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Don't panic (yet): The implications of ChatGPT for Education Studies in the UK

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Abstract

This theoretical article explores the recent furore surrounding the emergence of generative Artificial Intelligence tools, particularly ChatGPT. Both AI and ChatGPT are discussed, before recent debate is contextualised against historical reactions to the adoption of technologies in education. An example generated 'essay' is critiqued, before discussing more recent educational responses, and the implications of ChatGPT and other AI tools for Education Studies as an academic discipline, with reference made to the QAA Benchmarks (2019). Amidst calls for the return to more authentic assessment procedures, it is argued that Education Studies is already in a strong position to meet the challenges posed by generative Artificial Intelligence software. Furthermore, it is stressed that we should be critically engaging with these emerging technologies, discussing their ethical implications with students, and exploring their potential as both pedagogical and assistive tools.

Keywords

Artificial Intelligence, AI, ChatGPT, Assessment, Education Studies

Link to article

<https://educationstudies.org.uk/?p=20864>

Introduction and Context

everything that's already in the world when you're born is just normal; anything that gets invented between then and before you turn thirty is incredibly exciting and creative and with any

luck you can make a career out of it; anything that gets invented after you're thirty is against the natural order of things and the beginning of the end of civilisation as we know it until it's been around for about ten years when it gradually turns out to be alright really (Adams, 2005: 95)

Few people in UK higher education could have failed to witness the brouhaha and hullabaloo that followed the launch of ChatGPT on November 30th 2022. The arrival of Google's Bard in February 2023 met with similar portends of doom, slightly tempered by the fact that it delivered inaccurate information about the James Webb Space Telescope as part of its publicity campaign (Griffin, 2023). Meta's BlenderBot 3 had an equally 'successful' launch, telling the BBC that Mark Zuckerberg exploits its users for money, and that, 'he did a terrible job at testifying before congress. It makes me concerned about our country' (BBC, 2022).

Yet the arrival of ChatGPT seems to have struck a distinctly nervous chord among many in the higher education sector and beyond, from Jordan Peterson's rather typical claim that many universities will go 'bust', to the resignation of Google's chief Artificial Intelligence (AI) researcher warning of the 'scary' dangers of chatbots (BBC, 2023A), to even a range of key AI leaders asking for a 'pause' in AI development to assess potential risk (De Vynck, 2023). This is despite the fact that AI already forms an integral part of many people's lives. As Selwyn (2022: 80) highlights, much of the 'initial work in AI during the 1950s and 1960s underpinned a range of technologies used in education towards the end of the twentieth century', and, on a more mundane level, algorithms are already used in a wide range of ways – from recommending TV shows to calculating insurance premiums.

This theoretical paper will outline ChatGPT and contextualise the debate around its emergence, highlighting how much reaction is reminiscent of earlier 'moral panics' (Cohen, 2002) surrounding new technologies. Whilst academic research into the implications of ChatGPT is now starting to emerge, this paper draws upon the few publications available at the time of writing, as well as news reports and wider texts on educational technology. An example generated 'essay' will be shown and critiqued, before discussing more recent educational responses, and the implications of ChatGPT and other AI tools for Education Studies as an academic discipline.

AI and ChatGPT

AI, or what is sometimes known as 'algorithmic data processing' or 'automated processing' (Selwyn, 2022: 193) are computer systems that can make decisions or predictions based on access to information or previous inputs, what the European Commission (2018) defines as, 'systems that display intelligent behaviour by analysing their environment and taking action – with some degree of autonomy – to achieve specific goals'. Whilst intelligent tutoring systems or AI driven personalised learning systems have been utilised in education for many years now, and ChatGPT is not that different from other older tools, the key developments are that it has a free-to-use version (some other AI tools charge for services), and is very user-friendly (Grove, 2023) – hence it has been described as the 'most advanced chatbot thus far' (Rudolph *et al.*, 2023: 1). ChatGPT also offers a subscription service for more advanced features, and at the time of writing, the latest version (GPT-4) has just been released, and is initially only open to subscribers. This new version, it is claimed, can interpret images and even tutor students (Williams, 2023), leading to some arguing that this 'free availability is unlikely to be a permanent feature' (Rudolph *et al.*, 2023: 4).

ChatGPT, or, to give its full name, 'Chat Generative Pre-trained Transformer' (Farrokhniaa *et al.*, 2023: 1) is a natural language processing tool run by a form of AI based on 'machine learning' (Harasim, 2017), enabling the software to make decisions based on both interactions with participants and historical trends in the data. Both Google Bard and ChatGPT are generative AI tools based on "large language models" (LLMs) (DfE, 2023), in that they have been "trained" with vast databases to write coherent text in a particular style, according to the instructions (prompts) given by the user (QAA, 2023). As such, ChatGPT generates natural language responses to text-based prompts, in form, it is claimed, that is often indistinguishable from human written text (Farrokhniaa *et al.*, 2023).

ChatGPT is known as a 'chatbot', in that it is 'an intelligent agent that is capable of interacting with a user by answering a series of questions and providing an appropriate response' (Adiguzel, Kaya, and Cansu, 2013: 2). However, another key difference is that it develops natural language utilising a self-attention mechanism, allowing for the model to learn 'contexts' of dialogue and present more appropriate responses. In short, the software 'learns' to predict what the user wants, and the more people that

use ChatGPT, the better it gets – hence it can provide real-time and potential personalised responses with self-improving capability (Farrokhniaa *et al.*, 2023).

Very quickly, ChatGPT has 'established itself as a valuable resource for students and professionals' (Adiguzel, Kaya, and Cansu, 2013: 3), with Times Higher Education reporting that the service had received 850,000 hits from Warwick University alone over December 2022 and January 2023 (THE, 2023). Crucial, however, are the concerns expressed over its perceived threat to academic integrity, particularly, as Rudolph *et al.* highlight, in that 'it has the unique capability of being able to generate text that sounds remarkably intelligent based on the prompts provided by users, including homework assignments and exam questions' (2023: 11).

Reaction to ChatGPT

New technologies are often seen as the harbingers of change. Harasim (2017) highlights what she terms as four major socio-technological shifts in human history: the development of speech, writing, printing and mass communication, and finally the internet, and the profound changes that these technological developments brought about. Similarly, in the late 1980s, Hawisher and Selfe argued that the development of writing, printing, the telephone and the computer 'were all accompanied by profound social changes that were scarcely predicted and even now are only imperfectly understood' (Hawisher and Selfe, 1989: 243). Interestingly, however, Hawisher and Selfe were discussing concerns over the role of technology in education in relation to the development of word-processing, and it is fascinating to contextualise much recent debate over AI tools with those aimed towards earlier 'disruptive' technologies.

As Rudolph *et al.* highlight, 'the advent of new education technology often engenders strong emotions, ranging from doomsday predictions to unbridled euphoria' (2023: 1), and the initial reaction to ChatGPT has been no different. Headlines and comments such as 'this is going to change everything!' (Gill, 2023), 'academics are feeling some sense of panic' (Bagshaw, 2022), and that ChatGPT 'may soon kill the undergraduate essay' (Grove, 2023) have abounded. Many academics are concerned about the ethical considerations of ChatGPT, particularly those concerning plagiarism and the authenticity of students' written work (Bagshaw, 2022). Others have concerns about its potential negative effects on students' higher-order thinking skills, as well as the

effect it may have on assessment practices (Farrokhniaa *et al.*, 2023). Whilst ChatGPT is already being seen to be having a detrimental economic impact on existing online education providers (Deccan Herald, 2023), university teachers have agonised 'in their droves' over its implications for academic practice (Grove, 2023), with its emergence being regarded as 'a serious threat to academic integrity, especially in higher education' (Farrokhniaa *et al.*, 2023: 8).

Such reactions are nothing new. Pennington describes how many reacted to word-processing with a 'naive sense of excitement or fear' (1990: 78), arguing that its emergence 'elicited strong views on both sides, as those who first tried out computer-assisted writing in native speaker composition classes were either wildly enthusiastic in their advocacy or vehement in their rejection of the new medium' (1990: 77). Concerns over the reliability and accuracy of information provided by ChatGPT, particularly as its datasets only cover information up to 2021 (Grove, 2023), echo earlier criticisms of the information available in Wikipedia, with Kamm (2007), for example, arguing that that articles are dominated by the loudest editorial voices or by an interest group with an ideological 'axe to grind', and Black (2010) characterising the content of articles as a mixture of 'truth, half-truth, and some falsehoods'.

As Green and Haddon (2009: 2) highlight,

Every new medium with the potential to reach a mass audience has been a source of concern over its potential impact, and this has usually been conceptualised in negative terms. New media are seen as disrupting existing relations of communication between powerful and powerless, and so threatening existing hierarchies of power and control.

Such negative reactions can be seen in those not just to ChatGPT, but other earlier technologies, with observations on power and control being moot not just for Wikipedia, but even (again) word-processing. As Hawisher and Selfe observed in the 1980s, some academics viewed its emergence as almost an epistemological crisis: 'Who will now control the 'word' when everyone is publishing with ease...?' (1989: 175). *Plus ça change*.

Not all reaction to ChatGPT has been negative, however. Others have responded to the furore with barely concealed disdain, with Byrant (2023), for example, viewing the reaction as 'littered with hyperbole, barely evidenced case studies and the kind of end-is-nighism we have not seen since, well since MOOCs' [Massive Open Online Courses]. More recently, the possible benefits of AI-based chatbots are being explored, with the claim that 'neurodivergent students and those for whom English is not their first language will benefit most from ChatGPT' (BBC, 2023B). Even the QAA now recognises that since the initial explosion of panic and angst, 'there has been considerable reflection and debate in the sector around how these tools might be used to support academic programmes while maintaining the integrity of awards' (QAA, 2023: 1). Certainly, the initial panic appears to have dissipated to a certain extent, with responses becoming more measured and nuanced. Compare, for example, these comments from the same author on the website WONKHE, each less than six months apart:

students can have their essays written directly by the AI, and after refining their input prompts, can generate a variety of solid 2:1 responses in less time than it's taken you to read to this point in the article (Bagshaw, 2022)

with,

although it is claimed that ChatGPT can write an essay deserving a 2:2, in practice the user requires a great deal of critical reasoning and research to bring the average response up to that standard (Bagshaw, 2023)

The next section will examine these claims in the context of a fictitious Education Studies assignment, generated by ChatGPT.

Methodology – ChatGPT Example

In the short time since beginning to write this article, the capabilities of ChatGPT have changed. Even recently, Grove highlighted one of its shortcomings, in that it 'cannot yet cite sources to document... outputs' (2023) – now, this is no longer the case. Whilst this is a theoretical discussion paper, an objective approach to utilising ChatGPT was

adopted. After registering for the free version of ChatGPT (ChatGPT, 2023A), the software was trialled for a few days in March 2023, before the following query was sent: 'write an essay on inequality in education with references, quotations and citations'. What follows is the generated output:

Introduction:

Education is a fundamental right and plays a vital role in shaping an individual's life and society as a whole. However, education inequality is a pervasive issue that has persisted for years, both nationally and globally. Despite efforts to ensure equal access to education, disparities continue to exist, depriving children of equal opportunities to develop their full potential. This essay will examine the issue of education inequality, including its causes, consequences, and potential solutions.

Causes of Education Inequality:

Education inequality can be attributed to a variety of factors, including economic, social, and cultural factors. Economic inequality is one of the primary factors that contribute to education inequality. As Sirin (2005) asserts, "socioeconomic status is one of the most robust predictors of educational achievement" (p. 417). Low-income families may not have access to quality education due to financial constraints, which limits their educational opportunities. Additionally, education inequality can also be caused by social factors, such as race and ethnicity, gender, and geographic location. For instance, children from marginalized communities may face discrimination in accessing quality education, which limits their chances of success. As Brighthouse and Swift (2019) note, "Discrimination may limit individuals' access to high-quality educational resources and opportunities" (p. 42).

Citation:

- Reardon, S. F. (2011). The widening academic achievement gap between the rich and the poor: New evidence and possible explanations. *Whither Opportunity?: Rising Inequality, Schools, and Children's Life Chances*, 91-116.

- Egalite, A. J., & Kisida, B. (2018). The Effects of School Spending on Educational and Economic Outcomes: Evidence from School Finance Reforms. *Education Next*, 18(2), 62-69.
- UNESCO. (2021). *Global Education Monitoring Report 2020: Inclusion and Education*. UNESCO Publishing.

Consequences of Education Inequality:

Education inequality has significant consequences for both individuals and society as a whole. Children who lack access to quality education are more likely to drop out of school, have low academic achievement, and have fewer opportunities for advancement in their careers. Reardon (2013) argues, "Children from lower-income families tend to perform worse in school, graduate from high school at lower rates, and have lower rates of college enrollment and completion" (p. 95). This perpetuates a cycle of poverty and inequality, limiting their potential and ability to contribute to society. Furthermore, education inequality can also have economic consequences, such as decreased productivity, lower economic growth, and increased social inequality.

Citation:

- Hertz, T., Jayasundera, T., Piraino, P., Selcuk, S., Smith, N., & Verashchagina, A. (2007). The Inheritance of Educational Inequality: International Comparisons and Fifty-Year Trends. *The B.E. Journal of Economic Analysis & Policy*, 7(2).
- Sirin, S. R. (2005). Socioeconomic status and academic achievement: A meta-analytic review of research. *Review of Educational Research*, 75(3), 417-453.

Solutions to Education Inequality:

To address education inequality, policymakers and educators must take proactive measures to create equal access to quality education. As Sirin (2005) argues, "Equal access to quality educational resources and facilities can be achieved by allocating resources based on need rather than economic status" (p. 443). One approach is to invest in early childhood education, which has been shown to have a significant impact on academic achievement and social mobility. Additionally, policymakers

must address the economic and social factors that contribute to education inequality, such as poverty and discrimination. This can be achieved through measures such as increased funding for schools in low-income areas, targeted scholarships, and affirmative action policies to promote diversity and inclusivity.

- Jackson, C. K., Johnson, R. C., & Persico, C. (2016). The effects of school spending on educational and economic outcomes: Evidence from school finance reforms. *The Quarterly Journal of Economics*, 131(1), 157-218.
- Heckman, J. J. (2006). Skill formation and the economics of investing in disadvantaged children. *Science*, 312(5782), 1900-1902.
- Emdin, C. (2016). *For White folks who teach in the hood ... and the rest of y'all too: Reality pedagogy and urban education*. Beacon Press.

Conclusion:

In conclusion, education inequality is a significant challenge facing societies around the world. Its causes are complex and multifaceted, including economic, social, and cultural factors. The consequences of education inequality are severe, limiting individuals' potential and perpetuating social inequality. However, there are potential solutions that policymakers and educators can implement to address education inequality, such as investing in early childhood education and addressing economic and social factors that contribute to inequality. As Nelson Mandela once said, "Education is the most powerful weapon which you can use to change the world." By taking proactive measures, societies can ensure that all children have equal access to quality education, allowing them to reach their full potential and contribute to society.

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Hertz, T., Jayasundera, T., Piraino, P., Selcuk, S., Smith, N., & Verashchagina, A. (2007). The Inheritance of Educational Inequality: International Comparisons and Fifty-Year Trends. *The B.E. Journal of Economic Analysis & Policy*, 7(2).

Jackson, C. K., Johnson, R. C., & Persico, C. (2016). The effects of school spending on educational and economic outcomes: Evidence from school finance reforms. *The Quarterly Journal of Economics*, 131(1), 157-218.

Reardon, S. F. (2013). The widening academic achievement gap between the rich and the poor: New evidence and possible explanations. In R. Murnane & G. Duncan (Eds.), *Whither Opportunity? Rising Inequality and the Uncertain Life Chances of Low-Income Children* (pp. 91-116). Russell Sage Foundation.

Sirin, S. R. (2005). Socioeconomic status and academic achievement: A meta-analytic review of research. *Review of Educational Research*, 75(3), 417-453.

UNESCO. (2019). *Education and Equality of Opportunity*. Retrieved from <https://en.unesco.org/gem-report/education-and-equality-opportunity>

Note: The above citations are provided as examples, and it is recommended to consult relevant academic sources and adapt the citations as per the required referencing style (e.g., APA, MLA, etc.) for your essay.

(ChatGPT, 2023B)

Findings

The first notable feature of the output is its length, or lack of it, to be exact. ChatGPT seems to specialise in short, formulaic responses, where longer outputs (the user can request a specific word count) appear as bulleted or numbered lists of points (Williams, 2023). Unless a user paid for the subscription service, where longer formatted responses can be acquired, Bagshaw's above claim that more critical reasoning and research is needed by the student in order to format a suitable assignment, seems extremely pertinent. There is a slight caveat here, however, in that the rather generic essay title was asked after due consideration; when a more pertinent title was input, asking for a critique on personal experiences of educational inequality, for example,

ChatGPT gave extremely bland and unspecific generalisations dressed as 'personal examples' with the disclaimer 'The personal examples provided here are fictional and are meant to illustrate the experiences of individuals affected by educational inequality' (ChatGPT, 2023B).

The output was also submitted to Turnitin which returned a relatively low score of 18% (this has caused some concern – see below), mainly on the references used. Whilst the use of sources appears generally sound – some reports have highlighted that ChatGPT has the propensity to 'invent' them (BBC, 2023B) – there are several American sources cited that would not really be suitable for an undergraduate Education Studies assignment in the UK. It may also be rather telling to note how many of the sources have a distinctly economic rather than educational focus, and it is extremely unclear what the 'citations' are referring to. Similarly, there are sources in the reference list that are not used in the main body, and an unreferenced quotation in the conclusion (although for those used to marking undergraduate work, this is nothing new).

Despite claims that this new version of ChatGPT can write 'in the style of an original author' (Williams, 2023), the prose style of the output is both bland and uninspiring, being reminiscent of the findings from a study at the University of Bath, which found that ChatGPT outputs were characterised by being simplistic, having a lack of evidence, and repeating parts of the question posed in both the introduction and conclusion (BBC, 2023B). Indeed, although not immediately evident in this piece, other have highlighted how ChatGPT output, as well as being both bland and generic, may contain simple errors (Grove, 2023), and in its own search page the ChatGPT service also states a range of limitations, such as the generation of invalid information, biased content, and limited knowledge of world events after 2021 (ChatGPT, 2023A).

This output from ChatGPT is a rather soulless piece of prose, concurring with views that assignments written by AI services are unlikely to get the highest marks, or may scrape a 2.2 at undergraduate level but fail at Masters level due to a lack of knowledge synthesis (Webb, 2023; Grove, 2023). Indeed, in terms of the written quality of the example output, other studies have found that 'some of the statements are more like those of a GCSE pupil than a university student' (BBC, 2023B). In terms of the content, it is perhaps also rather telling that the perceived causes of educational inequality are

limited to income, race and ethnicity, gender, and geographic location. Farrokhniaa *et al.* (2023) warn that AI tools can perpetuate existing discrimination in education, and there is nothing here discussing other potential causes of educational inequality, such as class, special education needs, disability, or sexual orientation. Recently, UNESCO (2023) has expressed concerns over potential access and accessibility issues to AI services, as well as those concerning gender and diversity, and cognitive bias in its generated text. Simultaneously, the DfE (2023) warned of the lack of judgement or critical thinking in ChatGPT outputs (both evident in the above example). These are all important issues in Education Studies, as well as skills that we expect our students to develop.

ChatGPT and Education Studies

So how worried should we be in Education Studies? In terms of assessment, probably not much. Assessments in Education Studies tend to involve 'application of key principles to related contexts' (QAA, 2019: 9), which current AI systems such as ChatGPT really struggle with (Rudolph *et al.*, 2023). Whilst there has been recognition of the potential need for teaching staff to change or adapt assessment practice (QAA, 2023), or even calls to move back to 'authentic assessment' in order to combat the perceived threat of AI (Bryant, 2023), such types of assessment have been *de rigeur* in Education Studies for many years. Almost 10 years ago, Allsopp (2014: 71) highlighted that a simple counter to plagiarism is 'pedagogic practice in general and assessment practice in particular', where Education Studies lecturers look at the design of their assessments in order to minimise the opportunities for plagiarism.

In Education Studies, we already create authentic assessments in an attempt to foster students' creative and critical thinking abilities, often asking students to include reflections on personal experience or personal perspectives in their writing – these are difficult for AI systems to replicate. Similarly, in Education Studies we utilise a wide range of assessment methods (QAA, 2019), often characterised as 'innovative' (Curtis and Pettigrew, 2010: 46), in that they place the interest of learners at the centre of assessment practice, and thus redistribute educational power. Many Education Studies assignments also ask students to critique recent publications or policy – if this was published after 2021, then ChatGPT, by its own admission, would not be able to do this. Whilst it is unlikely that a title as generic as that shown in the example would

be used in undergraduate courses, Gill's (2023) claim that AI is 'only a problem if your assessment is designed for recall and summarisation' seems extremely pertinent.

The very nature of Education Studies as an academic discipline is also at odds with AI generative outputs. As the QAA Benchmarks state, 'all courses in education studies... draw on a wide range of intellectual resources, theoretical and ethical perspectives and academic subjects to illuminate understanding of education and the contexts within which it takes place' (QAA, 2019: 6). Yet AI has an objectivist epistemology (Harasim, 2017), where knowledge is seen as both fixed and finite, and more problematically, as *truth*, which is not the case in Education Studies. At the heart of the discipline lies a critical evaluation of the key issues in education, and one that deals with multiple rather than singular explanations of a phenomena (Bartlett and Burton, 2020), and this cannot be explained by formulaic generative AI outputs.

This is not to say we should be blithely ignoring the implications of AI in Education Studies. It is telling that the term 'technological' was added to the most recent QAA benchmarks, in that Education Studies 'offers intellectually rigorous analysis of educational processes, systems and approaches, and their cultural, societal, ***technological***, political, historical and economic contexts' (QAA, 2019: 4) [bold italics added]. As such, we need to be discussing the issues of AI with our students. Furthermore, we have both a moral and professional imperative to discuss these issues *critically*. AI is directed by algorithms that predict or direct human behaviour and, as such, one could argue that the unconsidered use of AI in education would lead to the automating rather than empowerment of the learner (Bates, 2016), a world where clicking has replaced thinking, and where logic is emphasised over creativity or ethics (Harasim, 2017). Ironically, it is perhaps even more telling that one of the transferable skills in the QAA Benchmarks states, 'On graduating with an honours degree in education studies, students should be able to use technology effectively to enhance critical and reflective study' (QAA, 2019: 11) - where the human faculties of both criticality and reflection are beyond the capabilities of any AI system.

Education Studies already utilises a wide range of technologies in learning and teaching, and current practice recognises the opportunities that it has afforded in terms of alternative forms of assessment, through the use of blogs, wikis, podcasts, e-portfolios and films, for example. We already have a responsibility to teach students

how to utilise a range of tools and resources in a moral and ethical fashion (Bagshaw, 2023), and AI is no different. Learning and teaching practices are often subject to a number of challenges when faced with the advent of a disruptive technology, but the management of these situations falls to the responsibility of both policymakers and education practitioners (Rudolph *et al.*, 2023). As such, we need to be discussing the implications of AI within the Education Studies curriculum, including their ethical and responsible use (UNESCO, 2022; Boucher, 2020). This is both as part of the discipline and in preparing students for changing workplaces, teaching them the safe and appropriate use of emerging technologies such as generative AI (DfE, 2023), and providing them with the 'knowledge, understanding and critical analysis to inform current and future professionals' (QAA, 2019: 4).

Conclusion

For good or bad, AI is here, and here to stay. Whilst it is already utilised in many university processes, particularly those used in the surveillance and management of students (Selwyn, 2022), more recently, the number of AI systems has grown exponentially, and is now ubiquitous in education and wider society as a whole (Maslej *et al.*, 2023). In education, the use of many AI tools is already countenanced, such as Grammarly for evaluation and corrective feedback, or Quillbot for paraphrasing a user's inputted text, for example. Microsoft already appears to be incorporating ChatGPT holistically into its products (Rudolph *et al.*, 2023), and has recently begun adding the AI Co-Pilot to its Office suite (McGee, 2023). Even more recently, a new AI service called Teachermatic was launched, designed to ease teachers' workload, with a range of tools including multiple choice quiz setters and scheme of work generators.

Despite this, reactions to both AI and the emergence of ChatGPT have been very mixed across the educational landscape, and many seem to fit Cohen's (2002) model of a moral panic in their sudden severity and (for some) equally fast dissipation. Whereas Manchester University initially banned its use (THE, 2023), for example, others have highlighted the futility of such an approach (Webb, 2023), and UCL has now begun to publish a series of student briefings on engaging with AI in education and assessment, with a declaration that 'rather than seek to prohibit your use of them, we will support you in using them effectively, ethically and transparently' (UCL, 2023). Obviously, what is needed are clear and adaptable guidelines for a rapidly changing

landscape, and such an approach – similar to that of that International Baccalaureate, where AI generative text is to be treated like any other online source (Milmo, 2023) – would seem a good starting point, beyond merely taking ‘reasonable steps where applicable to prevent malpractice’ (DfE, 2023:3). Many have also called for greater regulation of the AI industry by Ofcom, and here Selwyn’s observation that increasing integration of AI technologies in education and education processes is a ‘serious proposition with specific politics’ (2022: 165), and that AI developers should take more responsibility, seems rather congruent in light of the letter mentioned in the Introduction.

Despite call for a return to more ‘authentic’ assessment, we also need to ask ourselves whether the issues surrounding the use of AI are those that the massification of the higher education system has created for itself. In an era of large cohorts and anonymised assessment practices, attempts to build trusting relationships with our students in a student-centric pedagogy can be difficult (Rudolph *et al.*, 2023), and where often we may be forced to ‘look at the student as object’ (Noddings, 2003: 190). In Education Studies, many assessments are already characterised as being *for* learning rather than *of* learning, but any further shift to a more personalised authentic form of assessment would both marginalise misuse of AI tools and mitigate the current scramble for more advanced detection software. Despite claims that the formulaic nature of AI output can be picked up by AI detectors (Williams, 2023), others have warned the dangers or even likelihood of ‘false positive’ results (Webb, 2023), and that detection software will fail to keep up with the rapid developments of emerging AI technologies (Farrokhniaa *et al.*, 2023). Recently, Turnitin has developed AI Writing Detection Capabilities (AIWDC), and although some universities have now adopted this, others have claimed that this has been both rushed and un-tested, causing other institutions to opt out (Staton, 2023). There are other subscription detection services such as ZeroGPT, but the irony cannot be missed – we are utilising AI systems to detect AI output.

In Education Studies, we need to move beyond the debate of whether to use or not to use generative AI tools such as ChatGPT, which in itself is reminiscent of the debates surrounding the use of Wikipedia over 20 years ago (Kamm, 2007). The use of technology in education is complex, and goes beyond oversimplified binary

oppositions. The challenge is knowing how to utilise such tools in both an intelligent and ethical manner (Grove, 2023), as well as explore the opportunities they may bring for learners. Selwyn (2022), for example, highlights how AI has a huge potential as an assistive technology for learners with special educational needs or disabilities, from text-based tools to support students with dyslexia to socially assistive robots for learners on the autistic spectrum. Such opportunities are extremely important, as well as those for personalised and adaptive learning (Farrokhniaa *et al.*, 2023; Rudolph *et al.*, 2023). No-one knows where AI will be in a year's time, but as Bryant (2023) highlights, 'Learning is not a procedure, it is a sometimes traumatic, sometimes joyous journey of transition from not knowing to knowing, from incompetence to competence and from personal to collective. No generative AI can replicate that.' There's no need to panic – yet.

Ethical Statement

This article was not written by Artificial Intelligence, ChatGPT, or any other Chatbot

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