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A lecturer's reflection upon student undergraduate and postgraduate assessment submissions using ChatGPT and proposing a guideline forward of responsible use of ChatGPT through international comparative considerations

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1 Introduction to the study

This chapter aims to explore the comparative perspective of using Australia, United Kingdom and USA as a basis to catapult the notion of the successes and pitfalls of using ChatGPT for students within University institutions for a guided purpose, accountability, transparently and responsibly. These jurisdictions have elucidated the necessity of having guidelines and reference style when using ChatGPT. Looking forward thinking toward the European Union provides useful insights for the proper use of ChatGPT that one can still be responsible, accountable, transparent and avoid copyright infringements. The more that technology is developing, the more will technology be used as an aid and enhancement to teach methodologies and pedagogies. There is a

caveat of the unhealthy dependence on technology that can lead to the destruction of the mind as the dependence on cellphones and social media illustrated this fact so poignantly. The structure of the chapter is divided into the undergraduate example of the module AGF 420, which is a final year module from the year intake of 2023, and the postgraduate modules of the Masters in Alternative Dispute Resolution, namely Mediation, Conciliation, Arbitration and Online ADR and International ADR and Africa ADR. The research methodology adopted is a combination of analysis of the lecturer's class group of Prof R Baboolal-Frank for undergraduate (year 2023) and postgraduate modules over a three year period (2022-2024) and a desktop analysis of the literature pertaining to ChatGPT in different international jurisdictions.

1.1 Undergraduate example of the misuse and dishonesty in using ChatGPT

In the module AGF 420 (Alternative Dispute Resolution 4th year level of the LLB degree NQF level 8), students were given a factual scenario, in which they needed to role play, and there were specific aspects that students would need to address to resolve the conflict resolution scenario. Hence, the assessment composed of two parts, the oral component as well as the written component in explaining the resolution, how was the resolution obtained, what were the methods and techniques of resolution that was employed, which is well substantiated by the student, by applying the theory to the facts and role playing it. The written submission was submitted on turnit and the University of Pretoria has the license for tracking the use of Artificial Intelligence software, such as the use of ChatGPT. A separate report is generated, which you download as the course coordinator of the module, the highlighted parts directly from ChatGPT are highlighted and you are given the percentage of mere copy and pasting by the students. Students were also warned not to use AI and to rather use their original resources that were given to them in the course of the module such as their slides, doing additional research, and analysing the research and case law that they gathered as a group. Students were encouraged to be creative in activating their problem-solving skills in relation to the higher-level order of thinking skills of being creative in blooms taxonomy in relation to using problem-solving skills. Students were warned about failing the assessment if they relied upon AI for generating the answers to the questions in the assessment.

In a class of 214 students in 2023, (course co-ordinator and lecturer Prof R Baboolal-Frank) for AGF 420 only one group utilised ChatGPT, which composed of only two people, so majority of the students namely 212 students embraced the activity to fully engage and be innovative to provide solutions with novelty and authenticity. When one also engaged with the percentage of material used from ChatGPT it was still palatable to justify the deduction of merely 1 mark, since majority of the work was still their own.

1.2 Postgraduate examples of the transgression of the conduct rules of the University Pretoria policy

In the specialised Master of Laws in Alternative Dispute Resolution (LLM in ADR) composes of three core modules and a mini dissertation as well as the research proposal. In these modules, the assessments consist of a variety of opportunities and testing methods. Students are given readings, quizzes, essay writing relating to specific topics, namely two submissions upon two topics and composed of 3000 words and 5000 words respectively.

The below mentioned table consists of the analysis of the students' transgressions over a period of three years for the three core modules in the LLM in ADR. From the transgressions against the number of students constituted of the class registration it is evident that there is simply a minority of students transgressing, which is a positive outcome. Methods of deterrence against transgressions committed is holding students accountable for their assessments, are the lecture sessions and discussions of avoiding ChatGPT when writing and researching. If they use it then it must be referenced adequately as well as fact checked to the original source.

Table below illustrating the number of students (compiled by the data of Prof R Baboolal-Frank) in the three specialised modules of the LLM in ADR. The table shows over the three-year period of the different intakes there has only been a total of four transgressions from the assignment submissions on clickup. The AI report picked up that majority of AI was utilised to draft the research paper.

Year	Number of students for Module MCA 810	Number of students for module AAD 820	Number of students for module ADR 830	Number of students committed ChatGPT transgression
2022	12	9	8	1
2023	22	4	6	1
2024	9	7	6	2
Total students	**43**	**20**	**20**	**4**

1.3 A reflection upon the correct use of ChatGPT for undergraduate and postgraduate students

For the undergraduate group, with the specific module, the students significantly deferred also to the nature of the question phrased and the specific skills that needed to be employed and applied to the given scenario disseminated to the students. It is apparent that the lecturers for their individual modules need to be creative about the source of crafting the questions. Nowadays, it is useful to put through the questions through ChatGPT if a specific topic of research to be undertaken, to check what is generated. From the feedback of the peers and colleagues of the Teaching and Learning Committee, feedback was shared about take home assignments, was simply copy and pasting of ChatGPT and other assessment opportunities were given to the students in order to prevent mass failure for modules. On the Masters level, Prof Baboolal-Frank had to fail repeat offenders for using ChatGPT as the conduct committed was simply doing a copy and paste task of 100 per cent to 90 per cent AI generated. The one aspect about ChatGPT is that it is open source, therefore it is generalist source of information and does not give the depth of details in relation to the South African jurisdiction. Even when students copy and paste the information, it is easy to actually source with the naked eye due to format used and the way the information is conveyed with the lack of depth and analytical aspects from the content generated.

1.4 Advantages to AI and useful mentions

The ability to be creative virtually especially in interactive spaces to the underprivileged students based in jurisdictions and countries that are under resourced, politically and economically unstable environment across the globe. Remote learning at one own's convenience is not always an easy task through videos, and distance learning that students do not receive immediate responses from tutors or lecturers relating to complex scenarios and problems. Whereas ChatGPT you engage with in live space and time, that students receive instantaneous answers when you subscribe to the paid version of 4.0. at the time the data of the year groups were generated. Versions of ChatGPT are evolving at a rapid rate. Students with learning disabilities require many methods to address an enhanced learning experience pertaining to their sensory perception of learning that conventional learning cannot always resolve. The creation of the simulated lecture room with virtual participation stimulates learning through another medium and modality. The more learning mediums that students are exposed to, then they would be well equipped to determine the most suitable and adept learning medium. Virtual laboratories and virtual theatre rooms are allowing students to engage in these simulators without the consequences of mistakes made hence loss of life or damage to human or material thus lowering costs incurred significantly. Moot courts may also be created to give the student the engagement with different types of court rooms, improving their arguments and court etiquette.

1.5 Concluding lecturer reflection

The role that chatbots and virtual environments are creating for the enhancement of the conventional classroom setting is going to be a futuristic dynamic for Universities. Classes will be enhanced through technology but not a replacement. We live in a future where the UK school has launched the first AI school to be taught solely by AI, which can be a dangerous setting, as we are human beings that strive for human interaction and human touch of words. The motivation for the AI powered technology is to avoid any inaccuracies of information that is conveyed by humans, and also to provide a unique experience to students such as gaming and coding and to provide the individual attention to each student. Apparently, the AI learning methods adapts to the learning

comforts of the student to learn better. Chatbots and AI that is based on the larger language model that is premised on the human response. The reality is that unfortunately these environments AI created can be sterile, as there is no human interaction in these places no matter how real it may seem it is simply a mirage created by technology. The future that we pave, we need to be careful, as we are at the praecipe of denial of who we were truly meant to be as humans to interact with each other, learn and share our wealth of experience with others to enrich future generations. AI cannot simply be relied upon to make the harder interactions easier, as we shall create an unsociable future that is too dependent upon technology for their sole entertainment absent of human centredness at its core focus.

1.6 Recommendations

1.6.1 There is a need for the interrogation of the information received from AI and platforms such as ChatGPT.

1.6.2 Fact checking is a necessity.

1.6.3 Go to the original source, if it not listed, find the original source as the information is sourced from open sources.

1.6.4 Check the references that are listed in ChatGPT whether they are legitimate.

1.6.5 Refrain from copy and pasting information as plagiarising someone else's work that is not referenced but taken off the internet.

1.6.6 Engage in contentious debates and argument, look deeper than for simplistic descriptions of generalist information that is provided by ChatGPT.

1.6.7 Academic rigour, accountability, transparency requires that a student is engaged in critical thinking and skills.

1.6.8 Be awakened to knowledge and actively engaging with the content to research more credible sources for reading.

1.6.9 The notion of taking short cuts through AI and ChatGPT because it encourages laziness and compromises academic integrity and responsibility.

1.6.10 Strive for diligence, consistency and innovation towards your academic writing as a student.

1.6.11 Copy and pasting sources is not a methodology for breaking writers block but rather committing plagiarism because you fail to take the effort and care to read more widely.

1.6.12 Writer's block usually means one is bored with the current arguments and literature obtained, the only way to break writer's block is to discuss your areas of concern with experts and to engage in more research that you have not thought about to think broadly, critically and innovatively.

2 Comparative academic context of students using ChatGPT successfully and unsuccessfully.

The reflection of the academic experience of Prof R Baboolal-Frank sets the context of incidents in undergraduate and postgraduate studies of abusing ChatGPT as a tool of navigation but for full reliance to generate research writing. Therefore, a comparative study becomes necessary to benchmark experience. This section explores the comparative academic context of students using ChatGPT successfully and unsuccessfully in the United Kingdom (UK), Australia, and the United States of America (USA).

2.1 Background

Artificial intelligence encompasses a broad range of tools, each designed to perform specific tasks that can significantly influence academic outcomes.[1] In academic contexts, the type of AI used – whether generative, predictive, adaptive, or narrow – shapes both its successes and limitations.[2] Generative AI, like ChatGPT, is widely employed to assist with creative processes, such as generating text, brainstorming ideas, and supporting academic writing.[3] However, its potential for misuse, such as fostering over-reliance and diminishing critical thinking, raises concerns.[4] Predictive AI, often used for analysing student performance or guiding curriculum development, can provide valuable insights but may also lead to biased outcomes or inaccuracies if not carefully managed.[5] Adaptive AI, including personalised learning platforms and AI tutors, aims to tailor learning experiences to individual needs, promoting student engagement and inclusivity.[6] However, its effectiveness depends

1 X Lin and others (eds) *ChatGPT and global higher education: Using artificial intelligence in teaching and learning* (2024) Star Scholars Press 220.
2 As above.
3 Fahimirad M 'A review on application of artificial intelligence in teaching and learning in educational contexts' (2018) *International Journal of Learning and Development* 106.
4 As above.
5 F Ouyang and others 'Integration of artificial intelligence performance prediction and learning analytics to improve student learning in online engineering course' (2023) *International Journal Educaton Technology Higher Education* 4.
6 M Joshi 'Adaptive learning through artificial intelligence' (2024) *International Journal on Integrated Education* 41.

heavily on the quality of design and its ability to address diverse learning preferences.[7] Meanwhile, narrow AI technologies which are more task-specific, such as plagiarism detection or automated grading, offer efficiency and consistency but may miss nuances that a human educator could capture.[8]

These variations highlight that the success or failure of AI in higher education is not solely dependent on the technology itself but on how it is applied in these contexts.[9] Therefore, the type of AI used – along with its specific function – must be carefully considered when evaluating its impact on academic success.[10]

2.2 Successful use of AI in academic contexts

The successful use of ChatGPT in academic settings has been observed in various forms across the UK, Australia, and the USA. In all three countries, students generally view AI positively, recognising its potential to provide instant clarification on complex topics, assist with assignments, and foster self-directed learning.[11] This adaptive resource allows students to explore subjects at their own pace, enhancing their academic journey. Successes often hinge on how well institutions and students integrate AI into learning environments.

Australia: Pivoting strong regulatory frameworks to enhance learning for students and learning instructors, and the development of assistant bots. Australia has deeply embraced the use of AI, focusing on integrating it into traditional learning systems in both secondary and tertiary education and undergoing continuous regulatory development in attempts to ensure the ethical use of AI.[12] This holistic approach is strategic in ensuring that AI adoption is not fragmented but evolves

7 As above.
8 R Marrone and others (2024) 'How does narrow ai impact human creativity?' *Creativity Research Journal* 1-11.
9 A Iorliam & J Ingio 'A comparative analysis of generative artificial intelligence tools for natural language processing' (2024) *Journal of Computing Theories and Applications* 1.
10 As above.
11 J Moles & L Wishart 'Reading the map: Locating and navigating the academic skills development of pre-service teachers' *Journal of University Teaching & Learning Practice.*
12 D Liu and others 'Responding to generative AI in Australian higher education' (2023) *Working Paper.*

seamlessly as students advance through their academic journeys. Further, it demonstrates the belief that AI has the potential to be broadly and nearly indiscriminately used in all knowledge and creative domains.[13] Accordingly, a wide attitude to adaptation has distinguished Australia as an advocate for rigorous regulatory frameworks to support its endeavours.

Australian higher education institutions have an innovative approach to AI in education.[14] ChatGPT has been embraced to effectively enhance students' writing skills by providing immediate feedback on grammar, sentence structure, and style.[15] For example, students at the University of Sydney have used ChatGPT to draft essays and receive constructive critiques, leading to improved writing fluency and creativity.[16] These applications are particularly beneficial for non-native English speakers, who can use the tool to better understand nuanced language and improve their academic writing skills. While this benefit precedes AI, ChatGPT has been capitalised on for its ability to give real-time feedback and allow for a more iterative process.

Beyond this, the University of Sydney has also embraced the ethical use of AI in the teaching space, even developing its own generative AI tool, Cogniti, for teachers to assist in addressing the limitations of AI tools. Cogniti enables teachers to create custom AI agents tailored to specific instructional needs, enhancing the learning experience for students. This platform puts educators in control, allowing them to build 'AI agents' that support student learning.[17] These AI agents can function as Socratic tutors, provide targeted and personalised feedback, role-play as clients, and coach for effective group work.[18] Beyond the potential

13 N Ziebell & J Skeat 'How is generative AI being used by university students and academics? Semester 1' (2023) *Melbourne Graduate School of Education, University of Melbourne.*

14 As above.

15 M Mahrishi, A Abbas & M Siddiqui 'Global initiatives towards regulatory frameworks for artificial intelligence (AI) in higher education' (2004) *Digital Government Research and Practice.*

16 B Wise and others 'A scholarly dialogue: writing scholarship, authorship, academic integrity and the challenges of AI' (2024) *Higher Education Research & Development* 578–590.

17 As above.

18 K Weber 'University of Sydney creates own genAI, Cogniti' https://www.digitalnationaus.com.au/news/university-of-sydney-creates-own-genaicogniti-608334 (accessed 23 January 2025).

benefit to students, the approach in Australia is also focused on assisting teachers and learning instructors.[19]

The University of Melbourne has adopted ChatGPT to support personalised learning. The tool is used to create custom quizzes and practice problems tailored to individual students' learning paces and areas of difficulty.[20] By allowing students to interact with AI-driven study aids outside of the classroom, the institutions encourage self-directed study and deepen their understanding of course material. The university also shares this tool widely, partnering with over 60 universities, schools, and other educational providers both locally and internationally.[21] The University of Sydney's 'FinBot' assists the finance department by rapidly responding to financial queries, streamlining administrative processes, and enhancing efficiency.[22]

2.2.1 The United Kingdom: Using AI for framework and idea generation

In the United Kingdom, institutions like the University of Cambridge have encouraged students to use ChatGPT as a brainstorming tool to foster creativity. By generating ideas based on prompts, students are able to explore different angles for their assignments.[23] This approach has been successful in creative disciplines, such as literature and history, where students use AI to explore thematic interpretations or generate hypothetical scenarios for essays and projects.[24] This displays a tendency to lean to AI use for frameworks and outlines, rather than more heavily for substance generation.

19 D Liu & A Bridgeman 'Rules, access, familiarity, and trust – a practical approach to addressing generative AI in education' https://educational-innovation.sydney.edu.au/teaching@sydney/rules-access-familiarity-and-trust-a-practical-approach-to-addressing-generative-ai-in-education/ (accessed 23 January 2025).

20 J Skeat and N Ziebell, 'University students are using AI, but not how you think' https://pursuit.unimelb.edu.au/articles/university-students-are-using-ai-but-not-how-you-think?mc_cid=fa5dbf7c2a (accessed 23 January 2025).

21 Liu (n 19).

22 P Nasa-Ngium, W Nuankaew & P Nuankaew 'Analysing and tracking student educational program interests on social media with chatbots platform and text analytics' (2023) *International Journal of Interactive Mobile Technologies* 4–21.

23 J Brady 'Does ChatGPT make the grade? research matters' (2024) *A Cambridge University Press & Assessment publication* 24–39.

24 As above.

Furthermore, and similar to Australia, there is a strong inclination towards using AI to support personalised learning paths.[25] For instance, the Open University has implemented ChatGPT in their distance learning programs to provide personalised tutoring and learning resources to students based on their progress and performance. [26] This application of AI is particularly useful in large and diverse cohorts, where students possess varying levels of understanding and engagement with the material. In both contexts, AI plays a crucial role in offering real-time, adaptive feedback, ensuring that students receive the support they need to succeed.

2.2.2 The United States of America: Focusing on AI as an enhancer of independent learning

In the United States of America, the University of California system has integrated ChatGPT into writing centres, where students use it to develop their writing skills. The tool provides feedback on writing style, clarity, and argumentation, helping students refine their papers before submission. This approach has been particularly successful in improving the critical thinking skills of undergraduates, as they learn to analyse the feedback provided by ChatGPT and apply it to their work.

In the USA, institutions like Arizona State University have used ChatGPT to create adaptive learning environments. ChatGPT helps develop personalised study plans by analysing students' learning data and suggesting resources or areas of focus. This self-directed study model, enhanced by AI, has helped students better manage their learning schedules and prioritise their studies according to their strengths and weaknesses.[27] At the University of Cambridge, Professor Bhaskar Vira pointed out that university students should fully utilise artificial intelligence technology, such as ChatGPT and other new tools, and should not be limited. These technologies can help students

25 A Arowosegbe, J Alqahtani & T Oyelade 'Students' perception of generative AI use for academic purpose in UK higher education' (2024) *Frontiers in Education.*

26 A Alam 'Harnessing the power of AI to create intelligent tutoring systems for enhanced classroom experience and improved learning outcomes' in G Rajakumar, K Du, & A Rocha (eds) *Intelligent Communication Technologies and Virtual Mobile Networks* (2023) 577.

27 H Yu 'Reflection on whether ChatGPT should be banned by academia from the perspective of education and teaching' (2003) *Frontiers in Psychology* 11.

better master knowledge and improve learning efficiency.[28] However, to ensure that students adhere to academic integrity when using these new technologies, schools need to make appropriate adjustments to teaching methods and examination standards.[29] Similarly, Professor John Villasenor at the University of California allows students to use ChatGPT in assignments.[30] But more importantly, it is essential to teach students how to use these technologies correctly and effectively, to ensure that their learning process is meaningful and efficient.[31] Compared to restricting students from using these AI tools to save time and effort, it is a better choice to integrate these tools into the education system, allowing students to learn and use them in a correct and responsible environment. However, it is essential to balance the rights of students to independently use these tools with the requirements of academic integrity, so that students can use these tools properly and responsibly. [32]

2.3 Conclusion on successes

The comparative displays a strong pattern which universities are increasingly adopting AI-driven tools to optimise administrative, teaching, and learning operations. Global trend For example, the University of Canberra introduced 'Lucy,' a chatbot designed to handle student inquiries, providing timely support and reducing the administrative burden.[33] Similarly, in Colombia, the University of Magdalena has implemented 'Tashi-Bot' to address admission-related questions, although it faces limitations such as restricted visual quality,

28 A Young & J Fry 'Metacognitive awareness and academic achievement in college students' (2008) *Journal of the Scholarship of Teaching and Learning* 1–10.

29 M Stephens 'University of Cambridge will allow students to use ChatGPT' 2023, https://www.telegraph.co.uk/news/2023/03/02/university-cambridge-will-allow-students-use-chatgpt/ (accessed 23 January 2025).

30 Yu (n 27).

31 J Villasenor 'How ChatGPT can improve education, not threaten it' 2023, https://www.scientficamerican.com/article/how-chatgpt-can~improve-education-not-threaten-it/ (accessed 23 January 2025).

32 Yu (n 27).

33 C Cain, C Buskey & G Washington 'Articial intelligence and conversational agent evolution – a cautionary tale of the benets and pitfalls of advanced technology in education, academic research, and practice' (2023) *Journal of Information, Communication and Ethics in Society* 400.

limited deployment across social media platforms, and a constrained dataset for learning from user interactions.[34]

2.4 Unsuccessful use of ChatGPT

Despite its benefits, there are instances where the use of ChatGPT has been less successful in academic settings. These failures often result from misuse or over-reliance on the technology, highlighting the need for careful integration and oversight.

2.4.1 Australia: Compromising academic integrity and inadequate integration into learning systems

The formerly outlined regulatory system used in Australia is not without detriment. The framework often lacks clarity and specificity, making it difficult to achieve its objectives of properly regulating AI, resulting in the unsuccessful use patterns outlined below. For example, the framework states the importance of 'explainability,' but even developers of AI models struggle to outline what this actually means. This negatively impacts academic integrity.[35] In Australia, some students have misused ChatGPT for academic dishonesty. Instances at institutions like Monash University reveal that students have copied and pasted generated text into assignments, bypassing the learning process entirely. This misuse compromises academic integrity and undermines the educational value of assessments, leading universities to consider more stringent AI detection and plagiarism policies.

In Australian universities, there is evidence that some students have become overly reliant on ChatGPT for assignments. At the University of Queensland, for example, students using ChatGPT extensively have shown a decline in critical thinking skills, as they depend more on AI-generated responses rather than developing their own analytical abilities. This reliance can lead to superficial learning and a lack of deeper understanding of course material. This is difficult to manage and monitor, even with current regulatory frameworks. For example, the

34 H Carlos, S German S & D Salcedo 'Tashi-bot: A intelligent personal assistant for users in an educational institution' (2021) *Journal of Management Information and Decision Sciences.*

35 Liu (n 19).

Framework calls for schools to do risk assessments on the current threats of AI, however, this is difficult given that the nature and ethics of AI are complex and contested.

2.4.2 The United States of America

While the United States of America is lauded for its open embrace of artificial intelligence in education, the drawbacks are equally jarring. Institutions such as Harvard University have faced challenges with students using ChatGPT to generate content that is submitted as original work. This has raised significant concerns about plagiarism and has prompted discussions on constantly revising academic policies to include explicit guidelines on the ethical use of AI tools. A recent survey revealed that nearly 89 per cent of American college students use ChatGPT to complete homework tasks, with 53 per cent using the tool for writing papers. Additionally, 48 per cent of students use ChatGPT during exams and 22 per cent use ChatGPT to generate paper outlines.[36] It is worth noting that some students are not only able to successfully complete assignments using ChatGPT but also achieve high scores.

Similarly, at Stanford University, faculty members have observed that students frequently using ChatGPT to complete assignments tend to develop less robust problem-solving skills. The ease of obtaining answers through AI may discourage students from engaging in the challenging yet necessary cognitive processes that foster deep learning and critical analysis.

Nevertheless, it is difficult for teachers to determine whether students are using ChatGPT, which has a negative impact on students' over-reliance on this tool, gradually causing them to lose their ability to think critically, explore, verify, and summarise actively. If this trend continues, it will greatly affect students' learning outcomes and development - this is a direct result of their fast, robust embrace of artificial intelligence.[37]

36 W McGee 'Is ChatGPT biased against conservatives? An empirical study' (2023) *SSRN Electronic Journal*.

37 E Kasneci and others 'ChatGPT for good? On opportunities and challenges of large language models for education' (2023) *Learning and Individual Differences* 103.

2.4.3 The United Kingdom: Sparking increases in over-reliance

Similarly, in the UK, there are concerns about students becoming too dependent on ChatGPT for generating content and ideas. At King's College London, some professors have noted that students using ChatGPT often do not engage deeply with the material, resulting in lower quality of work and less originality. This over-reliance on AI can hinder the development of independent thinking skills that are critical to academic success.

2.5 Concluding comparative discussion

The integration of ChatGPT in higher education across the UK, Australia, and the USA presents both opportunities and challenges. While the tool has been successfully employed to enhance writing skills, foster creativity, and support personalised learning, its misuse can compromise academic integrity and diminish critical thinking. To maximize the benefits and mitigate the risks, educational institutions must develop clear guidelines, provide training on ethical AI use, and adapt teaching methods to incorporate AI responsibly into the learning environment.

3 EU perspective relating to ChatGPT guidelines

Section 3 deals with the EU perspective relating to ChatGPT. With the growing prevalence of artificial intelligence technologies such as ChatGPT in academic contexts, it is essential for students to ethically utilise these tools ensuring transparency and accountability. Guidelines will be discussed on how to responsibly use ChatGPT, these guidelines will be based on the European Union's Artificial Intelligence Act and other guidelines that are used globally. The notion of 'responsible AI', based on AI ethics and centered on the management of AI systems, is essential in ensuring fair and harmonious human futures.[38] The Global Centre on AI Governance on AI Governance established the

38 LIRNEasia 'The global index on responsible AI: Promoting responsible AI practices worldwide' 2024, https://lirneasia.net/2024/06/the-global-index-on-responsible-ai-promoting-responsible-ai-practices-worldwide/#:~:text=Recognising%20this%20need%2C%20a%20global,in%20countries%20around%20the%20world. (accessed 28 August 2024).

Global Index of Responsible AI (GIRAI) in 2023.[39] This index sets internationally applicable standards for users to ensure the responsible use of AI across 138 countries, to ensure progress is aimed at sustainable development.[40] The purpose is to achieve responsible use of AI across the globe and encourage countries to put frameworks into place to promote responsibility and openness in the governance of AI. The European Union (EU) is embarking on an ambitious regulatory mission to actively seek a digital revolution.[41] One 'that works for the benefit of people through respecting our values'.[42]

Considering the ongoing rapid technological progress, we must modify our methods to guarantee the secure and conscientious use of tools such as ChatGPT. To effectively navigate this framework, the following rules and guidelines can serve as a thorough framework for practising safe usage when using ChatGPT.

3.1 Comprehend the capabilities and constraints of AI

Students need to acknowledge AI as a tool, rather than a substitute when doing assignments.[43] As it is an advanced language model, it is only capable of producing text that resembles human language, it cannot give answers in a direct format that humans would.[44] To have genuine comprehension, logical thinking, and the capability to retrieve information that is up-to-date students should only use ChatGPT to assist in the brainstorming or drafting of ideas. Outlines for the assignment can be done, however when it comes to content development, the responsible conduct would be to do it yourself as a first step.

Any piece submitted needs to be valid and truthful information, there are risks when using information directly from AI sources, and there is

39 Global Index on Responsible AI (GIRAI) https://www.global-index.ai/ (accessed 28 August 2024).
40 GIRAI (n 39).
41 BA Beatriz 'Is it a platform? is it a search engine? it's ChatGPT! The european liability regime for large language models' (2023) 2 *Journal of Free Speech* Law 455-488.
42 European Commission 'Communication from the Commission to the European parliament, the council, the European Economic and Social Committee and the Committee of the Regions' (2020) 67.
43 Beatriz (n 41) 456.
44 L Magee and others 'Structured like a language model: Analysing AI as an automated subject' (2023) 2 *Big Data & Society*.

no validation that the information it is producing is not only up to date but also correct.[45] To produce work that is up to date with current affairs research needs to be conducted because AI is extremely outdated for specific related content such as South African case law for example.[46] This further impacts the accuracy of the work being produced. The quality of the information provided needs to be assessed in depth, ensuring it is accurate, and students can do this by verifying the information they received from AI and comparing it to their research conducted.[47] The research they conduct must however be from reputable sources, such as academic journals, reports, and different frameworks adopting the appropriate research methodology.[48]

3.2 Disclosing the use of AI

The EU AI Act explicitly establishes transparency as a basic principle, students must acknowledge their utilisation of AI to ensure full transparency, and to be in line with specific policies at institutions.[49] Not only does it show that the student is not hiding anything nefarious in terms of academic credibility and integrity, but it also shows they respect the academic environment and are willing to share the sources where they derived information from. It is extremely important to acknowledge your sources because then educators can give substantial feedback on assignments, as they can see where and how it was used effectively or incorrectly.[50]

This can be achieved by citing where the information was derived from in the reference list and indicating where it can be found for future reference. The ethical use of artificial intelligence (AI) in university settings necessitates transparent disclosure regarding its application

45 S Boege and others 'Impact of responsible AI on the occurrence and resolution of ethical issue: Protocol for a scoping review' (2024) *JMIR Publications.*

46 RP Lisinski 'The current South African legal position on artificial intelligence: What can we learn from the United States and Europe?' PhD thesis, University of the Witwatersrand, 2018.

47 Boege and others (n 45) 5.

48 L Currie and others 'Undergraduate search strategies and evaluation criteria: Searching for credible sources.' (2010) *New Library World* 113-124.

49 EU Artificial Intelligence Act, Regulation (EU) 2024/1689.

50 J Geyskens and others 'Towards effective feedback in higher education: bridging theory and practice' (2012) *Research Gate* 132-147.

in academic work.[51] As AI tools become increasingly integrated into research, writing, and learning processes, it is crucial for students and faculty to openly acknowledge their use of such technologies to maintain academic integrity and uphold the principles of honesty and accountability.[52] Disclosure fosters a culture of trust within the academic community, allowing for meaningful discussions about the implications of AI on scholarship and creativity.[53] Furthermore, transparency in AI usage helps to mitigate concerns about plagiarism and the erosion of critical thinking skills, ensuring that educational institutions can effectively navigate the challenges posed by these advanced technologies while promoting responsible practices.[54] By prioritising disclosure, universities can not only safeguard their academic standards but also prepare students for a future where ethical considerations surrounding AI will be paramount

3.3 Uphold academic integrity

Plagiarism is a grave transgression in academic environments, it is not a new concept, however, in current times it becomes more and more visible that students are resorting to allowing AI to write assignments for them and submitting them without doing any of the hard work and research, thus breaching academic integrity regulations, transgressing academic ethics and conduct.[55] Students need to therefore constantly remind themselves that the AI tools and measures should once again be used as an enhancement tool to facilitate their thoughts and ideas, rather than engaging in the practice of directly duplicating and inserting complete segments of text from AI in a mere copy and paste action. Students must disclose when the content they are including in their academic work is generated by AI, fully understanding that they cannot pass it off as their

51 M Perkins & J Roe 'Academic publisher guidelines on AI usage: A ChatGPT supported thematic analysis.' (2024) *F1000Research* 1398.

52 AL Overono & AS Ditta 'The use of AI disclosure statements in teaching: developing skills for psychologists of the future' (2024) *Teaching of Psychology*.

53 CKY Chan 'A comprehensive AI policy education framework for university teaching and learning' (2023) 1 *International journal of educational technology in higher education* 38.

54 R Mulenga & H Shilongo 'Academic integrity in higher education: Understanding and addressing plagiarism.' (2024) 1 *Acta Pedagogia Asiana* 30-43.

55 University of Oxford 'Plagiarism' https://www.ox.ac.uk/students/academic/guidance/skills/plagiarism (accessed 28 August).

individual authorship[56] When one is transparent and acknowledges they are making use of sources to obtain the information then they are acting responsibly. In the unfortunate event that a student does not ensure they have not put the research into their own words, the consequences are severe, and they could even be expelled from their institution of study for deliberate acts of plagiarism, bringing the reputation of the institution into question.[57]

3.4 Participate in the critical thinking and analysis process

There is a misconception that AI can generate proper research on any prompt received by a user, however, this is not the case, and one needs to be cognitively aware.[58] Awareness of cognitive bias is of extreme importance when using AI, one needs to remember that ChatGPT is based on programming, not on ethical principles, rights, and wrongs, therefore cognitive bias can be activated.[59] It is the deviation from what society views as normal or acceptable as it is unbalanced information pulled from various open source databases. To avoid this, and be a responsible user of AI, students need to use ChatGPT as a tool of assistance, take the information they had researched themselves, not derived from ChatGPT, and cross-reference it with the reputable information they found.[60] This can also be approached by fact-checking with other academic sources as per the EU AI Act.[61] Students still need to critically approach their assignments, they need to assess what they were provided by AI and then do further research to see if they can find more in-depth, and accurate information and still use their human input and creativity.[62]

56 Article 10 of the Artificial Intelligence Act (n 49).
57 M Perkins and others 'Reducing plagiarism through academic misconduct education' (2020) *International Journal for Educational Integrity*.
58 R Fjelland 'Why general artificial intelligence will not be realized.' (2020) 1 *Humanities and Social Sciences Communications* 1-9.
59 Oxford (n 55).
60 E Sabzalieva & A Valentini 'ChatGPT and artificial intelligence in higher education' (2023) *UNESCO*.
61 Article 16 of the Artificial Intelligence Act (n 49).
62 The IEEE 'Global initiative 2.0 on ethics of autonomous and intelligent system' https://standards.ieee.org/industry-connections/activities/ieee-global-initiative/ (29 August 2024).

3.5 Adhere to principles of privacy and data protection

There are instances where the information presented by ChatGPT is unethically sourced and taken from sources that not everyone has access to.[63] This becomes a major issue when taking accountability with the information you use in your work, hence the importance of fact-checking and cross-referencing. There is a General Data Protection Regulation under the European Union that needs to be adhered to.[64] This regulation contains the rules for data protection and privacy that users need to ensure that data protection and privacy are adhered to.[65] Measures need to be implemented by the user to ensure that the data they are using is not protected.[66] The data that is accessed from ChatGPT should only be used if it is available to the public and does not have a disclaimer or notices attached that it cannot provide a link to the article because it is from a site that is not accessible to everyone.

Data protection is not just for the research you derive from ChatGPT, but also from what you upload. To be a responsible user you need to make sure that you do not upload information that can go against any privacy or protected rights.[67] Anything you upload you will need to take accountability for, because these platforms are used worldwide and there are little restrictions placed on them, so the information you upload could end up on the wrong device.

3.6 Conclusion to EU guidelines

Students can fully utilise the potential of ChatGPT while upholding academic integrity, safeguarding privacy, and promoting responsible AI usage by following the guidelines set above. Derived from the EU AI Act, and various other global sources. As time progresses and so does artificial

63 W Xiaodong and others 'Unveiling security, privacy, and ethical concerns of ChatGPT' (2024) 2 *Journal of Information and Intelligence* 102-115.

64 Artificial Intelligence Act (n 49) and P Voigt & A Von dem Bussche 'The EU general data protection regulation a practical guide' (2017) *Springer International Publishing* 10-5555.

65 CJ Hoofnagle and others 'The European Union general data protection regulation: What it is and what it means.' (2019) 1 *Information & Communications Technology Law* 65-98.

66 Article 25 of the Artificial Intelligence Act (n 49).

67 The General Data Protection Regulation under The Artificial Intelligence Act (n 49).

intelligence and technology, it is crucial for students to keep up with the times, and to constantly refine their skills to be able to interact with the tools they are provided in a safe, responsible, and ethical manner, in ways that enhance their educational advancements, and behaviours. These guidelines not only improve academic experiences and assists students by making the work slightly easier to access, but also equips them for future developments, as everyone is aware, AI has a growing impact on all factors of life.

4 Comparative considerations of contentious aspects such as copyright infringements

In recent years, tensions have grown between copyright holders and AI companies, leading to numerous lawsuits alleging copyright infringement.[68] In response, countries have adopted different approaches to balance the protection of copyrighted works and the facilitation of data mining as a necessity for AI development. This subsection will address the copyright issues associated with data mining by looking at how the European Union and Japan have chosen to address the primary issues raised by copyright holders. This subsection will outline the practice of data mining and how it is used in training AI models; thereafter, it will detail the copyright implications associated with data mining and, finally, conclude by exploring and contrasting the diverging approaches adopted by the aforementioned jurisdictions.

4.1 Positional context of AI and infringement to copyright law

Generative AI is a subset of artificial intelligence that concentrates on generating new and original information through machine learning on massive databases of information. The application of this information extends to various areas, including, pictures, text, music, computer vision, natural language processing, and speech recognition.[69] Within this context are Large Language Models (LLM), a model subgroup

68 K Tyagi 'Copyright, text & data mining and the innovation dimension of generative AI' (2024) *Journal of Intellectual Property Law & Practice* 562.

69 O Aydin & E Karaarslan 'Is ChatGPT leading generative AI? What is beyond expectations?' (2023)3 *Academic Platform Journal of Engineering and Smart Systems* 119.

of generative AI that creates output based on input.[70] Chat-GPT-4, which stands for generative pre-trained transformer,[71] is an example of an LLM.[72] By virtue of it operating on using a deep learning model, ChatGPT and similar AI models, much like the human brain,[73] require extensive and continuous training to produce the quality of output they do.[74] This necessitates a big data set to generate predictions based on data. This training is based on semi-supervised and unsupervised machine learning methods.[75] This is the foundation of ChatGPT. Its development and function depend on data, as it is limited to making predictions based on data provided to it.[76]

The success of AI is contingent on its access to copious volumes of data, which is necessary for AI algorithms to learn and improve their performance. This process, where machines analyse tremendous quantities of data to identify patterns, generate new knowledge, and extract insights, is referred to as text and data mining (TDM),[77] It analyses 'the input', a large amount of data, to identify patterns to produce and 'the output', often involving the reproduction of copyrighted works for analysis. [78] It can do this because of the program's scale and the vast amount of data it is trained on. GPT-4 uses a large corpus of data, approximately 300 billion words, and a neural network of 175 billion parameters.[79] GPT-4 links to the Internet and incorporates plugins via its APIs, [80]granting it the ability to draw from a vast pool of knowledge and utilise its multi-model technology.[81] Therefore, GPT-4's training is

70 G Briganti 'How ChatGPT works: a mini review' (2024) 281(3) European Archives of Oto-Rhino-Laryngology 1567.
71 MR Chavez, TS Butler, P Rekawek, H Heo & WL Kinzler 'Chat Generative Pre-trained Transformer: why we should embrace this technology' (2023) 228(6) *American Journal of Obstetrics & Gynecology* 706.
72 Tyagi (n 68) 556.
73 Tyagi (n 68) 559.
74 A Haleem, M Javaid & RP Singh 'An era of ChatGPT as a significant futuristic support tool: A study on features, abilities, and challenges' (2022) *Bench Council Transactions on Benchmarks, Standards and Evaluations* 3 & 6.
75 Haleem (n 74)2.
76 Haleem (n 74) 6.
77 Tyagi (n 68) 562.
78 D Jodha & P Bera 'Copyright issues in the era of AI- A critical analysis' (2023) 3 *Res Militaris* 1740.
79 Briganti (n 70) 1556.
80 Briganti (n 70) 1567.
81 BD Lund 'A brief review of ChatGPT: Its value and the underlying GPT technology' (2023) Doi 10 Preprint. University of North Texas. Project:

dependent on a large data set on which to generate the output it does. [82] It uses a vast amount of text data from the Internet, most notably online human writing in the form of books, news, and webpages to develop a comprehensive comprehension of a subject, and it uses a web text data set to generate text equivalent to people.[83]

4.2 Problematising: the conflict between innovation and human interests

In association with their extreme dependence, AI systems present a problem: While they are deep learning models and programmed to imitate the processes of the human brain, unlike the human brain, they require exact copies of works in their training dataset.[84] As previously stated, this necessitates the creation of a training set of millions of examples by making copies of copyrighted images, videos, audio, or text-based works,[85] thanks to the globalised world in which we live, ChatGPT has unlimited access to the Internet. [86] In practice, the data input and learning processes of generative artificial intelligence are typically unclear and unpredictable, which can easily lead to violations of copyright concerning the original works used as data. [87] ChatGPT uses a 'black box model', which refers to utilising existing content and generating new content with little to no explanation or transparency.[88] The rise of generative AI is expected to significantly influence and disrupt the creative sectors, including the work of artists, performers, and professional writers. As these AI tools become more accessible and sophisticated, the concept of creative ownership may become less defined.[89] An example is the renowned AI research lab OpenAI that acknowledged that their training is conducted using 'large data sets

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82 G Briganti 'How ChatGPT works: a mini review' (2024) 281 *European Archives of Oto-Rhino-Laryngology* 1567.

83 Haleem and others (n 74) 4 & 5.

84 N Lucchi 'ChatGPT: A case study on copyright challenges for generative artificial intelligence systems' (2023) *European Journal of Risk Regulation* 11.

85 Lucchi (n 84) 12.

86 Jodha and others (n 78) 1743.

87 J Kicel 'The intersection of artificial intelligence and copyright law: Challenges and innovations' (2024) *Teisės apžvalga* 30.

88 Kicel (n 87) 29.

89 Tyagi (n 68) 557.

that are freely available but include copyrighted materials.' Due to the aforementioned, it is unavoidable that the generative AI models will replicate substantial if not entire works, according to the United States Patent and Trademark Office.[90]

4.3 The pursuit of a balance

In light of these challenges, addressing the copyright concerns tied to AI calls for a complete and overarching method to confront the AI associated copyright problems, regarding the inputs and outputs of AI systems.[91] This section will examine two jurisdictions to see how the above-mentioned issue has been dealt with in Japan and the EU.

4.4 European Union

The EU has a robust and structured legal system addressing copyright issues. In order to best articulate this, this section will be divided into two key discussions. Firstly, the exception provided for TDM to train LLM models. Secondly, the opt-out system and the obligatory summary that seeks to protect the rights of the copyright holders.

The exception: Article 4 of the Directive on Copyright in the Digital Single Market, Directive (EU) 2019/790 (CDSM Directive).

At its core, EU copyright law grants holders the right to authorise or prohibit reproduction of their work. The Information Society Directive provides narrowly defined exceptions, primarily for non-commercial purposes, which have posed challenges in the digital era. The Directive on Copyright and Related Rights in the Digital Single Market further refines these rules, [92] and aims to strike a balance by offering 'enhanced' access to copyright-protected materials for automated data analysis. [93] Article 3 introduces an exception for TDM for research purposes by institutions and cultural heritage organizations, requiring secure storage

90 S Thongmeensuk 'Rethinking copyright exceptions in the era of generative AI: Balancing innovation and intellectual property protection' (2024) 2 *The Journal of World Intellectual Property*281.

91 Lucchi (n 84) 3.

92 NM Oppedal 'Balancing innovation and copyrights: The legal framework for AI training in the European Union' Masters thesis, Tilburg University, 2024.

93 M Manteghi 'Can text and data mining exceptions and synthetic data training mitigate copyright-related concerns in generative AI?' (2024) 2 *Law, Innovation and Technology* 9.

of copies. [94] Most notable for this discussion is Article 4 regarding the commercial TDM exemption, enabling any party to engage in TDM for any reason, [95] provided they have lawful access or permission. [96] Article 4(1) of the CDSM Directive allows a broad exception for TDM, enabling commercial AI developers and educators to copy works or databases for extracting information. These copies may be retained as needed for AI training. [97]

Moreover, the AI Act establishes two key TDM provisions. The first of which confirms that aforementioned existing copyright exceptions and limitations (E&Ls) apply; otherwise, using copyrighted material requires the rights holder's permission.

4.4.1 Transparency Obligation and Opt-Out

The primary elements to consider are the opt-out mechanism and the transparency obligation.

Opting out: Article 4(3) and Recital 105

Article 4(3) of the CDSM provides that even when E&Ls are applicable, providers of general-purpose AI models must seek authorisation from rights holders for TDM if the right to opt out has been expressly reserved. This provision encourages formal licensing arrangements between developers and rights holders, fostering mutually beneficial relationships. Furthermore, Recital 18 explains that rights holders of publicly available online works can protect their rights using machine-readable methods, like metadata or website terms. In other cases, rights can be reserved through contracts or declarations.[98] This is reconfirmed in Article 54(c) of the AI Act which requires GenAI model providers to comply with Union copyright law and identify rights reservations under Article 4(3) of CDSM.[99]

94 Oppendal (n 92) 17.
95 Lucchi (n 84) 15.
96 Oppendal (n 92) 17.
97 Lucchi (n 84) 15.
98 Manteghi (n 93) 12.
99 Manteghi (n 93) 16.

Authors optimistically argue that this provision encourages formal licensing arrangements between developers and rights holders,[100] that foster mutually beneficial relationships. Notwithstanding, the scope of the opt-out provision raises a few hairs; namely that the option to opt-out poses the risk of centralizing control over the AI market with large AI companies, and consequently, Constraining the capacity of smaller tech firms with fewer resources to innovate and advance AI-driven products. Beyond this, it could limit access to essential data that private entities need to develop advanced AI applications, potentially undermining the EU's research potential. Additionally, there are still unanswered questions regarding the conditions for reserving rights, especially concerning whether the reservation should be made 'expressly' and 'appropriately', as the existing guidelines are unclear and ambiguous.[101]

Transparency Obligation: Article 53(c) and (d) and Recital 107

Furthermore, Article 54(c) of the AI Act imposes a transparency obligation,[102] by requiring GenAI model providers to create and publicly share a detailed summary of the content used to train the AI model.[103] The AI Act maintains that GenAI providers don't need to disclose all training data, but must provide a summary, including a list of main data sets (e.g. large private or public databases) and a narrative on other data sources used.[104] The transparency obligation helps protect AI developers from copyright claims and enables authors and rights holders to make informed decisions about reserving their rights. [105]

This approach is intended to assist parties with legitimate interests, including copyright holders, in exercising and enforcing their rights under Union law. For example, the summary should include a list of the leading data collections, or datasets used to train the model, such as significant private or public databases or data archives, accompanied by a narrative explanation of other data sources utilised.[106]

100 Oppendal (n 92) 18.
101 Manteghi (n 93) 13.
102 Oppendal (n 92) 18.
103 Manteghi (n 93) 16.
104 Manteghi (n 93) 17.
105 Manteghi (n 93) 16.
106 GM Riccio 'AI, data mining and copyright law: Remarks about lawfulness and efficient choices' (2024) *2024 47th MIPRO ICT and Electronics Convention (MIPRO)* 1460.

4.5 Japan

Japan as the second country to introduce an exception to copyright law for TDM,[107] has sought to strike a balance between AI innovation and the protection of copyright holders by adopting a positive attitude toward innovation. This attitude seeks to facilitate the progress and development of AI systems while simultaneously allowing for mechanisms and safeguards that are considerate of copyright holders' interests.[108] The flexible approach adopted by Japan is reflective of the value the country places on fostering innovation,[109] which is important in confronting labour shortages and attracting investment. [110] Therefore, the amendment endorses activities essential for 'technological progress and data-driven research'.[111]

Japan facilitates and safeguards TDM through a 2018 amendment to its Copyright Act, which came into effect in 2019.[112] This amendment is contained in Article 30, paragraph 4, and provides for an exception that protects TDM in AI training against copyright infringement claims,[113] under the concept of 'non-enjoyment.'[114] 'Non-enjoyment' prohibits the personal use of data for personal or another's enjoyment of its 'thoughts and sentiments'.[115]

Consequently, in accordance with the restriction of 'non-enjoyment', TDM geared towards technological development, data analysis, and computer processing is permissible. [116] Under this exception, there are four permissible activities and three permissible uses. The former include (1) extraction, (2) comparison, (3) classification, and (4) statistical analysis.[117] The latter include (1) testing for development or practical application of technology related to recording sounds and visuals; (2)

107 M Alharbi 'Data mining exceptions under the Saudi copyrights law' (2024) 11.
108 Alharbi (n 107) 11.
109 Alharbi (n 107) 12.
110 Oppedal (n 92)21.
111 Alharbi (n 107) 11.
112 T Ueno 'The flexible copyright exception for 'non-enjoyment' purposes-recent Amendment in Japan and its implication' (2021) 2 *Grur International* 145.
113 PM Fernandes 'AI training and copyright: Should intellectual property law allow machines to learn?' (2024) 2 *Bioethica* 16.
114 Ueno (n 112) 148.
115 Fernandes (n 113) 16.
116 Alharbi (n 107) 11.
117 As above.

data analysis involving statistical examination of elements from a large number of works; (3) excluding the execution of computer programs (i.e. optimising and analysing code), exploitation in computer data processing or other methods not involving the human perception of the expression of the work.[118] However, it is still uncertain whether using data from websites as training data for algorithms would be permitted if the terms and conditions prohibit such use.[119]

All while Japan supports the advancement of AI tech, it concurrently considers the interests of copyright holders and aims to balance them out with safeguards.[120] Their protection is incorporated through a three-step test, which limits the aforementioned allowance. The test requires that TDM not interfere with normal work exploitation, unreasonably prejudice the author, or involve unlawful activity.[121] Regarding interference, new works that evoke essential characteristics or creative expressions of the original work cannot be created.[122] On the other hand, unreasonable prejudice would have to be determined on a case-by-case, and what will be under determination is whether the specific instance of TDM conflicts with the copyright holder's market or prejudices future markets will be considered.[123] Whilst a threshold has not been applied by any Japanese court or tribunal on the aforementioned principle, the Report on AI and Copyright Issues by the Japanese Government outlines situations that would and would not constitute unreasonable prejudice.[124] In respect of the former, (1) bypassing blocks or security measures in place to bar AI use; (2) knowingly using infringing copies for training; (3) and making use of a creatively organised database without permission for research or analysis without compensation. In respect of the latter, (1) AI generated works similar in idea to copyrighted works, and (2) AI reproductions similar in idea to copyright works that replace the demand for the original work would not fall within the ambit of unreasonable prejudice or harm. This ensures that the original author is

118 Alharbi (n 107) 11.
119 Fernandes (n 113) 16.
120 Alharbi (n 107) 11.
121 Oppendal (n 92) 21.
122 Fernandes (n 113) 16.
123 As above.
124 Japanese Government Nagashima Ohno & Tsunematsu 'Report on AI and Copyright Issues' https://www.lexology.com/library/detail.aspx?g=a10ec535-678f-46ca-abe7-c2d61f1b348d (accessed 24 Jan 2025).

not unfairly harmed. If these conditions are violated, rights holders can prohibit their works from being used in TDM processes.[125]

5 Conclusion

This section has examined the conflict that arises between the interests of copyright holders and the advancement of GenAI advancement and capabilities caused by the TDM of copyrighted works for the training of GenAI LLM models, and further investigated the legislative responses of the EU and Japan to clashing interest of the two aforementioned groups. Both the EU and Japan have opted to take a robust and clear stance in regulating the copyright consequences of AI- associated TDM, albeit with different considerations and priorities in mind. Whilst the EU can be considered to have taken a stance involving greater protections for copyright holders alongside greater responsibilities for AI service providers via their opting-out and transparency provisions; Japan has opted to tilt their scales more in favour of advancing AI development, with comparatively less far-reaching and protective mechanisms available to copyright holders in the context of TDM by AI developers. Nevertheless, this does not denote no protection, as any other use outside of the designated 'non-enjoyment' parameters and the prohibition of 'unreasonable prejudice' still stand as safeguards to the rights of copyright holders. Looking at these two countries' approaches is valuable, especially at this early stage in the tug of war between copyright considerations and AI development, because, whilst in the early stages, with time and potential adjudication the results thereof could provide useful insights in how other countries yet to do so formulates the boundaries of TDM in their countries. It is evident that more guidelines and policies needs to be developed to navigate the complexities of AI copyright infringements.

125 (As above).