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MICRO-CREDENTIALED PROFESSIONAL LEARNING TO ENABLE FLEXIBILITY FOR DIGITAL TRANSFORMATION

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MICRO-CREDENTIALED PROFESSIONAL LEARNING TO ENABLE FLEXIBILITY FOR DIGITAL TRANSFORMATION

Charlotte Delouche, Laura Viselli and Lindsay Woodside

INTRODUCTION

eCampusOntario is a provincially funded non-profit organization that leads a consortium of publicly-supported colleges, universities, and Indigenous Institutes in the province of Ontario in Canada. Our focus is on supporting digital learning and digital pedagogies in all their forms – that is, online and technology-enabled learning – for our 53 member institutions. eCampusOntario provides supports needed to further innovation and collaboration to advance digital transformation in the postsecondary education sector in Ontario.

In higher education, digital transformation is "a series of deep and coordinated culture, workforce, and technology shifts that enable new educational and operating models and transform an institution's operations, strategic directions, and value proposition" (Grajek & Reinitz, 2019). The need for digital transformation reached a critical point when all publicly-supported colleges, universities, and Indigenous Institutes in Ontario transitioned to emergency remote teaching and learning in 2020. As important as the infrastructure and hardware required for this shift are, the skills required for digital transformation play an equally critical role.

eCampusOntario recognized this necessary skill set prior to the major inflection point for many others through the development of our first micro-credentialed professional learning program, Empowered Educator. The Empowered Educator program is designed to enhance digital fluency and pedagogical practices among educators. Since 2017, the program has evolved to meet the needs of modern educators, notably embodying flexibility in both structure and content. Research conducted by eCampusOntario through 2021 and 2022 revealed several emerging trends which suggested an increasing need and desire for flexibility in postsecondary education. To further understand flexibility, eCampusOntario engaged educators in 2023 to identify key mechanisms to support flexibility. One such mechanism is equipping educators with the space to experiment and skills to discern what tools and methods are best for them and their students. This article explores how this microcredentialed professional learning program provides that space for educators and, in doing so, furthers the flexibility of today's post-secondary institutions.

HISTORY OF EMPOWERED EDUCATOR

In 2017, eCampusOntario identified a need for a professional learning model to underpin a foundational approach to technology-enabled learning and teaching. In response, we collaborated with six colleges and four universities in northern Ontario to develop resource materials that could provide a common baseline of knowledge and complement local training and development programming. The framework for these resources is based on Simon Bates' model of the Anatomy of a 21st Century Educator (2016), providing a robust foundation for educators aiming to transform and extend their teaching and learning practices. In 2017, the program was named Ontario Extend and now, in 2024, it has been renamed Empowered Educator.

The program modules were originally created for the Northern Capacity Building project, an initiative involving 10 publicly-assisted postsecondary institutions in northern Ontario and led by Northern College. The project focused on designing a collaborative approach to knowledge building, skills development, and resource sharing to support the technology-enabled learning initiatives of the institutions. The resources were piloted with a group of 30 participants from 10 colleges and universities in northern Ontario during the Extend Institute in August 2017. After the Institute, the Extend program was made freely available on the Internet and educators were encouraged to use the materials for self-paced learning, to complete the Daily Extend activities, and to share their work via X (formerly Twitter) by including @ontarioextend and the hashtag "#oextend" in their tweet.

In 2018, eCampusOntario published an Ontario Extend research report that explored the experiences of educators who participated in the initial iterations of the program (Lopes & Porter, 2018). This report examined what, if any, pedagogical values and practice influenced the participants' reviews after interacting with the program, and summarized recommendations from participants for changes or improvements to the program design, materials, and facilitation strategy and approach. Key report takeaways include the identification of specific areas where digital literacy and pedagogical practices need strengthening, the importance of incorporating experiential and self-directed learning opportunities into the program, and the necessity for ongoing evaluation and adaptation of educational technologies. The report highlights the value of a supportive community and mentorship in enhancing the efficacy of professional learning, recommending that such elements be integral components of future iterations (Lopes & Porter, 2018).

From January to May 2019, a facilitated version of the six modules was offered to educators as a 'medium-sized Open Online Course' (mOOC) via the support and communication tools of the edX platform hosted by EDUlib. Thereafter, the program continued to be offered to post-secondary institutions to complete at their own pace during 2019.

In early 2020, the Ontario Extend in Practice report was published (Mackie, 2020). This report identified and surveyed the number of Ontario postsecondary institutions that had adopted and/or customized the modules or resources in some format. Attention was specifically paid to: formal teaching and learning department adoption and customization; informal local adoption and customization; module-specific adoption and customization, delivery modes, and technology used for customization. Key report takeaways included a broad acceptance and active use of program resources across 10 Ontario postsecondary institutions. The feedback from these institutions was overwhelmingly positive, with many planning to expand their use of the program to further enhance teaching and learning. The ongoing engagement and planned expansion highlighted the significant impact of the program on enhancing educational practices through technology (Mackie, 2020).

By the summer of 2021, the Extend program was migrated from its WordPress site to the Brightspace learning environment. This strategic move to offer programming in a learning management system (LMS) allowed for a higher-quality online learning experience. Each course model had facilitators available to support learners as needed. Educators were able to 'drop in' at any time to the virtual classroom check-ins and debriefs. Overall, the team observed a high uptake of program activity in the LMS, with a more than 200 percent increase in engagement since the initial offering, totaling 406 learners enrolled throughout the May to December 2021 session.

During this time, Empowered Educator also began to seek institutional endorsement partners to endorse the program as a credible micro-credentialed professional learning achievement. Conestoga College was the first Ontario college to provide an endorsement and pathway for Empowered Educator micro-credentials. All program participants would now be eligible to apply the 'Empowered Educator' micro-credential for credit toward Conestoga's recently launched Certificate in Post-Secondary Teaching. Available to all educators, this 30-credit certificate program prepares educators to teach credit and non-credit courses in colleges, universities, apprenticeships, and other programs for adult learners. To date, the Empowered Educator Program has nine

endorsement partners: Conestoga College, Fanshawe College, Georgian College, St. Lawrence College, Mohawk College, Nipissing University, Trent University, Brock University, and Windsor University.

Today, Empowered Educator continues to use the LMS to deliver facilitated professional learning sessions. Some of these sessions are enhanced with guest speakers who provide insights into and practices for educational technology and pedagogical innovation. Our facilitators offer regular check-ins and debriefs, ensuring ongoing support and interaction for all participants, arguably leading to stronger program completion rates. This program is structured around six modules — Teacher for Learning, Technologist, Curator, Collaborator, Experimenter, and Scholar — that each demand approximately 4—6 hours to complete. Upon successful completion of each module, participants earn digital badges, which cumulate in the Empowered Educator micro-credential.

The content of Empowered Educator is designed to address key skills, knowledge, and attributes essential for the modern educator. It aims to:

- Empower educators to design effective learning activities grounded in research-based learning principles.
- Enhance abilities in curating educational content, emphasizing the use of open educational resources and Creative Commons licensing.
- Improve technological proficiency to address specific learning challenges through a design thinking approach.
- Encourage collaboration by building personal learning networks that extend across and beyond disciplines.
- Foster experimentation with new pedagogies and technologies to enhance learning.
- Advance scholarly activities by supporting educators to systematically explore and improve student learning
 outcomes.

Central to Empowered Educator is its flexibility and accessibility. Participants can explore course materials at their own pace each week and have the option to join live sessions guided by an expert facilitator. In keeping with this commitment to flexibility, the program is offered in both English and French, under the name "Pédagogie numérique certifiée." This bilingual delivery enables educators from Francophone and bilingual institutions to fully participate in the program in their language of preference. Since its launch in 2023, the French version has garnered 593 registrations, with 192 micro-credentials awarded to date. Fifty-two percent of these enrolments are from aspiring French language teachers who are enrolled in French Language Teacher Education Programs at eCampusOntario member institutions, reflecting the strong interest in developing digital literacy skills among this group. The content can also be integrated into existing institutional teaching and learning programs, thanks to its open licensing in both English and French and compliance with the Accessibility for Ontarians with Disabilities Act (AODA).

THE VIRTUAL LEARNING STRATEGY

As all publicly-supported Indigenous Institutes, colleges, and universities transitioned to emergency remote teaching and learning, the Ontario Ministry of Colleges and Universities launched the Virtual Learning Strategy (VLS) with funding totaling \$70 million dollars to drive growth and advancement in high-quality virtual and hybrid learning (Government of Ontario, 2020). eCampusOntario was entrusted with supporting the implementation of the VLS (eCampusOntario, 2020), during which the Empowered Educator program continued to evolve by implementing enhancements to align with the needs of educators and the sector. Key initiatives include integrating Indigenous knowledge and pedagogies into the curriculum, and improving accessibility in line with the standards of the Accessibility for Ontarians with Disabilities Act (AODA).

Publicly-supported postsecondary institutions in Ontario include Indigenous Institutes. Indigenous Institutes offer a culturally relevant education for their students, and act as a gathering space for communities. Every Indigenous Institute is unique and offers a variety of opportunities, from Indigenous language and culture classes

to apprenticeship programs and more, which reflect the needs and desires of their communities (Government of Ontario, 2019).

eCampusOntario initiated the Indigenous Knowledge Integration project in the fall of 2022, in alignment with the National Truth and Reconciliation Committee's Call to Action #62 ii: "We call upon the federal, provincial, and territorial governments, in consultation and collaboration with Survivors, Aboriginal peoples, and educators, to provide the necessary funding to postsecondary institutions to educate teachers on how to integrate Indigenous knowledge and teaching methods into classrooms" (Truth and Reconciliation Commission of Canada, 2012). This initiative aimed to decolonize the Empowered Educator curriculum by incorporating Indigenous perspectives and pedagogies, working closely with Indigenous educators. Through this project, the Empowered Educator modules were reviewed and revised to enhance the curriculum to reflect a broader spectrum of perspectives and educational practices.

Building on a commitment to equity, diversity, inclusion, and decolonization, eCampusOntario made significant strides in ensuring that the Empowered Educator program adheres to AODA standards. These efforts include enhancing document accessibility, ensuring the accessibility of learning activities, and streamlining the course layout by integrating activities directly within the Brightspace platform. This transition not only enhances accessibility, but also streamlines the user experience, making the learning process more intuitive and compliant with AODA requirements. The full integration of these accessibility improvements was released in summer 2024.

As part of the third round of the Virtual Learning Strategy, eCampusOntario introduced Empowered Educator Sprints – an accelerated, condensed version of the program designed to be completed in just three weeks, with synchronous sessions to engage participants more intensively. This sprint model allowed educators to quickly develop key skills while accommodating their busy schedules. eCampusOntario organized four sprints, which saw participation from 397 educators across 44 institutions, including 22 colleges, 20 universities, and two Indigenous Institutes. The sprints were offered in both English and French, further supporting the program's bilingual reach and reinforcing the flexibility and accessibility at the heart of Empowered Educator.

RESEARCH AND FORESIGHT

In tandem with the VLS, eCampusOntario launched Research and Foresight services to support the higher education sector's ability to anticipate potential disruptions and prepare for 'digital by design' educational futures. In these publications, eCampusOntario explored the rapidly changing landscape of the postsecondary education sector, identified major factors impacting postsecondary education, presented current trends, and proposed questions to examine possible future implications. Through this work, it became clear that today's learners have evolving expectations necessitating more online options and new approaches to learning. This demand for flexibility is further articulated in our first report on flexibility, *Flexibility Brief 1: Making the Case* (eCampusOntario, 2023).

In the fall of 2023, eCampusOntario's Research and Foresight team engaged with educators from Ontario's publicly-supported postsecondary institutions to discuss their experiences, perspectives, and future visions around flexibility. Through a series of participatory workshops, we sought to learn how flexibility impacted the role of educators, the challenges they faced, and how they hoped to integrate flexibility in the future. Forty-five instructors from Ontario participated over six workshops. Calls for participation went out across eCampusOntario's member institutions. Twenty-nine participants taught at publicly-assisted colleges and 16 participants taught at publicly-assisted universities. Twenty-four participants self-identified as full-time instructors, and 17 self-identified as seasonal or part-time instructors. Four participants self-identified as staff from teaching and learning departments, directly supporting instructors at a postsecondary institution. No instructors from Indigenous Institutes participated.

The workshops were designed using strategic foresight methods to frame the conversations. These methods included: Futures Triangle, to understand the interrelationships among future visions, present drivers of change, and past limitations (Inayatullah, 2008); Causal Layered Analysis (CLA), to explore the assumptions that underlie the way we frame problems, situations, and solutions (Inayatullah, 2023); and Three Horizons, to explore what it would take to transition from present situations to future visions (Sharpe & Hodgson, 2006). Through these participatory workshops, eCampusOntario sought to gain a deeper understanding of what flexibility means to the sector, the factors driving the need for it, and how flexibility can be achieved.

EMBODYING FLEXIBILITY THROUGH EMPOWERED EDUCATOR

Our research collected recommendations from educators and informed our own recommendations for the sector. It was critical that any discussion stewarded by eCampusOntario about flexibility included the educators who are at the forefront of embodying flexibility. Recommendations rooted outside of their perspectives, ideas, and fears would not capture the nuance and the complexity of enacting large-scale transformation.

Listening to educators shaped the following recommendations from eCampusOntario to support transition design and change management:

- 1. Meeting the complexity of diversity with systems for agile, large-scale dialogue:
 - Educators noted that the growing diversity among postsecondary learners' profiles is a key driver of
 flexibility and personalization. However, they acknowledged that professional development is needed to
 adequately support diverse needs. Additionally, the profiles, needs, and perspectives of educators are very
 diverse. This diversity was reflected in the conversations about feelings and assumptions underlying the
 educators' perspectives around flexibility. The feelings, assumptions, and visions shared in our workshops
 do not represent all educators' experience. Therefore, having the space to hear, understand, and consider
 all perspectives is critical.
- 2. Enabling the scalability of innovation with exnovation:
 - Participating educators' feelings of being overwhelmed were ever-present throughout the conversations.
 Educators' shared perspectives on the need to learn more technological tools and teaching methods
 reflected a perception of continuous increase of workload as opposed to modification of workload. The
 establishment of a multi-stakeholder working group to explore exnovation strategies for the sector can
 identify programs, tools, and processes that need to be phased out. The efficiencies realized from the
 exnovation areas can be re-allocated to areas that require further support for experimentation and
 innovation.
- 3. Facilitating a forum for ongoing multistakeholder collaboration with a bias towards action:
 - The experiences and perspectives shared by educators in this study are only representative of a portion
 of Ontario's postsecondary education instructors. Ensuring sustainable digital transformation strategies,
 enabled by flexibility, will require continuous mechanisms for multistakeholder collaboration. We
 recommend establishing a multi-stakeholder forum where representatives from the sector can come
 together to co-design and agree on mechanisms to discuss future-focused challenges and opportunities
 facing the sector. This forum would also co-design and agree on productive ways to explore the issues and
 commit to action.
- 4. Supporting agile, shared, and safe spaces for experimentation and iteration:
 - Educators shared that the rapid pace of change within and around the sector is a key driver of the need for flexibility, but they shared concerns about their ability to keep up. Additionally, we observed that new measures to support flexibility in practice, infrastructure, and policy need to be tested before they can be scaled. Furthermore, sector collaboration in those experiments is critical if it is intended to have a large transformative impact in a short timeframe. Supporting a shared hub for safe experimentation and iteration, where multiple institutions with similar needs can collaborate on pilots for improving flexibility and then scale the results in their institutions, can reduce implementation time and cost. This model was piloted in the rollout of the VLS during the COVID-19 pandemic.

Our research also collected recommendations from educators. Educators referred to flexibility both as a goal for future education systems, and also as a means to reach that goal. Addressing the need for flexibility involves reconsidering and iterating on many things, such as: flexible practice, which has room for educators to experiment, iterate, and learn, and which grants them the autonomy to choose the best methods and tools for them and their students; flexible infrastructure, which is a dedicated space supported by institutions for educators to access new tools and systems, and flexible policy, which uses updated funding models and operational structures to support new ways of teaching, learning, enrollment, and assessment.

Empowered Educator provides the shared space for collaboration and experimentation needed for flexible practice to further large-scale digital transformation in higher education. This is achieved through program content and learners' choice of:

- Modularization: Learners can start/complete the module which addresses their immediate needs. They are encouraged to use their own professional experiences, no matter the role, to complete the activities.
- Language: Empowered Educator is offered in English or French to allow educators the opportunity to complete
 the program in their linguistic preference.
- Modality: Learners can complete the program asynchronously, which accommodates schedules and linguistic
 preferences, and fosters inclusivity.
- Accessibility: Empowered Educator is AODA compliant and offers multiple engagement options, ensuring access for all learners.
- Engagement: Empowered Educator is accompanied by a community of practice, with live sessions to share
 insights and experiences related to program content. These sessions support large-scale dialogue that respects
 and incorporates the diversity of educators' perspectives.

Supporting agile, shared, and safe spaces for experimentation and iteration is fundamental to enabling flexibility. The program empowers educators with the skills necessary to make informed choices about technology and teaching methods. Space is provided to enable them to answer questions such as: which tools, practices, and resources best meet my needs and the needs of my learners? Which ones should be eliminated and for what reasons? The importance of this space is critical, as new technologies continue to change the dynamics between learners and educators, and the skill sets required in the workforce evolve.

CONCLUSION

Built collaboratively out of a need for foundational approaches to technology-enabled and online teaching, Empowered Educator has supported over 2,700 educators to transform their teaching and learning practices. Over the past decade, the changes in the higher education landscape have further necessitated the growth of this program. This landscape has shaped learners' expectations, necessitating more online options and digital approaches to learning.

eCampusOntario's research with educators to understand their relationship with flexibility today, and their desires for flexibility in the future, illuminate the fact that flexibility is not only a means to digital transformation, but a key component of it. The Empowered Educator program provides educators with the skills and communities to enable the flexibility that is essential for digital transformation in higher education.

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Laura Viselli, M.I., is the Senior Manager of Research and Foresight at eCampusOntario. She completed her Master of Information, specializing in Library and Information Science, at the University of Toronto and completed her Bachelor of Arts at Wilfrid Laurier University. Laura has built her career as a mixed methods researcher with experience leading and contributing to various research activities at postsecondary institutions, cultural heritage institutions, and charitable organizations.

Lindsay Woodside is the Director, Programs and Services at eCampusOntario, where she heads a diverse team dedicated to growing the footprint and impact of digital teaching and learning supports to account for hybrid futures in education. Lindsay has spent over 20 years working in a variety of roles in both the secondary and postsecondary education sectors in the Province of Ontario. She also founded Ontario's first cooperatively owned craft brewery. Lindsay is always excited to be a part of facilitating conversations, building community, and driving innovation and transformation in technology-enabled teaching and learning environments on behalf of educators and learners in Ontario and across Canada.

REFERENCES

- Bates, S. (2016, August 31). The 21st century educator: Anatomy & a case study from introductory science. Slideshare. https://www.slideshare.net/EdPER talks/the-21st-century-educator-65570909
- eCampusOntario. (2020). Virtual learning strategy (VLS). https://vls.ecampusontario.ca/
- eCampusOntario. (2023). Flexibility brief 1: Making the case. https://www.ecampusontario.ca/wp-content/uploads/2023/09/Flexibility-Brief-1_EN_2023.pdf
- Government of Ontario. (2019, October 9). Indigenous institutes. Education and training. https://www.ontario.ca/page/indigenous-institutes
- Government of Ontario. (2020, December II). Ontario invests in virtual learning strategy. Ontario Newsroom. https://news.ontario.ca/en/release/59600/ontario-invests-in-virtual-learning-strategy
- Grajek, S., & Reinitz, B. (2019, July 8). Getting ready for digital transformation: Change your culture, workforce, and technology. Educause Review. https://er.educause.edu/articles/2019/7/getting-ready-for-digital-transformation-change-your-culture-workforce-and-technology
- Inayatullah, S. (2008). Six pillars: Futures thinking for transformation. Foresight, 10(1), 4-21. https://www.emerald.com/insight/content/doi/10.1108/14636680810855991/full/html
- Inayatullah, S. (2023, April 28). Casual layered analysis: Post-structuralism as method. Metafuture. https://www.metafuture.org/2023/04/28/causal-layered-analysis-poststructuralism-as-method/
- Lopes, V., & Porter, D. (2018). Shifting perceptions, changing practice: Ontario Extend. https://extend.ecampusontario.ca/wp-content/uploads/2018-01-11-shifting-perceptions-changing-practice-research-report-en-v1-1.pdf
- Mackie, K. (2020). Research report: Ontario Extend in practice. https://www.ecampusontario.ca/wp-content/uploads/2020/03/ Ontario-Extend-In-Practice.pdf
- Sharpe, B., & Hodgson, T. (2006). Intelligent infrastructure futures: Technology forward look. https://www.decisionintegrity.co.uk/ DIL%20Infrastructure%20Technology%20Forward%20Look%20-%20Sharpe&Hodgson.pdf
- Truth and Reconciliation Commission of Canada. (2012). Education for reconciliation. Truth and Reconciliation Commission of Canada: Calls to action. https://www.rcaanc-cirnac.gc.ca/eng/1524504501233/1557513602139