

Guidelines

Chatbots and student assessment

The following guidelines provide information on utilizing chatbots in student assessment, aiming to effectively assist students in their use, while maintaining the integrity and quality of educational outcomes.

Chatbots – What are they and how do they work?

- Chatbots are software applications designed to process natural language input, provide a response, and maintain dialogue with the user, simulating human conversation.
- While chatbots can be very helpful, remember they are not perfect, and their responses are only as good as the data they were trained on.
- When choosing a chatbot to interact with, consider its design, capabilities, and the accuracy of its responses.

What is ChatGPT?

- OpenAI's ChatGPT is a prime example of a chatbot. It is a Large Language Model (a type of Artificial Intelligence or deep learning algorithm) specifically trained to interact and respond to instructions that align with human conventions and preferences.
- ChatGPT is based on a model called 'InstructGPT', which has been trained with human feedback on the quality of its responses.
- The ChatGPT model uses what it has learned from humans to generate responses that humans are more likely to find acceptable. Here is how OpenAI explains it: <https://openai.com/blog/instruction-following/>.
- You can use ChatGPT for tasks such as finding information, or providing explanations. But remember to verify its responses using other reliable sources. Be aware that ChatGPT may self-censor answers and may generate responses that are more likely to be perceived as acceptable by users.
- Examples on how to use ChatGPT to revise effectively can be seen [here](#).

How reliable is the information provided by ChatGPT, both from a scientific perspective and as a general source of information?

- ChatGPT, as per OpenAI, has been designed to align with 'common sense'. This is reflected in how it has been trained with human feedback, which is not necessarily guided by any specific worldview, theory, or method. Therefore it is important to understand that ChatGPT's responses reflect a general 'common sense' approach, not specialized knowledge.
- OpenAI asserts that different sources of influence on ChatGPT's data do not guarantee alignment with a scientific method or values of academic integrity. Be aware that ChatGPT might not reflect the nuances and methodologies of specific fields, including science.

- ChatGPT does not, for the moment, has any built-in guarantees that what it generates is true, does justice to its sources, or even discloses or at least adequately cites them. Always verify the information provided by ChatGPT from other reliable sources. This will ensure accuracy and help maintain academic integrity.
- ChatGPT is a proprietary model and just as in the case of Google's search algorithm, we are unlikely to learn anytime soon how exactly it works and which data it is built on. Be aware of that and approach ChatGPT like a 'black box', meaning its internal logic may not be fully disclosed or understood.
- Exercise critical thinking when using chatbots like ChatGPT. Consider their outputs as starting points for exploration, rather than definitive answers. Always corroborate the information using multiple reliable sources.

Chatbots and citations - Can they be cited in an academic assignment?

- ChatGPT depends on pre-existing data sources, but it has been observed to create fictitious references and data in its responses. It's crucial to exercise caution when relying on chatbots for scientific evidence due to the potential for invention of data or references.
- Chatbots can be used in assignments, provided they align with standards of academic integrity and scientific judgement.
- If you decide to use a chatbot for an assignment, be sure to adhere to the principles of academic integrity. This means properly citing the chatbot as a source and disclosing in which parts of the text it has been used and how it has influenced the text.
- Example: if a text has been generated using the 'rephrase', 'grammar check', 'proofread', 'summarize', 'reduce/increase text', 'detail', and similar prompts, then this use of the chatbot must be clearly disclosed for each part of the text that used the specific prompt.

Illicit use of a chatbot - What constitutes improper use?

- Asserting ownership for a text or other work that has not been written or produced by the claimant, without crediting the actual source, is fraudulent. This includes submitting for assessment a text generated fully or partly by a chatbot under one's own name.
- When using a chatbot or any other chatbot for help with a text, always credit it as the source. This ensures transparency and respect for intellectual property.
- Remember that the goal of assignments is not just to get a grade but to learn and demonstrate your understanding. Use chatbots as aids, not substitutes for your own work.

Chatbot usage detection – Can it be identified if a chatbot has been used for an assessment?

- The University of Luxembourg uses an anti-plagiarism software called Turnitin that includes an Artificial Intelligence (AI) writing detection indicator. This feature can estimate whether a text has been generated by AI writing tools, including ChatGPT.
- The AI writing detection feature is an integral part of the Turnitin report for all assignments submitted through Moodle, and instructors can access it before grading.
- Be aware of this feature when submitting assignments. If you're a student, always properly reference any AI-generated content in your assignments to avoid potential fraud suspicion and charges. If you're an instructor, familiarize yourself with Turnitin's AI writing detection feature to better understand the sources of student work.

- For a comprehensive understanding of the functionality of Turnitin's AI writing detection capabilities, kindly refer to this [source](#).

Consequences of illicit chatbot use – What happens if a chatbot has been used improperly?

- A certain score on Turnitin's AI detection indicator may require further scrutiny of the assignment by the instructor, particularly of those segments identified as potentially AI-written.
- A substantiated suspicion of unauthorized chatbot use in an assignment will trigger the [disciplinary procedure for academic fraud and plagiarism](#).
- Therefore, be mindful of the role AI detection plays in grading your assignments.
- When using AI-generated text, clearly mark the sections and cite them appropriately to avoid confusion during the evaluation process.

The Office of the Vice-rector for academic affairs