



**University College of  
Teacher Education Tyrol**

# **Guidelines**

**Use of text-generative artificial intelligence at the  
University College of Teacher Education Tyrol**



## I Preamble

The progress of artificial intelligence (AI) has a significant impact on the environment in which we work, teach and learn. In line with this technical and social development, the University College of Teacher Education Tyrol is committed to integrating the potential of AI into teaching and research. In this context, there is a need for a framework that supports the understanding of AI and innovative approaches to its use in the educational and research process, as well as promoting a critical approach to the application of AI. As a University College of Teacher Education, we aim to utilise the associated opportunities in a beneficial and responsible manner in compliance with ethical standards. These guidelines set out the basic principles for the use of AI at the University College of Teacher Education Tyrol. This guideline for the use of text-generative AI is based on the recommendations of the Federal Ministry of Education, Science and Research as well as best practices from other colleges and universities.

This document is addressed to all teachers and students in the field of education, further education and training at the University College of Teacher Education Tyrol (PHT). Its purpose is to ensure that the use of AI in the context of educational and research processes at the PHT is carried out in a responsible, critical and transparent manner and that the legal, data protection and ethical framework conditions are always observed.

This document primarily refers to text-generating AI technologies - specifically to tools such as ChatGPT, Bard, Copilot from Bing and similar systems that produce written language. It is important to emphasise that these technologies are not so-called strong AI, but algorithms that attempt to generate appropriate responses in the form of text based on a prompt and calculated probabilities. It is essential to understand that text-generating AI technologies cannot think, read or understand in the human sense, but simulate human-machine interaction.

At the PHT, it is possible to integrate text-generating AI into teaching and research. The PHT recognises the importance and necessity of supporting students in the competent use of AI in order to prepare them as best as possible for professional practice. This preparation should be carried out in a critically reflective manner, taking into account both the opportunities and risks and, in particular, the legal frameworks.

These guidelines were developed by the following members of the working group on Artificial Intelligence at the University College of Teacher Education Tyrol under the leadership and with the collaboration of Margit Raich, Vice-Rector Research and Development Affairs and Gregor Örley, Vice-Rector for Academic and Student Affairs (in alphabetical order):

Sabrina Gerth | Reinhold Madritsch | Gerlinde Schwabl | Christian Vollmer | Ulrike Voß



## 2 Considered use of artificial intelligence

AI-based tools can be viewed as useful support in various work processes. For example, AI makes it possible to summarise complex content, facilitate understanding, translate foreign-language texts or even analyse extensive data sets. However, it is crucial to always critically scrutinise the information obtained using AI. In addition, the texts generated by AI should not be integrated into written theses for degree and university programmes (e.g. Bachelor's or Master's theses). This is due to the fact that the University College of Teacher Education Tyrol does not recognise text-generating AI as a citable source in these theses.

The integration of AI in educational and research processes is subject to continuous evaluation by the Ministry and the Rectorate. This ongoing review serves to adapt the implementation to the current standards and findings of research practice and to ensure that it complies with them.

## 3 Guidelines for education and research

The use of text-generating AI is only permitted in educational and research processes if the lecturers have explicitly informed the students at the beginning of the course about the planned type and scope of use of authorised text-generating AI tools.

### 3.1 Before using AI

If the use of text-generating AI is possible, students should consider the following questions in advance: Who has trained the AI in question and from which sources does the underlying "knowledge" originate?

The use of AI tools for personal understanding is acceptable in principle, but the accuracy of scientific sources or sound fundamental knowledge cannot be assumed. The limitations and error-proneness of AI play a key role in this respect. Although text-generating AI tools can produce a well-formulated text, they are not free of errors in terms of content and tend to reproduce existing views, as they only draw on selected data (e.g. from a training database). The AI results may represent false results in regard to data quality in impacting timeliness, accuracy and veracity.



Figure 1 illustrates when it would make sense and be safe to use AI.

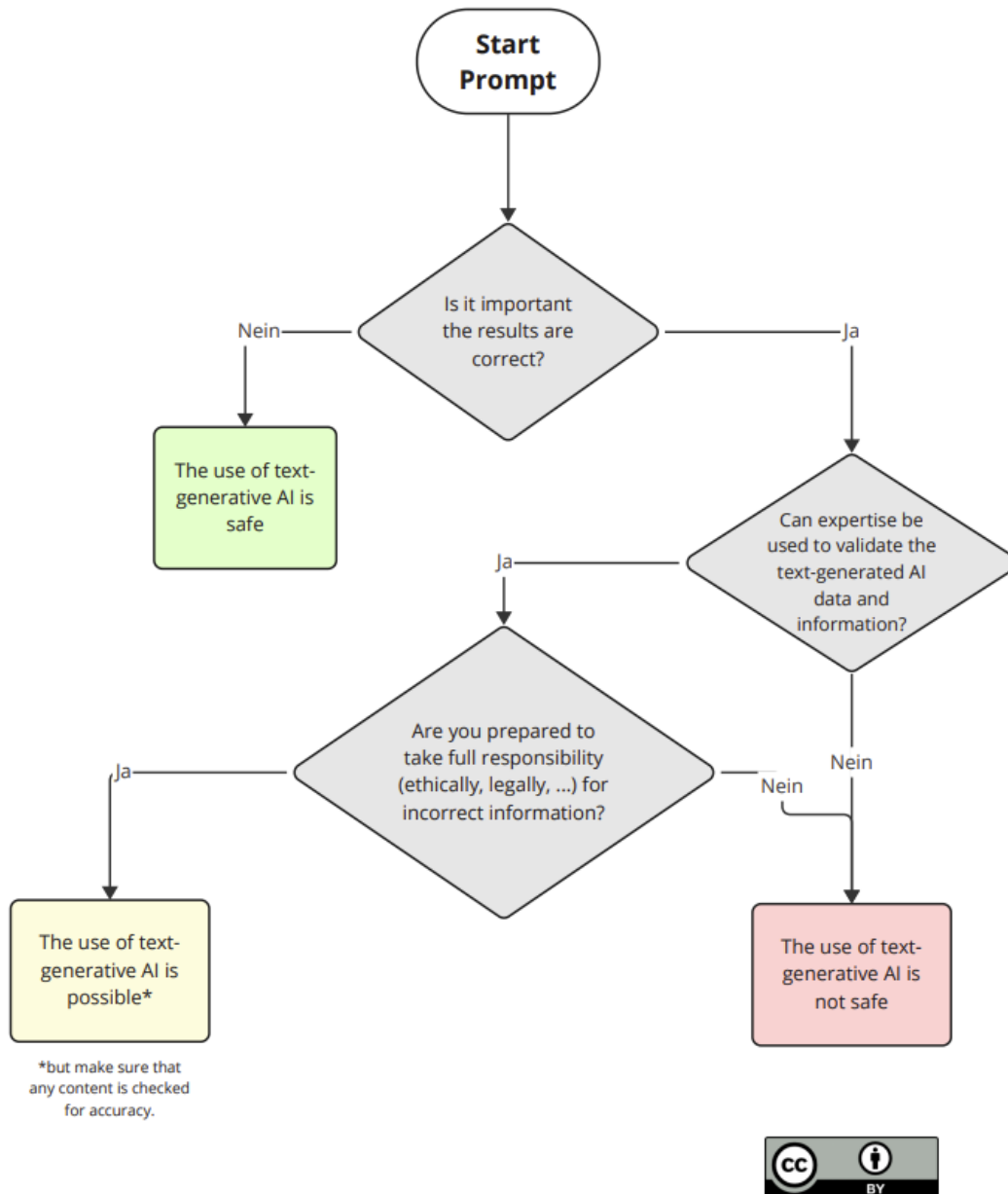


Figure 1: Reflective use of AI (based on Aleksandr Tiulkanov | CC-BY "Is it safe to use ChatGPT for your task?", adapted and translated by Ulrike Voß)



### 3.2 During the use of AI

To design prompts in such a way that they produce specific and appropriate answers instead of generating generalised information, it is essential to formulate the prompts precisely and in detail. This includes a clear definition of the question and possibly the inclusion of specific contextual information or parameters.

Identifying the scientific sources on which the answers generated by AI systems are based can prove challenging. It is therefore advisable to use the answers generated by AI as a starting point for independent research in order to find scientifically sound and verified sources yourself.

Possible applications include:

- Summarising content for personal use.
- Simplifying complex scientific text passages into a more understandable form.
- Translating texts into other languages.
- Obtaining a quick overview of a particular topic.
- Paraphrasing texts (although the person in question is responsible for the content).

In every application, a critical examination and review of the content generated by AI is essential to ensure its accuracy and relevance.

### 3.3 After the use of AI

- Verification of the results: AI can provide a basis, but it is the student's responsibility to check the accuracy of the findings obtained - this requires using and consulting recognised scientific sources.
- Responsibility for their own work: Students bear full responsibility for the production of their academic work. Texts generated or edited using AI tools, like other types of ghost-writing, are considered unauthorised as they are not the student's own intellectual creation. This is in direct contradiction to the usual declaration in academic papers, in which the originality of the work is stated in writing and signed.
- The PHT does not recognise text-generating AI as a citable source in bibliographies. It is essential to observe the principles of good scientific practice. AI cannot act as an official source as it lacks the status of an author. The output generated by an algorithm is not an independent achievement.

In the case of suspected non-independent work, proceedings will be initiated under university regulations for the use of unauthorised aids. Examinations that are to be completed without any aids are still an essential part of the performance assessment. In this context, it is important to emphasise that the use of AI tools and other aids is generally not permitted in examinations as part of the degree programme. Exceptions to this are cases in which the lecturer gives explicit permission.

### 3.4 Recommendations for lecturers

- It is recommended that assignments are designed in a skills-orientated and varied way, incorporating students' personal experiences. This increases the complexity of the tasks, making them less accessible for AI-based solution approaches (e.g. pure knowledge questions).
- Supplementing or substituting written examinations with oral examinations can be advantageous. This provides the opportunity to delve deeper into the subject matter, critically scrutinise what has been written and ask specific questions.



- Written examinations should, where possible, be held under controlled conditions in presence. The questions should increasingly focus on critical reflection in relation to their professional experience, previous knowledge and the students' attitude towards a specific subject area and the current state of research.
- Examinations that document the learning and working process and do not focus exclusively on the final product are recommended.
- It can also be useful to have your own examination questions processed in advance by a text-generating AI. This can provide an insight into the possibilities and limitations of AI technology.

Lecturers who use text-generating AI in their courses are encouraged to take part in further training in this area. This serves the purpose of using the tools responsibly and purposefully. Appropriate training opportunities are offered as part of the internal CPD programme. Teachers are recommended to keep themselves informed about the latest developments and the current scientific discourse in relation to AI technologies and to keep their knowledge up to date in this respect.