médiations & médiatisations
Revue internationale sur le numérique en éducation et communication

Imagining the Future of Higher Education: Designing an OER Workshop for Futures Thinking and AI Integration

https://doi.org/10.52358/mm.vi23.499

Iris Elliott, Foresight & Research Associate
eCampusOntario, Canada
ielliott@ecampusontario.ca

Edition and translation:
Cécile Figuière, OER, Digital Learning Associate
eCampusOntario, Canada
cfiguiere@ecampusontario.ca

ABSTRACT

This article presents a workshop and its facilitation guide in the form of an Open Educational Resource (OER), aimed at exploring the future of Higher Education through the integration of foresight thinking and generative AI (GenAI). The workshop, designed for the postsecondary ecosystem, is intended for all its members. It uses the “Futures Wheel” method to guide participants in collaboratively identifying upcoming trends and signals of change and imagining their direct and indirect repercussions. Working in small groups and with the help of generative AI tools, participants will create, reflect on, and respond to possible futures.

Keywords: higher education, generative AI, open educational resources, futures thinking, future of education, reflective pedagogy, Futures Wheel method, scenario workshop

Introduction

Higher education is undergoing profound transformation, shaped by challenges such as accessibility, funding constraints, evolving labor market demands, and the rapid advancement of artificial intelligence (AI). These forces are reshaping how institutions operate, how faculty teach and research, and how students prepare for rapidly evolving futures. In this context, educators are increasingly called upon to not only respond to change but to anticipate and shape it. Open Educational Resources (OER) offer a powerful means of doing this, by providing an adaptable accessible tool for educators and learners to engage with challenges and opportunities.

This article presents the rationale and pedagogical design behind an OER created to support a workshop on how the futures of higher education might be affected by AI, all while using a Generative Pre-trained Transformer (GPT) to help compress the lesson. However, this OER could be adapted for use in fields other than education with slight tweaks to the prompt.

The workshop integrates the Futures Wheel method, a structured brainstorming method that helps participants explore the cascading effects of potential changes by imagining direct and subsequent impacts, with generative AI tools to help participants imagine, reflect on, and respond to possible futures.

The article unfolds in several parts: it begins by examining the current state of AI in higher education and the need for intentional integration. It then explores the challenges of futures thinking, and how storytelling can support agency and engagement. The article goes on to describe the pedagogical design of the workshop, the structure of a fill-in-the-blank scenario prompt, and the role of the OER in facilitating this learning experience.

The Current State of AI in Higher Education

AI is evolving at a lightning-fast pace. In popular discourse, it is often framed as both a revolutionary tool and a disruptive threat, with early hype centered on warnings like “AI is coming for your job!” While such predictions have not fully materialized, the narrative has shifted toward a more strategic tone: “you won’t be replaced by AI, but by someone who knows how to use it” (Mollick, 2025). Yet despite this shift, uncertainty remains. This uncertainty can lead to reactive or superficial uses of AI, rather than thoughtful, strategic integration (Elish, 2019), such as usage of a plagiarism detection tool, without consideration of how a pre-AI assignment could be modified to achieve pedagogical outcomes that best match the learner’s needs.

The rapid pace of development, combined with the lack of unified pedagogical guidance (Nguyen *et al.*, 2025**,** UNESCO, 2023), reveals a deeper truth: even the companies building these tools cannot fully predict how they will reshape education (Muñoz de Luna et Martín Gómez, 2025; Knight, 2024). This is not just a technological issue, it is a futures thinking challenge. In this context, there is power in observing, and in choosing to engage with generative AI intentionally, not out of fear of being left behind or exclusively because of funding dynamics, but with a clear understanding of one’s goals, values, and processes.

Promising practices are beginning to emerge. Educators and researchers are developing frameworks for prompt design, AI literacy, and process mapping that help users understand when and how to collaborate with AI tools (Park, 2025; Lee & Palmer, 2025). These practices emphasize the importance of slowing down, analyzing one’s workflow, and identifying meaningful touchpoints for AI augmentation. This article builds on that foundation, offering a structured process for integrating AI into a futures thinking activity that is both reflective and creative.

Why Futures Thinking Is Challenging, and Why Storytelling Helps

Despite the abundance of futuristic imagery in media and culture, thinking about the future is cognitively and emotionally difficult. As Tennent (2023) explores, one of the key reasons people struggle with futures thinking is that the future often feels abstract, disconnected, or impersonal. This distance can make it difficult to imagine oneself in a future scenario, which in turn limits a sense of agency or motivation to shape what comes next. Tennent suggests that this challenge is not simply a matter of imagination, but of emotional and cognitive accessibility, people need tools and practices that help them connect with the future in ways that feel meaningful and grounded.

Storytelling offers a powerful way to bridge this gap. Jouvenel (1999) emphasizes that prospective scenario-making makes the future more concrete and motivating for participants. When individuals are invited to imagine themselves in a narrative, especially one that includes personal or relatable details, they are more likely to engage emotionally, make connections, and retain information (Kloetzer & Kloetzer, 2025). Storytelling can also enhance a sense of agency. It acts as a “mirror, map, and catalyst,” helping individuals align imagined futures with their values and take action in the present (Absentofi, 2025). These narrative practices are not only more enjoyable but also increase the impact of the story, supporting memory, meaning-making, and motivation.

The method we use to scaffold futures thinking is the Futures Wheel, a structured brainstorming tool developed by Jerome C. Glenn in the early 1970s (eCampusOntario, 2022, p. 6). Using the Futures Wheel starts with identifying a signal, which is a small, observable change in the present that may indicate a larger shift in the future. This foresight approach, is also described by Godet (2007), emphasizes the importance of structuring reflection on possible futures based on weak signals and cascading impacts. Signals can be technological innovations, emerging social behaviors, policy shifts, or cultural trends. By starting with a signal, participants create “spokes” by brainstorming first-order impacts (direct consequences), and then second-order impacts (indirect consequences), and so on. This process helps visualize how a single change might ripple outward, revealing complex and interconnected possibilities. It also encourages participants to think beyond immediate reactions and consider long-term implications and connections they might not otherwise consider (Glenn, 2009).

While the Futures Wheel is effective for generating insights and surfacing implications, its impact can be deepened by making the impact pathways into a narrative or scenario. Participants will use the insights from their Futures Wheel to co-create a “day in the life” story, that places a fictional character within the future they’ve imagined. This step adds emotional resonance and personal relevance, helping participants not only understand the future but feel it, making it easier for participants to reflect on whether the future is desirable and what steps might be taken to move toward or away from it.

Why Use an OER?

This facilitation guide is structured as an Open Educational Resource (OER). OERs are a powerful response to the rising costs and accessibility challenges in higher education and in the field of planning AI processes. OER provide free, high-quality learning materials that reduce financial barriers for students. OERs are also clearly licensed and easily adaptable, making them ideal for emerging fields like AI and futures thinking, where materials must evolve rapidly and reflect diverse perspectives (Hilton, 2016). Publishing this facilitation guide as an OER ensures that others can adopt, adapt, and build upon the work, extending its potential impact. The facilitation guide will be openly licenced under a Creative Commons Attribution (CC BY) licence, allowing others to freely use, adapt, and redistribute the materials with appropriate credit for additional institutional or cultural contexts.

Workshop Creation

This workshop was created to help develop skills in future thinking that increase feelings of agency at a time when so much in higher education, and the world more broadly, feels uncertain. The intended audience is faculty, administrators, and students and requires no prior experience, just an interest in practicing thinking about the future, and a willingness to ideate, reflect and share together. The workshop is designed to support learners as they imagine the impacts of signals of change into the future and evaluate speculative futures. The entire process is reflective, not only in terms of content but also in its structure: it serves as a model for how to map out a process and critically assess the role of AI within it. Furthermore, through AI, it allows participants to accelerate and deepen their thinking in a timeframe of the 90-minute session.

The workshop unfolds in four parts, each building on the last to scaffold futures thinking, collaborative analysis, and creative scenario development. It begins with orientation and warm-up activities, moves into structured foresight using the Futures Wheel, transitions into speculative storytelling through a fill-in-the-blank prompt (where the blanks are the [...] areas within the italicized text within the *Facilitation Guide Part 2: Futures Wheel Activity* section of this article), and concludes with reflection and strategic response.

Facilitation Guide

PART 1: WELCOME, ORIENTATION & WARM-UP (10 MIN)

The workshop opens with a brief overview of the workshop's goals and structure. Participants are introduced to the core concepts of futures thinking and the Futures Wheel method. Depending on the group, facilitators may also open a discussion about the role of AI in educational and professional processes, inviting participants to share their current experiences or questions.

To ease participants into the mindset of foresight, a warm-up activity is suggested. This might involve a more scholarly futures learning focussed activity like reviewing a board of signals and themes and selecting a light one to extrapolate together.

Or another example to try and increase the ease with which participants share with each other might be filling out a short fill-in-the-blanks exercise together. This is suggested because it mimics the pattern that the participants will follow during the futures thinking part of the workshop, it can create something that is a soft entry into working together, lowering the bar for performance, and making initial success easy.

A potential fill-in-the-blanks sentence could be: The [a NOUN linked to education] of tomorrow will [a VERB linked to teaching or learning] in a [an ADVERB] manner, using [a TECHNOLOGY either real or imaginary] in [a PLACE]. With the facilitator asking for ideas for each of the word types in turn and then reading back the sentence with the words implemented.

The goal of the warm-up is to activate creative thinking and reduce the pressure of "getting it right," reinforcing that futures thinking is exploratory and imaginative.

PART 2: FUTURES WHEEL ACTIVITY (35 MIN)

Participants are then grouped by topic area of interest (such as: Research, Innovation & Public-Private Partnerships, Work-Integrated Learning, or Professional Development) and remain in these groups throughout the activity. Each group begins by reviewing a set of pre-identified signals of change and is encouraged to brainstorm additional ones based on their own experiences or observations.

In these topic-based groups, participants are introduced to the structure and purpose of the Futures Wheel and guided through its step-by-step process. A curated set of signals of change is provided for each theme, and participants are invited to select one or more signals to explore further. The fill-in-the-blank prompt template includes dedicated sections for each group to record their chosen signal, along with the first order and second order impacts they identify through discussion. As the groups work together to map these ripple effects, they begin to build a shared understanding of how small shifts might lead to larger systemic transformations.

Once the second-order impacts have been explored, the idea of collaborating with generative AI is reintroduced. At this point, participants are shown a structured prompt designed to synthesize their Futures Wheel insights into a narrative scenario. The prompt reads:

Hi Gen AI, please create the following for me.

I am interested in exploring the following topic in higher education: [insert or describe topic area of interest].

I am exploring this topic in a workshop where we are using the Futures Wheel methodology by J.C. Glenn to extrapolate first- and second-order impacts from signals of change about this topic. I want to share the signals of change I am interested in, as well as the impacts that we imagine might happen in the future as a result.

Collected Futures Wheel Ideation *(to be filled during impact discussions in Part 1 & 2 and copied and pasted here)*		
Signal 1	*Title and website and/or Description:*	
	First Order Impact Details (First Future Wheel Rotation):	
	Second Order Impacts Details (Second Future Wheel Rotation):	
Signal 2	*Title and website and/or Description:*	
	First Order Impact Details (First Future Wheel Rotation):	
	Second Order Impacts Details (Second Future Wheel Rotation):	
Signal x…	*…*	

With this topic and the extrapolated signals, I would like you to imagine what higher education might look like in a world in 2045, and then create the following output:

Please create a 200–250-word scenario about the day in the life of a person in this world.

The details of this person are as follows:

They live in: [location]

They work at the following invented institution: [institution name];

Their name is [name];

Their role in 2025 is: [role] (Gen AI, please extrapolate what their role might be in 2045 based on the skills and interests that this job entails today);

And some boring facts about this person are (e.g., "They regularly lose connection with their refrigerator and can't get their lunch out due to rotating internet outages and poor refrigerator design" or "They prefer their insect ration lightly grilled and without added probiotics"): [boring facts].

Please synthesize these persona details into the future and return the requested scenario to me.

Before submitting this prompt to the AI, each group collaborates to define the persona details they want to include. This step reinforces the connection between the systemic changes mapped in the Futures Wheel and the lived experiences of individuals in the imagined future. It also ensures that the AI-generated scenario is grounded in the group's foresight work, while allowing space for creativity and personalization.

When the prompt is completely filled out, it is copied and pasted into a generative AI, and a scenario meeting those parameters should be returned promptly.

PART 3: SCENARIO REFLECTION & STRATEGIC RESPONSE (20 MIN)

After receiving their scenarios from the generative AI, groups read and discuss their stories. They reflect on whether the future described is desirable, and how it addresses or exacerbates systemic issues in higher education that they were exploring. If in initial reading it does not resonate, they are welcome to tweak the prompt and send it through the generative AI again.

Once the group has explored the implications of the scenario, they are invited to name the world they've co-imagined (Harb, 2023). This naming exercise helps crystallize the emotional tone and thematic essence of the scenario. It also encourages participants to summarize their reflections in a way that is memorable and meaningful.

The final step involves identifying the tools, partnerships, and system changes that would be needed to either embrace the desirable aspects of the future or mitigate the undesirable ones. This step bridges speculation with strategy, encouraging participants to think about real-world levers for change and imagine the next steps they could take. At this point questions about whether this is a good use of AI might be discussed, or reflection on AI literacy such as: How did the AI perform this extrapolation? Do the responses seem to follow certain clichés or stereotypes? How might these scenarios differ if participants had imagined themselves?

With all this group work complete the workshop reconvenes and each group is invited to share a brief summary of their experience with the larger group.

An example might look like the following:

> *A group co-creates a scenario exploring the issue of "AI tutors' impact on higher education." The story describes a future where students interact mostly with AI systems, and faculty roles shift toward oversight and content curation.*
>
> *The group discusses:*
>
> *Desirability: Some participants appreciate the increased personalization and accessibility. Others worry about the loss of human mentorship and the erosion of academic labor.*
>
> *Systemic issues: They note that while AI may reduce barriers for some students, it could deepen divides for others, especially those who benefit from relational learning or need accommodations not easily modeled by AI.*
>
> *Naming: Three names are proposed:*
>
> *"The Guided Path" emphasizing personalized learning and mentorship.*
> *"The Hollow Campus" highlighting the loss of human connection and physical presence.*
> *"Learning in the Loop" suggesting a hybrid model of AI and human collaboration.*
>
> *After this reflection, the group chooses to name their scenario "The Hollow Campus" as they feel the name captures their concern about the diminishing presence of human connection and community in higher education.*
>
> *Then they think about potential strategic actions that could be taken based on their experience to mitigating the harms and amplify the benefits: Some brainstormed ideas might be Investing in hybrid models that combine AI with human mentorship, creating policies to protect faculty roles and student agency, or partnering with accessibility experts to ensure inclusive design*
>
> *When they return to the roundtable, they share:*
>
> *A summary of the scenario, why they chose the name, their collective stance that this is a future they would want to avoid, unless significant safeguards and human-centered design principles are put in place, and a single next step they might take.*

PART 4: WRAP-UP (15 MIN)

The workshop concludes with a rapid-fire round in which each group shares one key insight or takeaway. This closing activity reinforces collective learning and highlights the diversity of perspectives in the room. If time allows, facilitators may also lead a final discussion about the experience of using futures thinking and AI together, inviting feedback and reflections on the process.

The OER: Structure and Purpose

The OER consists of a PDF facilitation guide and a prompt template that houses the interactive components of the workshop. It includes sector questions, signals of change, Futures Wheel templates, fill-in-the-blanks prompts, AI integration guidance, and reflection prompts. The aesthetic design is inspired by The Thing from the Future: AI Edition (eCampusOntario, 2025), a game-based foresight tool that encourages imaginative play and structured speculation. The OER will be published and openly licensed in the eCampusOntario Open Library (eCampusOntario, n.d.) in the Spring of 2026 and is intended to be adaptable, accessible, and easy to remix for different contexts.

Discussion and Implications

This workshop demonstrates how AI can be used not just as a tool for automation, but as a partner in learning and imagination. By simplifying complex tasks like scenario writing, AI allows participants to focus on one part of the imagining part of futures thinking: identifying impacts, making connections, and reflecting on implications instead of trying to create a catching story and refined scenario.

The integration of AI also prompts important questions about when and how to use technology in learning. Educators must consider not only what AI can do, but what learners need to do themselves in order to grow. This workshop offers a model for balancing automation with agency.

Conclusion

As higher education navigates this era of rapid change, futures thinking and AI offer powerful tools for exploration and adaptation. This OER-based workshop provides a structured, accessible way for learners to engage with both, imagining futures they can inhabit and reflecting on the technologies that shape them. Future iterations of this OER or workshop could explore different location for implementation of the AI tool such as with use of a Futures Wheel Explorer agent (designfictiondaily, 2025) or the differences between scenarios created by different generative AI models to help shape educational practice over time.

Rather than promising mastery of complex skills in a single session, the workshop creates space for participants to practice a critical first step in foresight: not looking for the “right answers” and exploring plausible futures through small, focused steps. By following the process for creating prompts and considering how signals might evolve, workshop participants gain a practical methodology they can adapt to their own contexts. Generative AI accelerates this by transforming insights into narrative scenarios, adding surprise and resonance that encourage continued engagement, or might even motivate participants to try the scenario generation process independently.

By combining foresight, generative AI, and reflective pedagogy, the workshop invites participants to feel more agency and become co-creators of the future, rather than passive recipients of change.

References

Absentofi. (2025). *The Long Journey Home – Envisioning the Future: Storytelling as a Mirror, Map, and Catalyst.* https://absentofi.org/...

de Jouvenel, H. de. (1999). La démarche prospective: Un bref guide méthodologique. *Futuribles, (247), 5–24.* https://www.researchgate.net/publication/44829851_La_Demarche_prospective_un_bref_guide_methodologique

Designfictiondaily. (2025). *Futures Wheel Explorer.* [large language model]. https://chatgpt.com/g/g-jZEOQRjgb-futures-wheel-explorer

eCampusOntario. (2022). *Ubiquitous Learning: From Anywhere, At Anytime.* https://ecampusontario.ca/wp-content/uploads/2022/11/Ubiquitous-Learning_04_EN_20221117_Tagged_Fixed.pdf

eCampusOntario. (2025). *Artificial Intelligence Edition– The Things from the Future of Higher Education* [Game]. https://ecampusontario.ca/...

eCampusOntario. (n.d.).Open Library. https://openlibrary.ecampusontario.ca/

Elish, M. C. (2019). Moral Crumple Zones: Cautionary Tales in Human-Robot Interaction. *Engaging Science, Technology, and Society*, 5, 40–60. https://doi.org/10.17351/ests2019.260

Glenn, J. C. (2020, February 6). *The futures wheel - the millennium project.* The Millennium Project. https://www.researchgate.net/publication/349335014_THE_FUTURES_WHEEL

Godet, M. (2007). *Manuel de prospective stratégique.* Paris: Dunod. https://larepublicadeloslibros.wordpress.com/...

Harb, A. (2023). *The Critical Forms of Design Futures Scenarios: Introducing Unconventional Ways of Scenarios Making. In Multidisciplinary Aspects of Design.* Springer. (p. 367-376). https://doi.org/10.1007/978-3-031-49811-4_35

Hilton, J. (2016). Open educational resources and college textbook choices: A review of research on efficacy and perceptions. *Educational Technology Research and Development, 64*(4), 573–590. https://doi.org/10.1007/s11423-016-9434-9

Kloetzer, L., & Kloetzer, L. (2025). Instant Futures: an experimental study of the imagination of alternative near futures thanks to science fiction. *Integrative Psychological and Behavioral Science*. https://doi.org/10.1007/s12124-024-09885-1

Knight, K. (2024). Navigating Uncertainty About AI In Education By Leaning On What Works. *Forbes*. https://www.forbes.com/...

Lee, D. & Palmer, E. (2025). Prompt Engineering in Higher Education: a Systematic Review. *International Journal of Educational Technology in Higher Education, 22*(1). https://educationaltechnologyjournal.springeropen.com/articles/10.1186/s41239-025-00503-7

Mollick, E. (2025, July 7). Against “Brain Damage”. One Useful Thing. https://www.oneusefulthing.org/p/against-brain-damage

Muñoz de Luna, A. G. & Martín Gómez, S. (2025, August 14). AI still isn’t making a serious impact on university education–here’s why. *The Conversation.* https://theconversation.com/ai-still-isnt-making-a-serious-impact-on-university-education-heres-why-263057

Nguyen, T., Smith, J. et Patel, R. (2025). Designing pedagogical frameworks for generative AI in education. *Information and Learning Sciences.*

Park, J. (2025). *Generative AI Prompt Engineering for Educators* [CIDDL Research and Practice File]. Center for Innovation, Design, and Digital Learning (CIDDL). https://ciddl.org/ciddl-research-and-practice-brief-generative-ai-prompt-engineering-for-educators/

Tennent, A. (2023). *Imagining Futures: A Personal Practice*. Université de l’OCAD. https://openresearch.ocadu.ca/id/eprint/3519

UNESCO. (2023). *Orientations pour l’intelligence artificielle générative dans l’éducation et la recherche*. Organisation des Nations Unies pour l’Éducation, la Science et la Culture. https://www.unesco.org/...

Résumé / Resumen / Resumo

Imaginer l’avenir de l’enseignement supérieur : Conception d’un atelier REL portant sur la pensée prospective et l’intégration de l’IA

RÉSUMÉ

Cet article présente un atelier et son guide d’animation sous forme de ressource éducative libre (REL), visant à explorer l’avenir de l’enseignement supérieur grâce à l’intégration de la pensée prospective et de l’intelligence artificielle générative (IAG). L’atelier, conçu pour l’écosystème postsecondaire, s’adresse à l’ensemble de ses membres. Il s’appuie sur la méthode « Futures Wheel » (la « roue du futur » en français) pour guider les participantes et les participants à identifier de manière collaborative les tendances et les signaux de changement à venir, et à imaginer les répercussions directes et indirectes de ceux-ci. Par petits groupes de travail et grâce à l’aide d’outils d’IA générative, les personnes participantes vont créer, réfléchir et réagir à des futurs possibles.

Mots-clés : enseignement supérieur, IA générative, ressource éducative libre, pensée prospective, futur de l’éducation, pédagogie réflexive, méthode « Futures Wheel », roue du futur, scénario d’atelier

Imaginando el futuro de la educación superior: Diseño de un taller sobre recursos educativos abiertos (REA) para la reflexión sobre el futuro y la integración de la inteligencia artificial (IA)

RESUMEN

Este artículo presenta un taller y su guía de animación en forma de recurso educativo libre (REL), cuyo objetivo es explorar el futuro de la educación superior mediante la integración del pensamiento prospectivo y la IA generativa. El taller, diseñado para el ecosistema postsecundario, está dirigido a todos sus miembros. Se basa en el método «Futures Wheel» para guiar a los participantes a identificar de manera colaborativa las tendencias y señales de cambio futuras, e imaginar sus repercusiones directas e indirectas. En pequeños grupos de trabajo y con la ayuda de herramientas de IA generativa, los participantes crearán, reflexionarán y reaccionarán ante posibles futuros.

Palabras clave: enseñanza superior, IA generativa, recursos educativos libres, pensamiento prospectivo, futuro de la educación, pedagogía reflexiva, método Futures Wheel, escenario de taller

Imaginando o futuro do ensino superior: criando um workshop de REA para o pensamento prospectivo e a integração da IA

RESUMO

Este artigo apresenta um workshop e o seu guia de animação na forma de recurso educativo livre (REL), com o objetivo de explorar o futuro do ensino superior através da integração do pensamento prospectivo e da IA generativa. O workshop, concebido para o ecossistema pós-secundário, destina-se a todos os seus membros. Baseia-se no método «Futures Wheel» para orientar os participantes a identificar de forma colaborativa as tendências e os sinais de mudança futuros e imaginar as suas repercussões diretas e indiretas. Em pequenos grupos de trabalho e com a ajuda de ferramentas de IA generativa, os participantes irão criar, refletir e reagir a futuros possíveis.

Palavras-chave: ensino superior, IA generativa, recurso educativo livre, pensamento prospectivo, futuro da educação, pedagogia reflexiva, método Futures Wheel, cenário do workshop