App-hazard innovation: An empirical investigation of media discourses on ChatGPT in educational contexts

Kristjan Kikerpill¹ and Andra Siibak¹

¹Affiliation not available

March 23, 2023

Abstract

An analysis of a sample of 143 news stories and opinion pieces published in the first two months since ChatGPT’s release. The method of analysis is critical discursive psychology.

INTRODUCTION

On 30 November 2022, OpenAI released the ChatGPT large language model to “early research preview” (Hutton, 2022), and the interactive application quickly garnered significant attention from the public (Marche, 2022). As a chatbot, ChatGPT is able to provide answers to complex questions, produce texts, including emails, poems and essays, as well as write code (Hachmann, 2022) in response to user-generated prompts. Having noted that ChatGPT is able to produce essay-style texts based on user input, the potential impact of the technology in educational contexts is clear. Less than a week after ChatGPT’s release to the public, Stephen Marche wrote an article for The Atlantic titled “The college essay is dead” (Marche, 2022). A day after Marche’s piece, Daniel Lametti responded with his own piece in Slate titled “A.I. could be great for college essays”, ending the article with “I hope my students use it” (Lametti, 2022).

ChatGPT itself went “viral” (Rosenblatt, 2022), capturing the attention of academics, journalists, and tech enthusiasts. The previously mentioned microcosm of radically differing positions taken with respect to ChatGPT signals the tug-of-war between techno-optimists and those more critical of novel technologies’ impact on society or its specific sectors. In fact, it has been argued that the rapid uptake of various advanced digital technologies has often initiated a deep societal concern about the potential consequences of this growing dependence on technologies (see Orben, 2020).

The reason for writing this article, thus, originates from two distinct but connected sources. The first impetus is an interest in understanding early media coverage of technologies that go “viral” (Rosenblatt, 2022), including the conflict dialogue between so-called transformationalists and sceptics (Elliott, 2022), and any sensationalising or catastrophising that may ensue. The second reason relates to the opportunities and concerns for the practice of academic writing entailed by ChatGPT and similar tools, as the circle of
arguments on the “death”, and the continued survival, of the college essay has made human-written text the central theme of large language models’ practical use (Lametti, 2022: para. 17).

Our aim in this paper is to trace the dominant social imaginaries, i.e., “collectively held constellations of speculations and narratives that draw on the understandings, norms, values and experiences of the world” (Lupton, 2021: 6), about ChatGPT in educational contexts. Although media plays a central role in shaping sociotechnical imaginaries shared on a specific topic (see Mackley & Jewitt, 2022), media texts have been used as the basis for such analyses only in limited instances (Bory, 2019; Natale & Ballatore, 2020; Mackley & Jewitt, 2022). To add to this currently limited but important body of work, we apply the critical discursive psychology (CDP) approach to N = 143 news stories and opinion pieces that were published in international news media during the first two months after the public launch of the technology. Our analysis shows that socially irresponsible technology release tends to operate with relative impunity and lack of regard for social consequences entailed by such technology introduction. Further, in the first two months since ChatGPT’s release, the educational sector found itself struggling with addressing the implications from ChatGPT, in particular whether the central issue pertains to the ‘product’ of such technologies or the face-the-facts necessity of incorporating ChatGPT into educational processes. Finally, our analysis shows that tech companies’ responsibility stops at the point of technology release, after which the responsibility of dealing with the consequences is discursively and practically transferred over to agents in impacted sectors, including the education sector.

Literature review

Socially (ir)responsible technology roll-out and techno disruptions

Previous research has shown at least two broad types of narratives that have accompanied emerging AI solutions over time: a struggle between humans and something humanlike, or a form of cooperation between human and something un-humanlike (see Bory, 2019). Part of the narrative myth-making surrounding artificial intelligence has involved the rhetorical use of the future that promises the elimination of shortcomings and limitations currently still present for a technology (Natale & Ballatore, 2020). Thus, while “[a] lot of the promised benefits of A.I. have been eternally five years away”, the ChatGPT “moment” has been described as the opposite in terms of delivery (Lopez, 2022: para. 4), which invites active engagement from the start. This engagement, including any controversies entailed by said technological moment that get narratively stacked against the accompanying hopes and opportunities, is likely to only add to the continued proliferation of myths and debate (see Natale & Ballatore, 2020). Considering that “to a computer scientist, the solution to a bug is often just more computer science” (Borel, 2018: para. 26), responses to a potential social fallout may have to come from actors in other fields (see Meyers, 2019: 257).

In 2021, security technologist Bruce Schneier pointed out that “[W]hat you code affects the world now. Gone are the days when programmers could ignore the social context of what they code […]” (Dern, 2021: para. 1). Furthermore, the lack of focus on public-interest technology, i.e., studying and applying technology to advance the public interest, generate public benefits and promote the public good (see Schneier, 2019), is the main reason why engineering schools ought to “include ethics and encourage engagement with the world” (Menn, 2019: para. 17). At the heart of the issue lies technology opportunism (see Berman, 2021), or developing technologies for maximum profit absent any social considerations. For example, while the education sector was nearing collapse under the unexpected pressures and adaptation requirements brought by the COVID-19 pandemic, technologists offering proctoring software were elated to increase their value by four or five times (see Selwyn, 2021).

In addition to pure opportunism, we are also required to deal with the social fallout from technologies, which are seemingly aimless in terms of public benefits, that turn out to be very harmful in social practice. An example of this from recent history is the emergence of deepfake technology: it could be used to regenerate the voices of people who cannot speak due to illness (De Ruiter, 2021), but is actually used primarily for the creation of non-consensual explicit content (Simonite, 2019). Yet, the responsibility for these technologies on the part of their creators seems to stop at the point of technology release, even if specific applications
may get caught up in the re-invigorated debate on software liability moving forward (see Schneier, 2004; Bertuzzi, 2022).

According to Berman (2021: para. 4), if we want to inhabit an environment “that is enhanced, rather than oppressed, by technology” there is a need to change from a culture of technology opportunism to one of technology in the public interest. This would, at minimum, require that public interest and social consequences are considered before a technology is released to the public (see also Campolo & Crawford, 2020). Technologies that cannot be considered general purpose, such as the internet (see Naughton, 2016), but also lack specific purpose in terms of a social need being addressed, seem particularly susceptible to reenacting the “harmful toy” scenario, e.g., deepfake technology used for ‘funny videos’ (Der Standard, 2020) and ChatGPT used for writing “an epic poem about the need for good oral hygiene” (Hachmann, 2022: para. 14). With ChatGPT, this may be even more problematic because its particular functionality immediately contributes to an already burdensome educational problem, i.e., academic dishonesty (Marche, 2022; see also McCabe, Butterfield, & Trevino, 2012).

From academic dishonesty to artificial stupidity

Ever since the early study by Bowers (1964), academic dishonesty and cheating behaviour among college students has remained a serious issue that has occurred, and continues, at significant rates (see Stiles, Wong, & LaBeff, 2018). In fact, research indicates that there has been an increase in detected cases of academic dishonesty after the COVID-19 pandemic (Jenkins et al. 2022). Recent studies show that students, who experience high stress, are particularly susceptible to misuse of AI technologies (Ventayen, 2023), because cheating has become a means for reducing stress and coping with academic pressures for many of them (Crawford, Cowling & Allen, 2023). Although more than half of students report engaging in cheating behaviour while in college (Krienert, Walsh, & Cannon, 2022), there exists a small minority of flagrant cheaters (Witherspoon, Maldonado, & Lacey, 2010). In terms of methods of cheating, cheaters are opportunists by-and-large, i.e., using whatever means are available, including both traditional and “high-tech” methods (see Stiles, Wong, & LaBeff, 2018; Surahman & Wang, 2022). However, Witherspoon and colleagues (2010) noted that flagrant cheaters’ preference falls on newer methods, particularly those made possible by advancements in technology. For example, years before the launch of ChatGPT, Google trends reveals a considerable increase in searches for article generator tools (Abd-Elaal, Gamage & Mills, 2019). Thus, students who engage in cheating behaviour more than their peers could be considered as so-called dishonesty innovators in academic settings. Moreover, while the conventional concern associated with academic dishonesty is its potential carry-over into work settings (LaDuke, 2013; Krienert, Walsh, & Cannon, 2022), anecdotal evidence suggests that new methods of content creation witnessed at internships also feed back into academic settings (see Heyward, 2022). The latter concerns, in particular, the use of AI-powered content creating applications (Peritz, 2022) that could now operate as the machine equivalent of “essay writing services” (see Ofqual, 2014; Knapp & Hulbert, 2017). The increased move towards the provision of online education has also witnessed companies that offer complete cheating services, including participating in online courses for the student (Malesky Jr., Baley, & Crow, 2016).

Keeping the aforementioned developments in mind, the issue of academic dishonesty can be broken down into the products it yields and the processes it involves. As noted by Hugenholtz and Quintais (2021), the human effort, or the creative process of conception, execution, and redaction, required for yielding output with ChatGPT is infinitesimal or non-existent, and the outcome would likely not be considered a “work” within the context of intellectual property. This lack of human effort is highly problematic in the context of authorship, but even more so in terms of skill development.

In the epilogue of his book “The Shallows: What the internet is doing to our brains”, Carr (2010) evoked a gloomy outlook: “[…] as we grow more accustomed to and dependent on our computers, we will be tempted to entrust to them ‘tasks that demand wisdom.’ And once we do that, there will be no turning back. The software will become indispensable to those tasks.” The aforementioned overreliance on and excessive trust in novel, apparently intelligent systems that have started to colonise “every aspect of human life” (Falk 2021: 38) has, however, provoked a concern about the rise of so-called artificial stupidity (Freedberg Jr., 2017).
have already witnessed how this radical deskilling effect has come to impair human experience in profound ways. Take, for instance, the gruesome example of the Air France 447 disaster from 2009, which was caused by pilots, who had become overly reliant on automated systems and were unable to control the aircraft once the autopilot systems shut down due to a powerful storm (see Freedberg Jr., 2017). The above example can be seen as a stark illustration of the fact that when our skills are unused, they diminish and may later disappear altogether. The growing reliance on automation and supposed techno-fixes that has increasingly found its way into the education sector, should not be accepted unquestioningly.

Data and methods

Media representations play a prominent role in defining social problems and shaping the agenda of public discourses (Critcher, 2003; Kitzinger, 2004) by allowing certain problem representations and voices to become central points of focus, while other perspectives and facts remain less articulated. In fact, considering that media representations are incorporated both into individual experiences as well as social groups’ systems of meaning (Thompson, 1995), we believed that studying the dominant educational imaginaries about ChatGPT would provide initial insights for interpreting the transformations within educational practices.

We compiled the initial list of news and opinion articles using the GDELT search engine. Using the search phrase “ChatGPT academic”, we conducted three searches for periods 30 November to 15 December 2022, 16 December to 31 December 2022, and 1 January to 31 January 2023 with the source language set to English. The search returned 50, 63, and 250 linked results for each period, respectively. The reason for using the aforementioned search phrase was two-fold: to capture discussions of large language models’ use in academic contexts and its potential impact on education, and to include articles and opinion pieces authored by academics or in which academics were asked for input.

Following the initial verification of article quality, a number of exclusions were necessary. The primary reasons for excluding results were repetition, i.e., GDELT returned lists of links of which some directed the reader to the same story published in different domains, or unsuitability for further analysis. We considered articles unsuitable if these were either very brief and/or “boiler-plate” introductions without analysis, authors’ engagement with ChatGPT, or direct quotes or in-text comments from others. The final sample includes $N = 143$ articles (31, 40, and 72, respectively).

We chose the critical discursive psychology (CDP) approach as our methods of analysing the sample texts. The greatest benefit of the CDP approach is the ability to “the possibility of exploring micro-level talk with a view to how such talk draws upon as well as shapes larger socio-cultural discourses” (Kikerpill & Siibak, 2023: 77). More specifically, CDP adopts the notion that people are simultaneously the products and producers of discourse (Billig, 1991). In other words, our expressions, e.g., as captured in published texts or quotes, are influenced by the discourses we consume, but also recreate and impact these in the process. This is a particularly important observation to make, when it comes to the support or criticisms voiced by authors with respect to a specific new technology. Additionally, it is equally important to note “what is neglected to be mentioned” (Billig, 1991). For instance, particularly polarising topics may lend themselves to the easy production of extremes, where something either ‘is’ or ‘is not’, and that potentially clouds the middle-ground, including the issues that fall somewhere between extremely positive and negative outlooks. Moreover, the indexical nature of discourse makes it “inseparable from its context” (Locke & Budds, 2020: 238). For example, when technologies such as ChatGPT are discussed from the perspective of technological innovation, authors may be inclined to emphasise the overall novelty of particular items and be less interested in negatives. However, when a particular functionality of ChatGPT is viewed from an educational perspective, positions may become more varied between positives and negatives as the focus shifts towards specific impacts.

It is important to note, however, that speakers in the general sense, i.e., inclusive of authors of media texts, do not always draw on large discourses in their expression. For this reason, the CDP approach makes use of interpretive repertoires, which are relatively coherent ways of expressing oneself about particular topics (Edley, 2001; Kikerpill & Siibak, 2023). When people address a specific topic, the vocabulary and examples
used tend to be more constrained (Locke & Budds, 2020). For instance, voices that are critical of certain technologies may be viewed as so-called voices of reason or concerned agents, but also as luddites or naysayers etc. Within the context of educational technology, or technology that directly impacts educational efforts, a similar divide may occur with respect to whether the new release is an opportunity or hindrance. This is significant due to the action orientation of talk (Locke & Budds, 2020), as people actively construct versions of events through discourse. The ways in which speakers, or authors, address accountability and agency, or a lack thereof, within their expressions is of importance when applying a CDP approach. Within the context of new technologies, the aforementioned aspects may prove particularly significant when agents reflect on their ability to cope with such technologies, e.g., by blocking use or incorporating it into existing practices.

Results

Following analysis of news stories and opinion pieces in the sample, three interpretive repertoires emerged: “No morals, just dollars?”, “Is it about the process or product?”, and “The unspoken problem of accepted mediocrity”.

No morals, just dollars?

“We should’ve been aware this was coming . . . and we do tend to sleepwalk into the future,” he said. “But it’s a step-change – it’s accessible, it’s got a nice interface and it’s easy to play with.” (Cassidy, 2023: para. 16)

In 2019, OpenAI considered the previous iteration of their technology, i.e., GPT-2, too dangerous for full release “due to concerns of malicious applications of the technology” (OpenAI, 2019: para. 1). While OpenAI started as a non-profit in 2015, it became a for-profit company in 2019 to attract investments (see Piper, 2019). Two months after the release of ChatGPT, OpenAI announced “ChatGPT Plus”, which gives users priority access to the chatbot (Clark, 2023). Previously, it was speculated that a premium version of the service would be released for a markedly higher price point, but the lower price makes the technology accessible to a wider range of people, including “students and businesses who need reliable access to AI-generated text” (Clark, 2023: para. 3). Thus, a more powerful version of a technology considered too dangerous for release three years ago, became perfectly acceptable for full release once the matter turned from so-called safe AI to safeguarding returns on investment. Instead of a “free research preview”, the two-month period starting from ChatGPT’s release was more akin to a degustation of an upcoming consumable, and there was no shortage of interested taste-testers. In fact, the total addressable market in which ChatGPT is operating has been assessed to be worth as much as $1 trillion dollars (see Garfinkle, 2023).

“Google, Meta and other tech giants have been reluctant to release generative technologies to the wider public because these systems often produce toxic content, including misinformation, hate speech and images that are biased against women and people of color. But newer, smaller companies like OpenAI — less concerned with protecting an established corporate brand — have been more willing to get the technology out publicly.” (Griffith & Metz, 2023: para. 15)

In the excerpt above, the choice of protectee within the context of potentially malfunctioning technology is noteworthy - instead of protecting people, who would be impacted by hate speech, misinformation, bias or other types of toxic content, the focus is on protecting corporate brands. Additionally, and as shown in the opening excerpt from Cassidy (2023), the central meta-agent of ChatGPT was initially addressed as something to “play” with:

“From sonnets about the intricacies of neuroscience to mini book reports about the news topic of the day, many are enjoying this new toy. But does it foreshadow something more sinister? If the eyes are a window to the soul, ChatGPT seems to be a window to our soulless future.” (Stern, 2022: para. 1)

Referring to ChatGPT as a “toy”, followed by implications to potentially “sinister” consequences, suggests frivolous or playful use accompanied by a lack of specific direction or purpose, and the possibility of negative outcomes in the longer run. Considering that the earliest tests of ChatGPT revealed poor protections against misuse, and how considerations of outcomes from misuse are not necessarily at the forefront for developers:
“‘A million choices made by engineers go into the design of these models, the underlying assumptions, testing, etc. Maybe more importantly, these companies make choices about how models are marketed and released.’ […] He added, ‘It’s a pretty common problem that ethics and safety take a back seat to having a flashy new application.’” (Tran, 2022: paras. 15-16)

Since a for-payment version of ChatGPT is, at the time of writing, set and the release of the technology was anything but deeply considerate of potential consequences suggests that the “free research preview” was a publicity stunt for a technology, which, at its time of release, primarily served either a ‘playful’ or less than promotion-worthy purpose. With the exception of compiling code (Hachman, 2022), the immediate practical application of ChatGPT was in the context of written university assignments:

“‘Academia did not see this coming. So we’re sort of blindsided by it,’ […] told The Post. “As soon as I reported this on Facebook, my [academic] friends said, ‘Yeah, I caught one too.”’ (Mitchell, 2022: para. 4)

However, even with the knowledge that AI-powered text generators have been used when handing in written assignments prior to ChatGPT (see Heyward, 2022), the matter of verifying whether a text or part of it is AI-generated, e.g., via the technique of watermarking, was only discussed as an ongoing process a few days prior to ChatGPT’s release:

“[R]evealed that OpenAI is developing a tool for ‘statistically watermarking the outputs of a text [AI system].’ Whenever a system — say, ChatGPT — generates text, the tool would embed an ‘unnoticeable secret signal’ indicating where the text came from”, (Wiggers, 2022: para. 2). “There are technical solutions – digital watermarking, but you can just run another program over it to destroy the watermark. It’s an arms race that’s never going to finish, and you’re never going to win.” (Cassidy, 2023: para. 19)

Just two weeks after ChatGPT went live, the first student plagiarism case was reported in the media (Mitchell, 2022). In an attempt “to curb its reputation as a freewheeling cheating machine”, OpenAI itself released a detection tool for teachers two months after the chatbot had been in use, noting that the tool - like other similar tools - is not perfect (O’Brien & Gecker, 2023: para. 1; see also Mitchell, 2022). What raises even more questions about the amount of consideration given by ChatGPT developers to potential consequences, is the fact that a student coder managed to release a detection tool earlier than OpenAI (see Notopoulos, 2023). Thus, if the entire process of release, promotion and ultimate monetization of ChatGPT were to be applied to any physical product, it would resemble a situation in which a car is released for public use while the braking system is still being developed, and no entirely stellar solutions exist (see Southern, 2023). However, because liability rules for software and physical products are not comparable, similar so-called app-hazard disruptions are likely to continue, and the responsibility for dealing with relevant consequences is up to the impacted sectors or communities.

**Is it about the process or product?**

The question of processes or products signifies the dilemma, which emerged from the intellectual conflict embedded into the views from Marche (2022) that came under scrutiny from others reflecting on the topic (see Rim, 2022; Lametti, 2022). While Marche bemoaned the downfall of the essay, or the final product, others minimised the specific issue in lieu of focussing on the processes that applications like ChatGPT could release. Addressing the issue of the product, including ones produced in so-called “essay mills”, Lametti (2022) observes:

“Much like the work of ChatGPT, the papers were vague and error-filled. It’s hard to write a good essay when you lack detailed, course-specific knowledge of the content that led to the essay question”. (Lametti, 2022: para. 22)

Lametti continues by suggesting that although ChatGPT might fail writing a “passable paper” (2022: para. 23), it is a useful pedagogical tool. Here, it is noteworthy that a subjective standard is imposed on the quality of the essay, or the product, as the reason for minimising the issue as such. In other words, the problem of the product is set aside, because the quality of the output may be questionable. In fact, critical voices have previously referred to the output of language models like GPT-3 as “stochastic parrots” (Bender et al.
2021), indicating that the responses of such systems “echo what they hear, remixed by randomness” (Hutson 2021: 23). However, it fails to consider Marche’s (2022: para. 2) argument with respect to how sections of most student papers “read[s] like filler”, which is what ChatGPT is capable of producing as output. The onus is not on off-the-shelf eloquence in writing, but the receipt of something that could provide the initial input for further editing. In other words, the initial quality of the product is secondary to the fact that a product can so easily be created without any real input from a human.

“While the tool may be able to provide quick and easy answers to questions, it does not build critical-thinking and problem-solving skills, which are essential for academic and lifelong success.” (Rozensweig-Ziff, 2023: para. 2)

In the excerpt above, the product-focus of the ChatGPT issue is further emphasised as a quick solution, which requires little to no effort and, thus, also provides the same amount of experience and learning for the human user. In line with McKnight (2021: 446), ChatGPT and similar technologies can rapidly identify what has gone before, whereas humans “can contribute what has not yet been thought, but which they perceive is needed for a better world”. Hence, the mundane production of text without human input has several consequences that must be considered, including diminished writing practice for students through excessive reliance on technology and potentially decreased critical engagement with the subject matter itself. Growing concerns about ChatGPT’s negative impacts on student learning, e.g., the inability to develop students’ critical-thinking and problem-solving skills (Elsen-Rooney, 2023: para 4), resulted in ChatGPT being banned from different schools and school districts around the world.

Additionally, facing the fact of potential ChatGPT use is not merely an issue on the product-or-process quandary entailing from students, because the same impacts become reflected on the administrative side of (higher) education. For instance, while AI-generated content has been a growing concern among academics (Sparrow, 2022), the release of ChatGPT was a type of watershed moment for the materialisation of such concerns in terms of education management:

“‘Our universities have revised how they will run assessments in 2023, including supervised exams . . . greater use of pen and paper exams and tests . . . and tests only for units with low integrity risks.’ […] ‘Assessment redesign is critical, and this work is ongoing for our universities as we seek to get ahead of AI developments’.” (Cassidy, 2023: paras. 8-9)

Thus, what may be decreased from students’ workload in terms of engagement with writing tasks, gets added onto administrative burden in the form of assessment reorganisation and potentially increased distrust towards students. However, the voices present in the sample also point out the ways in which ChatGPT potentially reveals issues that underlie current approaches to teaching and instruction:

“ChatGPT for sure sheds some light on what we’ve been up to, school- and teaching-wise, but the AI isn’t in control—we are. If ChatGPT is the end of high school English as we know it, well . . . that course in that form didn’t deserve to live anyway.” (Warner, 2023: para. 5)

As expressed in the excerpt above, current approaches to teaching language may have “deserved” what ChatGPT provided. While the criticism by Warner (2023) deals with a broader complex of problems faced by modern education systems, the ‘disruptiveness’ of ChatGPT – if and where it may serve as a spotlight – was, nevertheless, forced on the educational community. It is opportunistic to connect what may need to happen in terms of change, regardless of the human and financial resources required for such changes, to socially irresponsible technology roll-out that may speed up the aforementioned process of change. Moreover, it bluntly assumes that the current status quo, however flawed, persists due to a lack of willingness towards change, not because of material obstacles to such change. Put differently, while ChatGPT is accessible for everyone with an internet, the resources to quickly reorganise administrative practices are distributed less equally. Additionally, after-the-fact reflection on the reality of ChatGPT suggest the functional malleability of any technological tool:

“Whether it becomes your friend, whether it becomes your foe, whether it’s good or bad depends on how
you use it,’ he said. He acknowledged concerns around plagiarism, but countered that it could have several practical uses for students.” (Gray, 2023: para. 15)

It cannot be denied that ChatGPT, or any other dual-use technology, allows individual users to choose the type and quality of their engagement. However, the excerpt neglects to mention the choice that precedes the options of “good or bad” use: the choice between engagement and non-engagement with certain technologies. While academic integrity policies must clearly recognise and deal with tools such as ChatGPT (Perkins, 2023), responsibility for the absence of the non-engagement option cannot be set aside or ignored merely for the more immediate practical nature of the “good or bad” choice.

The unspoken problem of accepted mediocrity

Where the previous repertoire primarily addressed the edges of debate around ChatGPT’s impact on education, the strong focus on extremes left a discursive gap relating to what we term the “problem of accepted mediocrity”.

The combination of socially irresponsible technology roll-out and the struggle against high-tech methods used in student cheating must be placed within the context of the neoliberal university, or “edufactory” (see Troiani & Dutson, 2021). Performance pressure impacts students and academics alike, which ultimately leads to issues that persist between the two extremes of writing assignments as products, and the immediate incorporation of ChatGPT into teaching efforts as a questionable form of neutralisation. In other words, and as evidenced already from the products of ‘essay mills’ (Ofqual, 2014), not all students aim for well thought out and critical writing, and not all faculty expect such efforts from all students at all times. These are ideal scenarios that, in reality, often get pushed into the background in the neoliberal “edufactory” due to “conveyor belt” style approach to student teaching (Troiani & Dutson, 2021: 12). The debate in our analysed news articles and opinion pieces focussed on the extremes, but these extremes centre on what happens to the aforementioned ideal scenarios, not the silently accepted mediocrity that occurs in the middle.

Concerning the question of “toy or tool”, the former option invites “playing” and exploration, and the latter suggests potential advancement in how things are done. Since ChatGPT’s public release lacked any particular outward reason - it was not introduced into the public sphere in an effort to solve a specific problem - the chosen approach supports, at minimum, the “toy” interpretation. Primarily because making the application available to a large public audience allows the creators and developers to receive feedback on how their technology functions in the so-called wild, not unlike in the process of beta-testing video games. However, the functionality of ChatGPT, when combined with the interest of millions of “players”, presents it as a multifaceted tool with a particular knack for creating legible content that is able to persuade academic readers, who choose to or need to assign writing tasks:

“I would have given this a good grade,” […] said. “Academia has some very serious issues to confront.” (Hern, 2022: para. 5) “Pass or fail? A- or B+? And how would your grade change if you knew a human student hadn’t written it at all? […] Personally, I lean toward a B+. The passage reads like filler, but so do most student essays.” (Marche, 2022: para. 2) “What GPT can produce right now is better than the large majority of writing seen by your average teacher or professor”. (Herman, 2023: para. 8)

Of note in the brief excerpts above is that the response was not about the ideal in writing, merely that the writing would be considered adequate and even worthy of a ‘good grade’. Thus, with the standard of accepted writing residing somewhere below the subjective ‘ideal’ - to which even the current ChatGPT supposedly cannot reach - the issues entailing from real-world application become apparent, and do not concern ‘ideals’. While time-consuming assessment adaptations are by no means impossible, the time pressures of the neoliberal university on both students and faculty make these a difficulty with each new iteration of socially irresponsible technology roll-out.

Furthermore, assuming that the standard of accepted writing resides below ‘ideal’, it is also difficult to envision how the incorporation of ChatGPT, or similar applications, into the teaching process would remedy the now-fully-mechanised issue of accepted mediocrity. If anything, guided exploration of the nuances of
using prompts, introducing shortcomings such as poor or fabricated referencing, and assessing the elements of received output simply make students into more adept users of a technology that can easily assist in cheating behaviour. Granted, the same could be suggested about the internet since its incorporation into cheating behaviour (Witherspoon, Maldonado, & Lacey, 2010), but the internet is a general purpose technology (see Naughton, 2016), and ChatGPT is not. Hence, the early suggestions of including ChatGPT into the teaching process present more as a coping mechanism in the neoliberal university and less as a solution to the direct impact from socially irresponsible technology roll-out. The difference between ChatGPT and earlier applications of the same ilk come down to the ChatGPT’s advanced output:

“From what I’ve seen of this, it’s so good because it doesn’t run off down a rabbit hole nearly as much as GPT-3 previously did,” says […]. “I just think essay assessment is dead, really.” (Stokel-Walker, 2022: para. 4)

Therefore, the “product or process” debate in which the dismissals of the “product” focused on the so-called ideal, and not the issue of accepted mediocrity, fails to address how the “process” of creating expert users remedies the situation concerning the mediocre, but accepted “product”. Moreover, the notion of accepted mediocrity can take numerous forms, including cheap novels, articles published in predatory journals and countless other manifestations of “written stuff” (see Floridi & Chiriatti, 2020: 692).

“She’s hopeful that education providers will adapt. “Whenever there’s a new technology, there’s a panic around it,” she says. “It’s the responsibility of academics to have a healthy amount of distrust — but I don’t feel like this is an insurmountable challenge.”

Education officials and school administrators take a dichotomous approach to the issue of technology impact, but choose to single out the agency and responsibility of students. Early reactions by scholars have also revealed similar stances by emphasising the cultivation of “a moral character in students as imperative” (Crawford et al., 2023: 7). In part, this choice reflects a sense of helplessness when determining the locus of responsibility when it comes to disruptive technologies:

“[…] said it was ‘too early’ to predict the impacts of ChatGPT at school level, but that it would be "keeping a close eye" on any developments. 'There is clearly a need for the education system to stay informed about technological advancements, and for young people to be reminded of their responsibilities to behave ethically in a digital world.’” (Gray, 2023: paras. 27-28) “‘There have always been shortcuts. There’s always ways to avoid thinking for yourself,’ […] said. ‘Ultimately, the person who’s being educated has to decide whether they want to be educated.” (Lu & Teichholtz, 2023: para. 6)

Furthermore, by way of indirect impact, academic staff and education managers become affected via potentially deskill students even if the technology ultimately possesses didactic value and potential opportunity to “reimagine education” (Williamson & Hogan, 2020: 3).

“After all, when you give a medical doctor a degree, you want them to know medicine, not how to use a bot. The same holds for other skill certification, including law and business.” (Murphy Kelly, 2023: para. 16)

Acknowledging the potential of ChatGPT in the immediate future of education, those speaking to the need for better understanding the technology and its positives uses, referred to a process more so than a ready-to-class teaching option:

“[a teacher] who has been teaching for 25 years, likened it to more familiar tech tools that enhance, not replace, learning and critical thinking. “I don’t know how to do it well yet, but I want AI chatbots to become like calculators for writing’.” (Ceres, 2023: para. 2)

The above extract thus should be viewed as an invitation to “domesticate” and normalise a new technology. In turn, this could mean that readers and consumers of text have to get used to not knowing whether the source is artificial or human (Floridi & Chiriatti, 2020: 691).

Concluding remarks
Our analysis suggests that the uptake of ChatGPT was met with conflicting views: while some voices recommended banning the tool from use in the education sector altogether, others viewed ChatGPT as yet another so-called “technological fix”, which requires educators and educational institutions to reconsider their role, teaching philosophies and understandings of honest academic work. At the same time, one should not be blindsided by the supposed philanthropist mission behind the launch of the ChatGPT, given the for-profit status of OpenAI and an expectation of $1 billion in revenue by 2024 (Dastin, Hu, & Dave, 2022). It is equally important to note that a predecessor of ChatGPT was determined unsuitable for public release by OpenAI during their non-profit status. This should prompt anyone to enquire about the reasons behind the creation of the media spectacle witnessed in the first two months of ChatGPT’s launch.

The first reactions to the launch of ChatGPT were often met with voices full of wonder and disbelief, providing an exemplary illustration to the term “enchanted determinism” (Campolo & Crawford, 2020). On one hand, different stakeholders, i.e., academics, teachers and students, were in awe of the “superhuman” insight that the tool was providing. On the other hand, a layperson often found it difficult to explain, and to grasp, how exactly the responses displayed by ChatGPT were produced. Furthermore, while some believed the assignments, essays and texts produced by the ChatGPT to be “passable”, others found the results of their “playful” encounters with the tool “bizarre, illogical, incoherent, or repetitive” (Anson & Straume 2022: 5). This indicates that the so-called smart system is not in fact “thinking”. Thus, as argued by Falk (2021: 39), although ChatGPT and similar contemporary AI systems are capable of understanding, these systems tend to lack “genuine powers of judgement”. The issue of potential overreliance on such technologies should, therefore, be approached with utmost seriousness.

Media repertoires about the use of ChatGPT also reveal a social imaginary of inevitability. This imaginary emphasised the need for human agents – students and teachers alike – to domesticate and adapt to the technology, because regardless of the good or the bad, such AI-based tools are here to stay. Although Floridi and Chiriatti (2020: 691) argued that everyone will need to develop the skills necessary for differentiating between human and artificial “works”, they also believed that there will soon come a time, when people “will not notice or even mind” who has authored the text. We note that, in the academic context, techno-disruptions akin to ChatGPT’s launch create what may be called the issue of stress displacement. Put differently, if students turn to easy fixes due to mounting stress, the only thing ChatGPT and similar technologies offer is an option to displace the stress and shift it to academic staff, teachers, and administrators, who must now deal with the fallout. What is potentially decreased in terms of human effort required from students to create text will manifest as an increase in workload for academic staff when figuring out how to either prevent academic dishonesty, or find ways for integrating AI tools into learning, because these tools are being force-fed to society by a careless technology sector and non-engagement is not an option.

The phenomenon of ChatGPT requires extensive empirical investigation moving forward. As a study on media discourses, the current article has its limitations. However, the article also sets out numerous points of interest for future research with respect to ChatGPT: (academic) stress displacement from techno-disruptions, the (im)possibility of non-engagement with new technologies, the social responsibility of technology and software vendors, and the growing overreliance on AI-powered technology resulting in the deskilling of human actors.

References


Stern, A. (2022, December 8). We are not our algorithms. *Psychology Today*. https://www.psychologytoday.com/gb/blog/stern-talk/202212/we-are-not-our-algorithms


