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The future of higher education in the age of GenAI — are we all doomed?

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Abstract: This viewpoint addresses the concern expressed by some academics that GenAI is turning the works of higher education upside down and that our roles as educators will soon become redundant. It considers the academic literature on student academic misconduct and reflects on the many generations of acadmeics who have worried about this and written about it. While the internet was seen by some as "the end of the world", we have survived (and event thrived). Plagiarism software was the next big skirmish in the academic integrity war. Generative AI provides some reasons why students "cheat" using software programmes such as ChatGPT, al all institutions are working hard to respond to recent developments. While some have chosen to ignore or even ban it, others have decided students will use GenAI in the workplace and therefore should be trained for that. The paper briefly outlines my institution's response, which falls into the latter category. The article concludes with some recommendations based on personal experience of being an 'Academic Integrity Officer' — a role that did not exist just a few years ago.

Keywords: academic integrity, academic misconduct, cheating, plagiarism, students

One might be forgiven for harbouring the sentiment that we are all doomed in the age of generative artificial intelligence (GenAI). All our hard-earned academic knowledge seems to be available to anyone who can type the right question into a GenAl tool. While the internet has long been able to find material that was previously only available in limited print textbooks. AI can now take that material and turn it into PowerPoint slides, case studies, reports, or essays (Liu, 2024). Not only is that hard-earned, treasured and closely guarded knowledge now openly available for all to see and use, but it also opens the door for people to cheat in assignments. The cat-and-mouse game between students and their assessors has been going on for a long time. Once, hand-written essays were photocopied or written out, with the lecturer relying on their memory or unusual errors in understanding, spelling or phrasing to spot any offenders. Ashworth et al. (1997, p. 187) noted that "[t]he issue of student cheating has long been a matter of concern to those teaching within higher education". Franklyn-Stokes and Newstead (1995) found that 60% of undergraduate students in the UK admitted to some form of "cheating", whether that was copying others' work, plagiarism, or even inventing research data. They also discussed research that found cheating was less common in tertiary schooling than at high school, that more males admitted to cheating than females, that stress and pressure for good grades were common reasons, and that the low likelihood of getting caught increased its prevalence. They also noted that more able students were less likely to cheat. Klein et al. (2006) investigated if business school students were more likely to cheat than those in other disciplines. This was because of previous research that found students who cheated in their studies were also likely to engage in unethical behaviour in the workplace.

The arrival of the internet and electronic submission of assignments led to the introduction of plagiarism detection tools (Turnitin), although it also enforced a very Western view on what constituted "cheating", or (less condemnatory) "copying". Franklyn-Stokes and Newstead (1995, p. 159) noted that "there may be differences between different cultures, between different institutions and over time", and that some studies claim 80% of students admitted it in the mid-1990s, but that research from the 1940s was already reporting cheating rates of 23%. Pabian (2015) guotes studies in the USA that found two-thirds of students had cheated in some way in the previous year. He also claims that reasons for cheating included personal and psychological factors, but also the likelihood of getting caught and the penalties applied, findings already noted by Franklyn-Stokes and Newstead (1995, p. 168), who also added "to help a friend". Some blame academic staff and feel it is the result of poor teaching or assessment design. Others blame the focus on "authoritative knowledge" rather than "independent and creative knowledge" developed from student learning. This is supported by Franklyn-Stokes and Newstead's (1995) research that students in "new universities" (with presumably more varied, creative and less traditional assessments) were less likely to cheat. They found that there were three main motivations for studying for a degree - a stop gap (to avoid having to get a job); a means to an end (to improve prospects); and personal (intrinsic motivation and love of the subject) - but that there was surprisingly no significant difference in the level of cheating (self-reported) by students in each of these categories. They also reported that the fear of being caught or the punishment were not given as major reasons to avoid cheating, leading them to suggest "at least in the short term, it would seem wiser

to concentrate on informing students as to what behaviour is deemed to be acceptable, rather than introducing draconian sanctions" (Franklyn-Stokes & Newstead, 1995, p. 170). Ashworth et al. (1997, p. 202) found that students feeling that they were no more than a (student) number led to a rationalisation of academic misconduct — "The experience of being a degree student was frequently described as anonymous" — giving a sense that no-one would really be harmed by it. Klein et al. (2006) put this down to feeling part of a community and the peer pressure not to cheat. While similar numbers of business students admitted to cheating compared with other disciplines, research found their definition of cheating "tend to be more lenient...than other professional students" (Klein et al., 2006, p. 203), highlighting the dangers of relying on statistics in this area.

While GenAI has prompted a certain amount of panic in academic circles, it is instructive to look back at what Ashworth et al. (1997, p. 188) wrote a quarter of a century ago:

The proliferation of rapidly-accessible electronic information sources — full text CD-ROM databases, electronic journals on the Internet, etc. — and the ease with which material can be downloaded and appropriated for one's own purposes present clear opportunities for malpractice, with staff having no straightforward means of regulating how students use resources of this kind.

Generative Al

Foote (2024) explains that AI is thought to have originated with Arthur Samuel in 1952 as a checkers game, followed by Rosenblatt's invention of the "Perceptron" at Cornell University in 1957, and Weizenbaum's generative AI called ELIZA in 1961. The 1960s also saw the first chatbots, but then little more was visible to the public until Siri was launched on the iPhone 4S in 2011. GenAI started producing images (still and moving) and audio that seemed authentic in 2014, using the generative adversarial network (GAN). However, Franklyn-Stokes and Newstead (1995) were already finding fabrication of data and of references, so these practices seem to predate GenAI by a long way. It should also be noted that GenAI can contribute many good things to society and our students need to be aware of this (Sigala et al., 2024).

As an exercise for this article, I asked ChatGPT the question "Why do students cheat using AI?". The response was thoughtprovoking: due to the pressure to succeed from their families; poor time management in the face of multiple priorities; lack of understanding; easy access to AI tools; poor study skills; temptation and curiosity; the perceived low risk of getting caught (think border security TV programmes), and an as yet unclear ethical framework for the use of GenAI.

Institutional response

My institution is very proactive in addressing concerns about academic misconduct, particularly through the use of unauthorised GenAI (some courses specifically require its use to help students learn how to use it responsibly and wisely). There is a comprehensive "Academic Misconduct Procedure". New students take an online Student Academic Integrity Module (failure to complete this has consequences for the release of grades). There is a relatively simple academic

misconduct reporting interface on the main university website for staff to report their suspicions (once they have discussed the case with their line manager/co-ordinator). Cases are initially investigated by a small team of administrators, classified as a "breach", "concerning academic misconduct", or "serious academic misconduct" depending on whether it concerns plagiarism, contract cheating (Awdry & Newton, 2019), or the use of GenAI to create content or fabricate or falsify references, and then passed to academic staff (academic integrity officers) with a time allowance of half to one day per week to investigate. Students are interviewed by one member of the academic staff or a panel, depending on the severity of the misconduct. Penalties range from dismissal of charges, to a warning, deduction of marks, failure of the whole module/ unit, or even suspension or expulsion. Penalties vary depending on whether the student is a new or experienced student. If a student re-offends, the penalties increase. Students are advised to seek academic writing or library skills support from specialist staff at the university. Records are kept about whether they take up this advice or not. While at the time of writing, we are busy identifying and investigating cases of academic misconduct, we are hopeful of being able to "flatten the curve", although we also acknowledge that, like in sport, the cheats may always be one step ahead. Certainly, many interviews end with a (sometimes tearful) student promising it will not happen again.

Recommendations

I would like to share my thoughts and recommendations for others facing similar challenges, or to hear from anyone who has other successful strategies for tackling this.

- Having large numbers of assessments per unit/class reduces the ability of students to reflect on and learn from feedback, and means staff are on a marking treadmill that allows little time for detailed reading and (where necessary) investigation of sources and thinking/learning. A better approach may be to limit the number of assessments per unit — less is more.
- Asking the students to use personal reflection or experiences may be looked down upon by some traditionalists as "not academic", but would make it much harder for GenAI to produce plausible and relevant text.
- Finding ways to address a sense of anonymity or "just being a number" in an education system which some feel is increasingly "transactional" (Awdry & Newton, 2019) may reduce the likelihood that students will resort to GenAI or contract cheating through "essay mills".
- Having staff teach within their subject specialisms allows them to bring their research into their teaching, and also means that you will know the literature and can spot suspect referencing because you know the academic discourse in your subject.
- Changing assessments each semester (even if it is only rotating 3 or 4 versions) means "essay mills" are less likely to have relevant content for students to buy.
- Requiring students to use certain prescribed readings in their assignments will require them to either read the (good quality) articles, or to spend a lot of time creating prompts to extract the correct information from those journal papers — at some point it will become quicker and less effort to do the work rather than to try and get GenAI to come up with the answers.

- Most academic staff have no interest in becoming academic integrity police and want to get away from what Pabian (2015, p. 819) calls "the notorious triad: How much do students cheat, why do they do it and how can we stop them?".
- Groupwork runs the risk that one student in a group will use AI — this can use up a lot of time in investigating what happened and then who was responsible. A project which requires groupwork, but individual assessment would reduce this risk.
- Having a clear, transparent and well-publicised process for investigating academic misconduct will reduce the number of students who claim they "did not know".

To then answer the question "Are we doomed?" because of GenAI, I think the answer is up to us as academics and lecturers - and my viewpoint is "No".

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