CHATGPT AND ACADEMIC INTEGRITY: OPTIONS FOR ADAPTING ASSESSMENT IN SEMESTER 12023

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The recent release of ChatGPT has raised concerns that certain popular types of assessment tasks (e.g., essays, online exams) are now more vulnerable to plagiarism and cheating. This short guide provides practical examples of how academic staff could reframe aspects of their existing assessment design to mitigate the risk of academic misconduct. The examples provided in this guide are purposefully designed to work with existing assessment for Semester 1 2023, without requiring the overall assessment profile of the subject to be altered. This guide is designed to be a living document, and the content will be refreshed to reflect updates to ChatGPT.

What is ChatGPT?

ChatGPT is the latest version of Generative Artificial Intelligence for Language Processing that was made open access in November 2022. It leverages a vast amount of the information available on the Internet to quickly generate text and codebased outputs in response to simple contextual prompts from a user. The open access version of ChatGPT is powered by the GPT-3.5 model, while a more advanced model, GPT-4, is available to paid ChatGPT Plus subscribers. GPT-4 is capable of interpreting multimodal inputs, such as text and images, although this functionality has not yet been publicly released.

What are the limitations of ChatGPT?

ChatGPT has several limitations, as listed below:

- It is not creative in a human sense.
- It is not self-aware.
- It summarises information without providing references to sources or citations.
- It cannot judge when information is correct or not.
- It does not possess critical thinking skills.
- It has been trained using online content which only existed prior to 2022.
- It has biases inherent from its programmers and users.
- It cannot hold copyright or be assigned intellectual property.
- It is not able to make ethical decisions or value judgments.
- It is prone to 'hallucinations', meaning that it sometimes fabricates facts and makes errors in reasoning.

What are some options for reframing assessment in semester 1?

In this section we provide practical examples of how essays, online or open-book exams, and other types of assessment can be reframed to reduce the possibility of academic misconduct via ChatGPT. These examples, which focus on high quality assessment practices, have been distilled from a range of recent discussions based upon ChatGPT's limitations.

Strategies for reframing essays

- Develop essay prompts that ChatGPT will not easily be able to answer. For example, redesign essay topics or questions so that they ask students to:
 - $\circ \quad$ engage in creative thinking, critical analysis, or problem solving;
 - o write about ethical dilemmas or hypothetical situations;
 - draw on specific aspects of the syllabus or class content;
 - respond to an image-based prompt (e.g., an historical image, data visualisation);
 - refer to content that is not readily available online (e.g., personal experiences, objects in their local environment);
 - o focus on current events or news stories (i.e., events that occurred during 2022 or 2023);
 - \circ critically analyse academic articles that were published after 2021; or
 - o make affective or value-based judgements



After redesigning essay topics or questions in these ways, it may be useful to run the revised prompts through ChatGPT to confirm that it is not able to produce an essay of high quality.

- Ask students to write their essay using an online collaborative writing tool that offers sophisticated version control options (e.g., a Wiki, Word Document in SharePoint). These tools enable educators to identify when copy and paste has been used. They also help students focus upon the process of writing rather than simply the final product. It would then be possible to consider assigning marks to the process documentation (e.g., version control information from online collaborative writing tools, other written drafts) as well as the completed essay.
- Make it a requirement that students write their essays using Cadmus. This online writing tool makes it easy for educators to determine when students have copied and pasted large slabs of text or typed for long periods of time with minimal editing.
- Ensure that academic citations and referencing are key elements of explicit marking criteria, as ChatGPT does not accurately cite or reference sources. More specifically, when asked to provide references, ChatGPT cites fake scholarly articles or books and generates random DOIs.
- Ask students to include in their reference list a particular proportion of academic references that were published after 2021.
- Build reflection into the assessment. For example, ask students to write an essay in parts over a longitudinal timeframe incorporating peer review of each section. Formative feedback could also be provided before the final completed version is submitted.

Strategies for reframing open-book or online exam questions

- Include questions that require students to engage in critical thinking. For example, ask students to:
 - Assess the accuracy, reliability or credibility biases of a set of information sources.
 - Speculate or make inferences about an event or issue by asking them hypothetical, interpretive, or predictive questions.
 - Reverse engineer or analyse a complex problem or situation by identifying the key factors and processes.
- Develop questions that require students to extrapolate ideas to local and authentic scenarios, such as those connected to particular lectures or content within the subject. For instance, ask students to write about one out of five key topics that were discussed in a particular lecture or class discussion or to summarise the perspectives of a guest lecturer. However, as not all students are able to attend every class, ensure that the examinable content is recorded and readily available for all students to access.
- Design questions that prompt students to explore value judgements or affective domains.

Strategies for reframing other types of assessment tasks

While this guide has focused on essays and exam questions, there are other types of assessment design that are also vulnerable to cheating or plagiarism via ChatGPT. These include lesson plans, language translation, creative writing, screenplay writing, and coding. It should be noted that AI is being integrated into Office365 and web browsers and will soon become another writing aid similar to referencing, citation management, and information searching, and its use will therefore become part of basic digital literacies. However, below are a couple of general strategies that are worth considering for reframing assessment in these contexts:

- Ask students to submit process documentation and justification of their design choices along with their assessment task. For example, require that students submit a workbook or a short explainer video with the final product.
- Ask ChatGPT to generate several examples of the assessment task and ask students to critique the quality and creativity of these outputs and how they could be improved.
 Model the use of ChatGPT for students to clearly demonstrate how they would be able to use it ethically in the

development of their assessment tasks. For example, students could use ChatGPT as a starting point for a creative writing task, then students could critically analyse the output. This can help students develop higher order skills, such as critical thinking and evaluative judgement. When using this approach, ask students to include all prompt statements they used to generate content via ChatGPT and cite ChatGPT as a source.

Sources of additional information

- Melbourne CSHE Webpage on AI, Assessment and Academic Integrity <u>https://melbourne-cshe.unimelb.edu.au/ai,-assessment-and-academic-integrity2</u>
- University of Melbourne statement on the use of AI software in the preparation of material for assessment <u>https://academicintegrity.unimelb.edu.au/plagiarism-and-collusion/artificial-intelligence-tools-and-technologies</u>
- <u>https://chat.openai.com/</u>