

Editorial: There's an AI for that: Rhetoric, reality, and reflections on EdTech in the dawn of GenAI

Fiona Concannon*¹

Eamon Costello²

Orna Farrell³

Tom Farrelly⁴

Leigh Graves Wolf⁵

¹ *University of Galway*

² *Dublin City University*

³ *Dublin City University*

⁴ *Munster Technological University*

⁵ *University College Dublin*

1. Introduction

In recent months, the educators and higher education institutions have responded with concern, critique, and hope, to the rise of generative artificial intelligence (AI)'s unregulated and mounting influence. Following the period of emergency remote teaching, and the great 'snapback' (Jandrić et al., 2022), yet another new concern has emerged, promising to revolutionise education, or threaten its existence. The gravity of the situation has reverberated across the system, as wizardry of predictive pattern recognition fundamentally threatens the validity of long-held practices of summative assessments including essays, and online quizzes. This latest quandary/crisis shows no sign of abating, as venture capitalist funding and language modelling datasets grow. The technology becomes more deeply integrated into word processing, and cloud-based applications through which much of our academic labour is conducted.

Understanding and conceptualising new technology within education has long been a necessity, as we wrestle with wrangling tools into our human interactions. Higher education's relationship with edtech has always been characterised by a cyclical response to disruptive external influences of evolving technology, whose recent developments are often underpinned by neoliberal values of competition, efficiency, market-based solutions, and the privatisation of software platforms. Recent large language model developments are proving no different, with deregulation and the free market serving as the impetus to design and create such tools. Across higher education, educators scramble to decode the GenAI black box, deciphering hallucinations, confabulations, and smooth outputs indistinguishable from original student work. Policy responses range along a continuum of ban or embrace. New AI literacies are being woven into curricula, as change continues apace.

2023 marks a year of existential crisis precipitated by a global pandemic, followed by geopolitical events and a fatigue from the continual adaptation to a new normal. Even within, we are constantly shaping our educational systems. That pull is in many different directions – to accredit, to certify, to help learners become, to socialise, to emancipate, to measure - to meet very diverse purposes and aims. The politics and power structures inherent in our system further affect our response (Kuhn et al., 2023).

While the potential of AI chatbots based on natural language processing models is undeniable, it is crucial to discern the reality from the hype and to better understand how our actions and responses are shaping our educational systems in this evolving domain. This editorial examines this dilemma further, to consider the impact on our scholarship of teaching and learning and how we as a community of researchers and educators respond.

2. Educators lived experiences with Edtech vs the hype of technosolutionism

What is the reality of teaching with technology in Irish higher education? The lived experience in our classrooms, whether on campus or online, differs significantly from the lean, flat, and well-resourced organisational model of the San Francisco-based start-up that develops solutions designed to enhance learning within our public institutions. Significant challenges arise from a lack of core government funding, precarious teaching contracts and inadequate infrastructure for teaching both within the built environment and in the digital. Students' financial burdens from working long hours worsen these difficulties. Moreover, the pandemic shift to rapid remote, and subsequent haphazard decisions to retain online, blended or on-campus modes of learning, specific assessment practices and academic integrity responses reveal how crucial reliable evidence to inform digital education is, balancing the needs of stakeholders, and keeping the purpose and aims of education firmly in sight.

Walking into a classroom, educators face physical constraints with room layout and seating (Selwyn, 2023); technical challenges with network access, Wi-Fi, authentication, and GDPR-compliant platforms; audiovisual arrangements with microphones, venue cameras, room lighting, and multiple projector connectors to further augment the complexity, even before one begins to use a presentation application, or an accompanying audience polling tool. All these physical and technical arrangements, albeit necessary to support a range of demands, result in an environment where teaching is subject to numerous potential incompatibilities, glitches, and breakdowns. Research by Littlejohn (2023) and others illustrated the reality of the limited and problematic access to appropriate technology for teaching that were brought into plain sight during the pandemic and beyond in hyflex scenarios, for both teaching staff and also with regard to students (Buckley et al., 2021; Cullinan et al., 2021; Gourlay et al., 2021; Ó Súilleabháin et al., 2022).

However, these problems in the use of edtech existed even before the pandemic. Henderson et al. (2017) in their analysis from a large survey of student practice noted that *“university educators perhaps need to temper enthusiasms for what might be achieved through technology-enabled learning and develop better understandings of the realities of students' encounters with digital technology.”* (p. 1567).

Even beyond the physical classroom, over the last decade big Edtech providers or smaller startups have become deeply embedded into the university's core operations. Systems and platforms - from VLEs to MOOCs, interactive polling software, application, and data tenancies, learning analytics and plagiarism detection software, amongst the data infrastructure of Student Information systems, have become central. As these shift to cloud-hosted software-as-service choices, there is less opportunity to opt out of upgrades, or new features, and the direct decisions of these external companies, including those relating to the incorporating generative AI. In fact, a very recent report by UNESCO (2023) found that *“good, impartial evidence on the impact of education technology is in short supply....A lot of the evidence comes from those trying to sell it”* (p.5).

This is also true research on the efficacy of AI in Education (Holmes & Tuomi, 2022). AI in Education, like EdTech, has a long history of “bullshit” or discourse that is effusive while managing to say very little about what actually works (Selwyn, 2016; Costello, 2023). AI may be just another layer, albeit a deeply pervasive one of technology in education that we need to learn to live with that may prove as confusing as it is ever useful.

Thus, the ideal of the digital university for efficient and flexible teaching clashes with the challenges educators face. The reality of teaching with technology in higher education is far from a utopian ideal, with educators facing numerous complexities and constraints in adapting these digital tools in their on-campus and online teaching spaces, for various ends.

3. Our sensemaking new AI as the current phase

Given how far the lived reality of the digital campus is from what is sold as the dream, what collective responses are possible in the face of fast-changing technology developments such as GenAI?

Higher education must now step up and address a “*dramatic lack of critical reflection of the pedagogical and ethical implications as well as risks of implementing AI applications in higher education*” (Zawacki-Richter et. al., 2019, p. 21). As it is almost impossible to keep up with evolving technology and new tools in the GenAI space, the logical approach would be to focus on developing educators and students' critical skills, attitudes, and competencies. Three areas that we as a community need to focus on to address the challenge of GenAI:

1. Critical AI literacy
2. Ethical use and integration of technology such as GenAI in education
3. Re-imaging assessment design.

Critical AI literacy

It is clear that educators and students need to develop critical AI literacy... and fast. One model of AI literacy developed by Southworth & Migliaccio (2023), which describes four AI literacy types in the context of curriculum design:

1. Knowing and understanding AI
2. Using and applying AI,
3. Evaluating and creating AI
4. AI ethics

Another interesting approach to critical AI literacy is taken by the Civics of Technology group called “asking technoskeptical questions about ChatGPT”, this encourages educators and students to ask critical questions about technology (Civics of Technology, 2023). Literacy in this context is not only an ability to engage, but also to resist or build in opportunities for a negotiation or discussion on the issues raised.

Ethical use

Universities need to develop clear policies on the ethical use of GenAI. From a policy point of view, there has been a swift reaction to GenAI at national, European, and global level. In Ireland, the Quality and Qualification Agency (QQI) issued broad advice for tertiary education providers on GenAI in the context of assessment and academic integrity in March

2023 (QQI, 2023). The QQI led a sectoral response across Irish Higher Education institutions, and sought to connect to others in Australia, Canada, and across Europe, also focused on reacting to the impact of AI on assessment designs (QQI, 2023). In Europe, The European Network for Academic Integrity (ENAI) published very useful recommendations on the *Ethical use of Artificial Intelligence in Education* in May 2023 (Foltynek et al., 2023). At the global level, UNESCO (2023) published a simple guide for educators called *ChatGPT and Artificial Intelligence in higher education: Quick start guide* in April 2023. For a sector that usually moves slowly, the response on a higher education policy level to GenAI was very swift, but will this talk translate into action?

Integration

Faced with the option to ban or embrace GenAI, it seems like integration is the most likely approach for universities because detection does not work. Although, integration should be done in the context of agreed policies and underpinned by ethical frameworks. GenAI has the potential to enrich and encourage creativity, innovation, and experimentation in our academic communities, therefore integrating it into our teaching, learning and assessment makes sense. One such example is the crowdsourced open access book called *101 Creative Ideas to Use AI in Education* (Nerantzi et. al., 2023) which aims to give educators and students creative ways of integrating GenAI into their practice. The development of such approaches can involve online communities that cross institutional and disciplinary boundaries; via social media, email groups, public annotation; that enable online spaces for educators to sketch early, rough ideas and practices and reflectively iterate them to facilitate crowdsourced curation of resources and learning materials (Mills, Bali & Eaton, 2023). Crucially, such approaches will also involve conversations with students as core building blocks.

Re-imagining Higher Education Assessment

A reinvention of higher education assessment is long overdue (Farrell et al., 2021). The emergence of generative Artificial Intelligence (AI) tools such as ChatGPT, Elicit, iA Writer, Marmof, Botowski and DALL-E amongst others, pose a challenge to the academic integrity of traditional higher education assessment approaches (Bozkurt, et al., 2023; Glesson, 2022). However, this challenge is also an opportunity to innovate and evolve higher education assessment to be more authentic, creative, and inclusive. The solution is a major focus on higher education assessment design, but this requires institutional resources, time, leadership and buy-in (O'Neill & Padden, 2021). Will universities rise to this challenge?

4. Visions of “Hope Punk” futures

We need to reflect on the lessons we have learned from our response during and since the Covid-19 pandemic and the current GenAI panic. We need to move away from the reactive pedagogy of crisis toward a more agentic, measured and evidence-based approach, grounded in hope, care and ethics. Taking a critical mindset when evaluating the skeletons of Edtech, old and new. We need to put people at the centre of our design, focus on the human and humane elements of education. We need to engage with new challenges and technologies by holding onto our values, weaving ethical frameworks, openness, and equity through the fabric of our research and practice. In 2023 it is all too easy to fall into the trap of using the terms post-Covid, post-digital but we would suggest that are a little too trite as if to say that we

have crossed a highly debatable invisible line of demarcation into a post ‘something’ era. Instead, we are responding to Toft Nørgård’s call at EDEN 23 to adopt a **“Hope Punk”** mindset (EDEN Digital Learning Europe, 2023). This mindset asks us all to consider that when ideating our education futures - fighting for positive change, radical kindness, and a communal response to challenges; designing learning experiences for what we desire them to be rather than in response to (yet) another crisis. We look forward to future contributions to the *Irish Journal of Technology Enhanced Learning* that share answers that our community of scholars are reflecting on as we navigate the continually evolving terrain of Edtech.

5. About this issue

There are six articles in this issue, spanning research and practice, which pull common threads from many of the topics and themes in the editorial above. Collectively, the articles present a wide range of stakeholder perspectives.

Michael Flavin’s *“I Kind of Feel Resigned to the Fact”*: *A Foucauldian Perspective on Data Privacy and Social Media* presents the findings of a study analysing the extent to which social media users accept their loss of privacy. Framing the results through a Foucauldian lens presents a unique contribution to the literature.

While discussion boards are now deeply embedded into online community experiences, there are still many under researched areas of their implementation. In the research study *“How are you Getting On? “Evaluating Discussion Boards as Assessment for Social Care Work-Based Placement*, Karolyn McDonnell presents the results of a pre-COVID inquiry providing insight and advice for reflective practice in social care work-based placement settings.

In the study *COVID, Campus, Cameras, Communication, and Connection*, Jasmine Price, Donna Lanclos, and Lawrie Phipps explore the lived “back to campus” experiences of students as they (re)transitioned from the digital to the physical campus. The article presents implications for institutions, students, and staff.

A Case Study of Computer Science Lecturer’s Selection and Use of Digital Tools in an Irish Technological University by Michael Gleeson uses activity theory to explore the lived pedagogical experiences of computer science lecturers and how their selection and use of digital tools may unintentionally contribute to “digital tool sprawl.”

In another pedagogically focused inquiry, Karen Taylor presents an investigation into the student experience in *A Hidden Benefit in the COVID-19 Pandemic: Rethinking Physical Geography Pedagogy in Higher Education using a Flipped Classroom Approach*. This study provides further evidence for moving away from traditional lecture-based approaches in large classes and provides a model for fostering an interactive and dynamic educational experience.

Finally, in *Applied Gamification Using Virtual Escape Rooms: Case studies in Entrepreneurial and Anatomy Classes*, Roisin Lyons, Eva Marie Sweeney, and Ciara Lynch share a practice report on the use of escape rooms. This detailed report can serve as a mentor text for others who wish to explore the use of escape rooms or other game-based learning approaches in the classroom.

References

- Bozkurt, A., Xiao, J., Lambert, S., Pazurek, A., Crompton, H., Koseoglu, S., Farrow, R., Bond, M., Nerantzi, C., Honeychurch, S., Bali, M., Dron, J., Mir, K., Stewart, B., Costello, E., Mason, J., Stracke, C., Romero-Hall, E., Koutropoulos, A., . . . Jandrić, P. (2023). Speculative futures on ChatGPT and Generative Artificial Intelligence (AI): A collective reflection from the educational landscape. *Asian Journal of Distance Education*, 18(1), 53-130. <https://www.asianjde.com/ojs/index.php/AsianJDE/article/view/709>
- Buckley, K., Stone, S., Farrell, A. M., Glynn, M., Lowney, R., & Smyth, S. (2021). Learning from student experience: Large, higher education classes transitioning online. *Irish Educational Studies*, 40(2), 399-406. <https://doi.org/10.1080/03323315.2021.1916566>
- Chan, C. K. Y. (2023). A comprehensive AI policy education framework for university teaching and learning. *International Journal of Educational Technology in Higher Education*, 20(1), 38. <https://doi.org/10.1186/s41239-023-00408-3>
- Costello, E., (2023). ChatGPT and the Educational AI Chatter: Full of Bullshit or Trying to Tell Us Something?. *Postdigit Sci Educ*. <https://doi.org/10.1007/s42438-023-00398-5>
- Civics of Technology. (2023). <https://www.civicsoftechnology.org/>
- Cullinan, J., Flannery, D., Harold, J., Lyons, S., & Palcic, D. (2021). The disconnected: COVID-19 and disparities in access to quality broadband for higher education students. *International Journal of Educational Technology in Higher Education*, 18(1), Article 26. <https://doi.org/10.1186/s41239-021-00262-1>
- EDEN Digital Learning Europe. (2023, June 19). *Dr Rikke Toft Nørgård: Between the real and the ideal – Human futures in digital education?* [Video]. YouTube. <https://www.youtube.com/watch?v=2IKLEhhkb7U>
- Farrell, O., Buckley, K., Donaldson, L., & Farrelly, T. (2021). Editorial: Goodbye exams, hello eportfolio. *Irish Journal of Technology Enhanced Learning*, 6(1), 1–6. <https://doi.org/10.22554/ijtel.v6i1.101>
- Foltynek, T., Bjelobaba, S., Glendinning, I., Khan, Z.R., Santos, R., Pavletic, P., Kravjar, J. (2023). ENAI Recommendations on the ethical use of Artificial Intelligence in Education. *International Journal for Educational Integrity*, 19 (12). <https://doi.org/10.1007/s40979-023-00133-4>
- Gleeson, N. (2022, December 9). *ChatGPT and the rise of AI writers: How should higher education respond?* Times Higher Education. <https://www.timeshighereducation.com/campus/chatgpt-and-rise-ai-writers-how-should-higher-education-respond>
- Gourlay, L., Littlejohn, A., Oliver, M., & Potter, J. (2021). Lockdown literacies and semiotic assemblages: Academic boundary work in the Covid-19 crisis. *Learning, Media, and Technology*, 46(4), 1-13. <https://doi.org/10.1080/17439884.2021.1900242>
- Henderson, M., Selwyn, N., & Aston, R. (2017). What works and why? Student perceptions of ‘useful’ digital technology in university teaching and learning. *Studies In Higher Education*, 42(8), 1567-1579. <https://doi.org/10.1080/03075079.2015.1007946>

Jandrić, P., Martinez, A. F., Reitz, C., Jackson, L., Grauslund, D., Hayes, D., Lukoko, H. O., Hogan, M., Mozelius, P., Arantes, J. A., Levinson, P., Ozoliņš, J. J., Kirylo, J. D., Carr, P. R., Hood, N., Tesar, M., Sturm, S., Abegglen, S., Burns, T., . . . Hayes, S. (2022). Teaching in the age of Covid-19—The new normal. *Postdigital Science and Education*, 4(3), 877-1015. <https://doi.org/10.1007/s42438-022-00332-1>

Kuhn, C., Khoo, S.-M., Czerniewicz, L., Lilley, W., Bute, S., Crean, A., Abegglen, S., Burns, T., Sinfield, S., Jandrić, P., Knox, J., & MacKenzie, A. (2023). Understanding digital inequality: A theoretical kaleidoscope. *Postdigital Science and Education*. <https://doi.org/10.1007/s42438-023-00395-8>

Littlejohn, A. (2023). Transforming educators' practice: How university educators learned to teach online from home during the Covid-19 pandemic. *Higher Education Research & Development*, 42(2), 366-381. <https://doi.org/10.1080/07294360.2022.2073982>

Mills, A., Bali, M., & Eaton, L. (2023). How do we respond to generative AI in education? Open educational practices give us a framework for an ongoing process. *Journal of Applied Learning and Teaching*, 6(1). <https://doi.org/10.37074/jalt.2023.6.1.34>

Nerantzi, C., Abegglen, M.K., & Martínez-Arboleda, A. (Eds.). (2023). *101 Creative ideas to use AI in education. A collection curated by #creativeHE*. <https://doi.org/10.5281/zenodo.8072950>

Ó Súilleabháin, G., Farrelly, T., & Lacey, S. (2022). Dataset on student experiences and perceptions of emergency remote teaching (ERT) in an Irish university. *Data in Brief*, 41, 107954-107954. <https://doi.org/10.1016/j.dib.2022.107954>

O'Neill, G., Padden, L., (2021). Diversifying assessment methods: Barriers, benefits and enablers. *Innovations in Education and Teaching International*. 59(4), 398-409. <https://doi-org.dcu.idm.oclc.org/10.1080/14703297.2021.1880462>

Selwyn, N. (2016). Minding our language: why education and technology is full of bullshit... and what might be done about it. *Learning, Media, and Technology*, 41(3), 437-443. <https://doi.org/10.1080/17439884.2015.1012523>.

Selwyn, N. (2023). The modern classroom chair: Exploring the 'coercive design' of contemporary schooling. *Power and Education*, 17577438231163043. <https://doi.org/10.1177/17577438231163043>

QQI. (2023, March). *Advice on artificial intelligence in education and training*. <https://www.qqi.ie/news/advice-on-artificial-intelligence-in-education-and-training>

UNESCO. (2023). *Global education monitoring report summary: Technology in education: A tool on whose terms?* <https://www.unesco.org/gem-report/en/technology>

UNESCO. (2023). *ChatGPT and artificial intelligence in higher education: Quick start guide* https://www.iesalc.unesco.org/wp-content/uploads/2023/04/ChatGPT-and-Artificial-Intelligence-in-higher-education-Quick-Start-guide_EN_FINAL.pdf

Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education—where are the educators?. *International Journal of Educational Technology in Higher Education*, 16(1), 1-27. <https://doi.org/10.1186/s41239-019-0171-0>