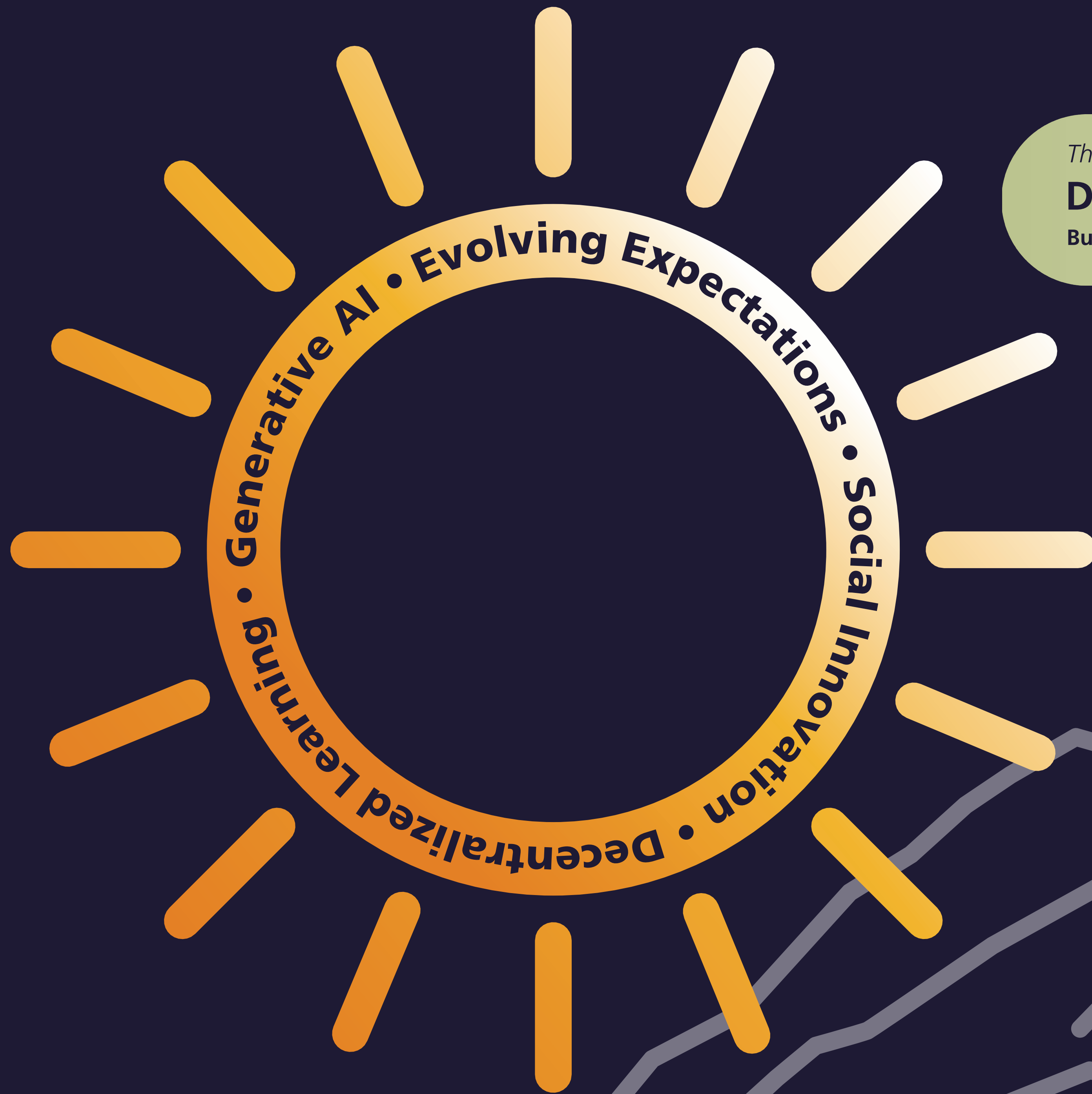


# Designing Education for the Future



*This report explores:*

## **Designing for a Shifting Educational Landscape**

Building an innovative and empathetic education system in tandem with technology.



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# Designing Education for the Future

## The *Virtual Learning Strategy (VLS)* is preparing Ontario postsecondary institutions for Transactional Education

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 Transactional Education Futures.

### 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.

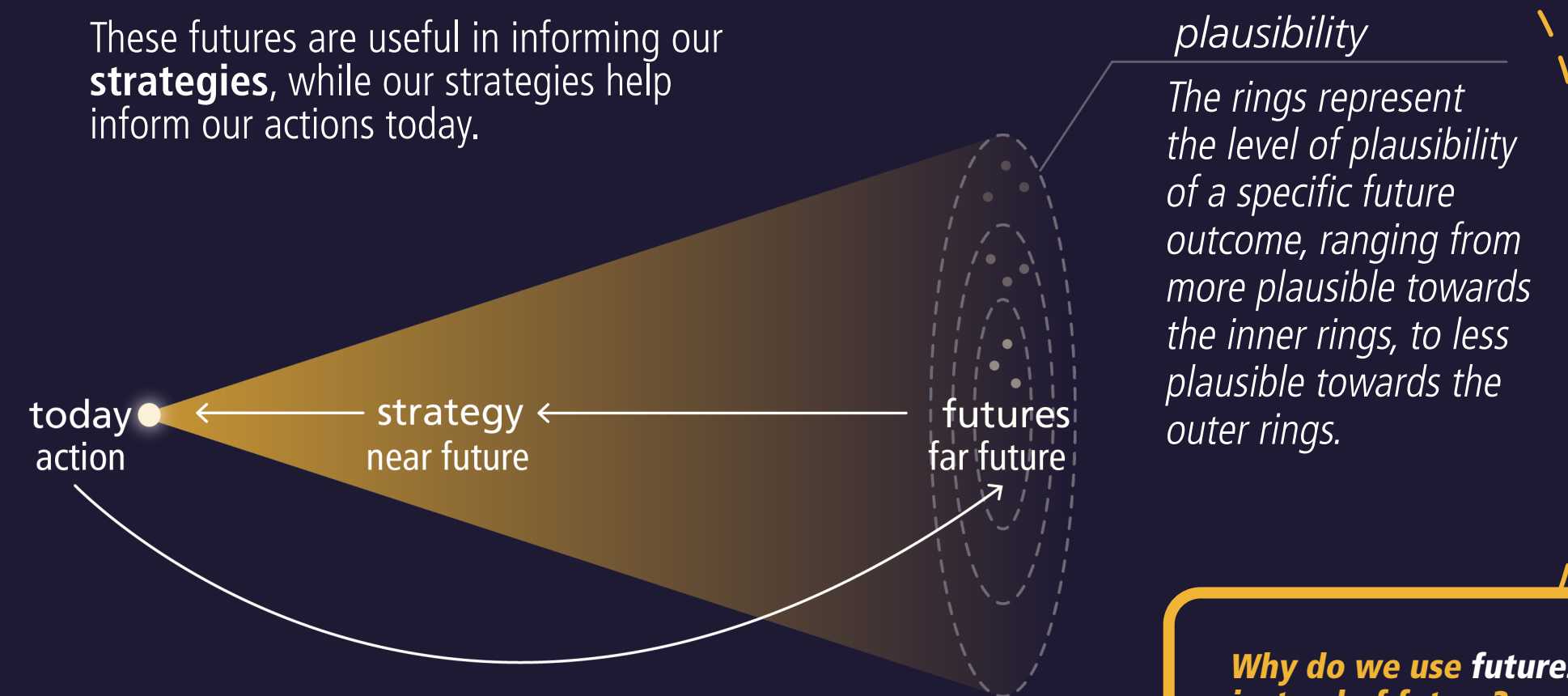
### How do I use this *Foresight Report*?

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 2027 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.

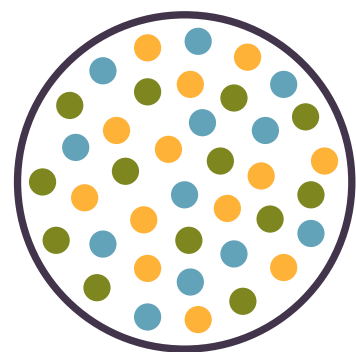


Adapted from [Joseph Voros, The Futures Cone](#)

### Why do we use futures instead of future?

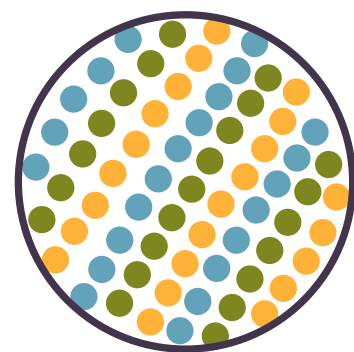
In foresight practice, we refer to the future in plural. As we cannot predict the future, there is no definite image or vision of it. Thus, the future will always be an infinite range of possible outcomes rather than a single destination.

## This report explores designing education for the future 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.



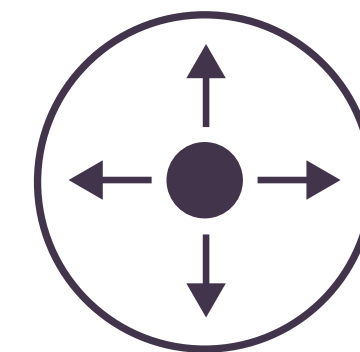
### Trends

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.



### Scenarios

Scenarios are stories that illustrate possible futures by using trends as the basis for the story. Scenarios in this report are set in 2033.

## FURTHER READING

Find each element in this report by locating the icon.

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



# Designing for a Shifting Educational Landscape

As we navigate a post-pandemic society, we face shifting landscapes ever-changed by our collective experiences over the past few years. This brave new world poses challenges, but also offers the opportunity to rebuild better. This report explores how postsecondary institutions might consider emerging trends of today to inform the design of learning content, tools, and supports for the future. Considering the who, why, and how of educational design, four trends stand out as having strong possible implications for the future. These trends discuss the growing disconnections between learners and educators, the shift towards social innovation, and the impacts of advanced and integrated technologies. While the effects of these trends can't be fully known, this report offers possible scenarios to envision four unique potential outcomes. We encourage you to continue the conversation and imagine how your institution might approach the design of education for the future.

## Overarching forces affecting the design of education

### Digital Transformation

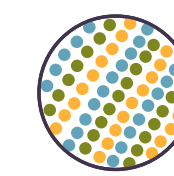
Digital transformation, the intersection of technology, business, and society, has fundamentally changed many parts of our economy, society, and physical world. This transformation is ongoing and can be expected to continue to affect most future plans.

### Industrial Revolution 5.0

Industrial Revolution 5.0 builds on the steam, electricity, and automation of earlier revolutions. It is driven by AI, robotics, and blockchain to revolutionize how we live, work, and learn. Focus shifts to human-centered needs and values, meaningful work, social responsibility, and environmental sustainability.

### Climate Crisis

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.



## Trends impacting the design of education

### Evolving Expectations

The lived experience of diverse learners is changing the expectations of the roles of learners and educators in postsecondary education.

### Education for Social Innovation

Postsecondary institutions are expanding their capacity to act as innovation hubs that prepare graduates to be agents of positive social change.

### Web3 Supports Decentralized Learning

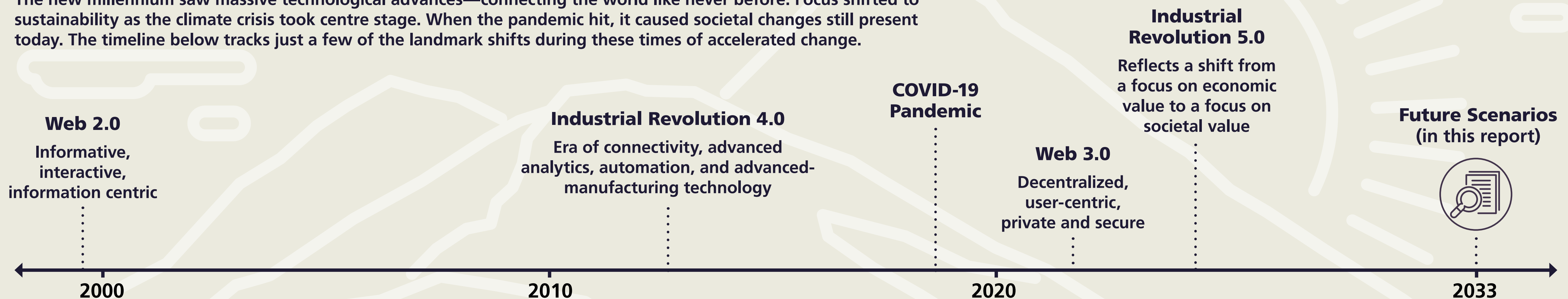
Web 3.0 brings decentralized platforms, like blockchain technologies and peer-to-peer networks, holding the potential for increased equity in access.

### Embracing Generative AI in Education

A new category of artificial intelligence, generative AI, has the potential to disrupt academia as a dynamic and responsive tool for both learners and educators.

## The Shifting Landscape

The new millennium saw massive technological advances—connecting the world like never before. Focus shifted to sustainability as the climate crisis took centre stage. When the pandemic hit, it caused societal changes still present today. The timeline below tracks just a few of the landmark shifts during these times of accelerated change.



### FURTHER READING

1 [Industry 5.0](#)

European Commission

2 [What Is Industry 5.0 And How It Will Radically Change Your Business Strategy?](#)

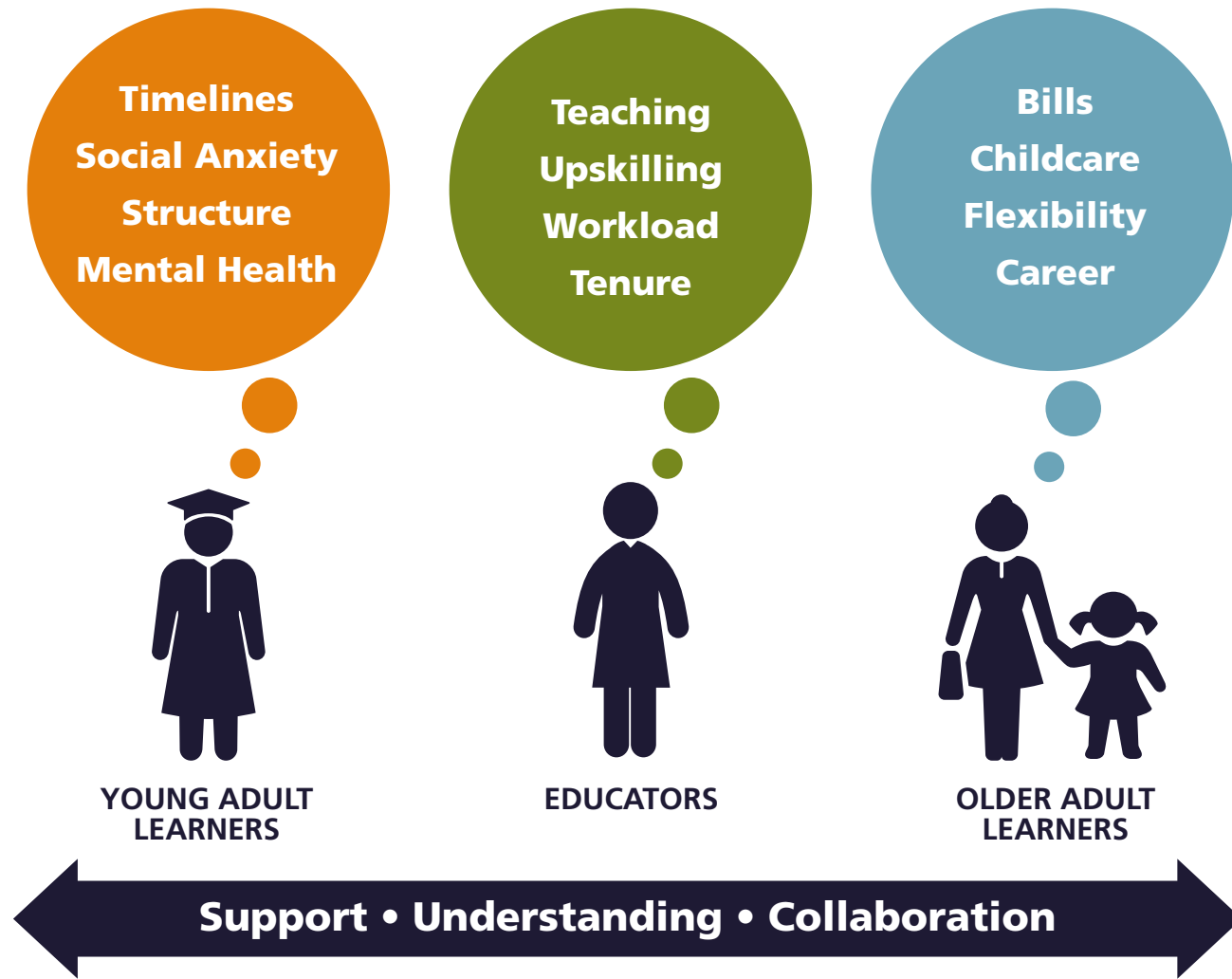
Forbes

3 [Digital rights management in the open seas of blockchain systems](#)

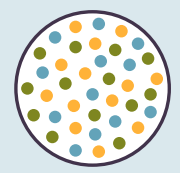
Cointelegraph



## TREND: Evolving Expectations



Today's learners have diverse lived experiences, and this is changing the expectations of the role of learner and educator in higher education. Young adults accustomed to a style of learning adopted during the pandemic are struggling to adapt to a traditional formula of teaching and assessment. Meanwhile, a growing number of older adult learners are entering a system that is often under-equipped to recognize and support their unique perspectives. Learners and educators alike are left disconnected and disheartened. While there's been more focus on mental health and meeting learners where they are, a larger shift is needed in curriculum and culture to better align the experience and expectations of learners and educators.



### Signals: What are we seeing that supports this trend?

- [Post-pandemic young learners](#) find it difficult to function in a pre-pandemic educational structure.
- Educators struggle to reach young adult learners [experiencing high levels of disconnection](#).
- [Missed milestones](#), due to the pandemic, may affect mental health in teens and have longer range impacts.
- [Shifting demographics](#) find adult learners and educators misaligned.
- [Mental health issues are on the rise](#), calling for an integrated approach supported by educators.



### Possible Implications: Where could this lead?

How might postsecondary institutions collaborate with today's learners to help reimagine programming to best support them now and in the future?

How might your higher education institution introduce and integrate new ways of doing and thinking to better support the evolving needs of learners?

How will institutions and educators engage a diverse learner group in designing their education?

#### FURTHER READING

1

[Adapting by Design](#)

Adrianna Kezar and Daniel Maxey

2

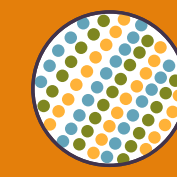
[Building the Future of Education](#)

Organisation for Economic Cooperation and Development (OECD)

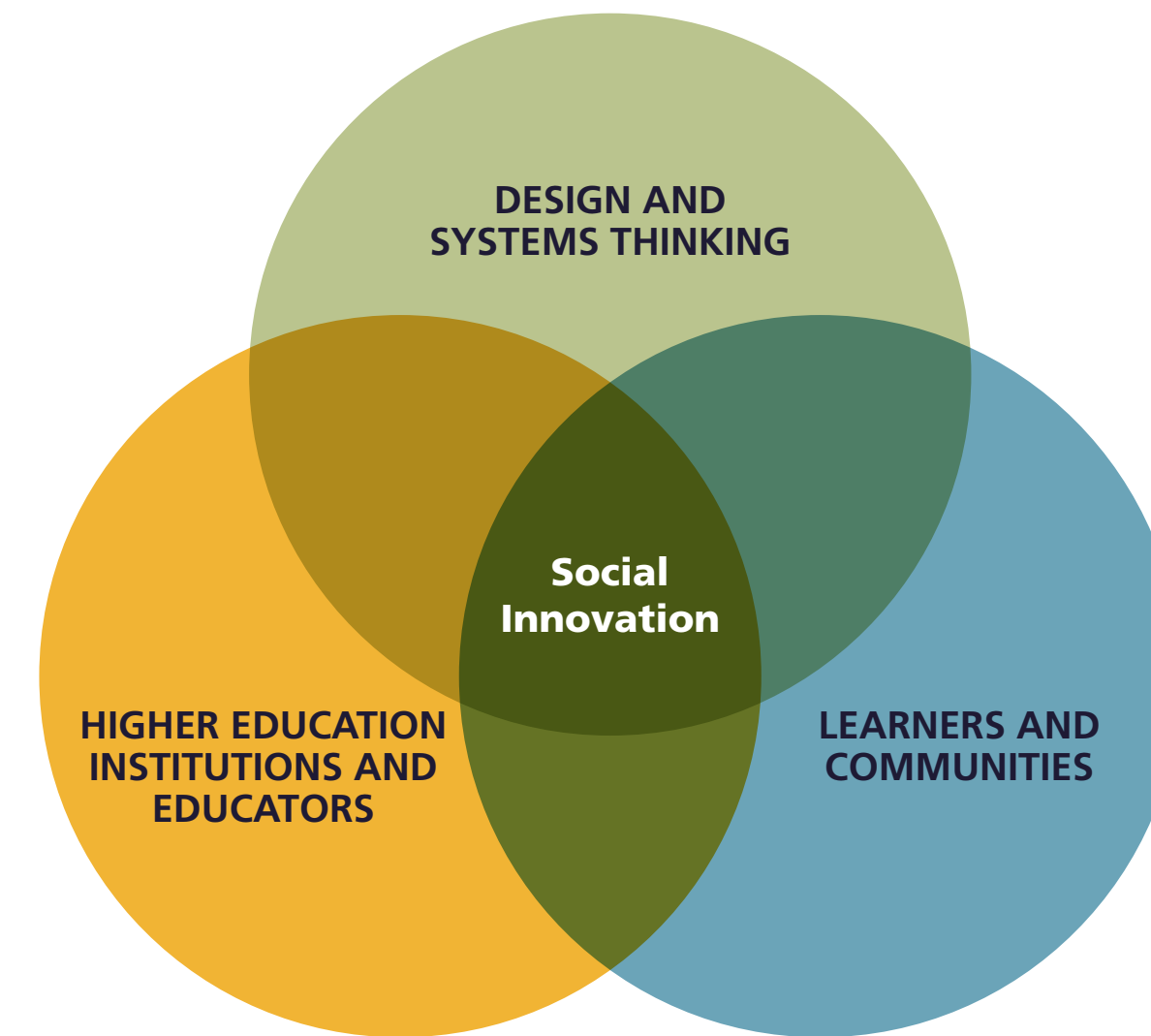
3

[The Future Of Learning Is Radically Decentralized: What's Next For Higher Education?](#)

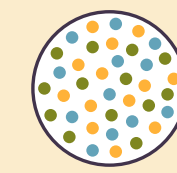
Forbes



## TREND: Education for Social Innovation



Postsecondary institutions are expanding their capacity to act as innovation hubs that prepare graduates to be agents of positive social change. To do this, educators and institutions are adopting design and systems thinking approaches. Educators can use foresight methods to help build more equitable futures for and with students. Human-centred design approaches offer institutions a way to ensure that new solutions are appropriate and impactful for their communities. Increasing social innovation approaches across education fields may have farther reaching impacts on resilience and sustainability.



### Signals: What are we seeing that supports this trend?

- CQ University in Australia is [embedding social innovation](#) in curriculum.
- Mexico's innovative [Tec21 model](#) prepares graduates to respond to the [global needs of the 21st century](#).
- Higher education institutions can help Canada "build back better" by serving as [gateways to the innovation ecosystem](#).
- [Educators and learners can use futures thinking](#) to envision and build more equitable futures.
- Human-centred design can help institutions better [meet the needs of their community](#).



### Possible Implications: Where could this lead?

What is required to restructure traditional higher education institutions to adopt more innovative models?

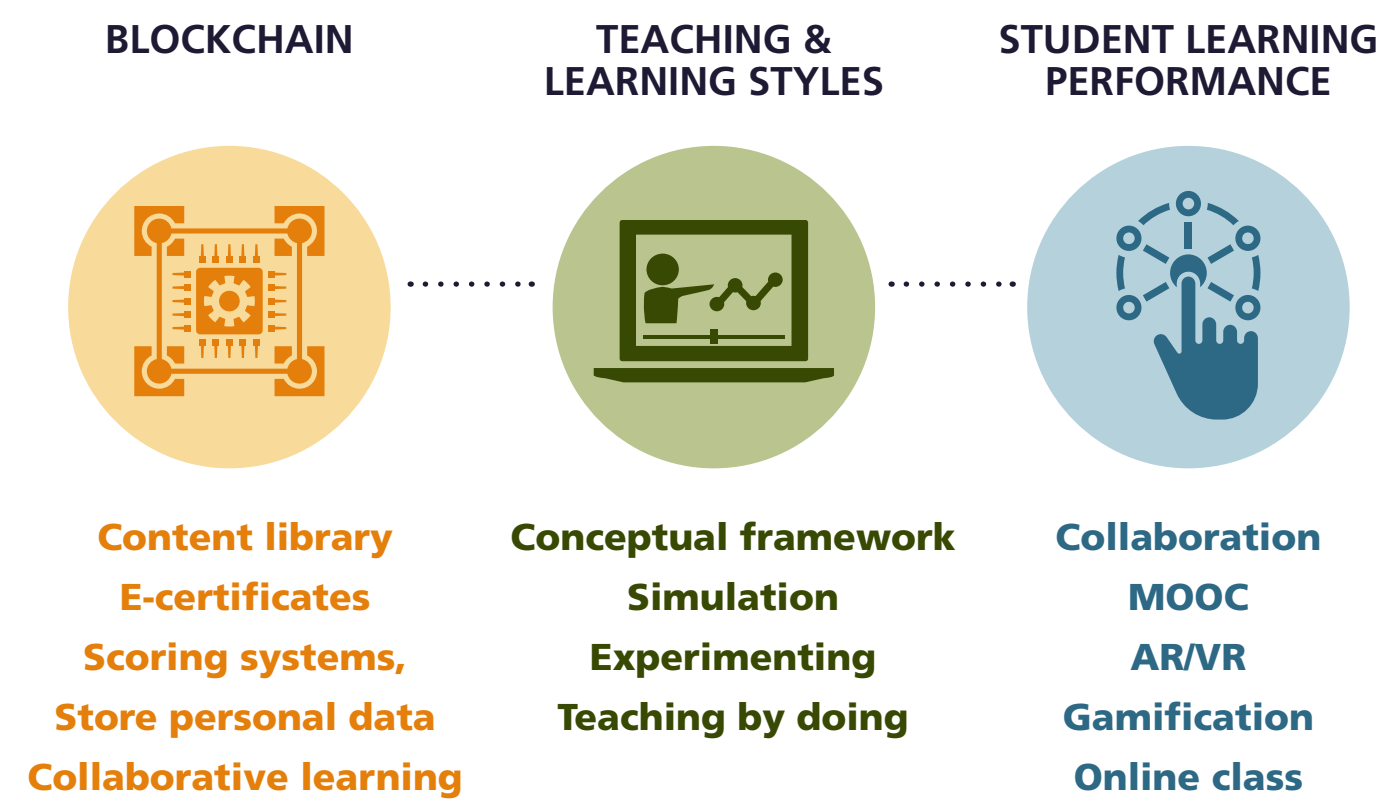
Who's deciding what social values receive the most focus? How might you consider equity in the innovation equation?

How might funding structures need to change to better facilitate social innovation initiatives by higher education institutions?

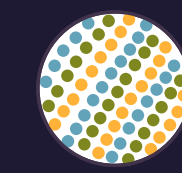




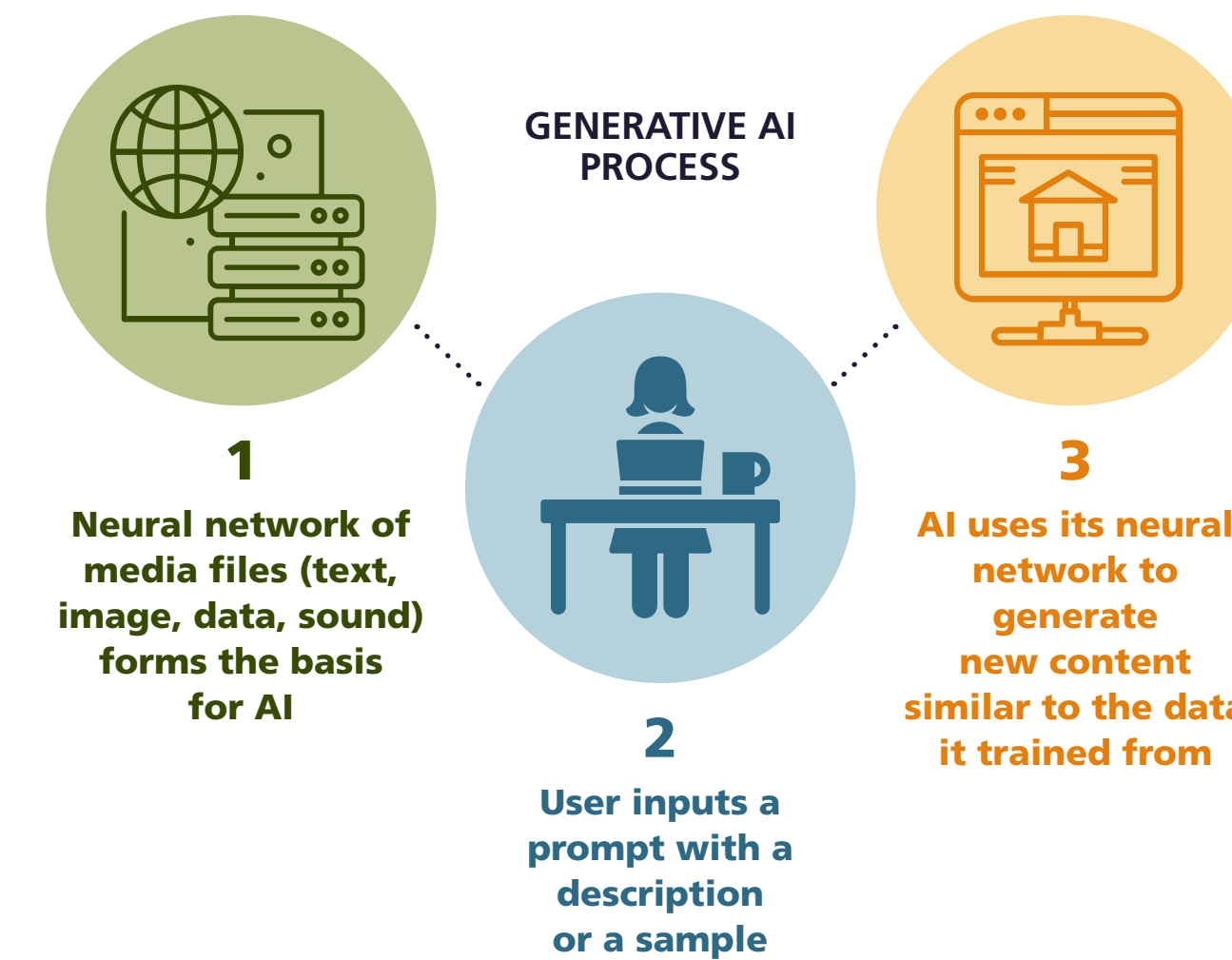
## TREND: Web3 Supports Decentralized Learning



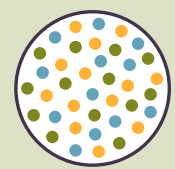
The third generation of the internet, Web 3.0, brings decentralized platforms such as blockchain technologies and peer-to-peer networks. Blockchain-based digital credentials can provide a more secure and trustworthy way to store and share academic records and transcripts—better facilitating international study, lifelong learning, and upskilling. Web3 brings the possibility of educational Decentralized Autonomous Organizations (DOAs), enabling hierarchy-free online work teams and peer-delivered and validated education. While the evidence is emergent, Web3 has the potential to democratize access to education due to its decentralized nature.



## TREND: Embracing Generative AI in Education

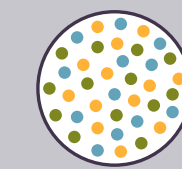


Generative AI, a new category of artificial intelligence that uses algorithms to create new text, images, and audio content, has the potential to disrupt academia as a dynamic tool for both learners and educators. The broad influence of generative AI could promote a shift from rote learning to in-person, project-based evaluation and experiential learning methodologies. There is the possibility of generative AI assisting with learning disabilities. However, there is concern that educators will be reluctant to change, possibly due to the technology's current problems with bias, and miss the opportunities presented by generative AI.



### Signals: What are we seeing that supports this trend?

- [Universities are using blockchain](#) to securely store student records (transcripts, grades, etc.) with controlled access.
- The [European Blockchain Partnership](#) seeks ways to leverage blockchain for cross-border academic credentialing, thereby better supporting international study.
- [Crypto, Culture, and Society](#), a crowdfunded DAO, is exploring how cryptocurrency impacts culture and society.
- Blockchain Education Network (BEN) is supporting [blockchain education worldwide](#) as an all-in-one online education portal for blockchain basics, trading cryptocurrency, music NFTs, and the metaverse.
- University of Nicosia in Cyprus offers the world's first Master's Degree in Blockchain and Digital Currency and issues [blockchain-based digital graduate certificates](#).



### Signals: What are we seeing that supports this trend?

- Generative AI chatbots such as ChatGPT have [broad implications](#) for higher education but there are concerns higher education will [miss the opportunity](#).
- Educators are encouraged to [move away from rote learning](#) to in-person evaluation.
- Generative AI has the potential to support [learning disabilities](#), particularly disabilities related to difficulties concentrating.
- Generative AI [supports a shift](#) towards more student-centred and experiential learning methodologies.
- [We Count \(IRDC at OCADU\)](#) is a community-driven project that aims to remove bias and exclusion in the data economy.

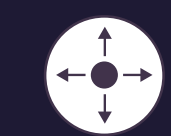


### Possible Implications: Where could this lead?

How might Web3 democratize higher education?

How might Web3 guide educators and learners in reducing their carbon footprint?

How might Web3 reduce the cost of education and increase the availability of high-quality education for all learners worldwide?



### Possible Implications: Where could this lead?

How might higher education institutions address bias in generative AI?

How might higher education institutions leverage generative AI to amplify social well-being and environmental sustainability?

How might generative AI facilitate transdisciplinary collaboration?

### FURTHER READING

1

[How OpenAI CTO Mira Murati became one of tech's most influential innovators](#)

Fast Company

2

[Blockchain education: challenging the long-standing model of academic institutions](#)

International Journal on Interactive Design and Manufacturing

3

[The Potential of Blockchain Technology in Higher Education as Perceived by Students in Serbia, Romania, and Portugal](#)

Sustainability



# Future Scenarios: Setting the Stage

To better understand how emerging trends might influence the design of education in the future, we developed four unique scenarios situated in 2033. Each includes elements of all the trends discussed in the context of the shifting educational landscape. We applied Dator's Four Futures to consider the future from different perspectives.

To understand the future in the context of the trends we asked:

What will evolving expectations in education mean for learners and educators in the future?

How will education for social innovation impact the future?

How will Web3 be present in education in the future?

How will generative AI shape education in the future?



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)

## Scenario Building Tool: Dator's Four Futures

[Jim Dator](#), Professor Emeritus and Director of the Hawaii Futures Studies Research Center, has formulated the most common ways we imagine the future based on his research. He clarifies, however, that the future cannot be precisely predicted and that it depends on our decisions and actions.

To help envision unique scenarios of potential futures, we applied [Dator's Four Futures](#) and developed worlds that represent a situation of discipline, transformation, collapse, and growth. The four scenarios on the next page, explore the potential impacts of our trends in the context of the ever-shifting educational landscape.



How might you and your team envision the design of education in the future in terms of Dator's Four categories?

What might the scenarios look like for your institution?

### Discipline

New forms of restraint and control are imposed on the present order to prevent collapse.

### Transformation

Entirely new systems and ways of being are found; we transcend the present order.

### Collapse

Our current trajectory comes to a sudden halt. Our systems and ways of being fall apart.

### Growth

The systems and ways of being continue along their current trajectory.





# Future Scenarios: Telling the Story

The descriptions below are crafted by applying Dator's Four Futures categories to the trends identified. Quotes from fictional future people living in the year 2033 allow us to imagine what these possible futures might look like for the design of education.

## SCENARIO 1

### What if the unbridled growth and consumption of today ceased?

- ▶ A future focused on community-driven learning, where the advancement of technology has slowed, and interests have shifted to social sustainability.

“ I think what I enjoyed most about the process of participating in the Colleges for Communities challenge was seeing the joy on both the seniors’ and the students' faces as they workshopped together. Not only were students able to showcase the skills learned in the Systems and Society program, but they were also able to learn from the unique lived experiences of the folks in the workshop. I look forward to sharing the results of our work on the Open Colleges Campus, where a free workshop toolkit will be available.

— *Ogijibani’okwe Songetay, Knowledge Leader at the Institute for Social Innovation*

## SCENARIO 2

### What if systems were radically reconstructed because of technology?

- ▶ A future focused on innovation and equity, where technologies and social sustainability are integrated and advanced.

“ The 'My Learning Place' platform really allows me to personalize my postsecondary journey. Since I often work asynchronously, I love the integrated AI tutor that's always available to answer my questions. I'm currently living in India but plan to move to Canada, so it's been reassuring to know that my blockchain-backed credentials are secure and transferable. It's also been great collaborating with my classmates who are spread out worldwide—their unique perspectives have been so valuable.

— *Raj Ahuja, Student in the Societal Health Development Program*

## SCENARIO 3

### What if our current systems, as we know them, collapsed?

- ▶ A future with outdated and limiting systems, where technology and social sustainability have not advanced and are in decline.

“ Government funding cuts have really affected the delivery of education and unfortunately, we've seen a lot of experienced educators leave the sector. With private donors also decreasing we've been forced to increase tuition and cut funding to our mental health supports. Many of our students have expressed frustration that they are expected to pay such a high premium without any guarantee their degrees will land them a job after graduation.

— *Chun Zhang, Dean of Education at College of Winchestertonfieldville*

## SCENARIO 4

### What if things remained on the current trajectory?

- ▶ A future driven by efficiency and enabled by technology, where advanced technological integration is the focus at the expense of social sustainability.

“ We're proud to say that much of our curriculum is powered by AI generated by our proprietary software, we can deliver our 'Skillup Now' program to more than 200,000 job seekers without them ever needing to attend a long lecture class delivered by a professor. I know some have argued that the quality of education is not on par with that of universities, but to them I say "Who cares!"

— *Tucker Scott, CEO of SkillUp-PayUp*



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