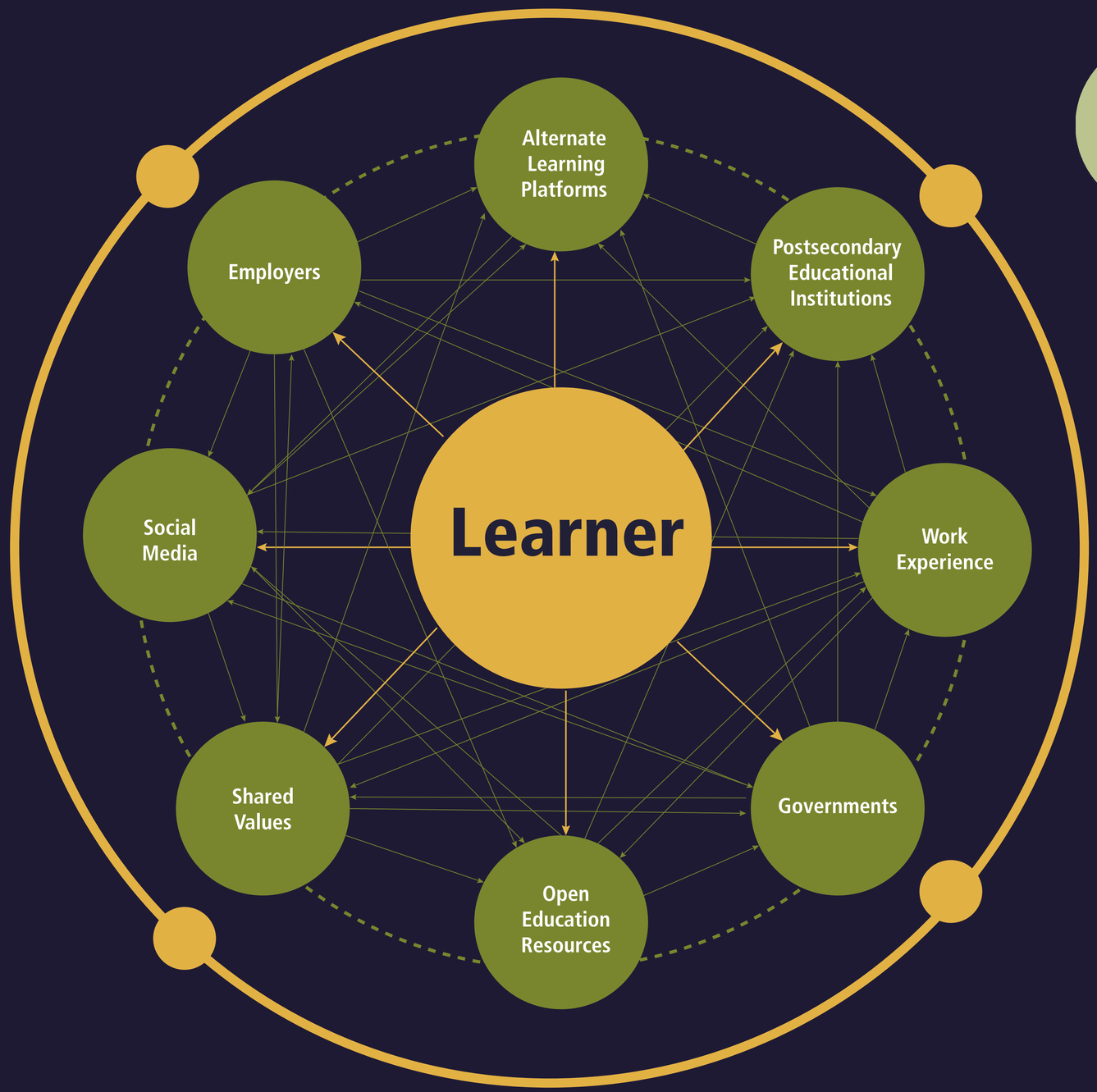
2023 FORESIGHT REPORT

Connected Education



This report explores:

Learning ecosystems

Exploring networks co-created for purposeful collaboration and coordination of learning

ecampus Ontario | Ontario

Connected Education: Learning Ecosystems

This report explores learning ecosystems through:

Signals

Signals are emerging phenomena that are not mainstream and are demonstrating change of some kind. Signals are important because they are early indicators of things that might affect us.

Trends

A trend is a group of signals showing a pattern. When a trend is evident, it is a stronger indication of possible disruptions that might impact our decisions.

Drivers

Drivers are significant, disruptive forces that are very likely to create impact across sectors, geographies, and industries.

Potential Implications

Implications explore the potential short and long term consequences of a particular trend.

Conversation Guide

The conversation guide introduces a new tool with which readers can explore possible futures.

Find each element in this report by locating the icon.

The *Virtual Learning Strategy (VLS)* is preparing Ontario postsecondary institutions for learning ecosystems

The VLS is supporting ongoing and future virtual learning needs at all Ontario Indigenous Institutes, colleges, and universities. The VLS is built on three key pillars:

Being the Future

Being a Lifelong Learner

Being a Global Leader

By applying strategic foresight approaches, the Ontario postsecondary sector can co-create learning ecosystems by monitoring emerging and maturing trends and identifying future possibilities. This work aligns with the VLS pillar of Being the Future.

What is a *Foresight Report*?

Foresight reports are tools to support the navigation of uncertain and complex futures. Using strategic foresight (i.e., a research-driven, systematic exploration of possible futures), foresight reports help inform present-day decision-making by identifying patterns of change that may have significant lasting impacts for futures.

Why is Strategic Foresight *important* to Ontario postsecondary education?

Strategic foresight supports institutions in navigating transformation by building awareness of some possible forces of change. Strategic foresight can help address immediate and short-term challenges, while articulating long-term visions for systems level evolution.

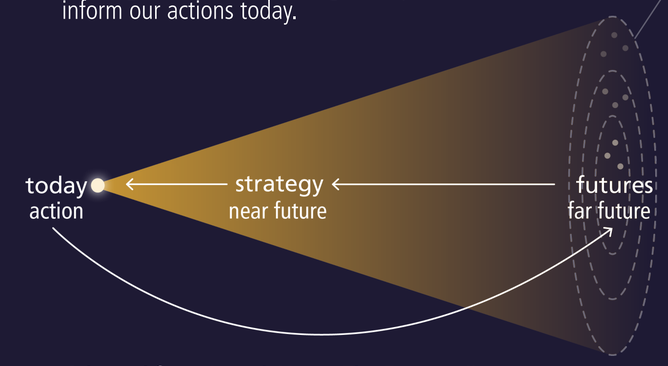
How do I *use* this Foresight Report?

This foresight report is a high-level overview of maturing trends within the postsecondary education sector. We recommend readers to use this report as a map for further exploration. Readers can click on the links provided to learn more about topics of interest. After exploring trends and implications, this report includes a conversation guide to spark futures-facing conversations and explore gradients of impact.

FUTURES INFORMING STRATEGIES OF TODAY

Emerging or maturing trends **today** allow us to imagine possible **futures**.

These futures are useful in informing our **strategies**, while our strategies help inform our actions today.



plausibility

The rings represent the level of plausibility of a specific future outcome, ranging from more plausible towards the inner rings, to less plausible towards the outer rings.

Adapted from Joseph Voros, The Futures Cone

Why do we use futures instead of future?

In foresight practice, we refer to the future in plural.

As we cannot predict the future, there is no definite image or vision of it. Thus, the future will always be an infinite range of possible outcomes rather than a single destination.

FURTHER READING

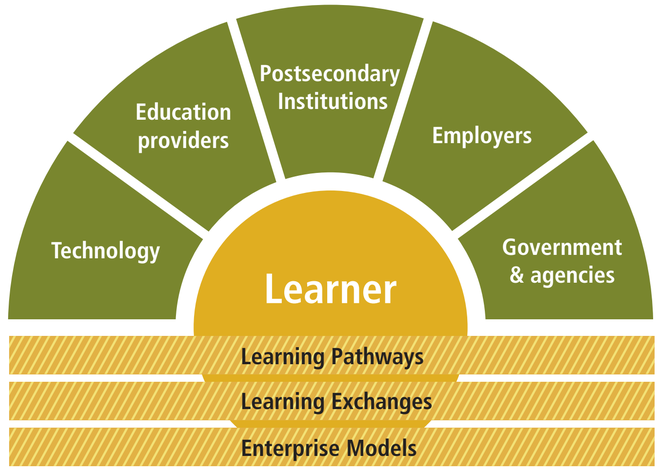
1. **What is Futures Literacy and Why Is It Important?**
   Medium
2. **What is Strategic Foresight?**
   Organization for Economic Co-operation & Development
3. **Foresight Reports**
   eCampusOntario

Connected Education: Learning ecosystems

Why should we talk about learning ecosystems?

Learning ecosystems are an example of a new, alternative model that places the learner at the centre of the network. The learner defines their own pathway of success, often around a specific need or project. Different providers, such as schools, businesses, community organizations, and government agencies contribute learning opportunities, information, and support to the learner's journey. Underpinning the learning ecosystem model is a non-traditional credentialling system and access to technology. Learning ecosystems are important as they have the potential to expand access to learners who may be shut out of formal education in its current format. This model may also broaden the notions of who educates learners, and where, when and how learners learn. There is a significant opportunity for traditional educational institutions to participate in these developing models.

Learning ecosystems architecture



Adapted from: Developing Local Learning Ecosystems in Qatar to Advance Equity, Inclusion and Social Cohesion

Changes to the Education Model

Industrial Education

Learning occurs within specialized learning institutions, such as, postsecondary institutions.

Learning is organized around standard practices in a limited number of pre-determined, standardized pathways. Learners are often grouped by age and gender.

Learning is determined and credentialled by a centralized government. The affluent tend to have better access to learning.

Learning Ecosystems

Learning occurs across networks of specialized and non-specialized learning providers and spaces, also known as Ubiquitous Learning Environments.

Learning is organized as a personalized journey and co-created by various stakeholders within the economy and society.

Learning is determined and credentialled by the learner and accessible to all, regardless of social and economic circumstance.

Factors Affecting Learning Ecosystems

Canada's **population is aging** and by 2028, 21% of our population will be over the age of 65, likely increasing the capacity and cost of our healthcare system, changing how we work, and affecting immigration policy, physical spaces and the experience of caregiving.

The growing gig economy: The share of gig workers among all workers has risen from 5.5% in 2005 (StatsCan, 2019) to 13% in 2021 (Payments Canada, 2021).

Digital transformation, the intersection of technology, business, and society, has fundamentally changed many parts of our economy, society, and physical world. This transformation is ongoing and can be expected to continue to affect most future plans.

Growing skills gap: The IBM Institute for Business Value reports that 60% of executives globally confirmed they are struggling to keep their workforce current and relevant.

Growing economic disparity: The Covid pandemic disproportionately affected the small firms, hours worked for small firms declined by 9.4% in the first quarter of 2020, compared with an overall decline of 5.6% in the business sector in that quarter (StatsCan, 2020).

The climate crisis will likely underpin many areas of future change. Areas to watch for and factor into planning include: temperature changes, extreme weather and air pollution impacting food shortages, diseases, human migration, and socioeconomic disruption.

FURTHER READING

1 **Wise report: Developing Local Learning Ecosystems in Qatar to Advance Equity, Inclusion and Social Cohesion**
Qatar Foundation

2 **Learning Ecosystems - An Emerging Praxis For The Future Of Education**
Global Education Futures

3 **The rise of the digital learning ecosystem**
IBM Institute for Business Value

Trends and Implications

The growing influence of informal learning and rise in alternate learning platforms is influencing learner expectations with the growth of alternate learning modalities. With flexible and varied learning journeys, informal and alternate platforms provide new ways for learners to define the how, when and why they learn.

Free, flexible educational content

Learners are increasingly accessing resources through learning providers such as MOOCs, Open Educational Resources (OER), Open Courseware, and other educational tools. In tandem, informal platforms like YouTube, TikTok, and Discord have created a constellation of digital spaces and online communities spanning interests, disciplines, age groups, and countries. Knowledge that was previously restricted to a small group of tuition paying students is now available to anyone with internet access. Alternate and informal learning providers are shifting how knowledge is consumed and by whom.

What's happening and what's emerging?

- Students access free or low-cost versions of textbooks as a result of the University of Minnesota's Open Academics textbook catalogue, which helps faculty find more affordable textbook options.
- eCampusOntario's OpenLibrary repository of Open Educational Resources (learning, teaching and resources materials available at no-cost for re-use, re-purpose, adaptation and redistribution) has 18,779 courses, 831 programs and over 6,500 other types of educational content.
- Coursera for Business, has over 500 corporate customers using the platform which delivers content through offers Massive Open Online Courses (MOOCS). MOOCS are free online classes available to anyone who wants to enrol.
- One Discord server, Study Together, has over 120 thousand members. More than just a study group, Study Together and includes tutoring, mindfulness and goal setting support.
- Under the hashtag #StudyTok, TikTok creators—ambitious students, recent graduates, and professionals—trade tips on finding focus, highlight the best strategy for note-taking, share their apps and tools. The official #StudyTok hashtag has over 680M views.
- The Government of Ontario's investment in micro-credentials aims to help institutions, industry and communities build capacity for micro-credential development, enable learner-focused programming and support reskilling and flexible lifelong learning.

Possible Implications

How can postsecondary institutions derive inspiration from the inexpensive and bite-sized formats offered by informal learning resources?

How can your postsecondary institution collaborate with employers to create content?

What is the institutional impact of learners seeking information and support through informal and alternate learning providers?

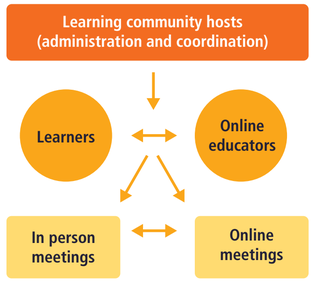
Informal learning communities

Informal learning communities, based on shared interests, are increasing. Some groups collaborate in fully virtual environments. Other groups meet in person but the administration and coordination is supported with an online technology. The expansion of learning communities represents an additional, fluid option for a learner to acquire knowledge. The discussions that result from these communities, particularly when in person, create chance encounters and connections that are difficult to duplicate in more formal, structured learning environments.

What's happening and what's emerging?

- Meetup is an online social networking portal that facilitates offline group meetings in various locations around the world. Bridging the virtual and in person environments, Meetup hosts online education providers edX with over 40 Meetup communities worldwide and Udacity with 18 Meetup communities.

Informal Learning Community



- Nearly 220 other Meetups exist for categories like "MOOCs" and "online learning." MOOC Meetups span the globe with concentrations in New York, London, Bangalore, and San Francisco, and newer groups in Beijing and Hyderabad.
- Coursera, the largest provider of MOOCs, has a Learning Hubs Initiative, which establishes physical spaces for students to access their classes.
- Adpt List is a global community consisting of 9,532+ mentors for 1:1 mentorship. Students can choose their mentor and seek advice, form connections and grow in their respective fields.

Possible Implications

What can be done within postsecondary institutions to support internal learning communities?

How can your postsecondary institution increase the potential for serendipitous connections in digital and physical environments?

What inspiration can your postsecondary institution take from the variety of stakeholders (industry, academic, learners, experts, policymakers) who collaborate in learning communities?

FURTHER READING

1 **Learning Ecosystems: Improving K-12 Education Through Learner-Centered Pedagogy**
Institute for Community Prosperity

2 **Open Education, the Long Tail, and Learning 2.0**
Educause Review

Trends and Implications

Learning ecosystems are developing based on the need for more flexible education models that provide access to a broader range of learners. Some of these ecosystems are created around shared values, such as community development or social improvement. Another group of learning ecosystems are based on reimagining a learning journey that weaves in skills required for the labour market. Both of these types of ecosystems are exploring alternative forms of credentialling in these learning environments.

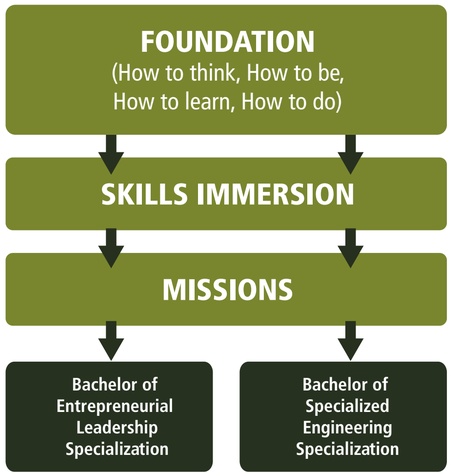
Learning ecosystems linked by shared values

Learning ecosystems are evolving and comprise open communities of diverse providers that cater to various learner needs. The ecosystems are gaining momentum based on the interest, experience, and real world challenges that align with learner values rather than content-based curriculums. The networked growth of learning ecosystems aligns values, supported by communities of practice and is scaffolded by shared technological tools.

What's happening and what's emerging?

- African Leadership University (ALU) assumes students learn best when they can see their education in action. At ALU students declare missions, not majors and are taught by faculty as well as industry, community, and peers.
- The Educació360 Alliance is a practical initiative supporting the creation of local learning ecosystems. It is an alliance of municipalities and partners committed to making high-quality out-of-school learning opportunities available to all children and young people in Catalonia, Spain.
- SYMBIOSIS: A STEAM learning ecosystem for BC. Symbiosis, Canada's first STEAM-learning ecosystem, is a network of diverse collaborators across education, technology, science, the arts, and business sectors, that are working together to ensure all learners have equal access to educational opportunities.

African Leadership University's Ecosystem Learning Model



Adapted from: African Leadership University

Possible Implications

Which stakeholders in your community could your postsecondary institution collaborate with to enhance learner outcomes?

How might the acceleration of self-paced learning impact your postsecondary institution?

What are the potential effects of self-paced learning in an community ecosystem on your postsecondary institution's credentials?

Recognized: experiences acquired outside school

Experiences outside of the school are integrated and recognized within the formal education system, expanding the physical experience of school beyond the building itself. Schools are collaborating with community partners to create a networked educational experience that supports the acquisition of skills needed for the workforce. The relationship between education and employers is reciprocal rather than hierarchical, resulting in a seamless learner experience.

What's happening and what's emerging?

- The Skills Builder Partnership, United Kingdom, is a global partnership that works with schools, teachers, employers, and other organizations to build essential skills in children and young people. Its network includes 514 schools and colleges, over 200,000 students and over 700 organizations. The Skills Builder Partnership links learning to a real-world application by connecting schools and employers.
- eCampusOntario's French experiential learning program Le Consortium d'apprentissage expérientiel francophone de l'Ontario (CAPFO) uses Riipen to enable transformative opportunities for companies to collaborate with post-secondary students on real-time, real-world challenges that are embedded directly into coursework.
- In 2017, Swinburne, Australia, launched its 2025 Strategic Plan, articulating the university's commitment to transforming education. To support lifelong learning, Swinburne is investing heavily in building a dynamic, interactive career management platform to connect groups across the ecosystem. The initiative allows users to meaningfully develop their own unique 'professional purpose' informed by real-time market data
- LRNG works with city networks and organizations to connect out-of-school learning experiences to career opportunities through facilitating direct relationships supported by a digital platform and 'playlists' of digital badges.

Possible Implications

How can we reimagine our postsecondary institutions as ecosystems and promote learning through cross-functional collaborations?

What do learning pathways that incorporate skills acquired outside the classroom look like?

What technology might your postsecondary institution need to support a learning ecosystem that includes skills acquired outside the classroom?

FURTHER READING

1. **Refugee Learning Ecosystems: Reimagining Higher Education Access for Refugees**
   The British Council/Mosaik Education
2. **WEF Report: Schools of the Future**
   World Economic Forum

Conversation Guide: Three Horizons framework

The Conversation Guide is an introduction to a method to help you explore learning ecosystems using a foresight methodology. You can use this tool on your own or as a way to spark conversation at your institution. We invite you to select one or more trends from this report and apply to the tool below.

The Three Horizons framework, developed by Bill Sharpe, was designed to help people think about long-term change in transition stages, by exploring current assumptions, emerging changes, and possible futures.

In Horizon 1, we consider what is happening today and its relevance into the future. In Horizon 3, we explore the desirable future state: what is the ideal future? Finally, in Horizon 2, the tensions between Horizon 3's vision and Horizon 1's reality are examined. By uncovering the overlapping and often competing timelines of unfolding change, the model provides a broader context on how we might make decisions today.

Three Horizons

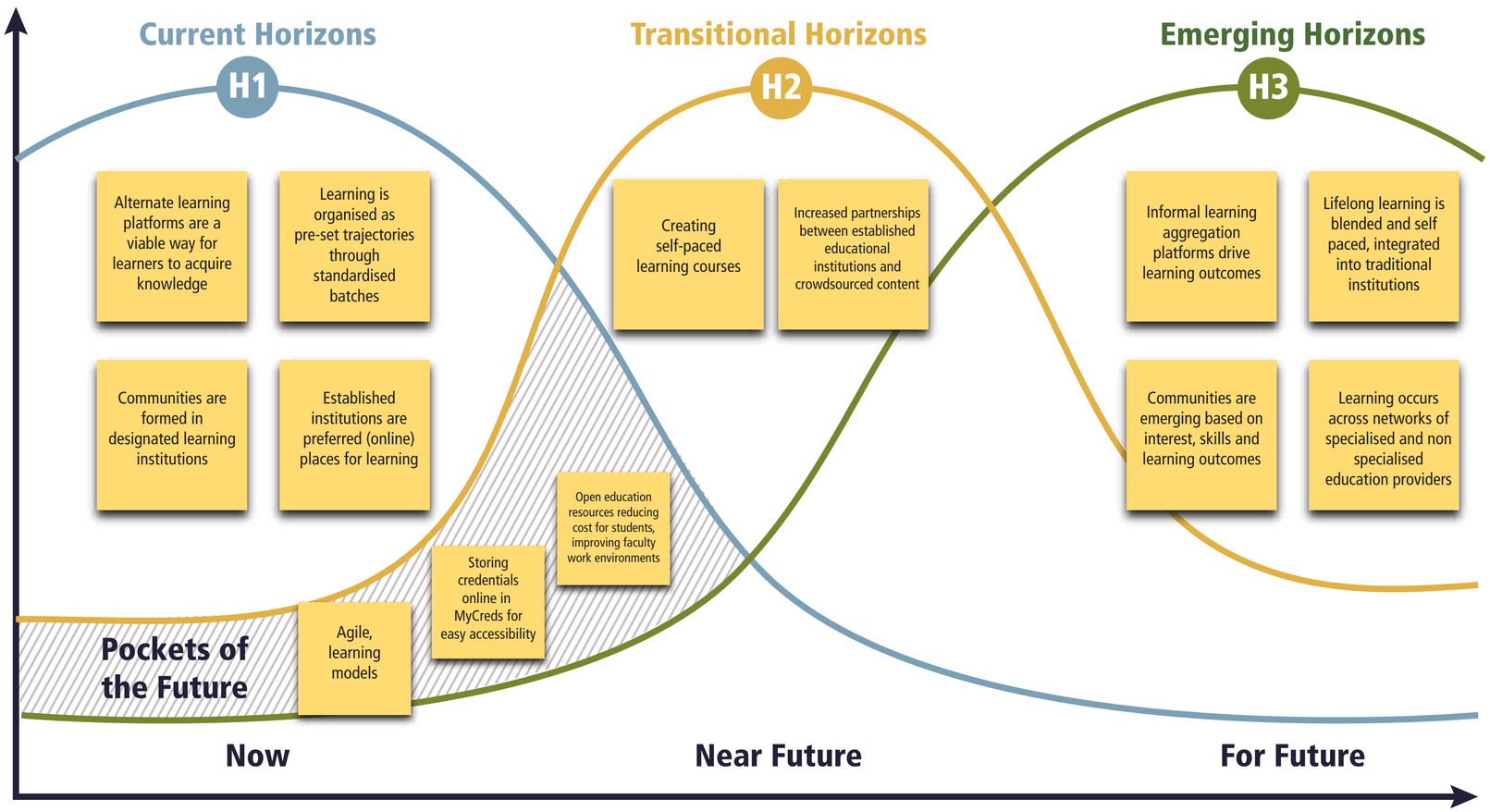
The Current Horizon explores the current context and conditions.

The Pockets of the Future discusses the glimpses of the future that we want to retain or likely want to see in the future.

The Emerging Horizon considers transformative emerging changes, ideas about possible futures, and visions of preferred futures; the focus is on transformation and disruption.

The Transitional Horizon examines actions taken in the present to resist change, to adapt to change, or to build on change; the focus is on creating and managing change.

Example: the Three Horizons of Learning Ecosystems



FURTHER READING

1 **Intelligent Infrastructure Futures Technology Forward Look**
Office of Science and Technology

2 **International Training Centre - Foresight Toolkit**
ITC

Conversation Guide: Three Horizons template - Use with your team!

When to use the Three Horizons model

Three Horizons' best use is exploring complex problems, that involve many stakeholders and have no obvious solution.

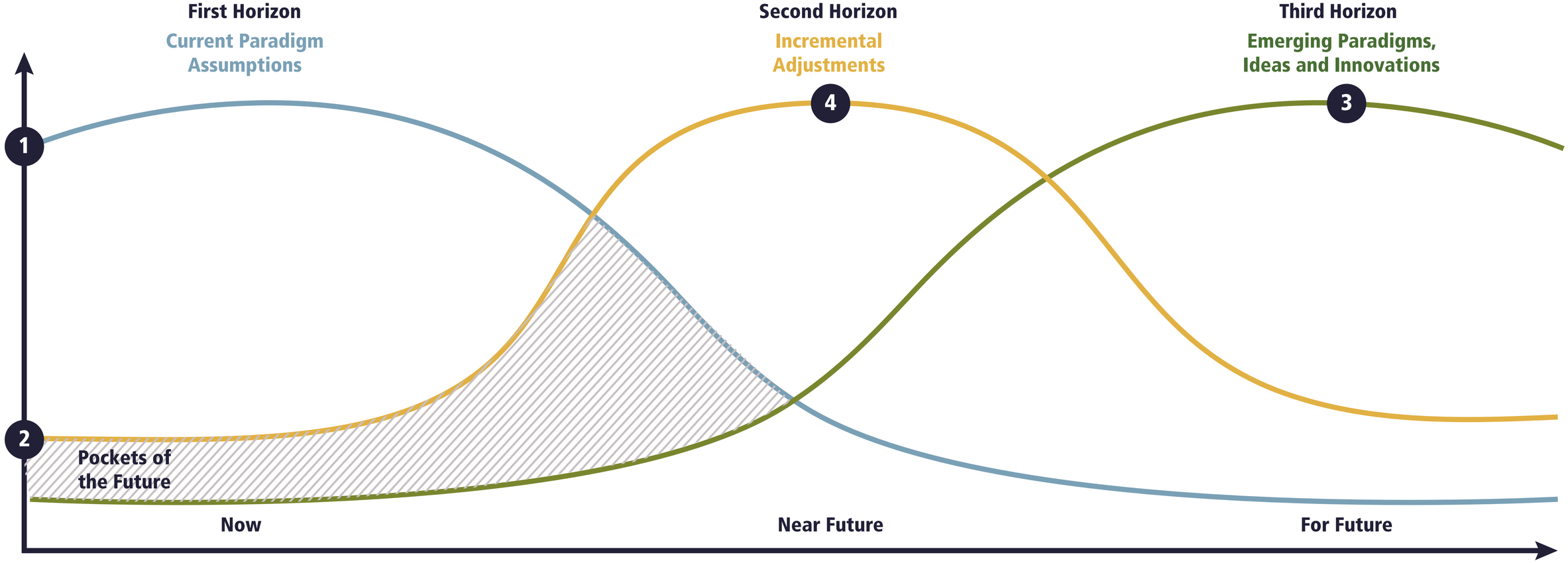
How to use Three Horizons model

1. In the **First Horizon** discuss current context and conditions.
Questions to consider: What are the behaviours of the system today, how are 'things done'? What do we assume when we make decisions? Who holds (and who doesn't) hold power and how does this affect the decisions we make?

2. In the **Pockets of the Future** discuss the glimpses of the future, existing today, that we want to retain or likely want to see in the future.
Questions to consider: What is emerging that seems desirable? How could these "seeds of that future" be scaled and spread?

3. In the **Third Horizon** discuss transformative emerging changes, ideas about possible futures, and visions of preferred futures; the focus is on transformation and disruption.
Questions to consider: What are competing visions of the future being pursued by others today? What would it look like and feel like if these visions came true?
What changes offer the most promise and immediately actionable opportunities? Which assumptions will be most challenged by change? Which resources can we combine or adopt to stay relevant in this transition?

4. In the **Second Horizon** discuss actions taken in the present to resist change, to adapt to change, or to build on change; the focus is on creating and managing change.
Questions to consider: What changes offer the most promise and immediately actionable opportunities? Which assumptions will be most challenged by change? Which resources can we combine or adopt to stay relevant in this transition?



Email us to keep the conversation going!

For additional guidance, questions, or to share your work, please contact:
research@ecampusontario.ca.

Connected Education: Learning Ecosystems

References and Resources

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