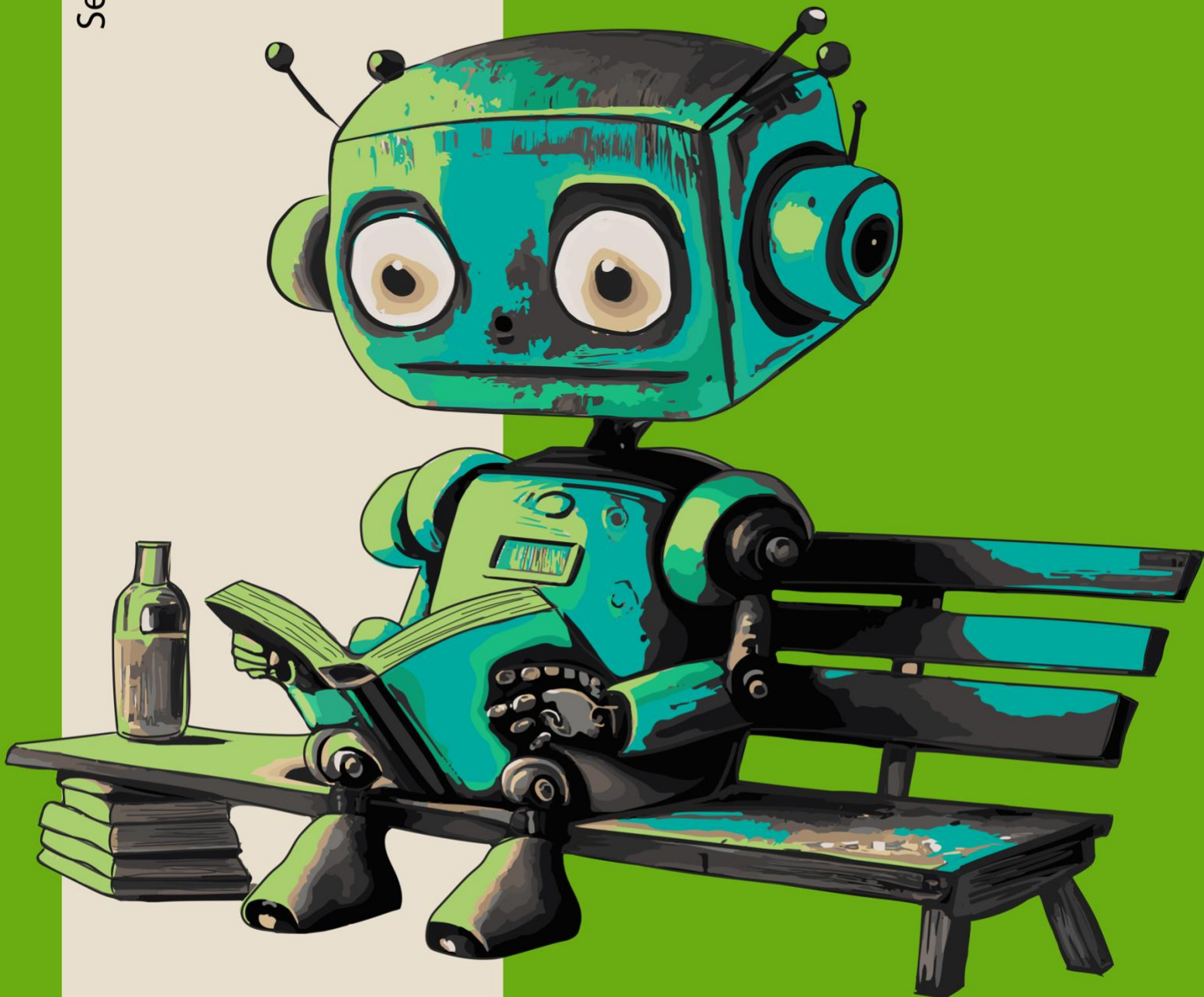


CLM Faculty
TEACHING AND LEARNING UNIT

September 2024

**STUDENT GUIDELINES
FOR GENERATIVE AI
TOOLS IN HIGHER
EDUCATION
(Draft)**



CLM Faculty: Draft Student Guidelines for Generative AI Tools in Higher Education

Version: September 2024

Adapted from: Centre for Innovation in Learning and Teaching (2023). [Student Guide: Using ChatGPT and other Artificial Intelligence \(AI\) Tools in Education](#). University of Cape Town. CC BY.

Introduction

The purpose of this guide is to help you navigate the risks and benefits of using Generative Artificial Intelligence (GAI) tools, such as ChatGPT, for learning. To appropriately and effectively make use of a GAI tool, it is important to know how it generates its outputs. Please send any queries you may have or any feedback on this guide to: COLTStudentSupport@wits.ac.za

What is GAI?

Artificial intelligence (AI) broadly refers to computer systems developed to accomplish tasks typically requiring human intelligence. AI tools are used today for a variety of everyday tasks, such as communication (predictive text), navigation (such as Google Maps), and finding information (such as Google Search). GAI can be used to generate new content that would typically require human creativity, such as text, programming code or artwork (Monash University, 2023).

What's ChatGPT about?

- [ChatGPT](#), or Chat Generative Pre-Trained Transformer, was released in November 2022. Anyone can sign up for a free account using version 3.5, although an enhanced version (ChatGPT Plus) is a paid-for service.
- It is software in the form of a chatbot that was developed by [OpenAI](#). It is built on a category of AI tools known as [Large Language Models](#) (LLM), which can perform various natural language processing tasks, such as generating and classifying text, providing answers to questions in a conversational style and translating texts from one language to another.

Here is a comparison of well-known GAI tools (adapted from Ithaka S-R, 2024). Most of these have mobile apps too:

Tool	Website	Information
ChatGPT (Open AI)	https://chatgpt.com/	<ul style="list-style-type: none">• Registration is required.• ChatGPT Free has limited access to 4.0 (but no access to data after January 2022).

		<ul style="list-style-type: none"> • ChatGPT Plus requires a \$20 monthly subscription (has access to information on the internet).
Gemini (Google)	https://gemini.google.com/	<ul style="list-style-type: none"> • Google account is required to use. • Replaced Google Bard. • Linked to other Google apps.
Copilot (Microsoft)	https://copilot.microsoft.com/	<ul style="list-style-type: none"> • No registration is required. • Built using GPT-4. • Replaced Bing. • Has access to internet information, so can provide sources as a search extension (but source verification still required). • Note: If you login with your Wits credentials the user and company data are protected and not shared back to the tool for training.
Claude (Anthropic)	https://claude.ai/	<ul style="list-style-type: none"> • Registration is required. • Claude Basic is free. • Does not have access to internet information. • Claude Pro requires a \$20 monthly subscription.
Meta AI (Meta)	https://www.meta.ai/	<ul style="list-style-type: none"> • No registration required. • Free version integrated into Facebook and WhatsApp. • Built using Llama-3.

Our recommended GAI tool to use is Copilot: If you login to Copilot with your Wits credentials, the user and company data are protected and not shared back to the tool for training. In other words, any information you share and use chatting in Copilot remains protected and cannot be added to the model's training data.

How do GAI tools generate outputs?

ChatGPT and other GAI tools generate outputs using natural language processing algorithms. When a user inputs a prompt, it analyses the prompt using its trained knowledge and generates a response. ChatGPT's trained knowledge is based on a vast amount of text data that it has been fed from the Internet and other sources. Its outputs are thus only as good as the data it has been trained on. If the training data contains misinformation and biases, then its outputs will reflect those issues.

As software which produces responses based on algorithms, GAI lacks understanding of real-world experiences, as well as social and cultural distinctions. The responses it produces thus may not be contextually relevant and it lacks human understanding. These mechanisms lead to some risks in using ChatGPT or similar GAI tools.

How can GAI help you in your learning processes?

GAI tools can be used to aid your learning but should **not be used** to complete your assignments. There are several ways ChatGPT can be used effectively in your learning, such as the examples in Figure 1:

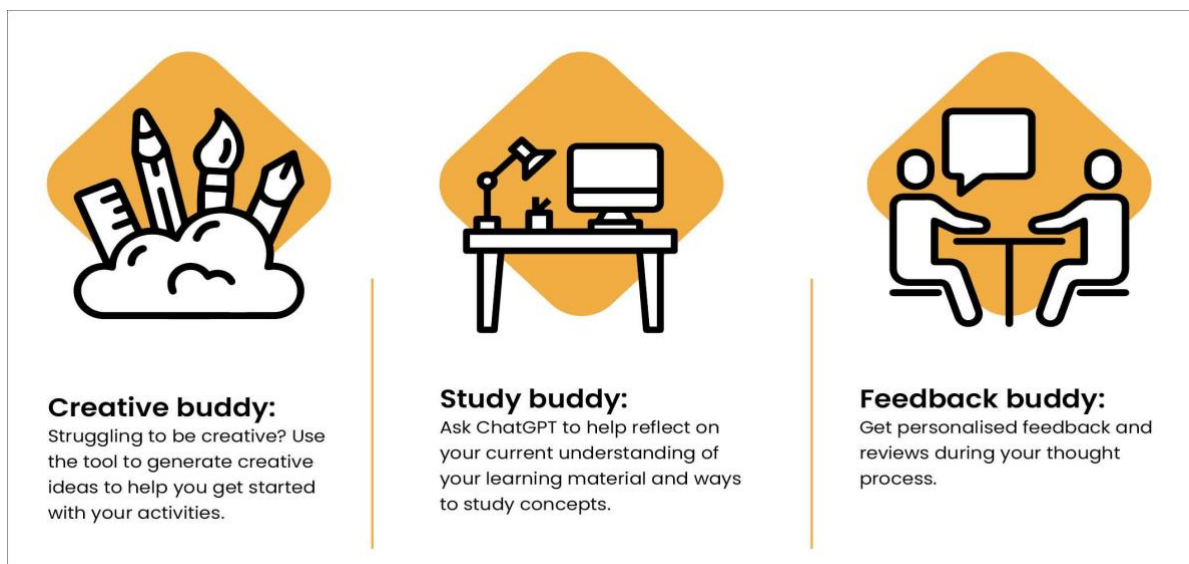


Figure 1: Ways of using ChatGPT for effective learning (adapted from UNESCO, 2023)

It is important for you to know *what is permitted in each of your courses* so you can make informed decisions. Remember that each course may have different rules for using GAI. To begin with, check the University, School, and course policies around academic integrity and plagiarism. For example, look at the [Student Academic Misconduct Policy](#) and the [Wits Student Code of Conduct](#). Also ask your lecturer to clarify if GAI tools may be used for course assessments.

Risks and Considerations for using GAI Tools in Higher Education

While a GAI tool can help you with your learning or preparing for an assignment, its outputs may be inaccurate, outdated, or contain errors and biases. Here are some important things to know before using a GAI tool (UNESCO, 2022; 2023):

- **Hallucinations or Inaccuracies in Generated Outputs:** While GAI outputs may come across as authoritative and convincing, responses are based on next word predictions. The software has no real understanding of the information it is providing. This leads to what are known as ‘hallucinations’, thus resulting in misinformation. When using GAI tools, the outputs must be verified for accuracy and reliability. It is also advisable to consult additional, trusted sources to ensure that the information provided is appropriate and accurate. In fact, it is recommended not to use GAI tools to prompt for “factual” outputs or rely on outputs as being factual (i.e., GAI tools

should not be used in the same way as Google searches for example). Read more about [why ChatGPT produces inaccuracies](#).

- **Relevance of data set:** GAI may not have the latest information or developments in a field. For example, ChatGPT version 3.5 was trained on data up until 2022. This means that the outputs it generates may be missing information and thus there is a need to verify outputs against other data sources. Additionally, the sources of the output from GAI tools cannot be easily verified. GAI tools represent information developed by others and so there is the risk of plagiarised content and/or copyright infringement being submitted by a user if they submit text generated by GAI.
- **Built in-biases:** GAI follows the “garbage-in-garbage out” principle. In other words, if the data that was fed to the system is biased, inaccurate, or questionable, then the responses generated will reflect that bias. GAI tools are trained using datasets that contain implicit and explicit biases (e.g., lack of cultural diversity, dominance of Western hegemonic knowledge, racism, sexism). In other words, GAI outputs may include historical, representative, algorithmic, ranking, behavioural and social biases. Users must be aware of the potential biases contained in AI generated outputs and should critically evaluate the information before using it.
- **Dependence/Overreliance for Writing or Thinking:** Assessments (such as written assignments) serve the purpose of helping you learn and practice skills relevant for your discipline. While GAI can help automate some tasks, it is important to guard against over reliance, to prevent individual’s ability to craft and think critically from being unnecessarily influenced. It is important to remember the purpose of obtaining your qualification: to ensure that you can think critically and apply what you have learned beyond the university. Thus, if you outsource the thinking work of your assessments to a GAI tool, you place yourself at a disadvantage. This doesn’t mean that you shouldn’t use it, but that you need to be aware of how you use it. We recommend that you use it to help you study and learn more efficiently. [Research](#) suggests that while GAI can lead to efficiencies in decision making, being over reliant on GAI can lead to cognitive overload, which means you must use these tools strategically.
- **Privacy and data risks:** AI systems collect a lot of data (for example, ChatGPT requires registration with an email and phone number), and these systems can track personal information and activity. Open AI’s [Privacy Policy](#) clearly states that “By using our Service, you understand and acknowledge that your Personal Information will be processed and stored in our facilities and servers in the United States and may be disclosed to our service providers and affiliates in other jurisdictions”. Therefore, users are strongly advised not to submit any personal information to GAI tools.

With these considerations in mind, the following flowchart can assist in helping you decide when to use ChatGPT and other GAI tools (Figure 2):

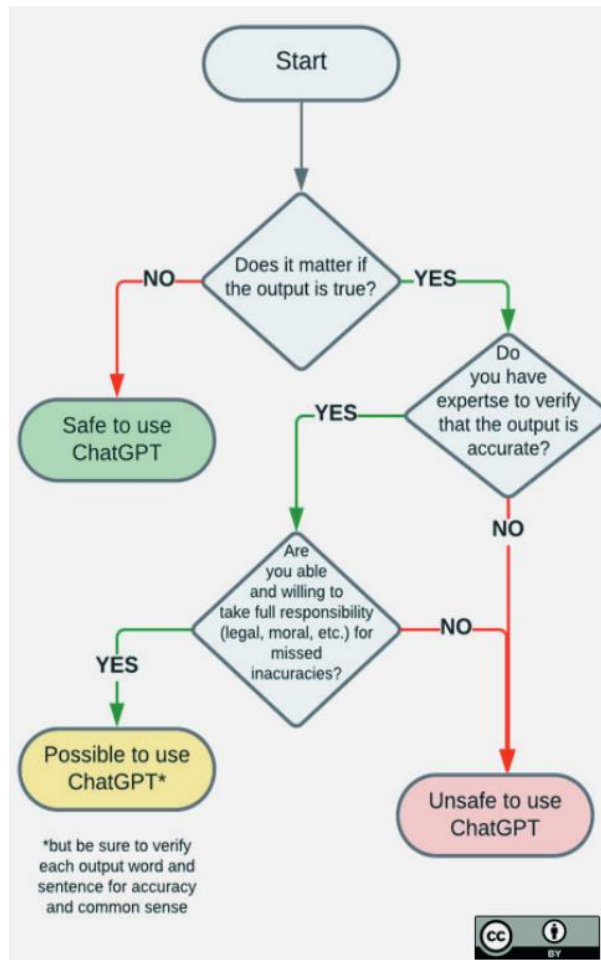


Figure 2: When is it safe to use ChatGPT? (UNESCO, 2023)

GAI Tools, Assessments, and Academic Integrity

You need to make sure you do not use AI tools inappropriately as it may result in an accusation of plagiarism or other forms of academic misconduct. If you are unsure about using a GAI tool please reach out to your lecturer, tutor, or course coordinator. It may be tempting to pass off AI generated work as your own, since it is not ‘copying’ other students’ work but unless you declare it, generating text or other outputs using ChatGPT means it is not your own work.

The Wits Student Academic Misconduct Policy (Wits, 2022b) definitions include:

Academic Misconduct includes any action which gains, attempts to gain, or assists others in gaining or attempting to gain an unfair academic advantage. It includes Plagiarism as defined below, collusion, cheating, copying, contract cheating, fabrication of data, the use and/or possession of unauthorised materials or devices during an assessment; and falsification or misrepresentation of information including, falsification of a medical certificate, and/or changing a script after it has been marked.

Plagiarism is a form of Academic Misconduct and is described as the failure to acknowledge the ideas and writings of others and/or the presentation of others' ideas or writings as one's own. This definition includes intentional and/or unintentional failure to acknowledge the ideas or writings of others.

Academic integrity can be seen as a commitment to six fundamental values: honesty, trust, fairness, respect, responsibility, and courage (Wits University, 2022a). The distinction between using GAI as an enabler or assistant and using GAI as an authoring tool has an impact on academic integrity – using GAI tools for assistance can be done effectively without plagiarising. Not all lecturers and supervisors will have the same views, so please check first with your lecturer, but the following are some examples of appropriate and inappropriate uses of GAI.

DO	Uses of GAI at university likely to be acceptable	DON'T	Uses of GAI at university likely to be unacceptable
✓	Find out whether or how GAI tools can be used for each assignment before starting	x	Use GAI tools when they are specifically prohibited
✓	Attribute the use of GAI if used	x	Use GAI tools without acknowledgement or attribution
✓	Use GAI as a prompt for an outline (unless specifically prohibited)	x	Copy a GAI output and pass it off as your own work
✓	Brainstorm ideas or request summaries of information	x	Trust GAI outputs without doing a critical check for facts and sources
✓	Ask GAI to rephrase a difficult concept into simpler language to help you understand it better	x	Share any personal or sensitive information or upload copyrighted materials
✓	Save your prompts and the outputs in case you are asked about your use	x	Use GAI tools when you are asked to submit original content

Additionally, here are some guidelines for using GAI tools for learning:

- First ask your lecturers, course coordinators and tutors for guidance about using GAI tools for course assessments.
- Always check and validate outputs from ChatGPT or other GAI tools – that is, apply [critical literacy](#) skills to evaluate the generated content.
- Make sure that the final product is **your own work**, and not just copied from an AI generator. You can use the generated text as a learning tool to formulate initial ideas or to suggest an essay structure, but the final submitted assessment must be your own work, creation, and analysis.
- In some courses, your lecturer may ask you to give a short oral presentation about the written assessment.

- You must appropriately [acknowledge](#) where GAI tools have been used in an assessment or any other part of your work, clearly indicate where you have used the AI generative tool and the extent to which it was used. For referencing ChatGPT, for example (APA, 7th Ed., 2023):

	Rule	Example
In-text citation (parenthetical)	(Author, Year) Optional: Long responses from ChatGPT can be included in an appendix or as online supplemental materials.	(OpenAI, 2023) (OpenAI, 2023; see appendix A for the full transcript).
Reference List entry	Author. (Year). <i>Title of software</i> (Version) [Software descriptor]. Publisher. URL	OpenAI. (2023). <i>ChatGPT</i> (May 3 Version) [Large language model]. OpenAI. https://chat.openai.com

Note: Guidance around [referencing](#) and [plagiarism](#) is available from the Wits Library Guides or consult your lecturers.

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