

ecampus
Ontario



2021-2024
STRATEGIC PLAN
DIGITAL BY DESIGN



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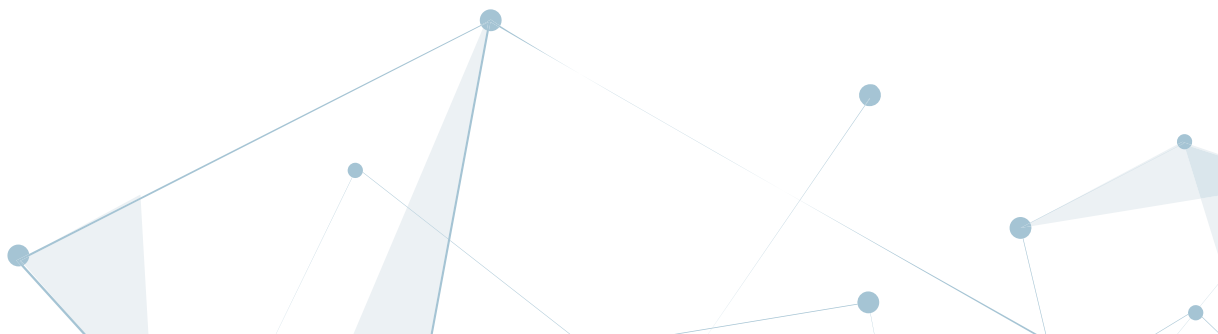
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Message from the CEO

Committed to the Evolution of Teaching and Learning

I am very pleased to introduce the *eCampusOntario Strategic Plan 2021-24: Digital By Design*. Our new Strategic Plan represents a tremendous amount of work and input from our entire community. Our talented team, faculty and staff from across the sector, learners, and our Board of Directors have all contributed.

Coming up with a new Strategy is always a challenging task; and even more so given the remote working context brought on by the pandemic. However, through this experience we learned that within adversity there is opportunity. And it is this opportunity that eCampusOntario is amplifying as we deliver our Strategic Plan for the next three years.

Our Strategic Plan offers a framework for how we will listen and serve our 50 member institutions, and provide platforms, programs and services in support of our collective growth. At a critical moment for the sector, eCampusOntario is uniquely positioned to continue to help support the Ministry of Colleges and Universities, Ontario's colleges, universities and Indigenous Institutes prepare for a future at the leading edge of postsecondary education.

Building on our established programs, our Plan focuses on three key themes:

- **Enabling flexible lifelong learning**
- **Facilitating capacity and contribution**
- **Supporting system-wide collaboration for future-focused global leadership**

These three themes combined create a responsive framework that will guide the development of platforms and services to generate system-wide value. In collaboration with our member institutions, this Strategic Plan will establish a permanent foundation to support rich, equitable, inclusive and flexible digital educational experiences. eCampusOntario's central role and 'honest broker' status means we are extremely well placed to lead and coordinate the development of these platforms for the benefit of all Ontarians.

Ontario's world-class postsecondary institutions are at the forefront of a digital revolution that is underway, spurred by the impacts of the COVID-19 pandemic. Providing the right guidance, support, expertise and resources on this journey is critical to ensuring their success and positioning Ontario as a global leader in advanced postsecondary education. Together we are growing the globally-competitive Ontario postsecondary education system.

eCampusOntario will continue to play a critical role in championing and advancing teaching, learning and innovation for postsecondary institutions in Ontario, connecting them to the future of learning.

Robert Luke, PhD
Chief Executive Officer
eCampusOntario



Message from the Co-Chairs

Leveraging Collaboration as a Competitive Advantage

The *eCampusOntario Strategic Plan, 2021-24: Digital by Design* has been created during a time of tremendous change and transformation. Our new CEO took the helm while an enormous shift in postsecondary education due to the COVID-19 pandemic was underway. Both learners and educators were challenged to find a way through. And collectively, we did.

The collaboration we saw across the sector to work together to achieve a common purpose was exemplary: the continuation of postsecondary education no matter the circumstances.

Fundamentally, eCampusOntario seeks to make “collaboration a competitive advantage” by building, with our member institutions, a permanent foundation to support rich, equitable, inclusive, and flexible digital educational experiences.

The 2021-24 Strategic Plan has three interconnected strategic themes that are organized around eCampusOntario’s core stakeholders of learners, faculty and staff and institutions, and will ensure that we focus our energy and activities over the next three years.

The work that lies ahead accounts for the immediate needs of the sector as well as stewarding the longer-term evolution of digital learning, which includes the increasingly diverse and intertwined forms of online, hybrid and technology-enabled teaching and learning.

Through collaboration and sharing of successful initiatives, we will connect learners, campuses and partners for successful digital educational experiences.

With this plan, eCampusOntario is taking bold steps to continue to support and help lead the evolution of digital learning. Every objective outlined in the Plan will only be accomplished if we work in close partnership with our member institutions and continually engage learners, faculty and staff and other stakeholders as co-designers in understanding needs and developing solutions.



Ann Marie Vaughan, EdD
President & CEO,
Loyalist College



Steven Murphy, PhD
President & Vice-Chancellor,
Ontario Tech University

We seek to build in collaboration with our member institutions; a permanent foundation to support rich, equitable, inclusive and flexible digital educational experiences.



Executive Summary

The *eCampusOntario Strategic Plan for 2021–2024: Digital by Design* articulates our role and the programs and services we provide. Our plan accounts for the sudden and enormous shift in postsecondary education due to the COVID-19 pandemic, but also the longer-term evolution of digital learning, which includes the increasingly diverse and intertwined forms of online, hybrid, and technology-enabled teaching and learning. Fundamentally, we seek to build in collaboration with our member institutions; a permanent foundation to support rich, equitable, inclusive and flexible digital educational experiences.

In preparing the new Strategic Plan, we used an extensive set of surveys, interviews and stakeholder consultations to gather insights and determine priorities. We conducted an environmental scan to understand the key trends relevant to Ontario's postsecondary education sector. We have integrated key components of the shift from Emergency Remote Teaching to digital learning at scale and have incorporated principles from Ontario's Virtual Learning Strategy (VLS) and the Micro-credentials Strategy, both launched by the Province in December 2020.

On the basis of these consultations, we developed three interconnected strategic themes:



Strategic Theme 1
Enabling Flexible Lifelong Learning



Strategic Theme 2
Facilitating Capacity and Contribution



Strategic Theme 3
Supporting System-Wide Collaboration for
Future-focused Global Leadership

These three themes create a responsive framework to guide the development of platforms and services to generate system-wide value. The new Strategic Plan is an operational framework that guides how we will implement and achieve the Objectives and Key Results articulated in our Transfer Payment Agreement with the Ministry of Colleges and Universities.

eCampusOntario is excited to embark on this next stage in the development of digital learning in Ontario with and on behalf of all our stakeholders.



Introduction

The *eCampusOntario Strategic Plan for 2021–2024, Digital by Design*, has been prepared for our Board of Directors, for the Ontario Ministry of Colleges and Universities (MCU), as well as our educators, learners and other stakeholders. eCampusOntario represents Ontario’s publicly assisted colleges, universities and Indigenous institutes—our member institutions. Our focus is on supporting digital learning and digital pedagogies in all its forms; that is, online and technology-enabled learning, be this fully online or hybrid, formal or informal, from the micro- to the macro-credential.

With this new Strategic Plan, eCampusOntario is taking bold steps to continue to support and help lead the evolution of digital learning, which includes the increasingly diverse and intertwined forms of online, hybrid, and technology-enabled teaching and learning, at Ontario’s publicly assisted postsecondary institutions. The Plan describes how funding received from the MCU will be allocated for maximum benefit to the sector over the next three years, and it builds on the progress made and the objectives accomplished in executing our previous Strategic Plan.

Broad Goal

eCampusOntario will provide the support, guidance and technical intuition needed to create and encourage innovation, collaboration, partnerships and engagement to advance digital (i.e. online and technology-enabled) learning in the postsecondary education sector in Ontario. Through collaboration and sharing of successful initiatives, we will connect learners, campuses and partners for successful digital educational experiences. This goal is reflected in our vision, mission and values statements. We will realize our goal through the lens of equity, decolonization, diversity and inclusion.

Development and Organization of Our Strategic Plan

We used a robust design methodology to craft and co-design our Strategic Plan in concert with our community. This process included a series of “sprints” (short, design-focused sessions), surveys, interviews and stakeholder consultations during the late summer and fall of 2020 to gather insights and determine priorities. We engaged with multiple stakeholder groups who contributed to our understanding—ranging from learners to

Our ability to be nimble and agile influences not only our approach to innovating in our sector, but also our organizational capacity to contribute to this innovation.

faculty to librarians (see Appendix A for a list of consultations). We also performed an environmental scan to understand key trends that are relevant to Ontario's postsecondary education sector (see Appendix B). Finally, this plan is responsive to ensure alignment with MCU's Micro-credentials Strategy and Virtual Learning Strategy, both initially announced during fall 2020.

Using all these inputs, we structured the Strategic Plan framework on three interconnected strategic themes to generate system-wide impact and value. We recognize, of course, that the scope of planned work may change due to new developments in our environment, such as what happened with the impact of COVID-19. Our ability to be nimble and agile influences not only our approach to innovating in our sector, but also our organizational capacity to contribute to this innovation.

The three strategic themes are organized around eCampusOntario's core stakeholders: Learners, Faculty and Staff, and Institutions. eCampusOntario has a Transfer Payment Agreement with the Ministry of Colleges and Universities that outline Objectives

and Key Results (OKRs) for the next three years. Our new Strategic Plan is a responsive operational framework that guides how we will implement and achieve these OKRs within a human-centred design lens. Where the OKRs are the what of our activities, our Strategic Plan is the how. This responsive operational framework informs our values and our approach to supporting our sector through innovation and thoughtful transformation.

Each theme is discussed and then linked to core objectives and key activities.

Lastly, we highlight several executive initiatives and organizational readiness projects. These are meant to prepare and strengthen eCampusOntario to effectively execute and attain the intended benefits of this Strategic Plan.

eCampusOntario is excited to embark on this next stage in the development of digital learning in Ontario with and on behalf of all our stakeholders.

Our Member Institutions

eCampusOntario will continue to listen closely and continually collaborate with its member institutions to imagine and realize the future of learning in Ontario. We will engage with learners, faculty and staff, and other stakeholders as co-designers in understanding needs and developing solutions.

Colleges

Algonquin College
Collège Boréal
Cambrian College
Canadore College
Centennial College
Conestoga College
Confederation College
Durham College
Fanshawe College
Fleming College
George Brown College
Georgian College
Humber College
La Cité collégiale
Lambton College
Loyalist College
Mohawk College
Niagara College
Northern College
Sault College
Seneca College
Sheridan College
St. Clair College
St. Lawrence College

Universities

Algoma University
Brock University
Carleton University
Lakehead University
Laurentian University
McMaster University
Nipissing University
OCAD University
Ontario Tech University
Queen's University
Royal Military College
of Canada
Ryerson University
Trent University
Université de l'Ontario
français
University of Guelph
University of Ottawa
University of Toronto
University of Waterloo
University of Windsor
Western University
Wilfrid Laurier University
York University

Indigenous Institutes

First Nations Technical
Institute
Kenjgewin Teg
Seven Generations
Education Institute
Six Nations Polytechnic



Mission, Vision and Values

Mission

To imagine and co-create Ontario's postsecondary digital learning ecosystem by supporting academic institutions, educators, and learners to navigate change and deliver excellent and innovative digital learner-centric experiences.

Vision

Support Ontario and its academic institutions to be global leaders in the design of rich, inclusive, and flexible digital learning experiences grounded in an evidence-based, creative understanding of learners, educators, and communities.

Values

We align our activities with the needs of Ontario's postsecondary education ecosystem to achieve meaningful impact through the following values:

Inclusion

We strive to build a digital postsecondary ecosystem that allows every learner to thrive.

Curiosity

We ask questions and bridge connections that leverage the community's strengths and visions to realize our collective goals.

Creativity

We use human-centered design practices to iteratively co-create solutions and learn what works best for our educators and learners.

Experimentation

We test ideas for digital learning to push boundaries and set new paths toward more equitable, fairer and thriving futures.



We will continually engage learners, faculty and staff, and other stakeholders as co-designers in understanding needs and developing solutions.



Our Strategic Themes: Making Collaboration a Competitive Advantage

eCampusOntario's strategy comprises three interconnected strategic themes to focus our energy and activities over the next three years. These themes are organized around eCampusOntario's core stakeholders.



Strategic Theme 1 Enabling Flexible Lifelong Learning

Focus on learners and supporting a learner-centric approach in our initiatives with member institutions and creating flexible learning supports, tools and practices to foster rich, inclusive, and flexible digital educational experiences for Ontario's diverse lifelong learners.



Strategic Theme 2 Facilitating Capacity and Contribution

Amplify faculty and staff capabilities, through professional development, capacity building and collaboration initiatives, to enable them to design and deliver the highest quality digital learning while engaging learners as co-designers.



Strategic Theme 3 Supporting System-Wide Collaboration for Future-focused Global Leadership

Pursue opportunities for collaboration and shared benefits, new business models, approaches and solutions for Ontario's postsecondary education system to excel, nationally and internationally, in digital teaching and learning.

Every objective outlined in this strategic framework will be accomplished only if we work in close partnership with our member institutions. We will continually engage learners, faculty and staff, and other stakeholders as co-designers in understanding needs and developing solutions.



Strategic Theme 1

Enabling Flexible Lifelong Learning

Many learners in the Ontario postsecondary education system continue to be admitted directly from high school and follow a traditional path as full-time students toward a degree or diploma. At the same time, a growing proportion of learners are entering the system as mature or mid-career students, to obtain additional credentials, or are otherwise weaving in and out of postsecondary education as their lives and careers progress. This includes the need for rapid reskilling due to a disruption in employment or integrated learn-work options. Many such learners are pursuing studies part-time while also juggling family, job, volunteering or other responsibilities.

This landscape calls for a high degree of flexibility in the postsecondary system to support these learners in meeting their educational objectives efficiently as possible. One way this flexibility and responsiveness can be delivered is via the modularization of learning into specific, compact and assessable competencies. A micro-credential can then be earned by the learner for the respective competency achievement. Micro-credentials support quick reskilling and lifelong learning.

eCampusOntario is a national leader in the micro-credential landscape. It is already very well positioned in this area, having pursued a range of foundational projects at colleges and universities over the past few years.⁶¹ This Strategic Theme, Enabling Flexible and Lifelong Learning, builds well on eCampusOntario's advance work in this area.

Additionally, flexible lifelong learning ecosystems should be aligned with the needs and ways of knowing and learning from an increasingly diverse population. The massive transition to emergency remote teaching²⁹ forced by the COVID-19 pandemic exposed critical gaps, particularly in relation to community, collaboration, socialization, and inclusion, that existed within the remote learning ecosystem and were worsened by the crisis.

As we recover from the pandemic, eCampusOntario will collaborate on initiatives that ensure learning ecosystems allow every learner to thrive. This means co-creating learning experiences and tools that consider the social, emotional and physical dimensions of learning, not only the cognitive and intellectual ones, from a holistic approach. It also means listening to, appreciating and addressing the accessibility,

A growing proportion of learners are entering the system as mature or mid-career students, to obtain additional credentials.

diversity, equity and decolonization needs of learners to co-create more inclusive systems for meaningful learning with those who have been continuously marginalized. Finally, it also means fostering the creation of digital labs for learners who require a hands-on, experiential, lab or studio-based approach.

eCampusOntario, in collaboration with member institutions, will develop and run programs to explore and advance approaches, tools and platforms for digital communities, as well as other essential

learner supports, such as digital fluency. We will listen closely to understand the requirements, ideas and priorities of various learners. We will invest in innovation activities and educational technology assessments, with a focus on inclusive design, to develop or acquire the right solutions that meet these needs.

Objective	Key Activities ⁶²
<p>Model and embrace equity, decolonization, diversity and inclusion to enable learner communities for socialization and collaboration.</p>	<p>Ensure a close and current understanding of characteristics and emerging requirements, ideas and priorities for all learners, including Indigenous, French and other learners and institutions to inform eCampusOntario programs; continue to develop appropriate learner resources, supports and open educational resources.</p>
<p>Augment learner preparation and digital fluency for digital learning.</p>	<p>Engage diverse set of learners, faculty and staff of centres for teaching and learning (including French and Indigenous) as co-designers to define needs, explore possibilities, be involved in prototyping and piloting of digital fluency initiatives to enhance readiness for digital learning.</p>
<p>Continue to build Ontario's micro-credentials infrastructure and supports as a foundation for flexible and lifelong learning.</p>	<p>Collaborate with partners to design, develop, prototype or pilot, implement and assess learner-focused systems and platforms for lifelong learning.</p>



Strategic Theme 2

Facilitating Capacity and Contribution

Faculty, instructors, educational developers, instructional designers, centres for teaching and learning staff, librarians and others at member institutions have always had a central role designing and delivering high-quality, effective educational programs. Digital teaching and learning creates new opportunities and poses distinct challenges for educators. It also calls for experimentation and innovation with emerging educational technologies, new resources and altered practices—as well as enhanced possibilities for collaborative design and development in connection with all of these.

At the same time, our interviews, surveys and other stakeholder consultations conducted recently have indicated that many faculty and staff are seeking professional development and other teaching supports to reduce barriers, ease stress and be more successful within a digital learning environment. eCampusOntario will lead and support initiatives in supporting the development of digital fluency for our faculty while enhancing the use and reuse of open educational resources and collaboration across the sector.

There is a continuing desire among an increasing number of faculty and staff for open, shared educational resources. The right high-quality

resources, made available for broad reuse across Ontario, can accelerate adoption and educational effectiveness while reducing system-wide costs for both educators and learners. eCampusOntario is already active in this space⁶³ and has an important role to play in facilitating targeted, multi-institutional and collaborative development of open resources by faculty and staff. eCampusOntario will augment its capacity, expertise and capabilities to allow faculty, staff, and learners to participate effectively as co-designers. Respecting the intellectual property rights of creators and acknowledging their contributions are key considerations in carrying out such work. Lastly, any such open resource created will require promotion to ensure wide adoption and reuse.

To better support the innovation life cycle, eCampusOntario will regularly engage in needs assessments with stakeholders to gather and understand requirements, ideas, perspectives and priorities. We know there may be substantial differences among various stakeholder groups and their interests, such as between full-time and part-time faculty. This very deliberate approach will, in turn, drive programming and focus our efforts toward the highest-value, most promising innovation projects.

Our objectives in this area are aimed at enhancing the capacity and contribution of faculty and staff toward the shift to fully online or hybrid learning.

Our objectives in this area are aimed at enhancing the capacity and contribution of faculty and staff toward the shift to fully online or hybrid learning. These are specifically intended to support equity across the postsecondary system. Throughout these

objectives and initiatives, eCampusOntario will strive to be a force for collaboration, community building, thought leadership and modelling innovation approaches to promote transformation.

Objective	Key Activities
Support faculty, staff, and learners in preparation and digital fluency for digital teaching and learning and the anticipated post-pandemic mass shift to hybrid teaching and learning.	Engage faculty, centres for teaching and learning staff, learners, and other stakeholders (including French and Indigenous) as co-designers to define needs, explore possibilities, and be involved in prototyping and piloting of the next generation of the Ontario Extend program.
Accelerate opportunities for faculty and staff exploration and innovative application of emerging educational technology.	Engage faculty, centres for teaching and learning staff, librarians, learners and others (including French and Indigenous) as co-designers to formalize educational technology assessments and knowledge sharing of findings.
Accelerate development of shareable learning content and open educational resources to promote sector collaboration on the use and reuse of courses, programs, content and shareable learning materials.	Engage faculty, centres for teaching and learning staff, librarians, learners and others (including French and Indigenous) as co-designers to define needs and priorities, design and develop open educational resources, and promote their use and reuse; ensuring intellectual property arrangements and protections are in place.



Strategic Theme 3

Supporting System-Wide Collaboration for Global Future-focused Leadership

Since its inception, eCampusOntario has provided a number of shared services for the learning needs of Ontario's postsecondary sector. Through our interviews, surveys and other consultations for the development of this Strategic Plan, it has become clear that eCampusOntario's shared services are highly valued and there is a desire to see these augmented. Over the next three years, these services will be expanded and made a more central part of eCampusOntario's value proposition as part of our support for the postsecondary education sector in Ontario.

We recognize our role in supporting the development of partnerships within and among our sector. Increasing the porosity and permeability of our sector will enhance partnerships that promote

learner and faculty engagement. This includes the continued collaborative development of open educational resources, wrap-around supports and experiential learning for learners, and the integration of new pedagogies and technologies in the digital teaching and learning experience. We will leverage our convening power to cohere thought leadership and the sharing of best practices and emerging models of digital learning across our sector. And we will support educational technology firms based in Ontario, including those emerging from our Indigenous Institutes, colleges and universities, to promote their solutions across Ontario's postsecondary educational institutions for mutual benefit. This is in part to help these firms realize global market potential and to aid the sector in digital transformation.

It has become clear that eCampusOntario’s shared services are highly valued. They will be expanded and made a central part of the organization’s support for the sector.

eCampusOntario will engage regularly with key stakeholders on a collaborative ecosystem for system-wide identification of emerging trends, decision-making of priorities, and for review and acceptance of new tools and platforms for broad adoption. This

will improve consistency, efficiency, cohesiveness and coordination across our postsecondary educational institutions in the selecting, acquiring and deploying the best digital learning solutions and practices.

Objective	Key Activities
Develop capacity and capabilities to promote digital learning experimentation, partnerships and collaboration.	Collaborate with partners to design, develop, implement and operate platforms and programs to support and promote sector collaboration, faculty engagement and learner support.
Promote foresight research capabilities and knowledge exchange systems.	Build repository of case studies, guides, research, surveys and other material for system-wide access and use; regularly share findings, insights and implications from foresight and applied research activities with stakeholder community via community events.
Enhance future-focused experimentation and innovation systems.	Amplify capacity, functionality and contribution of the EdTech Sandbox innovation environment; seek out and assess promising educational technologies, especially from Ontario-based or Canadian vendors.

Executive Initiatives and Organizational Readiness

Beyond the three strategic themes described above, eCampusOntario will pursue executive initiatives to continually improve its engagement with current and emerging stakeholder groups, and to strengthen the eCampusOntario organization to meet the challenges of an expanded and more complex set of accountabilities.

Objective	Key Activities
Renew faculty, student and other advisory councils.	Review existing advisory councils or determine requirement for new ones.
Increase public awareness and engagement with existing stakeholders.	Communicate and engage regularly, widely and deliberately. Monitor performance and review campaign metrics; produce annual progress reports.
Develop relationships and partnerships with emerging stakeholders.	Build communication and stakeholder engagement plan for emerging stakeholders (e.g., employers, in relation to micro-credentials).
Advance Indigenous programming.	Establish eCampusOntario Indigenous programming capacity and capabilities and support for Indigenous Institutes.
Advance French programming.	Establish eCampusOntario French programming capacity and capabilities.
Establish strategy execution, communication and monitoring framework.	Introduce a balanced scorecard system.



eCampusOntario will pursue executive initiatives to continually improve its engagement with current and emerging stakeholder groups.

Appendix A

Summary of Stakeholder Consultations

Our stakeholder consultations consisted of the following:

a. Long-form survey: This survey of 20 questions was invitation-based and sent to multiple stakeholder groups via eCampusOntario distribution lists or other lists prepared for this purpose. The survey took approximately 25 to 30 minutes to complete. All stakeholder groups surveyed spanned both colleges and universities. Both English and French versions of the survey were made available. The following groups were covered:

- Faculty (both full-time and part-time)
- Staff at centres of teaching and learning
- Librarians and library services staff
- Student government representatives
- Staff at accessibility offices
- Staff at equity, diversity and inclusion offices (or equivalent)

Some additional contacts, such as academic and non-academic administrators, IT staff and others were also included.

b. Short-form survey: This public survey of nine questions was made available via three social media platforms (Facebook, Instagram, LinkedIn) to Ontario postsecondary learners and educators. Respondents would have been drawn to the survey by a video or graphic encouraging participation. The survey took approximately five minutes to complete. Both English and French versions were made available.

c. Interviews: Interviews of 20 questions were administered as telephone-based, one-hour semi-structured discussions with a consultant.

d. Sprint sessions and consultations: These sessions, ranging from 30 to 90 minutes, were facilitated by a consultant. The session design varied based on specific objectives, nature of the stakeholder group and available time.

e. Other inputs: A number of other inputs concerning stakeholder requirements and perspectives from other sources were also used.

The data was analyzed and findings were prepared by a team of research assistants.

Appendix B

Digital Postsecondary Education

Future Trends

All strategic plans need to consider the world in which the organization operates or will operate. For eCampusOntario, it was essential that we understand this changing context as we plan for the next three years. There has, of course, been a major world disruption due to the COVID-19 pandemic. Some of its effects will be temporary and some are anticipated to be permanent. These effects, as well as other longer-term, relevant trends, must be considered and incorporated into our thinking.

We reviewed emerging trends in a number of categories for important signals of change and trends likely to impact digital postsecondary education in Ontario during the next three years. Even though each trend will impact each member institution differently, they will certainly require important consideration and will thus influence eCampusOntario's direction.

Societal and Demographic Trends

- **Higher enrollment rates:** Student enrolments in Canadian public universities and colleges rose for the fourth consecutive academic year in 2018/2019, driven solely by higher enrolments of international students. Universities saw no annual change in Canadian student enrolments, but a 10.1% annual increase of international students. As for colleges, enrolment from Canadian students decreased by 1.3% but grew by 28.2% in international student enrolments.¹ Additionally, according to the latest population census, First Nations People, Métis, and Inuit all made gains in postsecondary education at every level. Aboriginal people with a Bachelor's Degree or higher grew from 7.7% in 2006 to 10.9% in 2016. The proportion of Aboriginal people with a college diploma rose from 18.7% in 2006 to 23.0% in 2016.²
- **Older learners:** The population in Canada aged 65 and over will increase by nearly 60% between 2019 and 2036, compared to an increase of under 10% for the younger population.³
- **Indigenous youth:** The fastest-growing youth population in Canada are Indigenous people, expected to grow 42.5% between 2006 and 2016. This population will play a key role given shifting demographics, and they will require access to local, culturally relevant and tailored education in order to find employment and contribute to Canada's economy.⁴
- **Immigrants:** As of February 2020, immigrants made up 23% of the population in Canada. Immigration, Refugees and Citizenship Canada (IRCC) continues to state that its 2020–2022 Immigration Levels Plan has not changed due to COVID-19 and still aims to welcome over 400,000 new immigrants each year.^{4,5}
- **Equity, diversity, accessibility and inclusion:** Demographic changes call for stronger efforts to support representation and participation among minority populations. Bridging programs can help students overcome barriers by offering alternative pathways to education.^{6,7,8,9,10}
- **Mental health:** Mental health and work-life balance were mentioned by students and faculty as one of the main issues they faced during the pandemic.¹¹

Economic Trends

- **Return on investment:** The increasing cost of higher education is not keeping pace with the “skills premium” or return on investment from that education. The cost is also adding pressure to student debt.^{4,6,12}
- **Government funding:** In the aftermath of the 2008-2009 financial crisis, government support for postsecondary education stalled. There were no cuts, but after inflation, no increases either. The gap created by growing costs was mainly covered by income from student fees, and over the past five years, almost exclusively from international student fees, especially in Ontario.¹³ In fall 2020, the Ontario government released a plan to tie funding of 45 public universities and colleges to performance-based metrics.¹⁴ As for Indigenous Institutes, Ontario is increasing its operating funding support for nine institutes.¹⁵
- **International student recession:** Due to COVID-19, Ontario’s postsecondary institutions may see fewer international students in the 2020–21 academic year, with enrollment possibly decreasing by up to 50% in coming years.^{13,16,17} The current understanding of international students’ experience in virtual learning gained from the forced transition to Emergency Remote Teaching also represents an opportunity to rethink Canadian postsecondary institutions’ offerings.
- **Future workforce:** The World Economic Forum forecasts that 65% of school children will graduate into jobs that do not yet exist. A third of Canada’s workers are currently in occupations projected to change in the next decade.^{18,19}
- **Skills gap:** The Conference Board of Canada estimates the skills gap to represent a \$24.3 billion loss to Ontario’s GDP in essentially untapped potential (and \$3.7 billion in potential provincial tax revenue). The future job market will rely on “soft skills,” such as critical thinking, emotional intelligence and collaboration.^{8,18}
- **Gig economy:** Over 20% of the Canadian labour force is either self-employed (1.9 million) or within the temporary employee category (2.3 million). Between October 2015 and October 2016, 89% of jobs created in Canada were part-time.^{4,18}
- **Digital divide:** The digital divide, understood as access to technology, access to culturally appropriate content, and digital literacy skills to engage with technology and content represents a critical systemic issue that needs to be addressed to ensure equitable access to learning opportunities that become increasingly ubiquitous.^{30, 31}

Ecological and Sustainability Trends

- **Sustainable Development Goals (SDGs):** Curricula is being tied to the United Nation's SDGs, particularly number 4, Quality Education, by implementing impact labs and multidisciplinary forums for challenge-based learning.^{20,21}
- **Environment-based learning:** Postsecondary education plays a critical role in educating students who have a transdisciplinary understanding of social, economic and environmental sustainability and who can, in turn, play a role in seeking solutions to societal problems.²²
- **Carbon footprint:** Postsecondary educational institutions are increasingly expected to measure and manage their environmental footprint and transition toward a green campus.^{6,22}
- **Remote learning:** Online learning could be a sustainable educational model as students and faculty become less willing or able to commute. Extreme global weather events and droughts will have an impact on students' well-being and educational attainment, particularly in rural and/or under-resourced communities.^{6,22}

Political and Regulatory Trends

- **Data ethics:** There is increased pressure on educational institutions to develop policies relating to data ethics, to obtain consent from students to use and analyze any data from their interactions with EdTech, and to provide effective training and support for students and staff.²³
- **Stakeholder engagement with machine learning and artificial intelligence (AI):** Diverse stakeholders should be engaged in the design of intelligent learning systems. There is a danger for bias to be interwoven into learning pathways designed by machine learning and AI.^{24, 25}
- **Cybersecurity:** Developing a regulatory framework for cybersecurity is crucial as online education becomes the norm.^{7, 26}



Academic, Learning and Training Trends

- **Alternative pathways:** A growing segment of the population engages in postsecondary learning outside traditional programs, seeking credentials other than a degree. The number and types of alternatives have grown over the past decades.^{6,12,16,27}
- **Micro-credentials:** Micro-credentials, defined by eCampusOntario as “a certification of assessed learning associated with a specific and relevant skill or competency,”²⁸ offer avenues of access into postsecondary education and have potential for disrupting traditional notions of what a postsecondary credential is, how it might be accessed, and the ways in which iterative education and training might support lifelong learning, reskilling and retraining.
- **Increased competition:** With the popularity of e-learning, competition from non-traditional organizations investing in large-scale digital delivery threatens a portion of traditional institutions’ markets. With students realizing they can learn from anywhere, institutions will need to show why their campus experience is different. The real friction point will be within the credit transfer system.^{6,12,16,27}
- **Emergency remote teaching:** Learning environments have rapidly adjusted due to the COVID-19 pandemic, and they may need to be redesigned to respond to future crises, environmental or otherwise. Emergency remote teaching is more responsive to sudden wildcard events than online learning that is designed with typically longer timelines.²⁹
- **Digital divide:** The digital divide, understood as access to technology, access to culturally appropriate content, and digital literacy skills to engage with technology and content represents a critical systemic issue that needs to be addressed to ensure equitable access to learning opportunities that become increasingly ubiquitous.^{30, 31}
- **E-learning stigma:** Online learning is stigmatized as being lower quality than face-to-face learning, despite research showing otherwise. The rapid shift to e-learning due to the pandemic, and now the establishment of the Ontario Virtual Learning Strategy, will help scale online learning and could improve how it is perceived.^{11,29}
- **Communities of practice:** The paradigm of an instructor lecturing students is losing favour to communities of inquiry and practice, where individuals can collaboratively engage in purposeful critical discourse and reflection to construct personal meaning and confirm mutual understanding.^{32,33}
- **Post-humanist education:** As a philosophy, post-humanism examines what it means to be human and whether being human extends beyond our bodies into the real and digital world. As a pedagogy, it opens possibilities to learn with machines as partners.²³
- **Post-digital education:** Digital technology is no longer necessarily ‘innovative’ or ‘disruptive’ but has become a background element of everyday life. The ‘post-digital’ perspective examines whether the development and implementation of new technologies fundamentally shape lessons, institutions, and consequently society. It represents a critical reflection upon the effects of digitality and its socio-cultural implantation.^{34, 35}
- **Social justice pedagogy:** Faculty and students are beginning to explore ideas about systems of power, dominance, privilege, and oppression in an effort to become more active and conscious members of society. A more globalized education system calls into question a Eurocentric model of knowledge.²³
- **Human-centred design:** A new framework for education prioritizes the person—their values,

beliefs and goals. Adaptive and personalized learning is prioritized, with success metrics tied to a student's learning goals, interests and capabilities.^{12,36}

- **Self-directed, on-demand learning:** Curricula and systems need to become more flexible to support on-demand, self-directed and non-formal learning. Technology enhanced assessments that show visible records of students' personal and social learning can become a reflection resource for people to better understand themselves as learners.^{12,32,37,38}
- **Open Education:** The approach of Open Pedagogy or open educational practices (OEP) refers to the "use/reuse/creation of open educational resources (OER) and collaborative, pedagogical practices employing social and participatory technologies for interaction, peer-learning, knowledge creating and sharing, and empowerment of learners."^{23,39}
- **Agile methodology:** With the gig economy growing, people need to learn new skills quickly. Postsecondary institutions need to encourage learners to embrace continuous improvement, identify and test key assumptions, fail fast and fail often.⁴⁰
- **Soft skills:** Skills like literacy and numeracy, as well as higher-order skills such as critical thinking, creativity, emotional intelligence and collaboration, are integral to success in the future job market and social life. Online learning could help to better prepare a large audience of learners with the necessary skills to thrive, but context, application and practice, reinforcement and performance support must all be included in the holistic learning experience.^{4,40}
- **Unbundled curriculum offering:** Learning programs are becoming "unbundled" from traditional degrees with open data, AI and machine learning. These platforms help perform a skills gap analysis, and map learning and career courseways for workers at risk. In addition to improving access for learners, unbundling opens the door to new business models for institutions.^{4,12,36,40,41,42}
- **Work-integrated learning:** Work-integrated learning has become a program component for nearly 60% of postsecondary students. It cultivates workplace skills and professional networks that help smooth the transition to employment.¹⁶
- **Regional partnerships:** Teacher exchange and professional development programs support shared innovation and learning from experts. Collaboration between businesses and academia will help uncover innovative solutions to regional training and other needs. Stronger partnerships and sharing across institutions could ease revenue pressures.¹²
- **Canada as a learning nation:** Canada is defining itself as a learning nation, ready to shape the future. Ontario, with the country's largest and most diverse provincial economy, should be the largest beneficiary of this trend.⁴³

Technology Trends

- **Broadband access:** There is growing debate on internet access as a human right. Federal and provincial governments are funding wider availability and faster internet services. This is a major enabler for access to virtual learning, especially for rural and remote communities.^{44,45}
- **Virtual reality/augmented reality:** The virtual-reality market has doubled its growth to \$12 billion since 2016 and is expected to grow to \$20 billion by 2023. This technology can be used to gamify the learning experience, making e-learning more experiential and engaging for both students and teachers. However, scalability seems difficult considering the hardware and training obstacles, and research, testing and pilots are limited.^{46,47,48}
- **Learning analytics:** Learning analytics supports strategic decision-making regarding student success and enables students to access and track their data through visualizations, with the aim of giving them more agency over their learning. Collecting massive amounts of data, though, raises concerns of student privacy and data ownership.^{6,49,50}
- **Cybersecurity:** There is increasing concern over student data: how is it generated and measured? Who collects it? What do they do with it? While big data may be useful for decision making, it presents clear social hurdles; namely, students (and parents) often feel uncomfortable with these tools (e.g., such as e-proctoring).^{51,52}
- **Blockchain:** Blockchain technology in education primarily focuses on data security and credential authentication. Faking a diploma via a blockchain would be nearly impossible. Educational institutions could also store student data more effectively, and help faculty publish their research and maintain intellectual property rights for the authors, using blockchain.^{53,54}
- **Wearable technology:** Technology like the Fitbit and the Apple Watch is useful for quantifying the human body, such as tracking sleep patterns and heart rate. Such wearable tech can have use in physical education, in the sciences and elsewhere. It can also aid students with disabilities, illnesses or learning difficulties. Related privacy, equity, and security challenges need to be addressed for positive impact.^{55,56}
- **3D printing:** A benefit of 3D printing in education is its tactility. In other words, students can touch and feel the 3D-printed object. This technology can complement curricula, facilitate experimentation and bolster student engagement and creativity in a wide range of disciplines.⁵⁷
- **AI:** Artificial Intelligence has application in chatbots/student services, assessing online behaviour and identifying unengaged students. It can also analyze career trends and skills, matching students to the appropriate opportunities, and help in transcription, general spelling and grammar (e.g., Grammarly).^{58,59}
- **Gamification:** The gaming industry has grown beyond the gaming industry. Gamification has the potential to influence learner motivation, incentives and behavioural changes (like collaboration), but successful EdTech gamification applications are still in their infancy.⁶⁰

After an analysis of the interconnected implications that these trends pose for the postsecondary ecosystem of Ontario and digital learning, we extrapolated the following **'guiding principles for impact'**:

- Impactful digital learning ecosystems should be designed for and from **inclusion**.
- Redefining and redesigning strategies to build **readiness** for a transformed learning ecosystem, work, and social environment is essential to ensure learners have the opportunities to thrive.
- Educators need collaborative platforms of support to navigate and co-create the **transformation** of their roles and practices for digital learning.
- The increasing complexity and levels of implications of new technologies and digital educational practices call for **connected openness** that ensures participation and engagement in decisions affecting teaching and learning.
- Ensuring that the digital postsecondary sector of Ontario evolves in **resonance** with an increasingly diverse community of learners, with the global challenges, the changing nature of work and social life, and with future possibilities is essential.
- A resilient, dynamic, meaningful, and accessible digital postsecondary ecosystem needs to ensure **flexibility** for constant adaptability and impact.

Inclusion, readiness, transformation, connected openness, resonance, and flexibility are the guiding principles for impact with which we synthesize what it means to drive meaningful transformation in Ontario's digital postsecondary education ecosystem amidst a changing context, and thus serve as a foundation for our strategy.

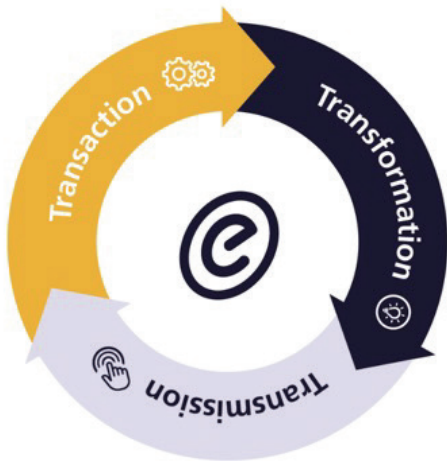


Appendix C

Operationalization of the Strategy

The eCampusOntario Platform Support Model

Our three strategic themes will be operationalized and implemented through our *3T Platform Support Model* to provide the sector with the tools, resources and engagement needed for excellence in digital learning and support for sector transformation. It comprises three components:



- **Transmission:** Access to systems and shared services
- **Transaction:** Opportunity for engagement, collaboration and partnerships
- **Transformation:** Vision and driving sector transformation to realize global leadership

The 3T Platform Support Model

This model accounts for the sudden and enormous shift in postsecondary education due to the COVID-19 pandemic, but it also considers the longer-term evolution of learning. Fundamentally, we are creating, in collaboration with our member institutions, the necessary learner and educator supports to foster rich, inclusive, and flexible digital educational experiences. In practice, this means developing new programs, services and support systems—our platforms that address sector-wide challenges and opportunities. eCampusOntario’s central role as “honest broker” status has us extremely well positioned to lead and coordinate the development of these platforms for the benefit of all Ontarians.

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61. Refer to <https://micro.ecampusontario.ca/> for an overview of eCampusOntario's projects and initiatives around microcredentials.
62. Respective metrics will be developed and integrated into eCampusOntario's balanced scorecard system for each strategic theme to support strategy execution, progress monitoring of activities and communication with stakeholders. Metrics will also be linked to program-specific outcomes evaluation plans.
63. See, for example: <https://openatscale.ca/> Retrieved December 9, 2020.
64. The Virtual Learning Strategy is based on the three pillars: *Be the future; Be a province of lifelong learners; Be a global leader*. It is funded for the 2021–22 fiscal year.

