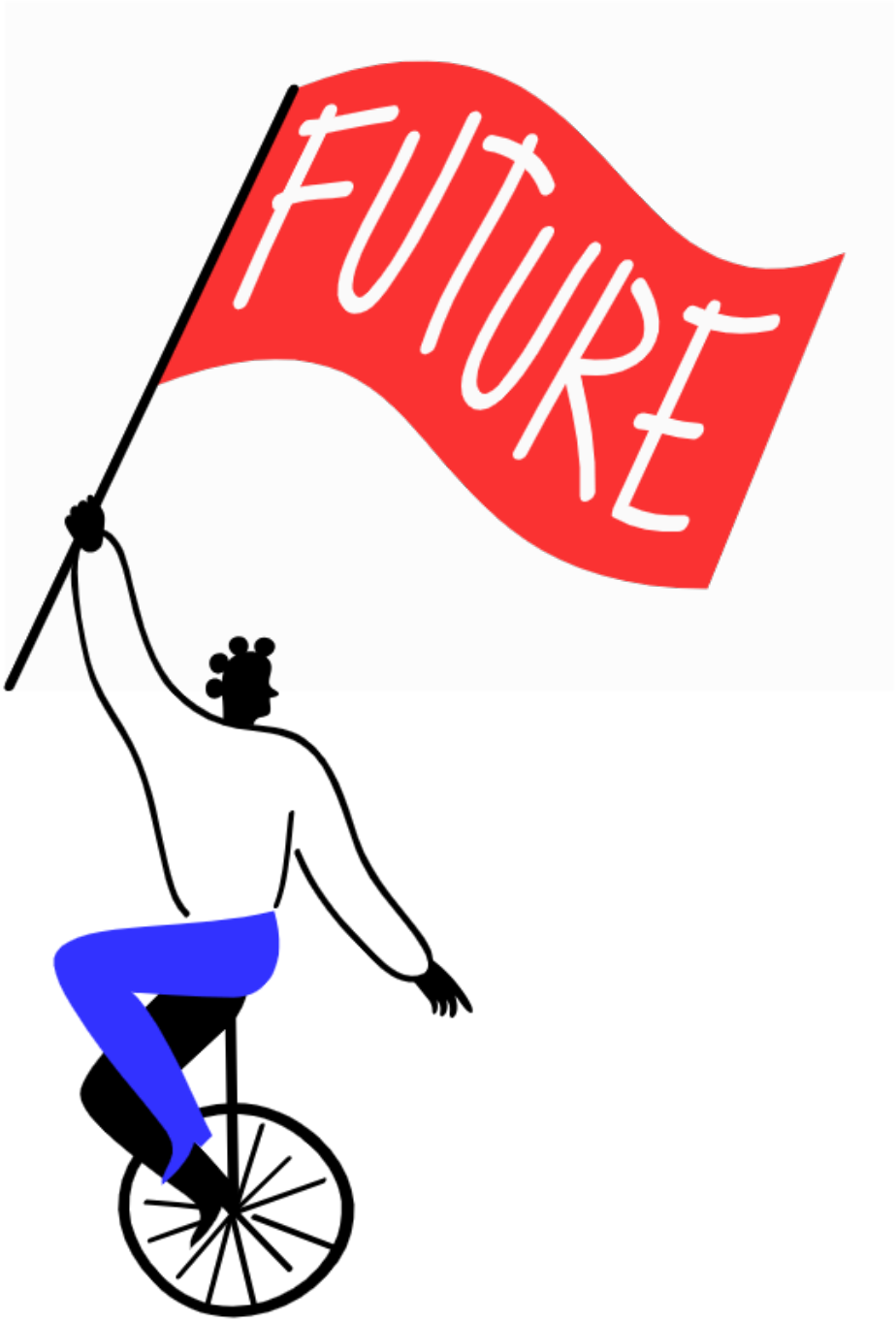
AI is Here, For Better & Worse: A Brief Student Guide on Safe and Ethical Use of Generative Artificial Intelligence



CC BY-NC-SA 4.0 Daniel Jones

Contents

Note: This Guide was Outdated Before it was Finished 2

Glossary 3

Types of Artificial Intelligence 4

Who can Sign up for a ChatGPT Account? 5

Risks & Benefits of Generative AI in Learning 5

Risk: General Risks of Using AI in Learning 5

Risk: How does ChatGPT describe the risks of using tools like ChatGPT? 6

Risk: Generative AI Platforms & Algorithms Replicate Bias & Discrimination 7

Risk: Academic Penalties at [Your] School 8

Benefits: What are the Benefits of Using AI in Learning 8

Decision Tree for Determining if you Should Using AI in Learning 10

Strategies for Safe & Ethical Use of Generative AI 11

1. **Safeguard Personal Information** 11
2. **Verify and Edit AI Generated Content for Accuracy and Suitability** 11
3. **Use Effective Prompting** 11

Cite, Reference & Declare the Use of ChatGPT and Other Artificial Intelligence (AI) 13

What Types of AI Programs and AI-Generated Information do you Need to Declare? 13

Introduction: What are the Three Steps in Referencing AI Use? 14

Explanation: Three Steps to Referencing AI Use 14

Step 3: How to Write a Declaration of AI Use 15

Example of a Declaration of AI Use: 16

Other AI Programs that Students Could Consider Using 16

Optional Extension Activity: Using the Traditions of Philosophical Enquiry to Reflect on Generative AI 17

Further Reading and Resources 20

References 20

Appendix 21

Note: This Guide was Outdated Before it was Finished

Artificial Intelligence (AI) powered programs are springing up daily across the internet. Capabilities of programs like ChatGPT are accelerating and their usage proliferating. This guide can never be 'up-to-date' or discuss everything about AI; however, this guide is intended as a beginning point for experimenting with AI, learning about it, reflecting on its potential uses, benefits, and risks, and importantly, the role of generative AI in education.

CC BY-NC-SA 4.0 Daniel Jones

Glossary

Artificial Intelligence (AI): *Any intelligence demonstrated by machines, in contrast to the natural intelligence displayed by humans and other animals. These machines use mathematical models that identify and encode patterns in data sets, which can then perform predictions on new situations which they haven't encountered before.*

AI-assisted writing: *When artificial intelligence software utilizes existing content to predict, modify or create text based on input that a user supplies it. Certain tools may create novel bodies of text, while others may reword existing text in the case of AI paraphrasing tools.*

AI-generated text: *Text created by artificial intelligence based on vast amounts of data of existing content from the internet.*

AI paraphrasing: *AI paraphrasing refers to the use of AI techniques to rephrase or rewrite a given piece of text in a way that preserves the original meaning of the text while using different words and phrases.*

Algorithm: *A set of instructions or computations that a machine follows in order to learn how to do a particular task.*

Chatbots (or "bots"): *A program designed to help human users with simple tasks and communicate via voice or text commands in order to feel like a human-to-human conversation.*

ChatGPT: *ChatGPT (short for Chat Generative Pre-trained Transformer) is a chatbot launched by OpenAI in November 2022. It is a Large Language Model with both supervised and reinforcement learning techniques. ChatGPT can produce a body of unique text from a user's specific input based on existing content from the internet.*

Generative AI: *Generative AI is a broad label that's used to describe any type of artificial intelligence that uses learning algorithms to create new digital images, video, audio, text, or code.*

Hallucinations: AI data is based on numerous sources including sites like Wikipedia and Reddit that contain mistakes. ChatGPT can generate entirely new text, that is convincing, irrelevant, nonsensical, and wrong.

Large Language Model (LLM): *Artificial intelligence that has been trained on massive quantities of text data,* ***or datasets,*** *to produce human-like responses to natural language inputs.*

Machine intelligence: *An overarching term for different types of learning algorithms, including machine learning and deep learning.*

Machine learning: *A subset of AI that is specifically focused on developing algorithms that will help machines to learn and change in response to new data, without the help of a human being.*

Natural Language Processing (NLP): *Technology that allows machines to determine–via text or by voice–what humans are saying.*

Prompt: *A prompt is natural language text describing the task that an AI should perform.*

(This glossary is copied and adapted from: https://www.turnitin.com/blog/ai-terms-education-a-glossary-of-what-you-need-to-know)

CC BY-NC-SA 4.0 Daniel Jones

Brief Introduction to Generative AI (Artificial Intelligence)

An example of generative artificial intelligence (AI) is ChatGPT; this is a computer program that uses artificial intelligence (AI) to communicate with people in a natural and conversational way. **For the most part, this guide will use the terms ChatGPT and generative AI in an interchangeable way.**



ChatGPT works by analysing billions of texts (datasets) on the internet to learn patterns and relationships in language. It then uses this knowledge to generate human-like responses to prompts or questions. Think of ChatGPT and all of the similar AI programs as a "computer robot" that you can talk to about anything (UNESCO, 2022. PG. 5).

Types of Artificial Intelligence

Artificial Intelligence (AI) can be categorised into three types: Narrow AI, General AI, and Super AI.

Narrow AI:

- Also known as Weak AI
- Focuses on one narrow task and cannot perform beyond its limitations
- Examples include facial recognition, speech recognition/voice assistants, driving a car, or searching the internet
- ***Narrow AI is the current state of AI technology (including ChatGPT)*** and is becoming increasingly common in our day-to-day lives as machine learning and deep learning methods continue to develop.

General AI:

- Also known as Strong AI
- Refers to where AI will (or may) be in the future
- Learns from its surroundings and responds to them itself
- Can think like humans without being programmed by humans
- Machines with strong AI will be able to exhibit self-awareness and emotions
- General AI is theoretical and not yet made.

Super AI:

- Surpasses human intelligence and can perform any task better than a human
- Also known as Artificial Super Intelligence
- Develops self-awareness by learning on its own
- Super AI is also theoretical and not yet made.

CC BY-NC-SA 4.0 Daniel Jones

Who can Sign up for a ChatGPT Account?

Talk to your parents or carers first, as of March 14th 2023, users must be aged 13+, and for users below age 18, they must have parental or carer permission. If you have parental permission, go to the following address and select the "Sign Up" button: https://chat.openai.com/auth/login

From April of 2024 ChatGPT can be used without an account; however, using ChatGPT without being signed in means that users can not access past chats or create a link to past chats to be included in a reference list.

Risks & Benefits of Generative AI in Learning

Risk: General Risks of Using AI in Learning

There are significant risks for students in using generative AI tools like ChatGPT. Here is a few:

1. Search engines can help you find information which you use in assessment tasks. Typically, in an assessment task it is the student who connects all of the bits of information together, analyses the information, identifies significance, makes connections between ideas, and creates conclusions in response to the assessment task question. Risk:
    a. **Generative AI can do a whole assignment.**
    b. **Generative AI can make significant mistakes.**
    c. **Not acknowledging that generative AI was used is cheating.**
2. It is in the process of doing all of the work that a student builds their academic skills including critical and creative thinking skills. Risk:
    a. **Letting generative AI do the work takes away that opportunity to grow and learn your academic skills including critical and creative thinking**.
3. Letting generative AI do the work takes your personality, your voice, your perspectives out of the learning product. Risk:
    a. **Generative AI can reduce or remove your voice in your work.**
4. Generative AI will not be with you when you do not have access to the internet. That includes a very broad range of situations when you may absolutely rely on your ability to read, analyse, interpret, generate ideas, think critically, think reflectively, and communicate. If you do not develop all of these qualities (and more) as personal core qualities and abilities of yourself, and you rely too heavily on generative AI… what happens in exams, in conversations with people, in problematic situations where your problem solving abilities are everything? The risk is that you may find yourself lacking in knowledge, qualities and abilities that you will in time consider essential and that would not be satisfactory at all.

CC BY-NC-SA 4.0 Daniel Jones

Risk: How does ChatGPT describe the risks of using tools like ChatGPT?

The following is an exact copy from a ChatGPT chat:

> ***Understanding the Risks of AI Chatbots in Learning Assessments***
>
> *Introduction: Greetings. As technology continues to advance, we find ourselves encountering new tools and innovations in various aspects of our lives, including education. One such tool is the AI chatbot, which has gained popularity in assisting with learning assessment tasks. However, it is essential to understand the potential risks associated with relying solely on AI chatbots, such as ChatGPT, without developing critical thinking and reasoning skills. Let's explore some of these risks together:*
>
> - ***Hallucinations and Inaccuracies:***
> - *AI chatbots like ChatGPT rely on patterns and data they have been trained on, but they can occasionally generate inaccurate or false information.*
> - *These chatbots may sometimes produce responses that seem plausible but are not based on verified facts, leading to misleading or incorrect answers.*
> - *Generative AI does not by default refer to the most authoritative and reliable source of information. AI data is based on numerous sources including sites like Wikipedia and Reddit that contain mistakes. Information can be prioritised because the website it comes from has excellent search engine optimisation to attract search engines; so if a website has great search engine optimisation because the designer wants to attract viewers for purposes like earning ad revenue, the information may not be accurate, verified, unbiased or even slightly reliable. ChatGPT can also generate entirely new text, that is convincing, irrelevant, nonsensical, and wrong.*
> - ***Inability to Refer to Real Information Sources:***
> - *Unlike human learners, AI chatbots lack the ability to refer to real-time information sources.*
> - *They cannot access the latest research articles, academic journals, or reliable reference materials, which limits the accuracy and currency of the information they provide.*
> - ***Limited Creativity and Originality:***
> - *AI chatbots are programmed to analyse patterns and generate responses based on existing data.*
> - *They are not capable of thinking creatively or coming up with original ideas, as they rely on averaging the responses of many users.*

CC BY-NC-SA 4.0 Daniel Jones

    - *Students may miss out on developing their own unique perspectives and ideas by solely relying on AI chatbots for learning.*
- ***Stunted Critical Thinking and Reasoning Skills:***
    - *Relying heavily on AI chatbots can hinder the development of critical thinking and reasoning skills.*
    - *Students may become dependent on the chatbot's responses instead of engaging in independent analysis, evaluation, and problem-solving.*
    - *Critical thinking skills are crucial for intellectual growth and success in higher education and the professional world.*

***Conclusion**: While AI chatbots like ChatGPT can be useful tools in certain contexts, it is important to recognize their limitations when it comes to learning assessments. Students must remember that AI chatbots may produce inaccuracies, lack the ability to refer to real information sources, restrict creativity, and impede the development of critical thinking skills. It is crucial to strike a balance between utilizing these tools for assistance and actively engaging in independent learning, thinking critically, and seeking reliable information from various sources. By doing so, you can foster a well-rounded education and nurture skills that will benefit you in your future endeavours.*

What is wrong with ChatGPT's Disclosure? The above statement by ChatGPT is the fourth attempt, earlier attempts failed to identify risks that were vital to be disclosed for a barely adequate response. Most significantly, "***hallucinations"*** was missing from any ChatGPT generated response. All ChatGPT users should clearly know that generative AI platforms will give false information at times. So you need to verify generated information the same way that we can use Wikipedia as a starting point, but then we go on to find more reliable (authoritative) sources of information.

It was only possible to prompt ChatGPT to do a more thorough job of describing the risks to students by reading widely, comparing the information from multiple information sources including ones easily identifiable as reliable.

Risk: Generative AI Platforms & Algorithms Replicate Bias & Discrimination

Bias is defined by Smith and Rastagi (2020) as "A tendency, inclination, or prejudice toward or against something or someone. Biases are often based on stereotypes, rather than actual knowledge of an individual or circumstance" (p. 54). Smith and Rastagi (2020) describe **Biased AI (or Algorithmic Bias)** as an AI system that produces information that discriminates against certain populations, these populations can be grouped by factors such as ethnicity, age, gender, sexuality etc.

Bias in AI can occur because it is created by the dominant culture, the values of the business leaders impact policy and developments, technology companies tend to be staffed by white

CC BY-NC-SA 4.0 Daniel Jones

male people (Smith & Rastagi, 2020, p.21-22). The large data sets that AI are trained on are generally large sections of the internet which contain numerous biases, so tools like ChatGPT can at times replicate bias and prejudiced ideas -even when these tools have been designed to not be biased.

Identifying bias can be difficult, a strategy to identify bias is to cross check AI generated information against other reliable information sources. You can learn more about bias, evaluating information and more from organisations like **AllSides** who feature a variety of webpages including Media Bias Chart, Misinformation & Disinformation explainer, and the Rate Your (own) Bias page. View at: https://www.allsides.com/schools/resources

Risk: Academic Penalties at [Your] School

Teachers and your assessment task notifications make it clear that your work must be your own, or you will receive penalties. When you include the ideas of other people, organisations, or web platforms like ChatGPT, you must clearly indicate what work is not generated by yourself -this includes if you have directly quoted a source (3 or more words in a row), or if you have paraphrased a source (put someone else's words into your own). Failure to clearly show when you have taken ideas from another source puts you at a high risk of receiving academic penalties.

What are the penalties at your school, look at your school assessment policy that is likely available through the school website, or have you received a handbook at the start of the year outlining your rights and responsibilities in the assessment context?

To avoid being accused of cheating or failing to identify the use of generative AI, it is vitally important to clearly show when you have copied ideas or words and included them in an assessment task; this is described below in the section: ***Cite, Reference & Declare the Use of ChatGPT and Other Artificial Intelligence (AI).***

Benefits: What are the Benefits of Using AI in Learning

The following are some benefits that the ethical use of generative AI might bring you as a high school student, but before you read them, remember, using GenAI in the wrong context, using it too often, using it when you shouldn't, all of these will reduce or remove any benefit that GenAI may bring:

- **+ Immediate Response:** Quick help for homework queries anytime.
    - **–** May make mistakes and give incorrect feedback.
- **+ Fosters Creativity:** Stimulates innovative thinking through diverse ideas.
    - **–** Can take away your opportunity to practise and develop your creative thinking skills.

CC BY-NC-SA 4.0 Daniel Jones

- **+ Research Aid:** Simplifies complex information for better comprehension.
    - **–** Can take away your opportunity to practise and develop comprehension skills.
- **+ Language Enhancement:** Provides practice for improving grammar and vocabulary.
- **+ Non-judgmental Learning:** Offers a safe environment for students to learn.
- **+ Supporting Neurodiverse Learners:** Edit tasks or texts to suit specific learning needs (E.g. Gifted, Autistic, ADHD) and provides scaffolding (support).

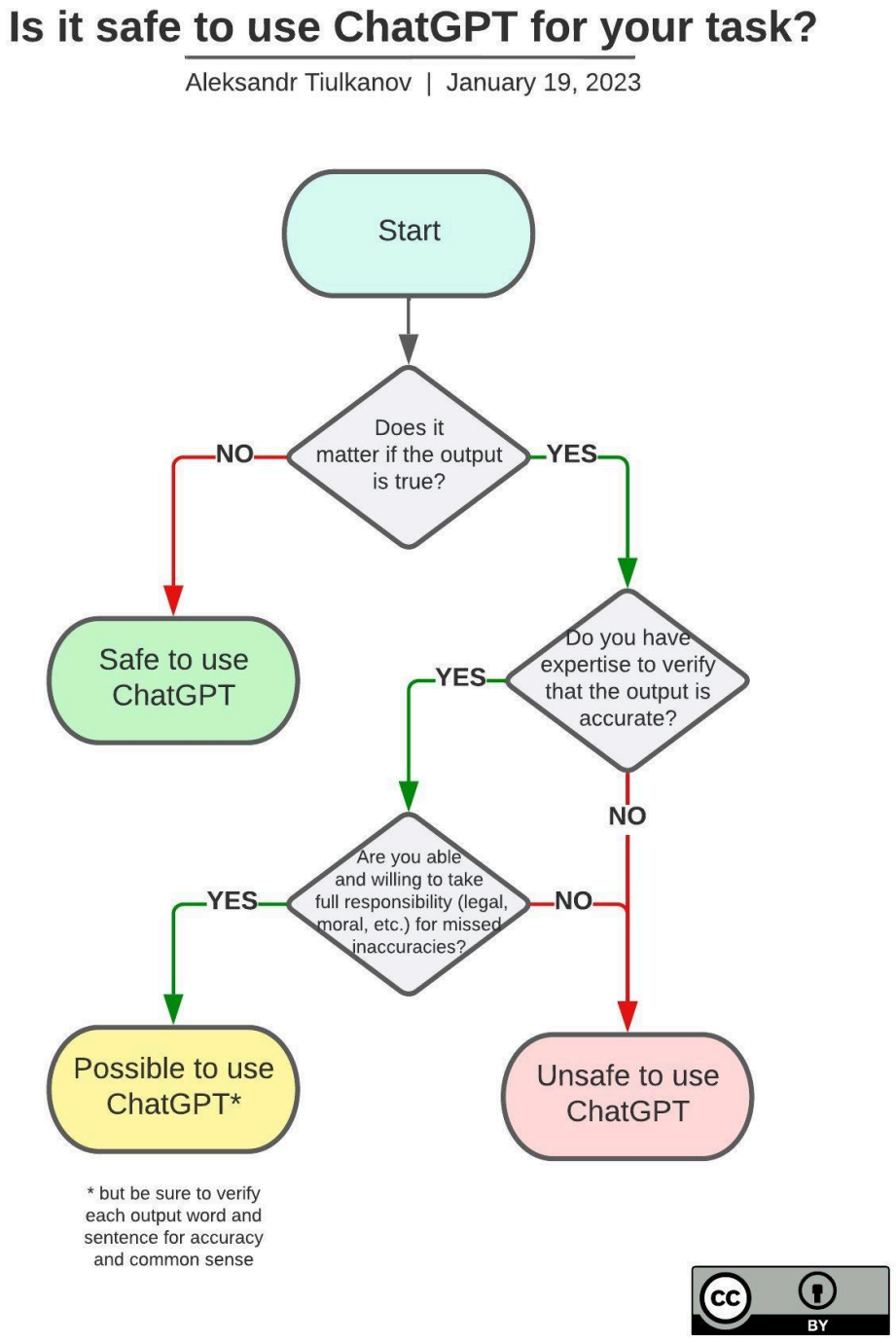
Implications for our broader society may include:

- **Increased Productivity**: Automates routine tasks, allowing for more creative human engagement.
- **Personalisation:** Tailors user experiences in various sectors, including education.
- **Rapid Research:** Assists in complex data analysis for advanced research.

As previously noted, generative AI also brings significant risks for you and our society as you can read elsewhere if you are feeling brave.

CC BY-NC-SA 4.0 Daniel Jones

Decision Tree for Determining if you Should Using AI in Learning



What do you think about this decision tree… while it may be a little black and white, and overly dramatic in its use of language, it does successfully highlight that you need to verify information that is generated by generative AI programs. Verifying information means seeking checking to see if reliable sources of information (websites/books etc) agree with the information the generative AI produced. Open the CRAAP Testing resources on this page (https://fosil.org.uk/fosil-cycle/investigate/) to learn more about how to effectively evaluate and verify information before using it in an assessment task.

CC BY-NC-SA 4.0 Daniel Jones

Strategies for Safe & Ethical Use of Generative AI

1. Safeguard Personal Information

It is important that you keep your personal information private.

- If you sign up for an account you need to provide some personal information. Whenever ever possible, reduce the amount of information you provide in the sign-up process.
- When you are putting prompts into generative AI do not include personal information like your name, address, class, school, family details, photographs of yourself or any information from which you, another student or other individual can be identified. A safe prompt can include information like “I am a Year 12 Biology student in Queensland…” More personal information that you include in prompts can be added to the database of information that the generative AI tools hold.

2. Verify and Edit AI Generated Content for Accuracy and Suitability

The section above titled “Risks & Benefits of Generative AI in Learning” explains that it is important for you to check any information provided by generative AI is correct. Find the information from a reliable source, then cite and reference the new source, not the generative ai.

Citing and referencing generative AI sourced content is explained later in this booklet in below in “Cite, Reference & Declare the Use of ChatGPT and Other Artificial Intelligence (AI)”.

3. Use Effective Prompting

What is a prompt?

Generative AI relies on a special input called a "prompt" to communicate with smart computer programs like ChatGPT effectively. A prompt is a message or instruction that you give to the generative AI, guiding it to create something specific or help you with a task.

Writing a clear and effective prompt can greatly improve the quality of output from generative AI tools, reduce errors and irrelevant responses.

Prompts can be simple, they can also be complex to the point of being an exercise in logic and planning to undertake complex and difficult tasks.

Types of Prompts

Note: Some of the following are terms broadly used, some are made-up to help you understand the types of prompts that can be created and used to help you.

CC BY-NC-SA 4.0 Daniel Jones

Direct Question Prompt: Asking a straightforward question. Examples:

- "*What is the capital city of New Zealand?"*

Specific Instructions Prompt: Providing detailed directives. Examples:

- *"Describe the water cycle in 3-5 sentences."*

Input/Output Prompt: Giving a specific input and expecting a calculated output. Examples:

- *"Given these numbers [1, 3, 5, 7], what's their sum?"*

Evaluative Prompt: When you have already made an initial prompt and received a response, an evaluative prompt is when you respond and ask follow-up questions. Example:

- *"Based on your last answer, evaluate the benefits of exercise."*

Self-Critique Prompt: Asking the generative AI to evaluate its own outputs. Examples:

- *"Review your last response and suggest improvements."*
- *"Review your last response, cross check this against multiple information sources that are credible, suggest improvements and explain why they are improvements."*

Role-play Prompt: Setting a scene for the AI. Examples:

- *"You're a teacher helping a student. Teach me…."*
- *"As an assistant, recommend three productivity improvement methods."*
- *You are William Shakespeare, think, talk, and write as though you really are William Shakespeare. I want to have a conversation with you, prompt me with a question, I will respond, and I need you to convincingly continue the conversation by responsively responding to my answer and ask follow up questions until I type "END".*

Tutor-me Prompting: This is an extension of role-play prompting in a specific context. Prompting the AI to act as a tutor, teach a concept, ask you questions to check for your understanding of that information, give you feedback on your response, and continue this process until you tell it to stop. Example:

> *“ChatGPT, can you quiz me on the [INSERT TOPIC]? I am at a Year [INSERT YOUR YEAR] level, use language and concepts appropriate to this level. Please ask me one question at a time, starting with a broad overview and then diving deeper. After I provide my answer, give me feedback on what I have correct and how I can improve. If answer a question wrong twice please explain the information at a simpler level and then check for understanding with another question. Keep asking questions and providing feedback until I type 'STOP'.”*

Recursive Inquiry: Engaging the AI in a dialogue until it gains sufficient information to perform a complex task. Example: *"ChatGPT, I need help with my project. Please ask questions until you understand the task thoroughly, then assist me."*

(“Types of Prompts” was in part copied & adapted in parts from Machine Learning Mastery (2023)).

CC BY-NC-SA 4.0 Daniel Jones

General Tips on Writing Prompts

One small tip is that it is easier to draft your prompts in a separate Word Doc, that way you can edit your prompts easily, save them for future reference, **and importantly, keep them as evidence if you need to demonstrate how you did an assessment task.**

You can improve your prompt writing by experimenting, reading sample prompts like those above, and even by having 'conversations' with generative AI asking for its help in how to write or refine prompts.

One structure, that is suggested by Danny Liu of Sydney University, suggests using clear steps in creating a prompt (2023). A prompt can describe:

- Role (ChatGPT act as…)
- Task (summary of what the AI needs to do)
- Requirements (what the completion needs to include, contain, be, etc)
- Instructions (what the AI should do to act on the prompt)

In the APPENDIX of this document there is a collection of "Prompts for Students for Ethical Use of Generative AI", these are examples that you can experiment with and edit to suit your purposes.

Cite, Reference & Declare the Use of ChatGPT and Other Artificial Intelligence (AI)

What Types of AI Programs and AI-Generated Information do you Need to Declare?

AI programs refer to programs, tools, apps, and websites such as:

- text generators including ChatGPT, Google Bard, Bing Chat etc.,
- paraphrasing tools that rewrite your text, or other people's text for you, eg. Quillbot etc.,
- image generators such as MidJourney etc.
- or any other AI technology that creates text, ideas, or images, including tools that rephrase/rewrite your own writing.

CC BY-NC-SA 4.0 Daniel Jones

Introduction: What are the Three Steps in Referencing AI Use?

1. In the text of your assessment, include an ***in-text citation*** whenever you do any of the following: directly quote AI-generated words or images, or paraphrase AI-generated ideas.
2. If you include any in-text citations, you need to write a **reference** in your reference list.
3. For each AI program, tool, or website that you utilise, you need to include a **declaration** as described below; this appears in an appendix after your reference list.

This process aims to make clear where, what to how much you have used AI in your assessment task.

Explanation: Three Steps to Referencing AI Use

Step 1: In-text Citation for AI. For an in-text citation, treat the AI tool the same as a corporate author, including the name of the AI tool and the year (Corporate Name, Year). Include an in-text citation when you either paraphrase or quote directly from **any** AI source. Citing a *paraphrased* idea would look like this:

As well as the loss and fragmentation of habitat, urbanisation in the Gold Coast hinterland brings risk to Koalas including domestic pet attacks and collisions with cars (ChatGPT, 2023)

A *direct quote* would look like this:

> Urbanisation in the Gold Coast hinterland has had an effect on Koala populations, an example of this is "The influx of humans and increased infrastructure development bring with them additional risks, such as road collisions and domestic pet attacks" (ChatGPT, 2023).

Step 2: Referencing for AI Use. If you have created an in-text citation where you have directly quoted, or paraphrased ideas generated by an AI program, you need to create a reference in your reference list. Use the AI company name in place of the author.

Company Name, (Year). Page Title. *Website or App Title.* Date retrieved. URL.

Example:

OpenAI, (2023). *ChatGPT.* Retrieved May 30, 2023, from https://chat.openai.com/chat

Tip: Creating a URL (web link) to your chat:

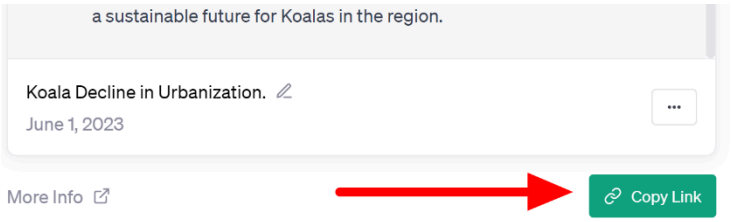
ChatGPT and other programs can produce a URL (web-link) to your AI conversation and this can be included in your reference. Example:

CC BY-NC-SA 4.0 Daniel Jones

1. From the top right of your chat screen in ChatGPT, click on the “Share Chat” button as shown below:



2. Click on the green box below and copy this into your reference or document:



Step 3: How to Write a Declaration of AI Use

Copy and paste the **Declaration of AI Use** text into your assessment task after the reference list. *Delete any parts that are not relevant,* and create a separate declaration for each AI tool, platform, or website that you have used:

Declaration of AI Use (Copy, Paste & Edit)

I acknowledge the use of (insert AI tool name and URL) in the preparation and/or writing of my assignment. I have used (insert AI tool name) to assist with: (delete items from the following list that do not apply):

- ***Research**: I generated an overview of my topic to assist with the research process.*
- ***Idea generation**: I generated suggestions on possible topics or angles to explore within my assignment.*
- ***Clarifying**: I generated explanations/examples to help me understand confusing or complex topics.*
- ***Structure and organisation**: I generated an assignment plan.*
- ***Writing**: I generated text which I adapted in my assignment. I have indicated through in-text citations where text has been quoted or paraphrased.*
- ***Other**: Please provide a description of how you have used the tool.*

The following prompts were input into (insert AI tool name):

- ***Prompt one**:*
- ***AI text passage or image**:*
- ***Prompt two**:*
- ***AI text passage or image**: etc.*

CC BY-NC-SA 4.0 Daniel Jones

Example of a Declaration of AI Use:

I acknowledge the use of OpenAI ChatGPT (https://chat.openai.com/chat) in the preparation and/or writing of my assignment. I have used ChatGPT to assist with:

- ***Clarifying**: I generated explanations/examples to help me understand confusing or complex topics.*
- ***Writing**: I generated text which I adapted in my assignment. I have indicated through in-text citations where text has been quoted or paraphrased.*

The following prompts were input into ChatGPT:

- ***Prompt one**: "Describe the effect of urbanisation on Koala populations in the Gold Coast hinterland"*
- ***AI text passage or image**: "Fragmentation also makes Koalas more vulnerable to predation, as they must navigate through unfamiliar landscapes and encounter increased interactions with domestic animals and vehicles. Urbanization also introduces various threats to Koala populations. The influx of humans and increased infrastructure development bring with them additional risks, such as road collisions and domestic pet attacks. Koalas are slow-moving animals with limited adaptation to urban environments, making them particularly susceptible to these dangers. The stress caused by urban noise, pollution, and human disturbance further compounds the challenges faced by Koalas in urbanized areas."*

Note 1: the *Declaration of AI Use* section is in part copied, and in part adapted from Curtin University. Their original version, and this adapted version are copyright protected by Creative Commons Attribution ShareAlike 4.0 International Licence. Any copying or adapting of the Declaration should be attributed as created by Curtin University Library (https://uniskills.library.curtin.edu.au/referencing/apa7/other/) and remain as CC 4.0.

Note 2: The Declaration of AI Use has been introduced here, to see examples of prompts mapped to the Declaration of AI Use, please see the document "***Prompts for the Ethical Student Use of Generative Artificial Intelligence***".

Other AI Programs that Students Could Consider Using

- **ChatGPT** (free) from OpenAI https://chat.openai.com/
  - The paid version (has better reasoning, less hallucinations and can access live internet through 'plug-ins'.

The following tools are similar to ChatGPT, but they also offer links to their information sources and some of them have live access to the internet

- **Bing Chat** from Microsoft https://bing.com/chat
  - 'Creative Mode' is powered by ChatGPT4
- **Bard** from Google https://bard.google.com/

CC BY-NC-SA 4.0 Daniel Jones

- **Perplexity.ai** from Perplexity https://www.perplexity.ai/
- **Humata.ai**
    - Humata.ai allows you to upload pdf files, including academic journal articles, and Humata provides a summary. You can ask questions about the article and customise responses with your needs, eg. “summarise in dot points for a 16 year old” or “summarise how global warming is affecting coral reef ecosystem health on the Great Barrier Reef.”

For a list of other AI tools that you might consider using as a student, have a look at the webpage “Different generative AI options” from the Sydney University website: https://canvas.sydney.edu.au/courses/51655/pages/different-generative-ai-options.

Optional Extension Activity: Using the Traditions of Philosophical Enquiry to Reflect on Generative AI

Consider the following philosophers, a little about their ideas, and a suggestion for a question that might reflect their perspectives. The questions are designed to help you reflect on artificial intelligence, its nature, its roll, its effect on you, and more. The suggested questions were created by ChatGPT and the writer of this document, not by the person referenced in each section.

Martin Heidegger: German philosopher who is often cited for his exploration of technology, asserting it's not merely a tool, but shapes how we interpret the world.

- **Quote**: "Everywhere we remain unfree and chained to technology, whether we passionately affirm or deny it. But we are delivered over to it in the worst possible way when we regard it as something neutral; for this conception of it, to which today we particularly pay homage, makes us utterly blind to the essence of technology."
- **Questions**:
    - How does your interaction with generative AI shape your understanding of the world and your place within it?
    - If technology is not just a tool but a way of understanding, how might generative AI influence our interpretation of human nature and existence?

Marshall McLuhan: Canadian philosopher who revolutionised media studies, proposing that the medium is the message, meaning that the nature of the medium itself, not just the content it carries, significantly impacts how the message is perceived. Here, the 'medium' refers to the tool or technology used for communication - such as print, television, or in our current context, AI.

- **Quote**: "The medium is the message."
- **Questions**:

CC BY-NC-SA 4.0 Daniel Jones

    - "Considering McLuhan's idea that 'the medium is the message,' how does the medium of generative AI shape our interpretation of its outputs and consequently our perception of the world?"
    - "If 'the medium is the message,' what might the use of generative AI as a medium tell us about our evolving understanding of communication, knowledge, and 'humanity'?"

Donna Haraway: American philosopher and feminist scholar known for her work on technology, science, and gender, particularly her concept of the cyborg as a symbol of 'hybrid identity' which refers to an identity that transcends traditional boundaries such as biology and machine, or human and animal, proposing new ways to think about relationships and categorisations.

- **Quote**: "The boundary between science fiction and social reality is an optical illusion."
- **Questions**:
    - "How does the development of generative AI blur the lines between science fiction and social reality, and what implications does that have for our future?"
    - "If a cyborg can be seen as a symbol of hybrid identity, what could generative AI tell us about our own identities?"

Jaron Lanier: Lanier is a contemporary philosopher and computer scientist who's critically engaged with the impact of digital technologies, including AI, on human society. He is particularly known for his views on 'digital dignity,' advocating for user empowerment and cautioning against the dehumanising effects of technology when users are reduced to mere data providers.

- **Quote**: "The most important thing about a technology is how it changes people."
- **Questions**:
    - "How has your interaction with generative AI changed you or those around you?"
    - "What does the existence and our use of generative AI tell us about our desire for creation and control?"

Tyson Yunkaporta: First Nations Australian and author of *Sand Talk: How Indigenous Thinking Can Save the World.*

- **Quote**: "Maybe the reason all the powerful instruments pointed at the sky have not yet been able to detect high-tech alien civilizations is that these unsustainable societies don't last long enough to leave a cosmic trace. An unsettling thought."
- **Questions**:
    - "How might the concepts of equity, social justice, and community well-being from indigenous perspectives be utilized to form ethical frameworks for AI, and what impact could these frameworks have on addressing systemic inequalities in society?"

CC BY-NC-SA 4.0 Daniel Jones

- For Tyson Yunkaporta “the war between good and evil is in reality an imposition of stupidity and simplicity over wisdom and complexity.” Generative AI simplifies complex realities and large amounts of information for the user, does the individual have a personal responsibility to strive for a more nuanced understanding? Why?

Sherry Turkle: Contemporary social psychologist and philosopher known for her studies on people's relationships with technology, especially concerning how it affects our human relationships and sense of self.

- **Quote**: "We expect more from technology and less from each other."
- **Questions**:
  - "In what ways do you think generative AI could change our expectations of technology and of each other?"
  - "How might reliance on generative AI influence our sense of self and our interpersonal relationships?"

Plato: Plato was an ancient Greek philosopher who told a story known as the Allegory of the Cave. He asked us to imagine people who have lived chained in a cave all their lives, facing a blank wall. All they have seen are shadows of objects behind them, cast on the wall by a fire. These shadows are the only reality they know. Plato suggested that knowledge is like a journey from the darkness of the cave into the light of the outside world, where true things, not just shadows, can be seen. This is a metaphor for learning and becoming wiser.

- **Quote**: "And if they were able to converse with one another, would they not suppose that they were naming what was actually before them?"
- **Questions**:
  - "In the context of the Allegory of the Cave, how might our interaction with generative AI be compared to the cave dwellers' perception of reality?"
  - "If the cave represents ignorance and the outside world represents knowledge, what role does generative AI play in this metaphor – does it keep us in the cave or lead us outside, and why?"

Rabindranath Tagore: Indian philosopher, artist, and Nobel laureate whose philosophies touched on the intersection of humanity and the natural world, which can be extended to the human relationship with technology.

- **Quote**: "Man is a creation of desire, not a creation of need."
- **Questions**:
  - "How does the creation and use of generative AI reflect our desires rather than our needs, and what does this tell us about human nature?"
  - "As generative AI becomes more prevalent, how might it influence our relationship with the natural world?"

Sun Tzu: Ancient Chinese philosopher, military strategist, and author of "The Art of War", which, though not directly about technology, offers insights about strategic thinking that can be applied to technological advancements.

CC BY-NC-SA 4.0 Daniel Jones

- **Quote**: "In the midst of chaos, there is also opportunity."
- **Questions**:
    - "As generative AI continues to advance and perhaps creates chaos in various societal aspects, what opportunities might arise?"
    - "What strategies from Sun Tzu's teachings can we apply to the development and implementation of generative AI to ensure its benefits outweigh its potential risks?"

Why Think These Thoughts? Why Ask These Questions?

Engaging in reflective and inquisitive thinking about technologies like AI is crucial for students like you. It can empower you to become an active, informed participant in our increasingly digital society. It not only equips you with critical perspectives on technological developments but also hopefully inspires you to imagine and shape a future where technology enhances human potential, respects diversity, and addresses ethical and social concerns.

Further Reading and Resources

Navigating Generative AI: The Teacher Librarian's Role in Cultivating Ethical and Critical Practices

- Oddone, K., Garrison, K., & Gagen-Spriggs, K. (2024). Navigating Generative AI: The Teacher Librarian's Role in Cultivating Ethical and Critical Practices. *Journal of the Australian Library and Information Association*, 73(1), 3–26. https://doi.org/10.1080/24750158.2023.2289093
    - Also available at: https://www.tandfonline.com/doi/citedby/10.1080/24750158.2023.2289093?scroll=top&needAccess=true

References

Liu, D. (2023). *Prompt engineering for educators – making generative AI work for you*. University of Sydney. Retrieved on 01/08/2023. https://educational-innovation.sydney.edu.au/teaching@sydney/prompt-engineering-for-educators-making-generative-ai-work-for-you/

Machine Learning Mastery. (2023). *Prompt Engineering for Effective Interaction with ChatGPT*. Retrieved on 01/08/2023. https://machinelearningmastery.com/prompt-engineering-for-effective-interaction-with-chatgpt/

Smith, G., & Rastagi, I. (2020). *Mitigating Bias in Artificial Intelligence: An Equity Fluent Leadership Playbook.* The Center for Equity, Gender and Leadership, Haas School of Business, University of California/Berkeley.

CC BY-NC-SA 4.0 Daniel Jones

https://haas.berkeley.edu/wp-content/uploads/UCB_Playbook_R10_V2_spreads2.pdf Retrieved on 02/08/2023.

UNESCO. (2022). ChatGPT and Artificial Intelligence in higher education: Quick start guide. UNESCO International Institute for Higher Education in Latin America and the Caribbean. https://unesdoc.unesco.org/ark:/48223/pf0000377706

Copyright ramifications:
https://www.federalregister.gov/documents/2023/03/16/2023-05321/copyright-registration-guidance-works-containing-material-generated-by-artificial-intelligence

Appendix

See: ***Prompts for the Ethical Student Use of Generative Artificial Intelligence***

This document is protected by Creative Commons **CC BY-NC-SA 4.0**

This license enables reusers to distribute, remix, adapt, and build upon the material in any medium or format for noncommercial purposes only, and only so long as attribution is given to the creator. If you remix, adapt, or build upon the material, you must license the modified material under identical terms. CC BY-NC-SA includes the following elements:

 BY: credit must be given to the creator.

 NC: Only noncommercial uses of the work are permitted.

 SA: Adaptations must be shared under the same terms.

To learn more about this type of copyright, go to:
https://creativecommons.org/licenses/by-nc-sa/4.0/

CC BY-NC-SA 4.0 Daniel Jones