Handout for students

Numerous questions arise when dealing with generative Al. This handout is intended to provide guidance on the most important aspects of the THKI GPT-Lab. It will be continuously updated.



1. What is the THKI GPT-Lab and how can I use it effectively in my studies?

The THKI GPT-Lab is a didactic interface that integrates GPT-4, the latest AI model from OpenAI, via an API programming interface. You can log in with your campusID and make requests to GPT-4 – free of charge and without the data of your campusID (e-mail address, user ID, IP address) being forwarded. With the license of the TH Cologne, requests are not personalized but centrally transmitted to OpenAI via API. GPT-4 is a language model based on artificial intelligence that has been trained to generate the most suitable answers to queries, also known as prompts. During your studies, you can use the GPT Lab, for example, to get tips for targeted research, draft text structures and have text modules corrected, develop ideas, receive feedback, understand programming code, or practice foreign languages. It can also be used as a tool to break down complex topics into simple explanations. Use it as a supplement to traditional learning methods, not as a substitute for independent thinking and learning.

2. What legal aspects are relevant when using the GPT-Lab?

When using the GPT-Lab, it is important to protect data privacy. Personal data such as names or sensitive information must not be entered in the queries. The GPT-Lab uses the API from OpenAI. This means that the information entered is transmitted directly to OpenAI servers in the USA. It is prohibited to enter personal data, i.e., information that refers directly or at least indirectly to a person, as well as content that is protected by copyright law, to prevent violations of applicable law and the OpenAI terms of use. Find out about the <u>data protection and acceptable use policy of the THKI GPT-Lab</u>.

3. Am I allowed to use content from the THKI GPT-Lab in exams?

The use of Al tools in your studies is not generally permitted or prohibited, and this also applies to the GPT-Lab. It is important to follow the rules and regulations that apply in your subject and to clarify with the examiners whether using the GPT-Lab as an aid is permitted. If you are allowed to use the GPT-Lab, you should always review and critically evaluate its generated content and transparently label it as such. Answers from Al models such as GPT-4 may not only be incorrect or misleading but may also replicate and reinforce discrimination and social injustice. The GPT-Lab can still be useful as an aid – however, keep in mind that the Al does not replace your exam performance but rather becomes part of it through your competent use of the Al tool. Safety in dealing with Al in an academic context is also provided by the Regulations for Safeguarding Good Academic Practice at TH Cologne, which state in § 13, e.g.: "Academic misconduct occurs if false information is deliberately or grossly negligently provided in academic work, if the intellectual property of others is infringed or if the research activities of others are sabotaged." In principle, you are responsible for your examination performance, with or without Al.

4. How do I avoid attempts to cheat when using the THKI GPT-Lab?

Your ideas and analyses should still form the core of your work. Simply adopting Al-generated texts and presenting them as your own work in the context of your thesis will be considered an attempt to cheat and will have consequences. The prerequisite for using Al tools such as the GPT-Lab in your coursework is that they are permitted as aids and that you mark Al-generated content following the respective rules that apply to the subject.

5. How do I make sure that the information provided in the GPT-Lab is correct?

It is crucial to always check and validate information with trustworthy sources – including answers from an Al model in the GPT-Lab. Sources can be scientific articles, books from recognized publishers, official websites, and other reliable resources. A critical assessment should always be made in terms of accuracy, relevance, and if it is up-to-date.

6. What are important ethical considerations when using the GPT-Lab?

Always be clear and transparent about when and how artificial intelligence is used in the creation of your academic work. Be aware of the possible biases and prejudices that can arise from using Al and critically question the data sources and algorithms you use. Use artificial intelligence as a tool to support your learning and research without violating the integrity and rules of scientific work. Consider the ecological impact of, e.g., energy and water consumption associated with the operation of large-scale Al systems.

7. How do I effectively use the GPT-Lab for my study project?

The GPT-Lab can support your study project by helping with brainstorming, research, and drafting. Formulate precise questions and prompts (see below) to obtain specific information or use open questions for creative suggestions. Keep in mind that the GPT-Lab is one tool among many. It cannot replace traditional research and your critical thinking.

8. What can I do if the answers in the GPT-Lab are unsatisfactory?

If answers from GPT-4 in the GPT-Lab do not meet your expectations, specify your requests or modify the questions. Give clear instructions to get exactly the information you need. Follow the <u>rules for good prompts (German)</u>. Use inadequate or incorrect answers as an opportunity to strengthen your own research and critical thinking skills by cross-checking information with reliable sources. Remember that challenges in dealing with Al-generated answers are part of the learning process. If the answers in the GPT-Lab are unsatisfactory, you can compare the results with other sources or, if necessary, resort to manual research to get better results.

9. How can I integrate the GPT-Lab into my learning routine?

Find specific areas of application for the GPT-Lab in your learning routine, for example, to structure materials and learning content for effective exam preparation. Combine the use of the GPT-Lab with other learning methods and avoid overdependence. Set yourself specific goals and regularly reflect on how AI is supporting your learning. Use the GPT-Lab to expand your understanding while cultivating critical thinking.

Sources (German)

- A. Fleischmann: <u>ChatGPT in der Hochschullehre. Wie künstliche Intelligenz uns unterstützen und herausfordern wird.</u> In: Neues Handbuch Hochschullehre, 110/2023, published in May 2023.
- Kompetenzwerkstatt of TH Cologne: <u>Selbstlerneinheit Einführung in die Kl</u>
- Salden, Peter; Leschke, Jonas (Hrsg.) (2023): <u>Didaktische und rechtliche Perspektiven auf KI-gestütztes Schreiben in der Hochschulbildung</u>. Bochum 2023.
- TH Cologne (2023): Ordnung zur Sicherung guter wissenschaftlicher Praxis. Cologne 2023
- Advice from the <u>legal department of TH Cologne</u>