ChatGPT Guidelines for Examiners

FASoS Board of Examiners, 7 February 2023

The Board of Examiners start from the premise that most students are willing to learn and are unlikely to cheat in their exams by using Al generated work. However, the latest Al developments should make us alert in designing education and exams. With this note — which benefited much from a FSE document written by Dave Vliegenthart and Lonneke Bevers and comments generously provided by FASoS colleagues — we want to highlight some points of attention and guidelines for the short term, and raise some discussion points for the long term. Since ChatGPT will develop and new insights may pop up, please consider this document a dynamic one.

Feedback on these guidelines is much appreciated, and will serve as input for a new version. You can forward your feedback to the BoE via boe-fasos@maastrichtuniversity.nl.

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Introduction

What is ChatGPT? ChatGPT (Generative Pre-trained Transformer) is based on the Transformer architecture, which is a type of deep neural network designed to process sequential data (such as text). It uses mechanisms to calculate relationships between words in a sentence and generate a context-aware representation for each word, which is then used to generate the final text output. ChatGPT is trained on a big corpus of text data, allowing it to learn general knowledge and patterns in language. During the feeding process, the model is trained to predict the next word in a given sequence of text. It can produce summaries, answers to essay questions, papers, programming code etc. ChatGPT cannot reason or produce original knowledge. However, it can combine information from different sources in such a confident and convincing way that it gives the semblance of understanding and reasoning.

ChatGPT for education and assessment ChatGPT can generate texts that students could use for their assignments without assessors being able to tell the difference between student and software-generated submissions. This is not *necessarily* a problem. It becomes a problem for education and assessment when students use ChatGPT to demonstrate knowledge and skills required to meet the learning outcomes of a module without having acquired such knowledge or skills.

ChatGPT brings challenges and opportunities for us. The main challenge is to ensure that students still obtain the knowledge and skills that we want them to obtain, regardless of whether or not they use ChatGPT. UM Vision on Assessment may guide that route, highlighting individual (and collective) learning, which assessment can foster. At the same time, Al generated text can provide interesting teaching opportunities or innovative assessments.

ChatGPT for answering exam questions or for writing (parts of) assignments Students might use ChatGPT to write papers, solve take home exams (or other exam formats they submit as being their own work), while the answers are manufactured by AI, or build on AI products. This means that these students do not own the knowledge, so the ECTS cannot be attributed to them. The Board of Examiners sees this as an attempt to commit fraud.

Short-term Guidelines

The BoE encourages all graders to try ChatGPT in order to see what the AI can and cannot do. In addition, we advise that all course coordinators submit each exam question to ChatGPT when designing the exam. This gives them a good baseline of what an AI-generated answer would be.¹

The course uses AI for teaching and assessment

If at the course level students are encouraged to use AI as part of the course design or the exam, the BoE advises the course coordinator:

- To be as specific as possible to what extent and in which context students are expected to use and to not use AI.
- ➤ If AI tasks are required or allowed during the assessment, then the course coordinator should ensure that the necessary ILOs are still assessed by the work requested from the students and not the AI. For example, by asking students to critically react on the answers generated by the AI or by comparing the AI's answer with their own answer (or specific sources).
- > To ask students to explicitly mark text that is AI generated in their assignments or exams.

The course does not use AI text for teaching and assessment

If the course coordinator wishes to not allow AI generated work in assignments or in the assessment, the BoE advises on the following:

- To exclude any misunderstandings, we recommend including in the course syllabus <u>and</u> in the exam instructions that students are not allowed to use ChatGPT or other similar text or image-producing AI tools in assignments, presentations or exams.
- The Board of Examiners can sanction exam work that was AI generated by considering it plagiarism (commissioned work) and/or fraud (an action that makes it impossible to evaluate the student's knowledge).
- If the course does not integrate AI work in assessment and wishes students not to use it for exam work, then a sentence along the following lines would be sufficiently informative:

¹ For example, ask "[Writing style guide: write from the perspective of a college junior]" to get an answer that's more similar to what a student would retrieve.

"Unless otherwise mentioned, AI generated text used to answer exam questions/assignments can be seen as commissioned work that represents plagiarism and fraud and will be sanctioned under the Rules and Regulations."

How can you recognize texts produced by ChatGPT?

ChatGPT is constantly evolving, so it may become continuously harder to detect it. At the moment, in a quick scan, text can appear as reasonable, well-structured, nuanced, discussing options, different positions, etc. We have not seen bold claims, or surprising arguments. Its referencing is rather weak, recent references are not included. The same applies to quotes. If someone tells you they produced a text via software, you will probably recognize it. However, if you read exams at a rather high pace, you may easily overlook it. It becomes even harder, of course, when students submit hybrid products, asking ChatGPT for feedback and suggestions.

Look for unusual language or formatting: texts (partly) produced by ChatGPT may be atypical of student work, with unusual or repeated phrases or differences in style, syntax, spelling and punctuation between different sections of the same text; pay extra attention to the content and reasoning of such sections/texts. A very low Ouriginal percentage could also be seen as suspicious.

The sources referenced by ChatGPT could be made up. The AI can create fake DOIs. Given that we apply APA referencing styles across all programmes, we advise all graders to first check the authenticity of the reference list.

Suspected AI commissioned work

So far, at least five AI text detection tools were circulated on the internet:

https://gptzero.me/

https://openai-openai-detector.hf.space/

http://gltr.io/dist/index.html

https://writer.com/ai-content-detector/

https://platform.openai.com/ai-text-classifier

NB: For GPTzero, the text should be at least 10 sentences long with a maximum of 5000 characters. You also have the option of uploading a paper via the upload button.

For Open AI, you can enter max. 510 tokens (characters, spaces); we recommend around 200 tokens (characters, spaces) per sample. The result is considered reliable after around 50 tokens but the more text is included, the more reliable the outcome is.

The AI Text Classifier (platform.openai) requires a minimum of 1,000 characters (approx. 150-250 words).

All available software tools are still beta versions, which provide probabilistic results. It is not yet known how reliable their checks are. Therefore, we advise you to use them cautiously and only as a means to confirm several other findings (e.g. writing style as mentioned above, lacking claims, no real argumentation, meagre referencing, fake sources).

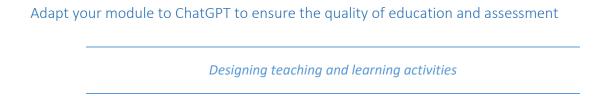
If your suspicion is strengthened by further inspection and/or detection software, please contact the BoE service desk at boe-fasos@maastrichtuniversity.nl.

Needless to say that we will advocate the integration of AI detecting software in the new plagiarism tool.

Long-term Guidelines

Reduce the risks of ChatGPT via the assessment programme

- Diversity of assessments within each programme is key. The BoE requires that as of academic year 2023-2024 at least 30% of the assignments in a programme are full (student) identity proof. Oral exams, presentations, MECC Exams (Testvision or on paper) for instance fullfil these requirements.
- > Complement written assignments in a course (on-site written essays) with non-written and identity-proof components (e.g. presentation, poster, debate) to written assignments produced at home.
- Monitoring different stages in the production of longer papers (or a thesis) is advisable. In-between presentations may help (see above). A thesis presentation (with Q&A) or defence is highly recommended by the BoE.



- Design teaching and learning activities that are based on project work that require critical and out of the box thinking, creativity, and collaborative skills.
- ➤ Have students apply the theory to concrete (recent) case studies.
- > Have students critically relate different sources instead of merely summarising them.
- ➤ Have students provide key quotes from their readings and explain why they capture the gist of what they read. Have ChatGPT answer the learning goals, and let students discuss these answers based on their readings.
- Ask students to reflect on how course materials relate to their personal experience, or to a case that is personal to them (e.g. their age group, country, identity, area of experience, etc.).
- ➤ Have students submit both the ChatGPT output and the prompts they used, and have them reflect on both. Producing the right prompts requires good knowledge of the subject that the students are using ChatGPT for.

Designing assessments		Designing assessments	
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- Reconsider (exclusively) written assessments; oral exams may serve as an alternative (see FASoS assessment policy).
- Do not use take-home exams, except when peer collaboration and use of Al-tools is taken into account in the design and grading of the exam.

- Have students integrate content from the module into their written assignments (with concrete references, indicated in the assignment).
- ➤ Have students provide reasons for why they dis/agree, using content from the module.
- ➤ Have students peer review written assignments based on content from the module.
- Have students use ChatGPT to formulate an answer to a question, and then have them critically assess this answer with arguments based on the content of the module (with concrete references).

Recommended literature

- https://www.theguardian.com/technology/2022/dec/04/ai-bot-chatgpt-stuns-academics-with-essay-writing-skills-and-usability
- Teaching Experts Are Worried About ChatGPT, but Not for the Reasons You Think
- https://educationalist.substack.com/p/lets-get-off-the-fear-carousel
- https://activelearningps.com/2023/01/17/the-robots-are-coming-and-theyre-writing-essays/
- https://www.npr.org/2023/01/09/1147549845/gptzero-ai-chatgpt-edward-tian-plagiarism
- https://www.knack.be/nieuws/technologie/deze-tekst-is-nog-niet-door-een-algoritme-geschreven/
- https://theconversation.com/chatgpt-our-study-shows-ai-can-produce-academic-papers-good-enough-for-journals-just-as-some-ban-it-197762?utm_source=The+Abstract&utm_campaign=484d365d22-EMAIL_CAMPAIGN_SPRJ_Abstract_JAN23_COPY_01&utm_medium=email&utm_term=0_9e_1c242ede-484d365d22-343149889
- https://3starlearningexperiences.wordpress.com/2023/01/31/chatgpt-what-teachers-needto-know/