



## ChatGPT, Academic Integrity, and Teaching, Learning and Assessment – a brief overview to prompt discussion

### What is the issue?

OpenAI's new chatbot, ChatGPT is one of the latest technologies to cause concern and to challenge some of the traditional and longstanding approaches to teaching, learning and assessment. OpenAI describe themselves as 'an AI [Artificial Intelligence] research and deployment company' whose mission is 'to ensure that artificial general intelligence benefits all of humanity' (OpenAI, no date). ChatGPT is a language model or chatbot which 'interacts in a conversational' way; it is trained to 'follow an instruction in a prompt and provide a detailed response' (OpenAI, no date). ChatGPT can produce different types of text (academic papers, poems, essays, advertisements, rap, speeches, stand-up comedy scripts, presentation outlines, learning outcomes), computer code and art. O'Connor and ChatGPT, co-authoring, describe what the technology is:

ChatGPT is a large language model trained by OpenAI. It is a machine learning system that is designed to be able to understand and generate natural human language in order to assist with a wide range of tasks, such as answering questions and providing information. It is not a human but is designed to be able to communicate and interact with people in a way that is similar to how a person would. It is constantly learning and improving, and there to help with whatever questions or information you need. (O'Connor and ChatGPT, 2022)<sup>1</sup>

Put simply by Torrey Trust, 'You ask ChatGPT a question or provide a prompt, [and] it replies using natural language' (Trust, 2023, p. 3). While ChatGPT is dominating the headlines at the moment, as Contact North note, it is 'one of a variety of AI-enabled writing tools'; they point to others including [Writefull](#), [TooWrite](#), and [CoAuthor](#). Very recently Google announced its chatbot [Bard](#) albeit to some public humiliation as a result of Bard providing incorrect information in answer to a question in a promotional video and a consequently dramatic drop on the day in Alphabet's (Google's parent company) market value (Sherman, 2023).

Those who have been following the ChatGPT story and the commentary around it will not have been surprised by Bard's blunder. While admittedly ChatGPT can produce coherent, plausible, grammatically correct, and prompt-relevant text largely reflective of the desired genre, as Mike Sharples notes regarding AI Transformer Networks, of which

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<sup>1</sup> It should be noted that subsequent to the publication of the O'Connor and ChatGPT article, the journal and publisher (Nurse Education in Practice and Elsevier respectively) published a corrigendum to the article within which they noted that ChatGPT was removed from the author list on foot of 'The first author [becoming] aware that the second listed author, 'ChatGPT', does not qualify for authorship according to the journal's guide for authors and to Elsevier's Publishing Ethics Policies' (O Connor, 2023).

ChatGPT is one, they ‘can’t access current information, can’t reflect on what they have written, have no explicit model of how the world works, and are amoral’ (2023). Trust notes ChatGPT cannot ‘yet’, ‘write a self-reflection ... write about anything that happened after 2021 ... browse or summarize content from the Internet’ (2023, pp. 34-35). Colleagues who have experimented with the technology note that it can lie and can make up references (Beckingham and Hartley, 2023).

### Why are we concerned?

The emergence of this technology, and potential use of same in higher education, has led to academic colleagues and students, Higher Education Institutions (HEIs), quality assurance agencies and other stakeholders raising concerns around the implications the technology’s availability may have for academic integrity and/or academic misconduct. A fear is that students will effectively be able to ask ChatGPT to write their essay or other academic assignment for them and subsequently submit that work as their own. Colleagues in the Centre for Teaching and Learning in University of Oxford note that ‘ChatGPT does present a challenge to maintaining academic integrity, but this is neither new nor unique’ (2023). They explain:

The system is designed to produce cohesive and plausible text, but it is not factual in the sense that we expect from a database search. It will intersperse accurate facts with fabrications that have come to be known as ‘hallucinations’. Nevertheless, it is not difficult to prompt the system to produce work that will not be easily identified as machine generated and will probably for the time being escape detection by plagiarism checkers such as Turnitin. As such, it is a possible tool for cheating. (2023)

Hand in hand with HE concerns around how ChatGPT and other similar technologies might be used by students to breach our academic integrity principles and policies is an awareness across the academic community that this type of technology will most likely persist, will become more sophisticated and more accessible (albeit that there is already a monetisation of some of these products with ‘plus’ versions for which one must pay), and may become a tool like any other that both students and staff use; there have already been comparisons made with MS Excel (Naughton, 2023). Consequently, our concerns are not only around how the use of AI might be detected but also how we might best use ChatGPT and similar technologies in teaching (Watkins, 2022). In turn, when we scratch just below the surface of immediate practical questions around ChatGPT and academic integrity we encounter far-reaching questions associated with AI and ethics (Lancaster, 2022) and the consistently pertinent questions around fit-for-purpose assessment, the quality of the learning experience for our students, and what it means to have a higher education (and to be a HEI).

### Pedagogical opportunities

Historically, new technologies (e.g. writing, the printing press, the internet) were seen as both challenges to established educational practices and concerns, and possessing affordances that can be utilised in teaching and learning contexts. Initial reactions are often cautious and problematise the technology, before gradually evolving into more comprehensive discussions. ChatGPT may be seen by some as a challenge in areas such as academic integrity, but others will argue that it also offers opportunities for imaginative

assignment construction and other teaching and learning opportunities towards, potentially, a pedagogical paradigm shift.

A particular area where the impact of AI may be experienced in higher education is within assessment, notably, the written components of assessment and Irish HEIs are already envisioning a shift in assessment models (O'Brien, 2023). This might include a focus on more personalised and artefact driven approaches, where, for instance, 'students ... bring personal examples into their writing' (Parsons et al., 2023), focusing more on writing processes than only writing products or outputs (Gleason, 2022), creating assessments that require students to 'demonstrate their critical thinking, problem-solving, and communication skills' (Cotton, Cotton and Reuben Shipway, 2023), greater use of appropriate authentic assessment methods, the use of oral exams, etc. Some colleagues are embracing the use of ChatGPT as part of the writing process where AI generated text is intertwined with student writing (Villasenor, 2023), whereas others are suggesting that students could debate with this technology 'as a way of thinking through a question and articulating an argument' (D'Agostino referring to Steipe's work, 2023). Another perspective from higher education is one where this technology is brought into class where 'students work with [it], and analyze [the] outputs. By creating awareness, not least among the students as a group, ethical and practical dilemmas could be addressed' (Anson and Straume, 2022, p. 7). In terms of curriculum construction and delivery staff are leveraging ChatGPT to co-instruct material, to certain degrees, in areas of their courses (Alemi, 2023) thus leaving more time to delve deeper with students in a more active face-to-face approach.

### What can we do?

There are a number of practical things we can do to respond to this technology recognising that the nature of our response will vary based, amongst other factors, on how far into the future we are looking (an imminent assignment deadline, this semester, an academic year, 5-10 years out) and how deeply we wish to explore what AI technologies could mean for HE.

Actions we can take might include:

- Becoming familiar with this technology and the conversations around it.
- Providing space and time for dialogue within the university community, staff and students, to explore the 'responsible, ethical, and transparent use of AI tools and other emerging technologies' (EUA, 2023).
- Reviewing our current academic integrity policies and updating them to incorporate the emergence of ChatGPT and related technologies. This will also include clarifying with students what is and isn't acceptable regarding the use of AI.
- Updating student assignment submission statements mindful of the availability of technology like ChatGPT and its potential use by students.
- Exploring where the potential is to use this technology within our teaching, learning and assessment.
- Working as a university community, a HE sector and with technology partners to learn more about these technologies and how they might be detected.

- Revisiting our approaches to assessment with a view to ensuring that they reflect sound principles and good practice particularly regarding their role in student learning and success.
- Continuing to promote and nurture a culture of academic integrity across the whole university community.

As Philip Dawson notes, 'e-cheating is here to stay' (2020, p. 141). The agenda that he identifies for 'securing assessment against e-cheating' involves five key messages 'to improve assessment security while maintaining awareness of the potential for unintended negative consequences' (p. 17). Getting the balance right, will involve reacting, responding and re-imagining, in the short, medium and long term, using the multi-pronged and holistic approach for which Bretag et al. (2019) advocate.

### Further Information

For further information and resources on this topic please visit the Centre for Teaching and Learning's Assessment and Feedback hub section on [Academic Integrity and Artificial Intelligence](#).

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