

## 5 Questions and 5 (Short) Answers about AI and Academic Writing

*This handout by the International Writing Lab at the University of Göttingen briefly answers 5 frequently asked questions from students about writing and AI. You can find more detailed information under the respective links and in the Writing Lab's workshops and writing consultations.*

### **Question 1: How do generative AI tools like ChatGPT, Bing Copilot, Perplexity AI, Google Gemini etc. work?**

Asking a generative AI for information is not comparable to looking for information in a database or search engine! Common AI models (Large Language Models, Generative Pre-Trained Transformers) are language models and not knowledge models! Expressed in very simple words this means: AI tools do not search for information but merely combine words into sentences based on probability and after training with huge amounts of text data. This results in texts that sound very convincing but that may, however, contain incorrect information. Generative AI cannot decide in any way whether information is correct or incorrect!

*The learning platform AI Campus offers background knowledge about AI comprehensible to a broad audience (partly in English): <https://ki-campus.org/>*

### **Question 2: Am I allowed to use AI tools in my writing?**

According to a declaration by the University of Göttingen, the use of AI tools in non-supervised exams (term papers, final theses, essays etc.) is not generally prohibited. However, it must be documented in a way that is transparent to others: <https://www.uni-goettingen.de/en/674738.html>  
In case of doubt, this question should be discussed with the respective supervisors.

### **Question 3: What are the arguments in favor of using AI tools for writing?**

Used adequately, generative AI can have a supportive or relieving effect in different stages of the writing process:

When **generating ideas**, AI can...

- ...help you brainstorm: It can for example offer you several sub-topics or possible questions on a topic.
- ...help you discover new ideas and questions if you prompt effectively (and repeatedly).

This AI support does not substitute thinking about (sub)topics, interests, objectives and questions yourself!

When **evaluating academic literature**, AI can...

- ...provide an overview by summarizing papers.
- ...provide initial access to papers by presenting content in a simplified way.

This AI support does not substitute reading and understanding academic texts yourself!

#### When **drafting text**, AI can...

...generate beginnings of text and by this provide ideas and prevent writer's block.  
...transform written notes into text.

This AI support only works if you check AI-generated text critically for content, structure and style and revise it in a way that matches your own style!

#### When **revising text**, AI can...

...give feedback on drafts, for example regarding arguments, structure or style, and initiate revision.  
...generate different versions of text.

When having AI give feedback on your text or revise your text, you must check if these revisions and remarks make sense!

#### When **proofreading text**, AI can...

...support you by correcting grammar, spelling and punctuation mistakes.

Here, too, you must check if these corrections really make sense or if a correction may have changed a meaning (unlike human proofreaders, AI cannot recognize this!).

*These suggestions originate, among others, from the recommendations for students by the Goethe-Universität in Frankfurt a.M.: <https://lehre-virtuell.uni-frankfurt.de/knowhow/einsatz-von-generativer-ki-im-studium-handlungsempfehlungen-fuer-studierende/>*

#### **Questions 4: What are the arguments against using AI tools for writing?**

Unfortunately, there are a number of arguments against using AI tools:

- Incorrect information: Generating false (or inaccurate) information can never be avoided completely! As the information often sounds plausible, it takes a lot of knowledge to recognize false information.
- Inadequacy in discipline-specific terminology and style: AI generated texts often use discipline-specific terminology incorrectly and sometimes use uncommon words.
- Sustainability conflict: One single AI query requires around 10 times as much energy as a search engine query, which makes its usage highly questionable in times of climate catastrophe and limited resources.
- Violations of copyright: Uploading content created by others (e.g. published papers) is illegal.
- Violations of data protection: Especially if the use of AI tools is free of charge, we pay with our data (no data protection according to GDPR in US enterprises).

*This article (in German) takes a critical look on AI: <https://netzpolitik.org/2023/maschinelles-lernen-nicht-so-brillant-wie-von-manchen-erhofft/>*

### Question 5: What do I have to keep in mind when using AI tools for writing?

If you would like to have AI support you in your writing process despite the arguments mentioned above, please remember the following:

- Check any information retrieved by an AI tool with the help of academic sources (discipline-specific papers, books) and/or conventional methods of retrieving information (search in databases, catalogues)!
- To decide whether information is correct or incorrect, you often need discipline-specific or methodological knowledge. Therefore, be particularly careful if you are at the beginning of your study program or work on topics you are not familiar with.
- As author, you are responsible for your text at any time, not AI. Always remain critical towards the AI's output, no matter how convincing it may sound.
- The quality of AI generated answers depends heavily on your input (prompts). You should therefore reflect on what you want the AI tool to deliver and express it precisely.
- Be transparent! Indicate for which purposes and at which points within your work process you have used AI. You can take the university's suggestion as guidance under <https://www.uni-goettingen.de/en/674738.html>, but you can also think of ways how to document your individual AI use as comprehensibly as possible. If in doubt, clarify this with your supervising teacher.
- Never upload other's data (e.g. papers or empirically collected data) or your own sensitive data in commercial tools.
- Instead of commercial providers, use the GWDG's GDPR-compliant chatbot (based on GPT4) under <https://chat-ai.academiccloud.de>.
- Whenever you hand over a task (e.g. structuring, proofreading, translating, summarizing) to an AI tool, think about what you are not doing yourself and therefore not practicing. Especially if you are not experienced in these tasks, it might make sense to make the effort yourself – also to avoid becoming dependent on AI in the future.

Further ideas and suggestions for responsible AI use in writing can be found on the website of the writing center at Goethe-Universität in Frankfurt a.M.: [https://www.goethe-university-frankfurt.de/87509658/PortalStartPage\\_87509658?locale=en](https://www.goethe-university-frankfurt.de/87509658/PortalStartPage_87509658?locale=en)

*Transparency information: This handout has been translated from German with DeepL support.*