



# Applying GenAI: a Conversation Student Learning Development



#### **Dr Grace Gaynor**

Student Learning Development Advisor

Developed in collaboration with the Library and TCD Students' Union

student.learning@tcd.ie
https://www.tcd.ie/sld/



## Today's Workshop

- 1. Demystifying AI: A Conversation
- 2. GenAl in an academic context, specifically TCD
- 3. What are the Strengths, Weaknesses, Opportunities, and Threats?
- 4. Using AI effectively, ethically, and critically? How do you cite it?
- 5. A conversation



# What are your concerns about using GenAI in your academic work?

#### What is Generative AI?



Al vs GenAl



Conversational chatbots designed to respond to prompts made by the user. They can mimic/re-create the types of complex responses given by humans



Examples: ChatGPT, Google Bard, CoPilot and Notion

## Why should you be thinking about GenAI?



You may already be using it and want guidance



Uncertainty around your school/department's expectations/policies



Impact on the academic integrity of your assessments



Al-augmented workplace/world after University.

# Ask your School/Department!

## **Academic Integrity**

#### What should you ask your school/department?

- Can you use it?
- Can you use it for some things and not others (i.e. for research prompts but not for generating content)?
- Do you need to cite it?
- If you do need to cite it, what information should you include? (i.e. name the GenAl platform used, date of use, prompts inputted, responses received, etc)?
- For more on TCD's policy on GenAl, see the <u>Centre for Academic</u>
   <u>Practice</u>

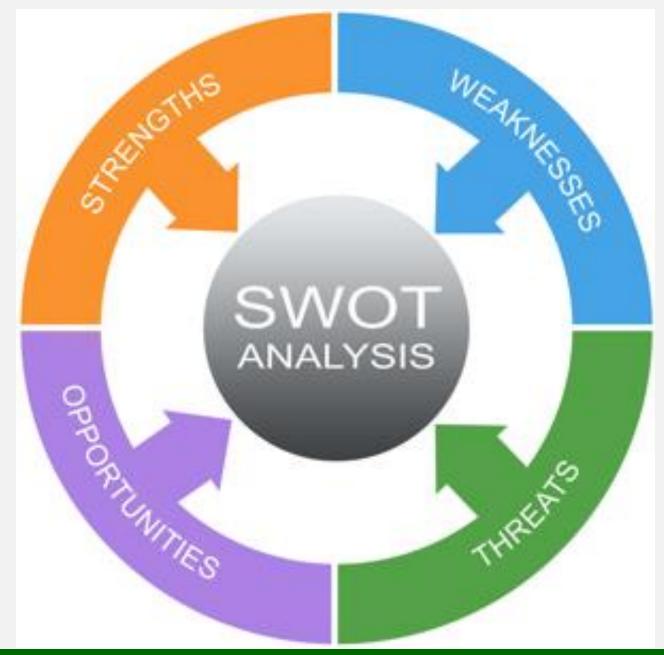


# Data Privacy: What should you NOT do with GenAI?

- Some uses illegal break GDPR law
- 'You are NOT allowed to use private student or staff
  information as part of your queries or instructions when using
  GenAl tools.'
- 'Content which is confidential in Trinity, confidential to your studies or work (research, teaching or administrative), which is not public or for which you do not own the copyright should NOT be used in creating prompts or providing context information for GenAl to generate content."

FROM <u>Centre for Academic Practice</u>, <u>Trinity Teaching & Learning - Trinity College Dublin (tcd.ie)</u>











## Strengths

- Summarising large volumes of information
- Identifying key points
- Avoiding procrastination
- Explaining terminology/theories
- Ironing out grammatical errors
- Rewording language/refining syntax.

#### Weaknesses

- Language models based on probability
- Cannot prioritise/evaluate
- 'Hallucinations'
- Incorrect references/citations
- Bias
- Assignments generic and lack originality
- Information cannot be verified
- Over reliance prevents use of reliable, verifiable, and academically rigorous sources.

## **Opportunities**

- As long you remain critical and questioning of GenAl outputs, and ensure your assignments are still the result of your own ideas, writing, and critical analysis, GenAl can:
  - Be used as a 'jumping off point' for an assignment
  - Be used as a useful reading/mind mapping tool
  - Save you time in the planning stages of an assignment.

#### **Threats**

- Academic misconduct penalties
- Underdevelopment of study/life skills:
  - Critical thinking
  - Formulating original opinions
  - Expression
  - Synthesising
- Impact on personal development
- An employer in an AI-augmented workplace will still value the above skills (e.g. an uncritical mindset will not know how to effectively prompt responses from AI or be discerning about the quality of these responses).



## Questions to ask when using GenAl

- How can I use Al ethically:
  - Assignments still my own?
  - In line with school/department guidelines?
- How can I use it effectively:
  - Where can it save me time?
  - Help me synthesize information?
- How can I approach the material produced by GenAI critically:
  - Is the information correct?
  - Has it been subject to bias?
- Do I need to cite it?



## Critical Thinking

"I asked Chat GPT to give me titles of 5 research articles on social justice theory. It responded with 5 paper titles, authors, and journal names. When I looked them up, I couldn't find them. I've had this experience with Chat GPT before so this time I followed up by asking it:

Are the article titles you have provided genuine? I cannot find them.

ChatGPT said:

The titles provided in the previous response were examples to illustrate the kinds of research that would align with your request, but they were not actual published articles. I apologize for the confusion."

- Anonymous doctoral student



## Critical Thinking

- Be critical like any other source
- Problems?
- Bias/generalisation?
- Correctly supported/cited?
- Useful in any way?
- Starting point/mind mapping?
- Should this be where your engagement with an answer generated by GenAI ends?



# Ask ChatGPT: 'What does a history professor look like?'

### Reflections

Gained knowledge of TCD policies and expectations

Applied current understanding of using GenAl to SWOT analysis

Critically analysed an answer produced by ChatGPT

#### **Further Resources**

- How to use ChatGPT as a learning tool (apa.org)
- How you should—and shouldn't—use ChatGPT as a student | Open Universities Australia

### **Questions and Feedback**

https://forms.office. com/e/ai5yXYaGwx **Demystifying and Applying GenAl** 



#### Some uses of GenAl are illegal and break GDPR law



- Using private student or staff information as part of your queries or instructions when using GenAl tools.
- Sharing private information with a third party (the GenAl provider).
  - GenAl tools harvest this information and depend on interactions with users to train their systems.
- Content which is not public or **for which you do not own the copyright** should NOT be used in creating prompts or providing context information for GenAI to generate content.

#### GUIDANCE FROM TRINITY'S GENAI HUB



GenAl can generate erroneous content and information generated from GenAl cannot be considered correct all of the time. Therefore, students are expected to fact-check information that they generate from GenAl when using it to learn or explain subjects.

If a student **generates content from a GenAl tool and submits it as their own work, it is considered plagiarism**, which is defined as academic misconduct in accordance with the College Academic Integrity Policy. If a sentence or quotation is being used by a student in their answer, then it must be referenced.

Cases of plagiarism are considered under College Academic Misconduct Procedures.



# SCHOOL POLICIES OR APPROACHES TO THE USE OF GENAL EXAMPLE: FACULTY OF SCIENCE TECHNOLOGY ENGINEERING & MATHEMATICS

Our (current) policy towards Gen AI could perhaps best be described as follows:

- •Use is encouraged within modules under the specific conditions prescribed by the module co-ordinator. All use should be acknowledged according to standard citing conventions
- •In the absence of specific conditions, the default will be that use of Gen AI is not permitted



# SCHOOL POLICIES OR APPROACHES TO THE USE OF GENAL EXAMPLE: FACULTY OF SCIENCE TECHNOLOGY ENGINEERING & MATHEMATICS

Should I use AI in my academic work?

There is no right or wrong answer to this question. Writing your entire assessment using an LLM will most certainly fall under the College Academic Integrity policy. Using machine learning as a statistical method for your research project will most certainly not and might create a very exciting and state of the art project. Beyond that, use your judgment, keeping in mind the caveats above. Some modules will have a specific AI policy, and you should follow that. If in doubt, do not hesitate to ask the module coordinator



#### SCHOOL POLICIES OR APPROACHES TO THE USE OF GENAI

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**NOTE:** Where (B) is selected, students are required to include an appendix containing a <350-word explanation of how generative AI was used (which tool; how the output was generated; how this output was used in the assignment) and how that use conforms with the principles of academic integrity. Questions and/or prompts and the generative AI output should be included as part of the appendix. These are not included in the word count for the assignment. Where these are not included, **they may be requested as part of the marking process.** 



#### SCHOOL POLICIES OR APPROACHES TO THE USE OF GENAI

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The School is committed to upholding the highest standards of academic integrity and intellectual rigour. For this reason, the School will treat the presence of any text which has been generated by artificial intelligence (AI) tools in any work submitted for assessment as a breach of College's guidelines on Academic Integrity. Any use of AI-generated material in an essay or exam answer will render that work inadmissible for assessment and will be subject to the sanctions outlined in the College Calendar