workforce. A course like the *Digital Fluency Accelerator Micro-Credential* has been designed to enable the transition from digital literacy to digital fluency and improve the skills of the digitally fluent towards digital mastery.

Digital **LITERACY** → Digital **FLUENCY** → Digital **MASTERY**

FACULTY PROFILE

Lassandra Conliffe, Educational Technology Analyst- Ontario Tech University

As a digital fluency coach, I've found significant benefits in supporting learners through micro-credential programs. The critical nature of these opportunities is underscored by the need for widespread availability across our campus, ensuring all learners can enhance their digital skills. Extending such opportunities beyond the classroom is essential, offering them to administrative staff who share a passion for education and technology. This experience has allowed me to engage with learners in my coaching role and as an educator, advocating for the mandatory integration of digital fluency skills. Collaborating with like-minded learners, educators, and coaches, I've contributed to advancing micro-credentials and fostering a broader learning community. This inclusive approach recognizes the importance of digital fluency within academic settings and administrative roles, promoting a holistic and integrated approach to technology-enhanced learning.

Two of Ontario's leading postsecondary education non-profits were empowered by the Ministry of Colleges and Universities to collaborate for the first time ever. A project of this magnitude, led by the leading experts in digital learning in Ontario, demonstrates the sector's commitment to improving learner digital fluency skills for success in postsecondary education and in the digital workforce.

ecampus Ontario

"The new *Digital Fluency Accelerator Micro-Credential* will help all of Ontario's learners be productive learners and active participants in the digital economy. The important skills that this new micro-credential teaches are foundational to learning and working in today's – and tomorrow's – economy. The partnership between Contact North | Contact Nord and eCampusOntario exemplifies the power of collaboration and how working together to create open educational resources results in better support for learners in cost-effective ways. We look forward to continuing to work together to ensure all of Ontario's learners can access this valuable resource."

Robert Luke,
Chief Executive Officer of eCampusOntario

CONTACT NORTH NORD

"eCampusOntario developed an educational resource called the *Digital Fluency Accelerator Micro-Credential*, which is available in English and French. Contact North | Contact Nord helped make the English and French versions of this free resource available to learners using its Moodle learning management system.

Our two organizations are working together to help Ontario learners improve the digital skills they need to succeed in online and hybrid programs and courses and to be ready for the jobs of today and tomorrow.

The free resource has already helped over 1,000 learners in the province. It is available as a helpful, free and easily accessible resource to learners to improve their digital skills."

Maxim Jean-Louis,
Chief Executive Officer of Contact North | Contact Nord