

# Evolving Teaching and Learning Roles

*This report explores:*

## Teaching and Learning Roles

Exploring the changing roles of teachers and learners in a transitional environment.

Weight of the Past

Pull of the Future

Teachers

and

Learners

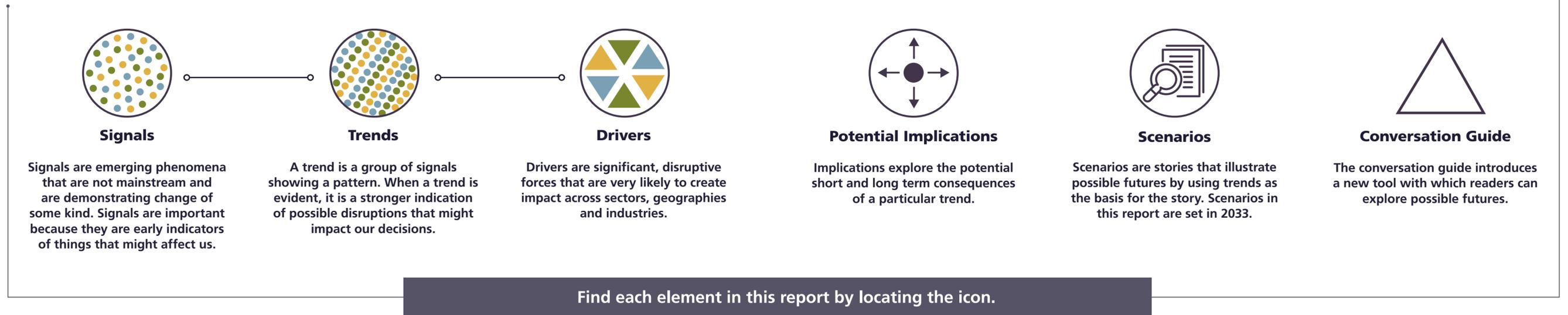


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# Evolving Teaching and Learning Roles

This report explores teaching and learning roles through:



## The *Virtual Learning Strategy (VLS)* is preparing Ontario postsecondary institutions for Evolving Teaching and Learning Roles.

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:



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.

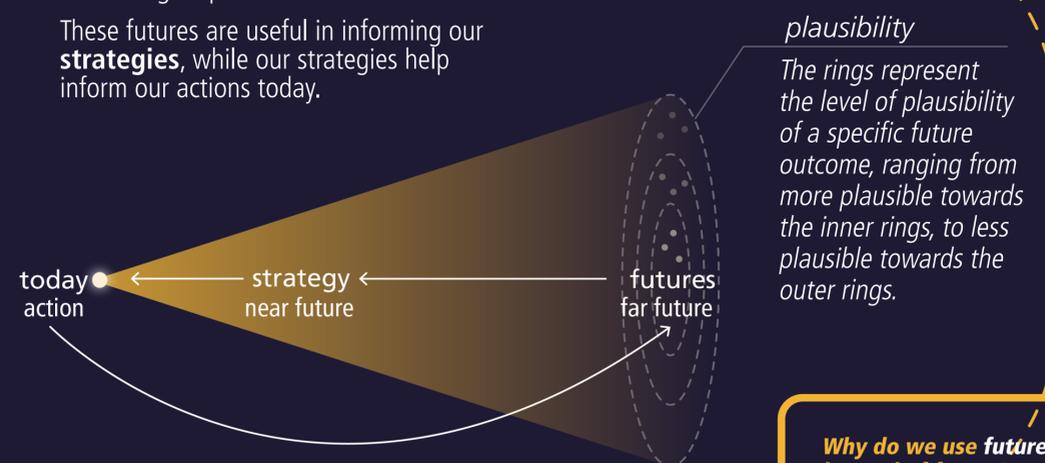
### How do I *use* this Foresight Report?

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. It also includes a series of scenarios set in 2033 as provocations to start those future-facing conversations.

## 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.



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

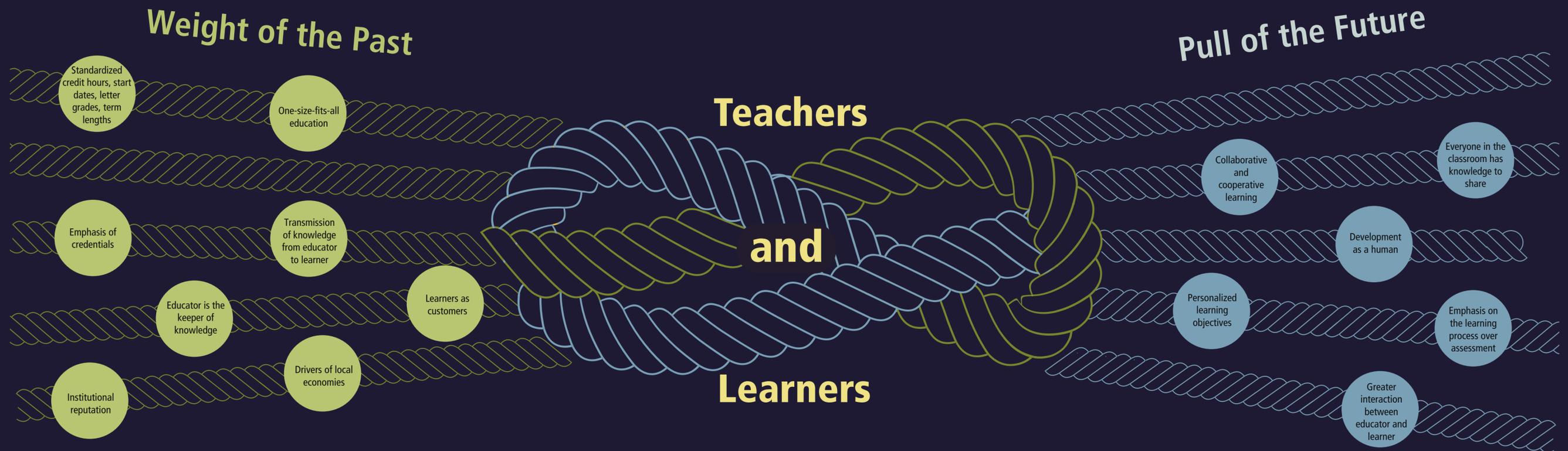
**1** [What is Futures Literacy and Why Is It Important?](#)  
Medium

**2** [What is Strategic Foresight?](#)  
Organization for Economic Co-operation & Development

**3** [Foresight Reports](#)  
eCampusOntario

# Evolving Teaching and Learning Roles

Teachers and learners are currently at the centre of competing tensions. The expectations, structures and processes of the past are co-existing with emerging needs, technologies and skills and we are at the inflexion point. This report explores how the sector may determine what from the past should be preserved and what institutions may wish to move towards in the future as the roles of teachers and learners will be impacted.



## Forces affecting teaching and learning roles

**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 socio-economic disruption.

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

**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.

### FURTHER READING

**1** [From Transactional to Transformational Teaching](#)  
Inside Higher Ed

**2** [Universities after neoliberalism](#)  
Radical Philosophy

# Trends and Implications

With the COVID-19 pandemic bringing campuses to a standstill, institutions began developing programs that facilitated a transfer of knowledge outside of the traditional classroom. To accommodate this shift, educators began taking on a growing workload.



## Between walled classrooms and borderless communities

There is a growing demand and expectation for classes to break out of the four walls of a classroom. With the growing integration of EdTech in all areas of institutions, opportunities for borderless, global communities of learners begin to emerge. Along with the expansion of technology, there is a shift in understanding who holds knowledge. There is a growing acceptance that everyone, including learners, educators, and members of the community, has knowledge to share. Educators become part of the class and facilitate knowledge creation through peer-to-peer learning. Work integrated learning provides learners the opportunity to gain valuable paid, hands-on experience and address concerns that graduates aren't ready for the workforce and concerns for labour shortage.



### What's happening and what's emerging?

- In a panel of Canadian university leaders, [Dr. Graham Gagnon](#), Dean of Architecture & Planning at Dalhousie University, sees international collaboration as the greatest opportunity to reach challenges such as the UN's Sustainable Development Goals.
- eCampusOntario's [Ubiquitous Learning: From Anywhere, At Anytime](#) foresight report explores how ubiquitous learning can be scaled within post-secondary institutions.
- The [Government of Canada](#) announces new funding to create more work placement opportunities for post-secondary students.
- [Global Skills Opportunity](#) provides funding for institutions to create work and study abroad programs for Canadian students.



## From teachers to multidimensional educators

Amplified by the COVID-19 pandemic, institutions have added pressure for educators to take on additional responsibilities. Teachers are no longer just facilitators of knowledge: they are also data collectors, analysts, planners, instructional designers, problem solvers, mentors, and more. There is additional pressure from learners wanting educators to keep up with the latest technology and pedagogies. Educators are required to constantly upskill with new DEI initiatives being introduced on campus. These added responsibilities and demands to the educator role increase financial, training, and time demands, especially if the role of the educator is still framed as a single individual role.



### What's happening and what's emerging?

- [KnowledgeWorks](#) explores what new educator roles are needed to support an expanding learning ecosystem.
- The [University of Kansas](#) describes the "teacherpreneur", a new version of teachers that combines the roles of a traditional classroom teacher, the administrator, and the educational policy maker.
- [Brandon Busteed](#) explores the future of U.S. schools - 'brownouts'. The impending shortage of teachers due to early retirement, burnout, and decreasing interest in the profession.



## Possible Implications

How can institutions effectively use technology to support learning beyond the classroom?

How might institutions support learners and employers demands for education beyond the classroom?

How can institutions benefit from collaborating with members of their community and beyond?

What impacts might global classrooms have on the mental health of learners?



## Possible Implications

How can institutions support educators through their changing roles?

What role do educators play in the future of their profession?

How can institutions prepare for possible disruptions due to staffing shortages?

How might institutions boost the appeal of the teaching profession to attract future educators?

What skills are required to for the next generation of educators to succeed? Is it too much?

What educational roles are needed to support the next generation of educators? Of learners?

## FURTHER READING

1

[Thinking Higher and Beyond: Perspectives on the Futures of Higher Education to 2050](#)

UNESCO International Institute for Higher Education in Latin America and the Caribbean

2

[Reimagining the future: developing teachers' research and collaborative capacity through teacher education curriculum reform](#)

UNESCO

# Trends and Implications

Growing social movements, magnified by major events in Canada including the discovery of unmarked graves at former residential schools, have found their way onto Canadian campuses.



## Economics under pressure

Learners, who are paying an increasing amount of tuition, are demanding specific courses, teaching methodologies, flexibility, and educators. International learners are voicing their concerns with employment laws, rising costs of tuition. Educators, especially part-time or sessional instructors, are demanding fair wages, job security, institutional support, and healthy work environments. Under economic constraint, governments are reconsidering their funding allocation approaches to postsecondary education.



### What's happening and what's emerging?

- The Government of Ontario has introduced a new [performance-based funding](#) model that places a greater emphasis on student and economic outcomes.
- Students, frustrated with the poor quality of instruction compounded by the high cost of tuition, successfully petitioned for the dismissal of a highly respected New York University [professor](#).
- Many faculty associations across Canada, including at [Western University](#), have taken strike action to bargain for better recognition, job security, and healthier work environments.
- Given financial pressures, full-time [international students](#) are temporarily allowed to work over the previous limit of 20 hours per week.



## Between performative and authentic allyship

There is a growing expectation for institutions to re-examine the colonial structures that exist in post secondary institutions in Canada. From rethinking diversity hiring practices to understanding the history of namesakes, institutions across Canada are beginning to implement a variety of initiatives. However, there is concern of what initiatives are performative and what are authentic. Institutions must be willing to embark on this process with the right reasons, take risks, and be willing to fail. There is a need to engage with diverse learners and community members. Educators play an important role in creating spaces for all learners to feel safe and welcome in classrooms and the greater institutional community.



### What's happening and what's emerging?

- The [University of Prince Edward Island](#) has made a requirement for all incoming students to take an Indigenous Studies course to be able to graduate.
- [DoriT unstall](#), Dean of Design at OCAD University, speaks about the rise of the supertoken and how organizations can dismantle systemic structures of exclusion.
- With cases of [false self-identification](#) on the rise in Canada, some are calling for the need for proof of Indigenous status and the end of self-identification.
- The [U.S. Supreme Court](#) has heard two challenges to race-based admissions policies that are designed to ensure minority groups are represented fairly.



### Possible Implications

How might increasing tuition costs affect learners' expectations?

How does growing public distrust in institutions affect institutions' operations?

How can institutions prepare for possible funding changes due to a decrease in international students or greater impacts from performance-based funding?

How might institutions address rising tensions between tenure and sessional instructors?



### Possible Implications

How might institutions support authentic diversity, equity, and inclusion?

How can institutions combat fraudulent self-identification?

How can institutions create initiatives that address the digital divide?

How can educators be better equipped with the tools and knowledge to further diversity, equity, and inclusion?

How can institutions work with learners from minority groups to build authentic relationships?

What are the characteristics of decolonized institutions?

## FURTHER READING

1

[The case for a student-centric campus](#)

Deloitte

2

[Pulling Together: A Guide for Teachers and Instructors](#)

BCcampus



## Futures Scenarios

Future scenarios combine possible long-term implications of evidence of change with fictional element to expand our imagination and visualize how trends might evolve into the future. The intention is not to predict the future, but to explore how different futures may unfold in 2032, challenge assumptions about the present, and explore alternative ways to approach innovation in education.

## One size fits "all"

### Rigid, low-cost, technology-enabled programs limit flexibility for learners.

Hassan, a student in Pakistan, and his family were approached by recruiters from the University of Futuretown and were told about the opportunities that came with enrolling at an Ontario institution. The recruiter said: "Not only do Ontario institutions provide a high level of education, but they also offer learners a pathway to Canadian citizenship and a well-paying job."

Coming from a middle-class family, Hassan decided to move to Ontario and enroll at Futuretown College due to the comparatively low cost of tuition, the short two-year program, and the online and asynchronous structure. Hassan enrolled in the Accounting Certificate program.

Shortly after classes started, Hassan developed an interest in Computer Systems. So, Hassan approached the institution asking if there was an opportunity to take a Blockchain Technology course which fell outside of his program. The institution promptly responded "No. All of our programs are specifically designed for the learning outcomes outlined at the outset of the program. If you wish to take the Blockchain Technology course, you will need to switch programs. No credits will be transferred for uncompleted programs." Feeling frustrated, Hassan has begun questioning his choice of the Accounting program knowing that he does not have the funds to switch programs.

Hassan is considering dropping out of the program to find a job to earn savings to pay for the new program. He has set up a meeting with his immigration lawyer to see if he is able to get a work visa and how it may affect his future in Canada.

## Educators: the ultimate polymaths

### Decreased funding and increased learner expectations lead educators to carry the weight of expanding roles.

During a regular townhall last month with the University of Futureville's staff, Dr. Mariah Black heard it loud and clear. "We are at our breaking point," one educator said. Another said, "I love what I do, but if I don't get any support from the University, I am done. I can't do it anymore."

Over the past decade, the expectations of educators have been on the rise. Educators are no longer just knowledge experts, they are also researchers, facilitators, instructional designers, data collectors, technology experts, counsellors, and administrators.

With declining enrolment leading to funding from the Government of Ontario being on the line, Dr. Mariah Black, is now tasked with building back the trust of educators.

One of Dr. Black's new initiatives is to reduce the workload of educators by committing to invest \$160 million in new technology over the next three years. One of the tools is an AI-powered learning management system that claims to reduce learning time and provide real-time feedback.

While some learners are loving the new system, others have started to question the implementation.

One learner approached Dr. Black and voiced their struggles with the new system. They said "I have never felt so isolated in my life. I paid so much money to come to this University and all I do is sit behind my computer screen. How will I be able to find a job with no experience working with people?"

Having committed so much money to new technology, Dr. Black feels stuck without any clear path forward.



*How can institutions create elevated learning experiences while recognizing the financial barriers faced by learners?*



*How can institutions reduce the burden and support the growing role of educators?*



## The best and brightest, saving the world

### Futures Scenarios

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### Financially wealthy learners have access to the greatest opportunities further widening the knowledge and wealth gap.

2032 marks the fourth year of an exchange between the Future University of Ontario and the Future World University. This opportunity offers faculty and students the opportunity to mobilize, share knowledge, work in collaboration with other educators and learners, and gain access to the resources of the other institution.

Dr. Bhatia, a sessional instructor at the Future University of Ontario was provided the opportunity this year to co-teach a studio course through the program. The course, Contemporary Issues, is a year-long multidisciplinary course that provides a small group of 12 students the opportunity to collaborate with one another and the instructors on a complex and intractable problem facing the world today. Not only is this course highly competitive, but it is financially inaccessible for many. Many students and faculty have called for changes to the course due to its highly competitive and financially inaccessible nature.

Before the term begins, the students and instructors came together to choose a specific problem that they have a vested interest in. This year, they decided to understand and explore how might they be able to address the decreasing political participation in the Global North.

Throughout the year, the students and instructors were able to forge a partnership with the Government of Ontario that provides two years of funding for the cohort to continue their project outside of the course.

Although this opportunity provides tremendous opportunity for some, it further exacerbates the knowledge gap leaving many learners behind.

## Education as you go

### With the rising costs of tuition, learners are opting for non-traditional, customized learning experiences.

After working as a chef for 12 years, Lin felt a change in their career was necessary after the birth of their first son. Lin wanted to be more present and the long hours of working in the kitchen was not conducive to that.

With the rising cost of tuition and the costs of raising a child, formal post-secondary education was out of the question for Lin. While browsing the metaverse, Lin came across an advertisement for an online platform that offers courses on any subject matter.

Rather than attending a traditional institution, Lin is able to customize their learning journey and pay for only what they need. With Future DAO, Lin is joining a community of individuals with similar interests. Lin is able to attend classes when and how frequently they wish. Then, they can begin to use their knowledge working on real projects created by businesses worldwide.

Lin has decided to take a few web development courses as well as a digital marketing course. At the end of each course, Lin will receive digital credentials for the completion of the courses while gaining valuable experience working on real projects.

Lin hopes that by the end of this year, they will have their own web development business up and running.



*How can institutions create favourable learning experiences accessible to all?*



*How can institutions prepare for increased competition from digital-first, informal, learning communities?*

# Conversation Guide: Futures Triangle

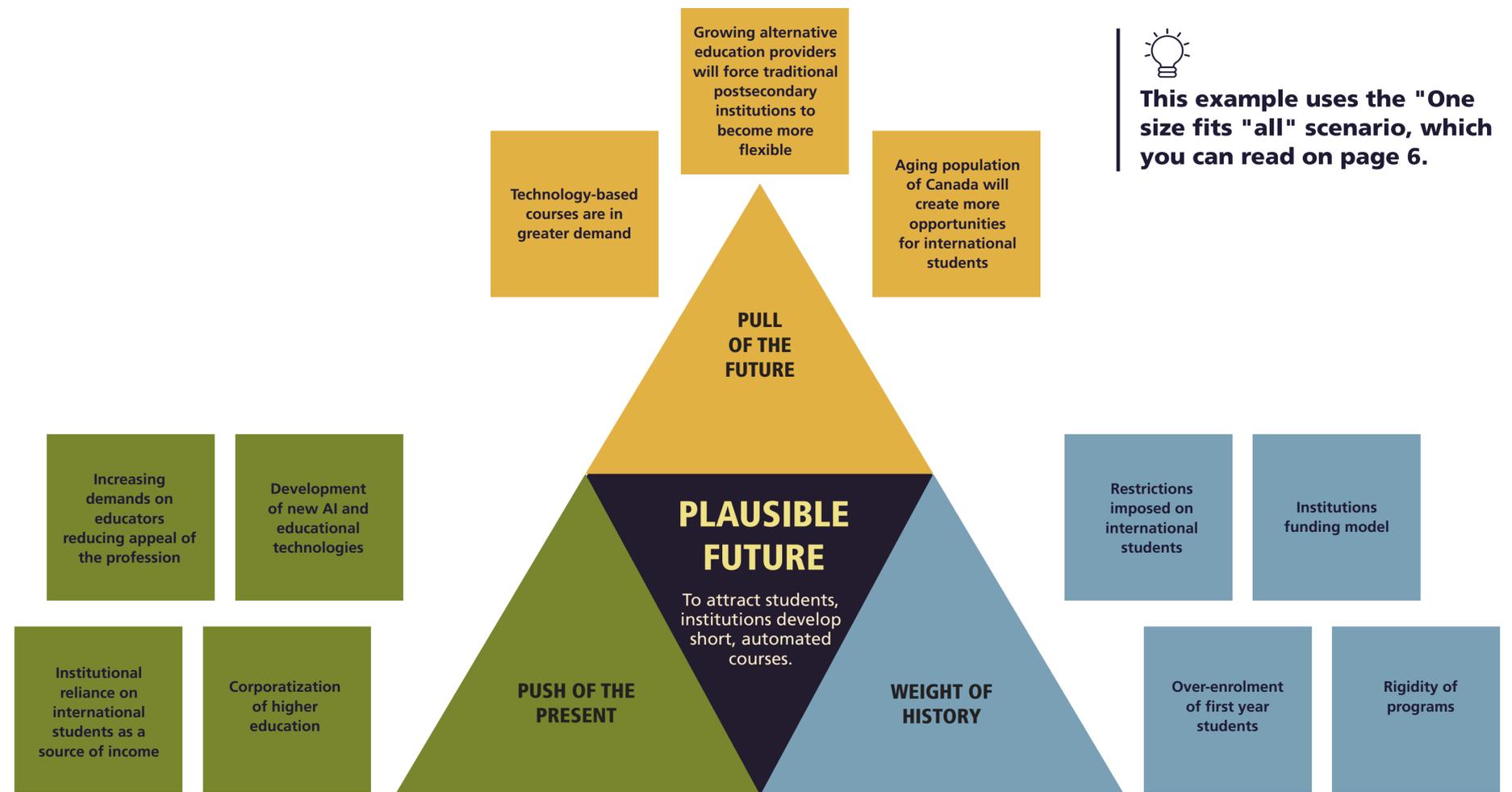
The Conversation Guide is an introduction to a method to help you explore the changing teaching and learning roles using a foresight methodology. You can use this tool on your own or as a way to spark conversation at your institution. We invite you to select one or more scenarios or trends from this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

The Futures Triangle is a tool, developed by foresight practitioner Sohail Inayatullah, that helps us map views of the future through three dimensions: the Weight of History, the Push of the Present, and the Pull of the Future. Through the analysis of these three forces, the Futures Triangle can help develop or analyze a plausible future.

Any plausible future scenario is not a unidirectional change. It is always the product of tensions among:

- visions and images of the future pulling society towards something different (**Pull of the Future**)
- driving forces and patterns in the present that affect the future (**Push of the Present**)
- barriers of change that keep us in the past (**Weight of History**)

The **Futures Triangle** is a foresight tool that can be used to deconstruct, analyze, and reconstruct scenarios of the future to explore the tensions within them, and understand the competing forces that might create varying possible futures. When exploring future possibilities to inform decision making today, it is always critical to not only understand the primary directions of trends and visions moving us towards those futures, but also the conflicts and counter-forces.



This example uses the "One size fits all" scenario, which you can read on page 6.

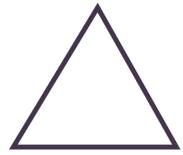
## FURTHER READING

1

Six Pillars: Futures Thinking for Transforming

Foresight for Development

8



# Conversation Guide: Futures Triangle Template - Use with your team!

## When to use

The Futures Triangle is a useful tool to develop, deconstruct, analyze, or project plausible future scenarios by exploring the tensions and relationships among historical legacies, present day trends, and future visions within issues or systems.

1. Select a scenario from the report to frame the exercise (pages 6-7).

2. Start with the Pull of the Future and answer the following questions:

- What are the visions of preferred futures are pulling towards this scenario?
- What compelling images of the future ("you can't not go there") might have influenced this scenario?
- What is the "ideal" behind this scenario?
- Are the competing desirable visions of the future?

3. Next, consider the Push of the Present and answer these questions

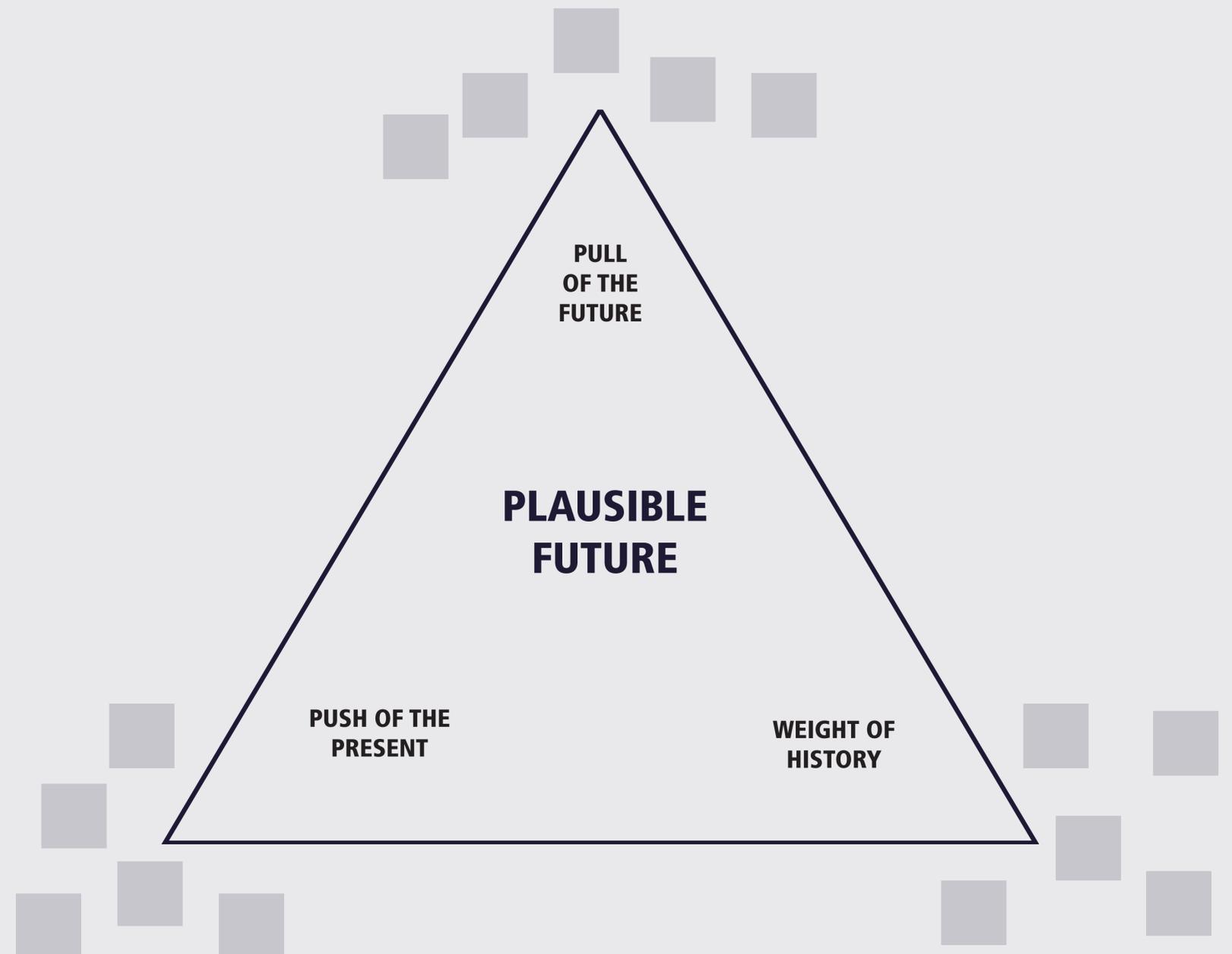
- What trends might be pushing the present towards this particular future scenario?
- What is pushing change forward?
- What already known new policies, procedures, laws, budgets, decisions, technologies, etc. will start to push changes forward in the near future?

4. Last, think about the Weight of History and answer the following questions on sticky notes:

- What are the barriers to change that might have affected this scenario?
- What are the deep structures that resist change?
- What might be holding further change back?
- What status quo might not have been deeply transformed? Who does that status quo benefit?

5. Use the following questions to guide your reflection about the exercise:

- a. What enablers of the future scenario arose from the intersections of past, present, and future?
- b. What barriers of the future scenario arose from the intersections of past, present, and future?
- c. What would need to be done to scale the enabling conditions and relationships?
- d. What would need to be done to address the barriers?



Email us to keep the conversation going!

For additional guidance, questions, or to share your work, please contact:

[research@ecampusontario.ca](mailto:research@ecampusontario.ca)

# Teaching and Learning Roles

## References and Resources

### Overview

- Harkavy, I., & Hodges, R. A. (2021, August 18). *Universities after Neoliberalism: How to Build a Democratic Civic University*. Nonprofit Quarterly. Retrieved December 2, 2022, from <https://nonprofitquarterly.org/universities-after-neoliberalism-how-to-build-a-democratic-civic-university/>
- Larsen, Kæseler Mortensen, & Miller. (2020, February 11). *What Is Futures Literacy and Why Is It Important?* Medium. Retrieved December 5, 2022, from <https://medium.com/copenhagen-institute-for-futures-studies/what-is-futures-literacy-and-why-is-it-important-a27f24b983d8>
- Mintz, S. (2022, January 12). *The Revolution in Higher Education Is Already Underway*. Inside Higher Ed. Retrieved December 2, 2022, from <https://www.insidehighered.com/blogs/higher-ed-gamma/revolution-higher-education-already-underway>
- Mintz, S. (2022, January 4). *From Transactional to Transformational Teaching*. Inside Higher Ed. Retrieved December 2, 2022, from <https://www.insidehighered.com/blogs/higher-ed-gamma/transactional-transformational-teaching>
- Newfield, C. (2021, July 30). *Universities after neoliberalism*. Radical Philosophy. Retrieved December 2, 2022, from <https://www.radicalphilosophy.com/article/universities-after-neoliberalism>
- Reports | eCampusOntario VLS. (n.d.). <https://vls.ecampusontario.ca/reports/>
- *What is Foresight? - Organisation for Economic Co-operation and Development*. (n.d.). <https://www.oecd.org/strategic-foresight/whatisforesight/>

### Between walled classrooms and borderless communities

- eCampus Ontario. (2022, November). *Ubiquitous Learning: From Anywhere, At Anytime*. eCampus Ontario. Retrieved December 2, 2022, from [https://vls.ecampusontario.ca/wp-content/uploads/2022/11/Ubiquitous-Learning\\_04\\_EN\\_20221117\\_Tagged\\_Fixed.pdf](https://vls.ecampusontario.ca/wp-content/uploads/2022/11/Ubiquitous-Learning_04_EN_20221117_Tagged_Fixed.pdf)
- Global Skills Opportunity. (2022, May 1). *Global Skills Opportunity*. Retrieved December 2, 2022, from <https://www.globalskillsopportunity.ca/>
- Innovation, Science and Economic Development Canada. (2022, September 29). *Government of Canada announces renewed funding to create more work placement opportunities for Canadian post-secondary students*. Cision. Retrieved December 2, 2022, from <https://www.newswire.ca/news-releases/government-of-canada-announces-renewed-funding-to-create-more-work-placement-opportunities-for-canadian-post-secondary-students-848342044.html>
- MacDonald, M. (2019, October 25). *7 university leaders contemplate the future of higher education in Canada*. University Affairs. Retrieved December 2, 2022, from <https://www.universityaffairs.ca/features/feature-article/7-university-leaders-contemplate-the-future-of-higher-education-in-canada/>
- Sabzalieva, Chacón, Liu, Lily, Morales, Mutize, Nguyen, & Chinchilla, Roser. (2021). *Thinking Higher and Beyond : Perspectives on the Futures of Higher Education to 2050*. UNESCO International Institute for Higher Education in Latin America and the Caribbean. <https://www.iesalc.unesco.org/en/futures-of-higher-education/thinking-higher-and-beyond-perspectives-on-the-futures-of-higher-education-to-2050/>

### From teachers to multidisciplinary educators

- Busteded, B. (2022, November 8). *The Future of School? 'brownouts.'* Forbes. Retrieved December 2, 2022, from <https://www.forbes.com/sites/brandonbusteded/2022/10/02/the-future-of-school-brownouts/?sh=3a933734406a>
- Mary Lou Fulton Teachers College. (2022, November 8). *Next Education Workforce*. Arizona State University. Retrieved December 2, 2022, from <https://workforce.education.asu.edu/>
- Prince, K., Saveri, A., & Swanson, J. (2022, April 21). *Exploring the future education workforce: New roles for an expanding learning ecosystem*. KnowledgeWorks. Retrieved December 2, 2022, from <https://knowledgeworks.org/resources/future-education-workforce-roles-ecosystem/>
- Tatto, Teresa. (2022, May 23). *Reimagining the future: developing teachers' research and collaborative capacity through teacher education curriculum reform*. Retrieved December 5, 2022, from <https://en.unesco.org/futuresofeducation/ideas-lab/tatto-teacher-education>
- University of Kansas. (2021, June 9). *What is a teacherpreneur?* School of Education & Human Sciences, University of Kansas. Retrieved December 2, 2022, from <https://educationonline.ku.edu/community/what-is-a-teacherpreneur>

### Economics under pressure

- Robitaille, E. (2022, November 15). *Starting today, international students can temporarily work more than 20 hours per week*. CIC News. Retrieved January 20, 2023 from <https://www.cicnews.com/2022/11/starting-today-international-students-can-temporarily-work-more-than-20-hours-per-week-1131897.html#gs.nrcb7f>
- Government of Ontario. (2020, November 26). *Promoting Excellence: Ontario Implements Performance Based Funding for Postsecondary Institutions*. Government of Ontario. Retrieved December 2, 2022, from <https://news.ontario.ca/en/release/59368/promoting-excellence-ontario-implements-performance-based-funding-for-postsecondary-institutions>
- Newcombe, D. (2022, October 3). *Faculty at Western University overwhelmingly approve strike mandate*. CTV News. Retrieved December 2, 2022, from <https://london.ctvnews.ca/faculty-at-western-university-overwhelmingly-approve-strike-mandate-1.6094040>
- Saul, S. (2022, October 3). *At N.Y.U., students were failing organic chemistry. Who was to blame?* The New York Times. Retrieved December 2, 2022, from <https://www.nytimes.com/2022/10/03/us/nyu-organic-chemistry-petition.html>
- *The case for a student-centric campus*. (2022, May 19). Deloitte Canada. Retrieved December 5, 2022, from <https://www2.deloitte.com/ca/en/pages/public-sector/articles/the-case-for-a-student-centric-campus.html>

### Between performative and authentic allyship

- Doria-Brown, J. (2022, August 12). *UPEI makes Indigenous Studies course mandatory in order to graduate* | CBC News. CBC News. Retrieved December 2, 2022, from <https://www.cbc.ca/news/canada/prince-edward-island/pei-indigenous-faculty-upei-1.6547157#:~:text=CBC%20News%20Loaded-,UPEI%20makes%20Indigenous%20Studies%20course%20mandatory%20in%20order%20to%20graduate,a%20course%20in%20Indigenous%20Studies.>
- Epstein, K. (2022, October 31). *US Supreme Court takes up race-based college admissions*. BBC News. Retrieved December 2, 2022, from [https://www.bbc.com/news/world-us-canada-63394285?xtor=AL-72-%5Bpartner%5D-%5Bbbc.news.twitter%5D-%5Bheadline%5D-%5Bnews%5D-%5Bbizdev%5D-%5Bisapi%5D&at\\_custom4=9F14B476-591A-11ED-B15F-E1AE4744363C&at\\_custom1=%5Bpost%2Btype%5D&at\\_custom3=%40BBCWorld&at\\_campaign=64&at\\_custom2=twitter&at\\_medium=custom7](https://www.bbc.com/news/world-us-canada-63394285?xtor=AL-72-%5Bpartner%5D-%5Bbbc.news.twitter%5D-%5Bheadline%5D-%5Bnews%5D-%5Bbizdev%5D-%5Bisapi%5D&at_custom4=9F14B476-591A-11ED-B15F-E1AE4744363C&at_custom1=%5Bpost%2Btype%5D&at_custom3=%40BBCWorld&at_campaign=64&at_custom2=twitter&at_medium=custom7)
- Jacknife, S. (2021, March 23). *Invaders to the buffalo hunt: False claims of Indigenous heritage in education*. CBC News. Retrieved December 2, 2022, from <https://www.cbc.ca/news/canada/calgary/road-ahead-indigenous-identification-post-secondary-education-buffalo-1.5952633>
- Obed, N. (2022, October 24). *We must adopt policies that require proof of Indigenous status and end self-identification*. CBC News. Retrieved December 2, 2022, from <https://www.cbc.ca/news/opinion/opinion-indigenous-self-identification-must-end-natan-obed-1.6624157>
- Tunstall, D. (2022, June 6). *The rise of 'supertokenism'—and what organizations get flat wrong about DEI*. Fast Company. Retrieved December 2, 2022, from <https://www.fastcompany.com/90751644/the-rise-of-supertokenism-and-what-organizations-get-wrong-about-dei>

## One size fits "all"

- Garcia-Sitton, I. (2022, November 9). *Canada identifies international students as 'ideal immigrants' but supports are lacking*. The Conversation. Retrieved December 2, 2022, from <https://theconversation.com/canada-identifies-international-students-as-ideal-immigrants-but-supports-are-lacking-191105>
- Gottsegen, G. (2022, November 22). *7 Examples of Robotics in Education to Know*. Built In. Retrieved December 2, 2022, from <https://builtin.com/robotics/robotics-in-the-classroom>
- Government of Canada. (2020, October 19). *Canada's International Education Strategy (2019-2024)*. Government of Canada. Retrieved December 2, 2022, from <https://www.international.gc.ca/education/strategy-2019-2024-strategie.aspx?lang=eng#2>
- Riina, V., Yves, P., & Cabrera, M. (2020). *Emerging technologies and the teaching profession*. Joint Research Centre, European Commission. <https://doi.org/10.2760/46933>

## Educators: the ultimate polymaths

- Arya, A., Chan, A. D. C., Hellemans, K., & Hornsby, D. J. (2022, June 7). *Faculty lack training programs in pedagogical skills*. University Affairs. Retrieved December 2, 2022, from <https://www.universityaffairs.ca/opinion/in-my-opinion/faculty-lack-training-programs-in-pedagogical-skills/>
- Burt, C. (2022, October 3). *Will Great Resignation among faculty hit higher ed next?* University Business. Retrieved December 2, 2022, from <https://universitybusiness.com/will-great-resignation-among-faculty-hit-higher-ed-next/>
- Keper, L. (2022, September 8). *The unheard impact: technology and the teaching profession*. Education International. Retrieved December 2, 2022, from <https://www.ei-ie.org/en/item/26803:the-unheard-impact-technology-and-the-teaching-profession>

## The best and brightest, saving the world

- El-Azar, D., & Nelson, B. (2020, May 29). *How will higher education be different in 2030?* British Council. Retrieved December 2, 2022, from <https://www.britishcouncil.org/voices-magazine/future-higher-education>
- Mitchell, N. (2022, November 3). *Our future depends on the sharing of intellectual resources*. University World News. Retrieved December 2, 2022, from <https://www.universityworldnews.com/post.php?story=20221103132315898>
- Tatto, M. T. (2022, May 23). *Reimagining the future: developing teachers' research and collaborative capacity through teacher education curriculum reform*. UNESCO. Retrieved December 2, 2022, from <https://en.unesco.org/futuresofeducation/ideas-lab/tatto-teacher-education>

## Education as you go

- Meyer, S. D., & Saraf, V. (2022, February 15). *DAO.edu - The Future of Decentralized Learning*. ed3.mirror.xyz. Retrieved December 2, 2022, from [https://ed3.mirror.xyz/VJUCPEMKKvh5Fyh6Gb1\\_YEZrl2FCAP6jgmsByuCCkmA](https://ed3.mirror.xyz/VJUCPEMKKvh5Fyh6Gb1_YEZrl2FCAP6jgmsByuCCkmA)
- Piper, D., & Wong, J. (2022, March 14). *Rising tuition, student debt weigh heavily on post-secondary students*. CBC News. Retrieved December 2, 2022, from <https://www.cbc.ca/news/canada/pricedout-postsecondary-1.6378577>
- Singh, A. (2022, March 27). *Reimagining the future of education with web3*. Medium. Retrieved December 2, 2022, from <https://medium.com/geekculture/reimagining-the-future-of-education-with-web3-536d46c87df6>

## Futures Triangle

- Inayatullah, S. (2008). *Six pillars: Futures thinking for transforming*. Foresight, 10(1), 4–21. <https://doi.org/10.1108/14636680810855991>
- Riedy, C. (2012, November 4). *The futures triangle*. Medium. Retrieved December 2, 2022, from <https://medium.com/@chrisriedy/the-futures-triangle-7ef2ed728a02#:~:text=as%20shown%20below.,The%20futures%20triangle,future%20space%2C%20inside%20the%20triangle.>

