

Dear University Members and Staff,

Talk is everywhere about ChatGPT and other generative AI (GenAI) tools. The University of Tübingen believes it is its duty to address this debate so as to help shape developments and produce guidelines. To this end, the President's Office has set up the Generative AI work group, consisting of members from every faculty, central administration and relevant institutions. The role of the work group will be to advise the President's Office on the use of GenAI at the University of Tübingen. Its members take a critical yet optimistic attitude to the potential of GenAI. Together, the President's Office and the work group have discussed principles, which will continue to be developed. Their aim is to achieve the critical, reflexive, transparent and responsible use of GenAI. The current status of the discussion is given below.

The University as a developmental space for critical AI skills

As a forward-looking and progressive university, the University of Tübingen recognizes the transformative potential of GenAI. This potential currently encompasses many areas of society and is changing both university and non-university work environments. GenAI is already becoming incorporated in various professions at rapid speed. There will no longer be a world without AI. In future, many University of Tübingen students will work in professions where the use of GenAI will be an everyday part of work processes. Likewise, GenAI will increasingly change the day-to-day work of researchers in various disciplines, as well as that of administrative staff. The University of Tübingen sees this as a major challenge, but also a substantial opportunity. After all, the University can be the place where critical, reflexive, transparent and responsible ways of working with GenAI are negotiated, developed, and transmitted. For instance, it contributes to shaping social change in the context of AI in a way that is both sensitive to problems and at the same time constructive.

Wide-ranging potential

The potential for GenAI in the field of text and data processing is extremely diverse. For the University of Tübingen it extends over every relevant area: GenAI has the potential to change how students learn and operate in a data-saturated scientific world. It can enable new didactic approaches in digital teaching, open up new ways for researchers to work with texts or images, contribute to the expansion of science communication and last but not least provide support at an administrative level. The variety of possibilities makes it especially difficult to determine potential, or to develop rules on how to proceed. What is clear is that – whether in studies, teaching, research or science communication – the potential of GenAI varies, and sweeping assessments have little to offer. At present the University is in an exploratory phase, where it has to investigate, test and discuss critically the potential in all of these fields. Given the speed of technical development and the technological hype, we need to evaluate the potential of GenAI realistically, in order to define a framework in which it can be used by a forward-looking university.

Problematic implications

Besides its wide potential, GenAI also has many problematic implications. These include the fact that there are still many unresolved copyright and data protection issues. Generated texts can produce erroneous, ambiguous or misleading results and 'hallucinate' sources. GenAI can reproduce any bias recorded in the system's training data. Social, cultural and scientific prejudices can be incorporated in the system and the generated texts. Developers can sometimes deliberately manipulate the generated texts. In addition, extensive use of GenAI has a substantial ecological footprint, in particular through electricity consumption, CO₂ emissions, consumption of minerals and water.

Furthermore, different payment models for stronger and weaker AI systems can further increase economic inequalities (e.g. between students with different incomes).

Goals and guidelines

Therefore, a key objective of the University of Tübingen is to test the potential of GenAI and apply it productively in various areas of the University, while bearing in mind these problematic implications. This includes developing both basic and subject-specific study programs as well as the legal framework, e.g. for application in examinations. The University will also benefit from a critical discourse on the potential and the limits of GenAI in relation to research, science communication and administration. Achieving these objectives will demand a lot of work and attention. However, it is already clear that key guiding principles will be indispensable.

Firstly, members of the University must tackle GenAI in a critical and reflexive way. Many of the problems with GenAI (including at a social level) arise from a naive attitude. A critical and reflexive attitude demands not only the development of a sophisticated awareness of the problems, but also the ability to realistically assess the potential and limitations of GenAI.

Secondly, use of GenAI should be organized transparently. If GenAI is used (whether for research, studies, administration or science communication), the procedure must be documented and made visible/transparent in the relevant format.

Thirdly, all members of the University are exhorted to use GenAI responsibly in line with good scientific practice. Among other things this means that when working with GenAI it is the individual responsibility of the authors to ensure that their texts do not contain any plagiarism and all sources are critically examined. It also means that each user must assume responsibility for how and to what end the data provided by AI systems are processed.

The way in which these principles are applied must by their nature be applied differently depending on the field of work and culture of the discipline. Departments and institutions are called on to formulate and provide their own guidelines. The Generative AI work group and the President's Office are currently working on basic solutions in order to respond to urgent procedural questions concerning examinations. These will form the basis for future development in the faculties and institutions.

If we can provide the fundamental conditions for critical, reflexive, transparent and responsible use, GenAI can offer potential to enhance work processes both within the University and beyond. What precisely these enhancements will consist of and how a critical process of evaluation can assess them with regard to their problematic implications will be the subject of ongoing discussion at the University of Tübingen in coming years.