

Understanding Our Past to Create Visions of Our Future

TESS 2024



<https://www.ecampusontario.ca/research-and-foresight/>

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The following is a presentation delivered at eCampusOntario's Technology and Education Seminar and Showcase (TESS) on November 5, 2024. This version of the slide deck presented has been edited to reflect the main themes from the speakers' notes.

Research and Foresight Team – Previous Presentations

TESS 2021

**Co-creating
the Future**



TESS 2023

**Supporting
the Digitally
Empowered Learner**

TESS 2022

**The Hybrid
Experience:**

Designing the Future
of Learning

Your storytellers



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Why tell the story of our past?



We are going to start with the story of our past. We are in a pivotal moment in our sector's history. As eCampusOntario's Research and Foresight team, our mission is to help imagine, understand, and co-create futures of higher education. One approach to this work is to understand how the sector had previously innovated to see how that might help us innovate today. Here are four examples of previous innovations.

Past: Innovation #1: Ontario's College System Created (1966)



In 1965, the newly created Ministry of University Affairs passed Bill 153 to establish 20 colleges of applied arts and technology, creating a new pillar of post-secondary education in Ontario. This included new accreditation for students and educators, capital infrastructure, and communication with employers about the meaning and value of a college diploma.

Today, Ontario's publicly assisted college system is so established and large with 180,000 full time students and 24 colleges, it's hard to imagine a time when it didn't exist at all.

Past: Innovation #2: First fully online class (1986)



In 1986, long before internet connection was commonplace, an instructor at OISE (University of Toronto) conducted the first fully online class, focused on Women and Computers in Education.

At this time, there were so many obstacles, to get 'online' you had to interact with a black screen, green letters and a flashing cursor – no graphics. You had to have a basic knowledge of computer language to find the online forums. Plus, you used a very slow, often glitchy phone line to access the internet. This is an example of how messy and ugly an innovation can seem in the beginning.

Past: Innovation #3: Indigenous Institutes recognized as third pillar (2017)



After over 30 years of operation, Indigenous Institutes were recognized as the third pillar of postsecondary education in Ontario with the *Indigenous Institute Act*, 2017. Through the Indigenous Institutes Act, the scope, impact, and relevancy of nine Indigenous Institutes was enhanced by enabling the granting of credentials, such as diplomas, degrees and certificates building on the culturally relevant education, gathering space, and community resources Indigenous Institutes offer.

This innovation demonstrates the work of persistent advocacy in the face of systemic, colonial barriers, and the fundamental role that Indigenous owned and controlled education has in the strength and growth of identity, belonging, and community.

Past: Innovation #4: eCampusOntario was established (2014)



It's been 10 years since we were established so we want to take a moment and recognize the innovation of our own organization. The Ontario's government's establishment of a consortium to support the digitization of the postsecondary education sector was a significant recognition of the need for cross institution support as well as the fundamental shift in role of technology in higher education sector. Our organization's mandate expanded with our support of the innovative Virtual Learning Strategy (VLS), a \$70 million dollar investment in the sector.

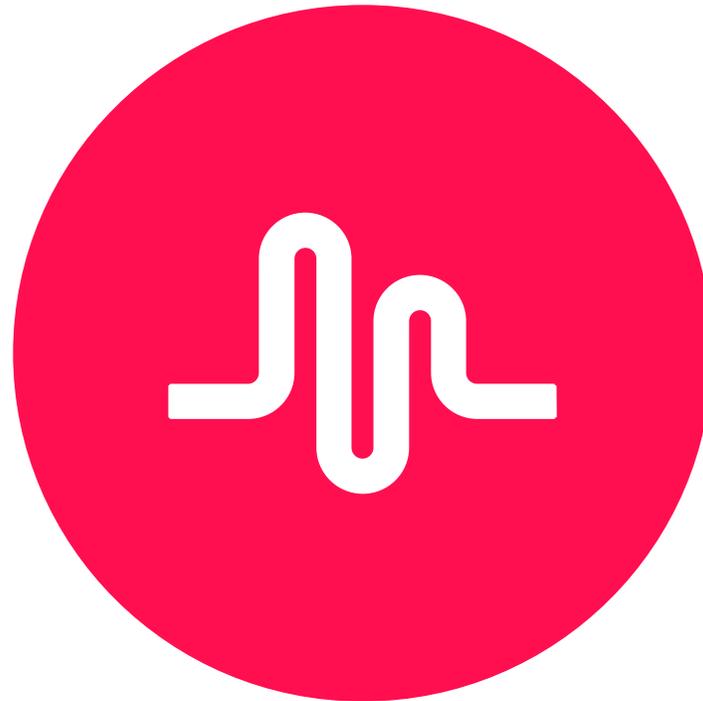
10 years – what's changed



Another reason to note eCampusOntario's 10-year anniversary is it offers the opportunity to think about change. Specifically, when we think about change, we often think change takes a long time. And that can be true, change can sometimes take a long time. But it's also true that things can change quickly. So, let's take a quick look at how much has changed since 2014.

Past: Only Ten Years Ago

Tik Tok's parent company, musical.ly launches.



Past: Only Ten Years Ago

Iconic Academy Award Selfie Captured



Past: Only Ten Years Ago

Kathleen Wynne was the Premier of Ontario



Past: Only Ten Years Ago

Olympic Games were in Sochi, Russia



Past: Only Ten Years Ago

First Apple Watch announced



Past



This selection of moments in 2014 illustrate the context in which eCampusOntario was born into. It's not an exhaustive list, but like eCampus has changed substantially over the past 10 years, so too has the conditions for innovation. Context matters.

In this brief telling of the story of Ontario PSE's past, we have focused on some of our sector's successes. We recognize that the story of our past also includes obstacles and challenges and that these too are an important. Also, the story is incomplete and within the innovations we described, there is still room for more development and growth.

However, for today, we are telling a story focused on what we might build on, examples from successes in our past to inspire us to create success today and in the future.

Present day

"You can't read the label from inside the jar."
- Blair Enns

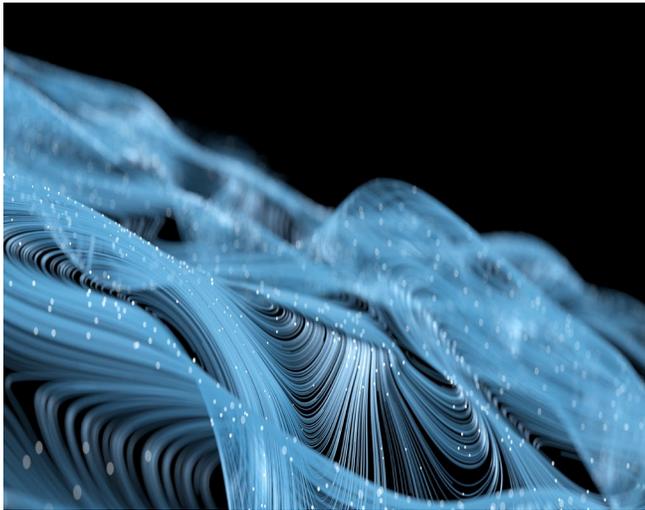


Present day



Next, we're going to tell the story of the present. Sometimes it's hard to see and understand an innovation while it's happening. Most of us don't have the time and it's difficult to place events in context. This is part of our team's job – trying to 'read the label' to help the sector make sense of what is happening today in Ontario higher education. We're going to look at two innovations affecting postsecondary education today. For clarity, when we say innovation in this context, we're thinking about innovation as something new that also changes the status quo.

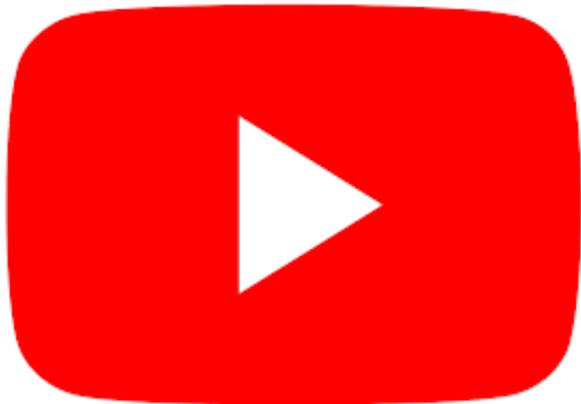
Present: Innovation #1: Natural Language Processing Artificial Intelligence



This is an innovation that has brought significant and widespread change. For most of us, the wide release of ChatGPT (though there are many similar technologies) defined a significant change. This tech has already affected our sector, changing both learner and instructor behaviour, assessments, planning and policy.

Now we are trying to make sense of this version of artificial intelligence and to do this, we tell each other stories. One story we tell is: 'because of this tech, learners will no longer need to learn how to write'. Another story we're telling is: this tech, will help us find cures for many diseases. Right now, we, as a sector, are writing the story of how we assess learners in this new context.

Present: Innovation #2: YouTube as Educational Assistant



Launched in 2005, YouTube content has incrementally become part of higher education. Today, YouTube content can be found on course syllabi as reference material, many learners use it as a study aid to explain and clarify concepts they did not understand in class and informally, and YouTube is an alternative to continuing education offered by institutions. The role of YouTube accelerated during the pandemic with K-12 using google classrooms and YouTube course materials; these K-12 kids are now learners in higher ed, totally assimilated to this new learning modality.

This is a story of improved accessibility. It's also the story of a US private company affecting Canadian higher education and it's a story of how difficult material can be delivered in compelling ways with high production value and the need for critical thinking skills to separate the quality from the questionable content.

Why tell the story of the present day?

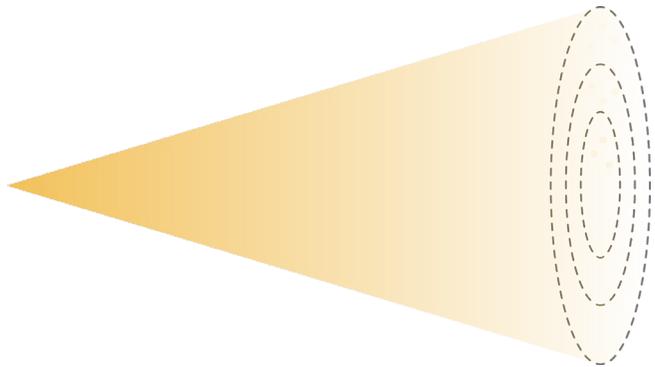


One reason to tell the story of present day innovations is for self-reflection. And there are reasons to be both anxious and excited about the changes. However, in these busy times, it's easy to tell ourselves stories aligned with our default reaction without exploring the broader possibilities and implications. This is where foresight comes in.

How we typically think about the future

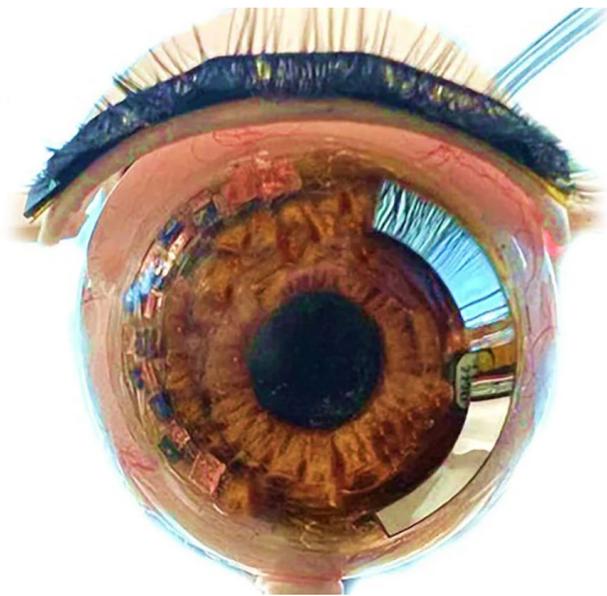


The Foresight Mindset



As the world becomes progressively more complex and the pace of change increases, how we think about the future is more important than ever. Our team uses foresight methodologies to help understand Ontario post-secondary sector understand where we are as well as where we might be going. Note, we're not predicting this will happen rather our research is showing evidence of these innovations but not widespread adoption. We're going to share examples of innovations that might have future impact.

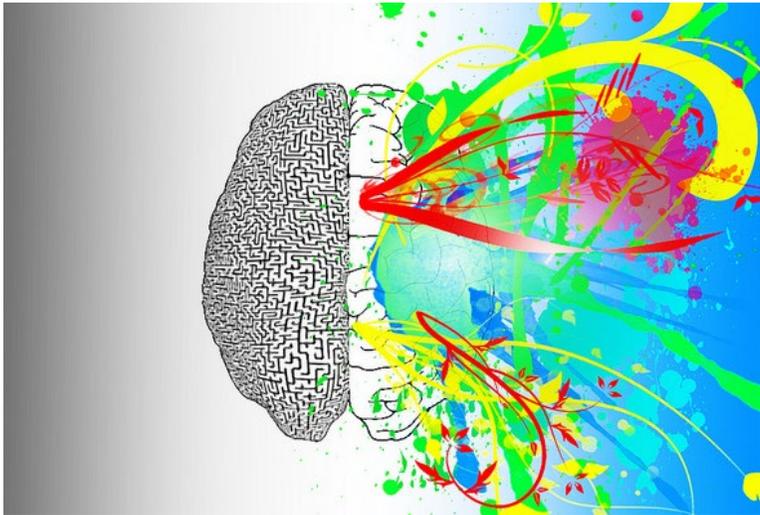
Future: Innovation #1: Wearables Replacing Screens



There are many wearable technologies at the concept or prototype stage that could result in the minimization or elimination of physical screens. The image on the slide is from a company called Blink that has prototype of a contact lens that includes a microbattery that recharges using a light source. Big Tech companies also have many patents for contact lenses as this may resolve the problems related to vertigo, distortion and nausea associated with headset glasses. A company called Volley is looking to use audio and have raised capital for voice initiated games. Medical technology has abundant wearable tech that monitors physical functions without or minimal screens.

Screens may well be around for a long time. But what if they're not? How would that change our sector?

Future: Innovation #2: Rise in Transdisciplinarity



Transdisciplinarity, programs that teach across historically separate academic domains, are increasing. These programs are often related to the increase in 'mission' programs that aim to solve a complex societal problem such as climate change, cancer research or geopolitical unrest. For example, Cornell has a program called 2050 Transdisciplinary Moonshots that brings together disciplines such as agriculture, life, environmental and social sciences, as well as government in academic partnerships to create practical, real-world impact. Closer to home, the University of Calgary's Strategic Plan is focusing on the importance of transdisciplinary training for graduates in the workforce to improve research and innovation to tackle societal challenges.

If this increases, particularly as new fields of study develop, how might change the structure of our institutions?

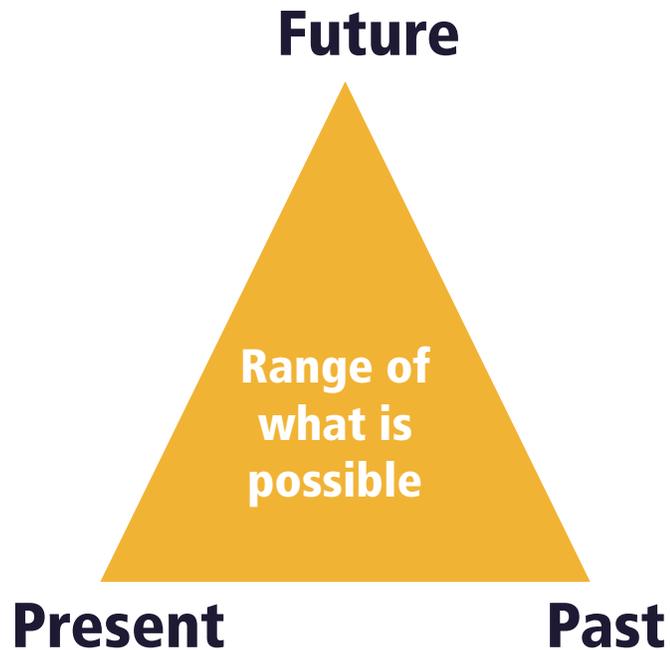
Future: Innovation #3: Right to Repair



In October 2023 California enacted legislation aimed at creating a marketplace for consumers to repair their electronics and appliances. Initial impact of this legislation is reflected in changes to the iPhone 16 which has integrated repair features and information for both consumers and business. The Canadian federal government passed a right to repair bill in October 2023 and in April 2024, Ontario introduced a private member bill that includes the right to repair among other things, electronic devices.

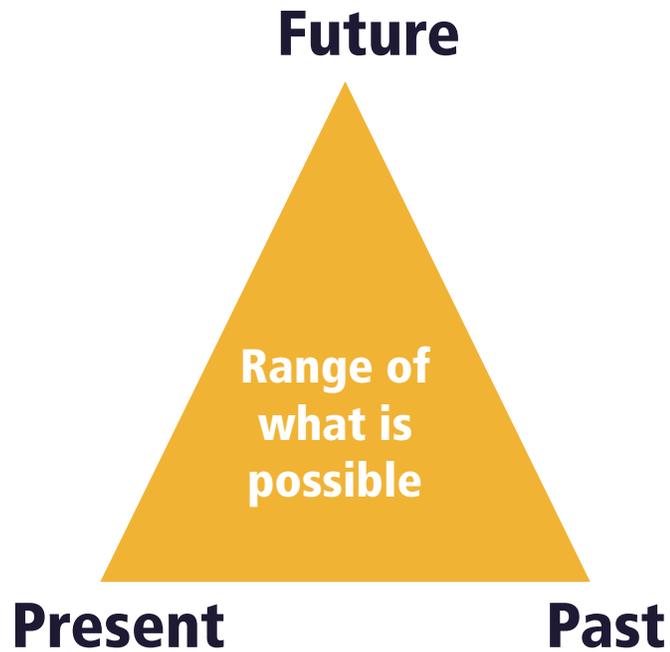
You might be thinking: 'repairing things is not new' and you're correct, what's new is: the ability to repair many electronics particularly personal electronics. Organizations may be forced to ensure repairability, lessening timed obsolescence and possibly increasing access to the proprietary technological information.

Why tell the story of past, present, future?



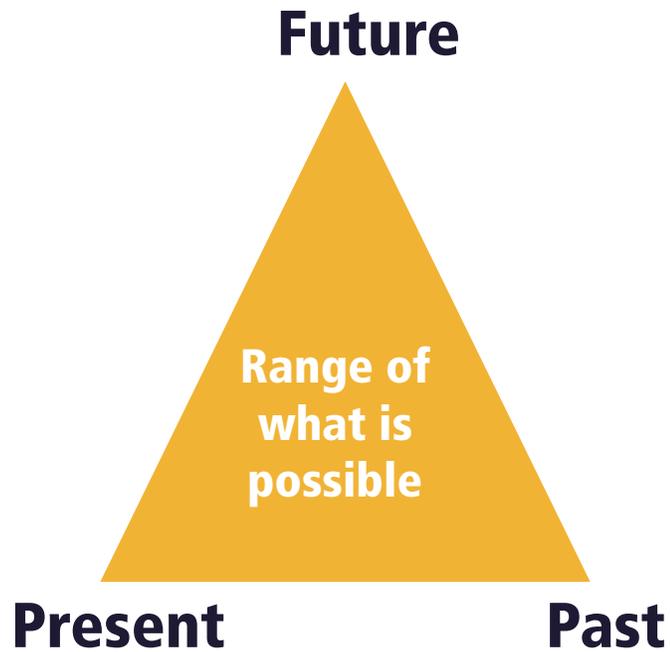
When we try to solve complex problems, our range of possible solutions is framed by the stories we tell about the past, present and future. The broader and more explicit our stories of the past, present and future is, the greater the range of possible solutions.

Why tell the story of past, present, future?



This visual of this triangle, referred to as the Futures Triangle, shows how, if we are focused on only one or two corners of the triangle, the range of what is possible shrinks. Conversely, expanding the range of possible solutions has practical implications as we may need new and different ways to address a problem.

Why tell the story of past, present, future?



The stories we tell about the past, present and future have emotional implications. Thinking expansively and exploring ideas widely and systematically encourages feelings of hope and optimism which, in turn, supports more creative thinking and collaboration.



Tell Us

What innovations have you seen in the past?

What innovations are you seeing now?

What potential innovations are you seeing?

Get in touch! Send us an email: Send us an email
research@ecampusontario.ca

Want to learn more?

We can help you define, analyze, and consider solutions for complex problems using foresight methods.

Scenarios, Artifacts, Reports, & Scan Clubs

<p>Futures Scenarios</p> <p>Future scenarios, as in 2035, combine possible elements of change with a forecast element to expand our imagination and insight into the future. The scenario is used to provide a clear and specific goal to explore how different future may unfold. Challenge assumptions about the present and explore alternative ways to approach innovation in education.</p>	<p>Big Tech's Monopoly of Academic Content</p> <p>Postsecondary education's reliance on Big Tech for up-to-date, student-friendly content has resulted in Big Tech having significant power to increase subscription fees.</p> <p>Dr. Heidi Black used the skills with foresight, Big Tech had substantially increased its market share in the postsecondary market. It has also increased its subscription fees, which has led to a significant increase in the cost of education. This has led to a significant increase in the cost of education. This has led to a significant increase in the cost of education. This has led to a significant increase in the cost of education.</p>	<p>Many data scientists, not enough nurses</p> <p>New tech uses AI to map learning pathways that guarantee employment in lucrative jobs creating a reinforcing feedback loop promoting market economy jobs and diminishing resources for education related to other jobs.</p> <p>Future tech uses AI to map learning pathways that guarantee employment in lucrative jobs creating a reinforcing feedback loop promoting market economy jobs and diminishing resources for education related to other jobs.</p>
<p>How can institutions adapt course content to maintain institutional autonomy as well as relevance?</p>		<p>How can institutions support education for jobs that contribute to society?</p>



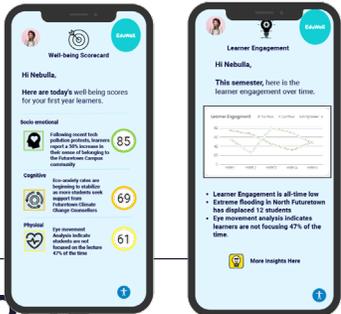
Workshops & Micro-credential



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RESEARCH & FORESIGHT

PROSPECTIVE STRATEGIQUE : CERNER LES SIGNAUX DU CHANGEMENT



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