## Methods of "Artificial Intelligence" as an aid in examinations (18.2.2023)

In recent weeks, the public discussion about the possibilities and problems of methods and techniques of "Artificial Intelligence" has developed a remarkable dynamic. In this context, the examiners at the department and the examination board have also been engaged in intensive discussions. The situation regarding the performance and accessibility of such systems changes almost daily. For this reason, the following information from an examination perspective is and can only be a snapshot.

Essentially, two forms of examinations can be distinguished. In the first form, especially in written exams, aids are prohibited unless they are explicitly permitted. Compliance with these prohibitions is monitored ("proctored testing").

The second form of examinations is non-proctored. Examples are the completion of exercise sheets, thesis papers, project reports, seminar, bachelor or master theses. These are to be done independently and if aids (e.g. literature, databases, etc.) are used, they must be explicitly indicated.

Even before the advent of "AI", this meant that certain things were "still" allowed, but others were excluded, and this was clear to all involved. Some of the tools that are permitted today already make use of artificial intelligence, for example search engines, automatic spelling corrections in word processing programs, or systems that translate individual phrases from one language to another. In addition, more complex statistical packages already use methods that can be classified as "artificial intelligence". In some subjects at the department, the development and refinement of software also plays a role. Al can be usefully employed to test functionalities. These examples show that simply "banning" the use of AI-supported tools would not only be inappropriate, but even gross mischief.

To what extent students now have to indicate the tools used, because otherwise they are to be accused of intent to deceive, is a question that the respective academic advisors (teachers, professors) have to answer, usually for example in guidelines for scientific work. However, it is also clear that even "proper" citation does not justify everything. This is because the examination results to be produced by students must still have been produced "independently". It has always been permissible, for example, to have a friend proofread a seminar paper and then accept and implement tips on spelling and grammar, though it has never been permissible to have this person write the entire term paper or only parts of it and then hand it in under one's own name. "Digital ghostwriting" is of course also not permitted. Examiners therefore always have the option of taking measures at short notice to ensure the authorship of a text. This includes not only the use of digital instruments, but also random checks of students' level of knowledge, in particular to ascertain whether it is plausible that they were or are the authors (in terms of content) of the relevant texts at all.

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