



GUIDELINES FOR TEACHERS OF THE FACULTY OF SOCIAL SCIENCES ON GENERATIVE AI

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Introduction

Since generative AI has been introduced to a larger audience in November 2022 with the launch of ChatGPT, we have experienced how generative AI can impact teaching and learning at the Faculty of Social Sciences. This guide provides you with tools for dealing with generative AI in your courses, taking in account all those experiences, implemented initiatives and the general guidelines of the VU.

Generative AI in teaching at the VU

At the moment the [VU's vision](#) on generative AI in education states that **the use of generative AI is prohibited UNLESS the teacher decides otherwise**. Teachers can never require students to use a generative AI tool that VU has no license of. At this moment, the only licensed generative AI tool is [Microsoft Copilot](#).

How does generative AI affect your teaching

Even when a license is available to use, teachers need to weigh up the use of generative AI in their courses. Because of the way generative AI works, it can answer some prompts quite accurately, but fail to give accurate answers to other questions.

To understand how this affects your teaching, Figure 1 illustrates the ability of generative AI to perform tasks using the (revised) Bloom's taxonomy, and how this correlates with the tasks we assign to our students.

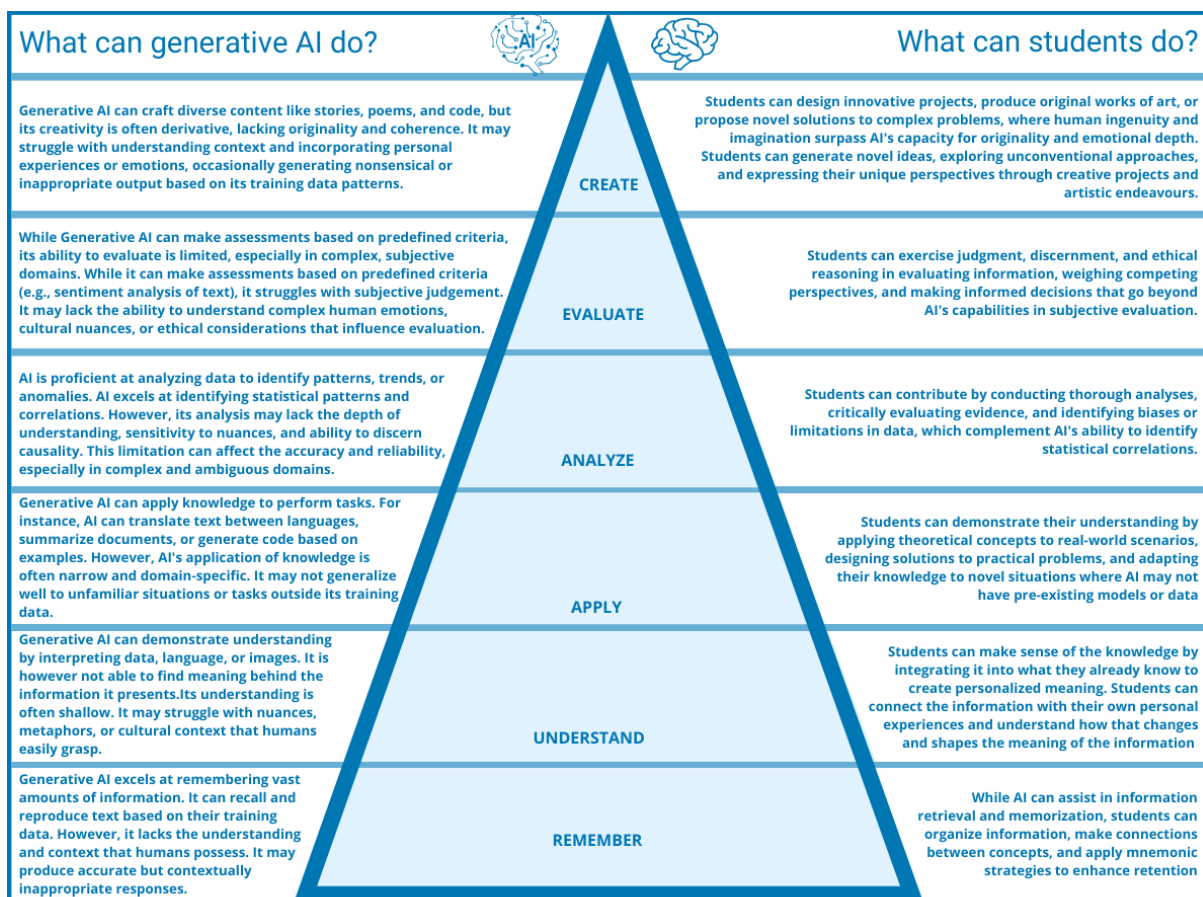
In summary, generative AI possesses capabilities that align with many of the (cognitive) skills, and with varying degrees of complexity and proficiency.

However, AI's strengths often lie in tasks related to **remembering, understanding, applying, and analysing**, while its abilities in *evaluating* and *creating* are still evolving and may not match those of humans in all respects.

Therefore, when students are asked to perform higher-level Bloom's taxonomy tasks - that is cognitive tasks that are more complex - they need more detailed and comprehensive prompts to get useful output from generative AI.

WHAT IS GENERATIVE AI?

- Generative AI are Large Language Models (LLM's) that generate texts, images, or other media in response to questions and/or commands entered by humans (also known as prompts).
- ChatGPT, Copilot and Google Bard are examples of AI chatbots, that use generative AI to generate output.
- It generates responses (word by word) based on a probability model created from information on the internet.
- It is trained to predict the next word, or a missing word in a sentence, and does not have semantic or epistemic knowledge.
- Output is based on what the language model has learned, NOT on what is actual valid.
- The generated output can be biased, and the answers will be socially desirable due to the settings of the chatbot.
- There are ethical issues to take in account when considering using generative regarding privacy, transparency and environmental and societal responsibility.
- If used in a responsible way, generative AI can serve as tool to enrich and support



J. Benson, 2024 used as basis for figure

Figure 1: the ability of generative AI to perform tasks across Bloom's revised Taxonomy of cognitive skills, and how this correlates with the tasks we can assign to our students

Generative AI advantages and disadvantages for teaching

Taken in account the current capacity of generative AI, we can conclude that it can offer several advantages for students:

- **Assistance with Creativity and Idea Generation:** Generative AI tools can help students brainstorm ideas, create content, and explore innovative solutions across various disciplines.
- **Efficiency and Productivity:** These tools can automate repetitive tasks like drafting essays, summarizing texts, or generating code snippets, allowing students to focus on higher-level conceptual understanding.
- **Personalized Learning:** Generative AI can adapt to individual learning styles and preferences, offering personalized study materials, feedback, and tutoring.
- **Access to Expertise:** Students can access expert-level knowledge and insights through generative AI models, enhancing their understanding of complex topics and facilitating self-directed learning.

TIPS

- Examples generative AI can support students and teachers can be found here: <https://vu.nl/en/employee/didactics/tips-for-active-blended-learning-at-vu-amsterdam>

However, these advantages can turn into disadvantages if not used properly or without guidance:

- **Dependency and Lack of Critical Thinking:** Overreliance on generative AI may inhibit students' ability to think critically, analyse information, and develop original ideas independently.
- **Plagiarism and Academic Integrity:** Without proper citation and attribution, using generative AI to generate content can lead to unintentional plagiarism, compromising academic integrity.
- **Misinformation and Bias:** Generative AI models trained on biased or inaccurate data may produce flawed or misleading outputs, leading students to incorrect conclusions or reinforcing existing biases.
- **Loss of Essential Skills:** Depending too heavily on generative AI tools can result in a lack of proficiency in fundamental skills such as writing, problem-solving, and research, which are crucial for academic and professional success.

Therefore, while generative AI offers significant benefits, it's essential for students to use these tools sensibly, critically evaluate their outputs, and complement their use with traditional learning methods to mitigate potential drawbacks.

Preparing your course

Before the start of your course, become familiar with generative AI - what it is, how it works, what it can and cannot do - and experiment with it. Understand the privacy issues, the ethical issues and the impact on the environment that comes with the use of generative AI and determine how generative AI can affect your course assignments and teaching. Know the [rules](#) of the VU and the Faculty of Social Sciences regarding the use of generative AI and always take the course objectives as a starting point. Use the decision tree (figure 2) to understand the steps you need to take in order to deal with generative AI in your course. Keep in mind that when the learning process and summative assessment are well balanced, the formative dialogue and summative evaluation moments complement each other (see [VU vision on future proof assessment](#)).

Need help preparing your course?

- Check out these tips on how generative AI can help you prepare your course: <https://vu.nl/en/employee/didactics/design-your-course-with-chatgpt-in-5-steps>
- Ask your FSS Blended Learning Team advisors for help: <https://vu.nl/en/employee/social-sciences-getting-started/blended-learning-fss>
- Follow one of the generative [AI Shorts](#) of the Education Lab:
- Specifically for writing: check out this site of the VU Academic Language Programme: <https://vu.nl/en/about-vu/more-about/tips-and-tricks-from-the-alp-on-ai-and-writing>

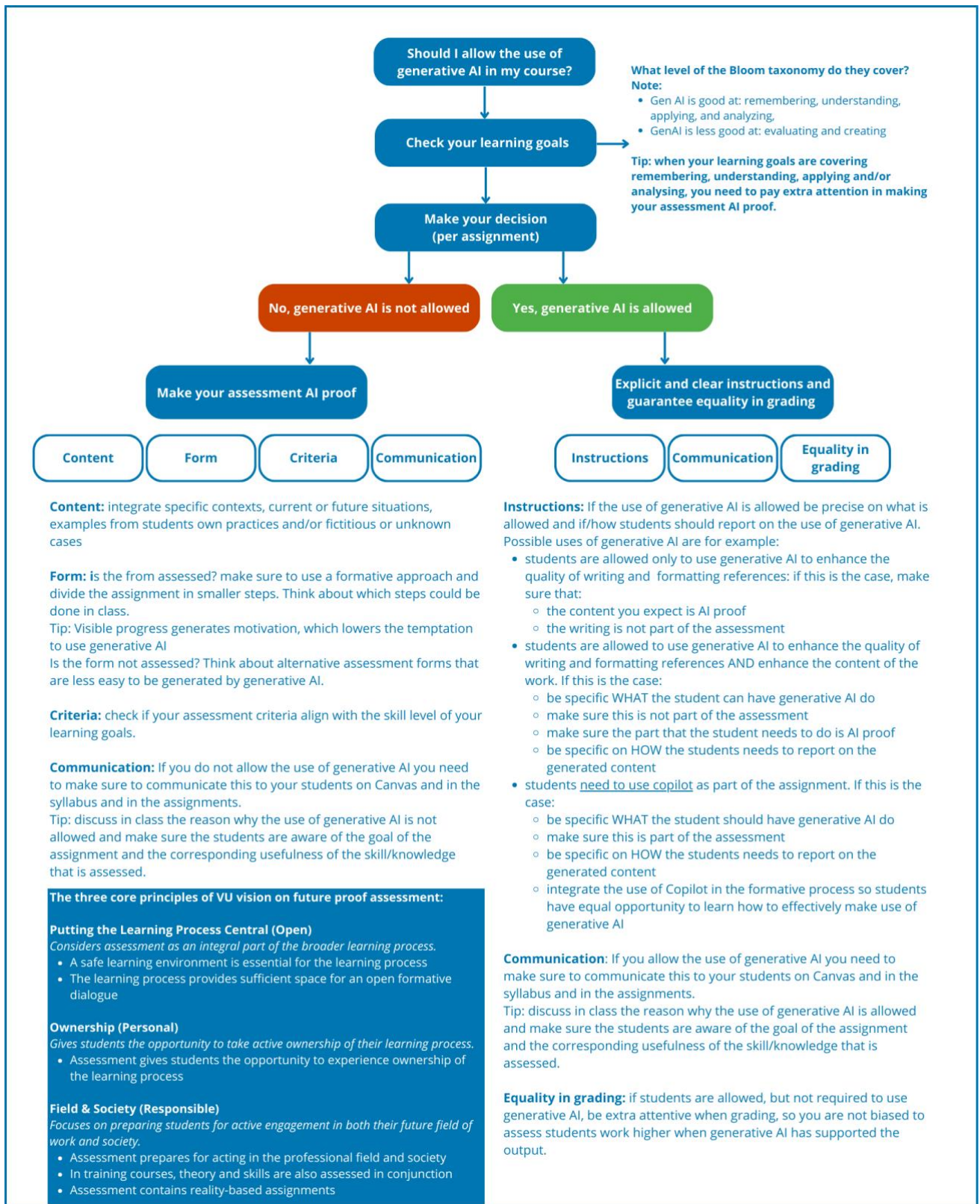


Figure 2: Decision tree using generative AI in your courses

Teaching your course

After preparing your course, it is necessary to give attention to the use of generative AI in the introduction of your course and to be clear what you expect from your students. Discuss with your students what skills they need to develop during the course and how they think using generative AI affects the development of those skills. By doing this you can explain your decision or allowing or prohibiting the use of generative AI by the students in your course. For an example see Figure 3 on writing skills (more information and interesting podcasts can be found [here](#)).

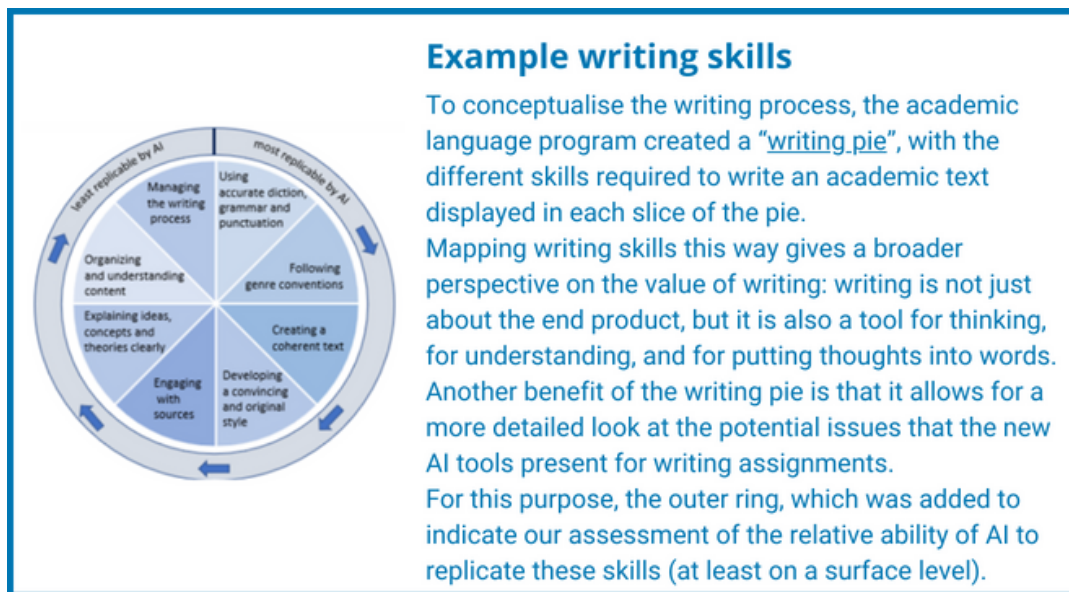


Figure 3: Writing pie – skill development in writing

TIPS:

Watch [this clip](#) to understand the student view on generative AI

Show [this clip](#) in class to start the discussion on generative AI with your students (made by students)

Why and when do students use generative AI

[Interviews](#) with our students show that students are most likely to use generative AI when they have stress, do not see the use of the assignment or experience writer’s block.

Furthermore, they tend to use generative AI to improve their academic writing style, save time in preparation, help with coding or with writing essays.

It is important to set the norm about the use of generative AI together with your students and inform them about pros and cons of using generative AI.

To evaluate the use of generative AI in your course ask the students how they experienced the rules regarding the use of GenAI in your course evaluation, keep notes during your classes to remember what worked and what not and talk to your colleagues about your experiences.

How can you help students (not) to use generative AI during your course

To help your students understand what generative AI can and cannot do you can use generative AI in your teaching activities. For instance, use output you generated to start class discussions on ethics, the course topic, argumentation, prompting etc. You can also let students think about what the development of large language models and AI means for your discipline and their future work environment and discuss what their added value as graduate will be in their field. That way you can help them understand the importance of their own academic skills and development.

Progress influences motivation. Students might find a task overwhelming or do not know where to start. Those situations can lead to misuse of generative AI.

If you divide assignments in smaller parts and introduce formative assignments to build your students' progress, you can introduce part of the assignments as in-class activities, like making a writing plan or doing short coding practices. This will help students make a start with their assignment by themselves, so they will be less tempted to use generative AI for support.

Assessing your course

When you have designed your course with generative AI in mind and have discussed the use of generative AI with your students, the misuse of generative AI should be minimized. However, it is of course still possible that you encounter cases where you suspect students to use generative AI when this is not allowed. In that case, it is good to know what you can do in case of suspicion of misuse of generative AI.

- When misuse is suspected with a graded assignment, and it is a written assignment, check the used sources. Most generative AI cannot reach beyond the paywall for non-open access papers (for now) and tend to make up sources and journals. If the sources are indeed non-existing or wrongfully used, this is fraud and you can involve the FSS examination board.
In other cases, like unusual use of language, you can ask advice from the examination board.
- When the suspicion of misuse is with formative assignments, talk to your student in an open conversation regarding your suspicion. Make sure your students understand what plagiarism and fraud in academia is and how to avoid that. This [information](#) should also be included in your course manual.

To prevent misuse, keep in mind when your students are more tempted to use generative AI (stress, lack of understanding of an assignment, tight deadlines, etc.) and be explicit in your instruction about plagiarism (especially for 1st year students) and other cases of violation of academic integrity, for instance by showing examples.

Detection tools for of generative AI

Do **not** use detection tools like ZeroGPT. They are not supported by VU and cannot be used as evidence. Not only do they score low on accuracy, by using them you upload (sensitive) information in an unprotected environment.

On top of that, detectors will always fall behind new updates of generative AI.

Here you can find some useful links:

- [GenAI Chatbot Prompt Library for Educators](#)
- [Examples of AI syllabus statements](#)
- [Chat with any PDF](#)