

The Impact of ChatGPT on Education

Current Perspectives by CIT, UCG and TAG

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Three Perspectives

1. **Assessment (~short term)**
2. **Teaching (~mid term)**
3. **Learning Outcomes (~long term)**

Assessment: Challenges

- 1. ChatGPT can complete many types of assignments** (essays, take home exams, reflections, computer code, entry level mathematics, simple formal proofs...)
- 2. Output of ChatGPT is very hard to detect** (by humans as well as by programmes)
- 3. Suspected use of ChatGPT is difficult to prove** (there is a high risk of false accusations)

Assessment: Some Directions for Solutions

1. **Make ChatGPT unavailable during examination** (in person examinations instead of take home exams and essays, block ChatGPT Aletta Jacobs Hall)
2. **Use assignments which ChatGPT cannot (yet) do (well)** (recent events, projects, oral presentations, interpretation and creation of pictures and videos...)
3. **Make ChatGPT explicitly part of the assignments** (students work with/check/improve/evaluate output of ChatGPT)
4. **Use previous grades as indicator for potential fraud and retest orally**

Some solutions might be work intensive or conflict with learning outcomes!

Effective fraud detection VS education quality and workload

Teaching: Opportunities

- 1. ChatGPT can create teaching material** (explanations, summaries, exercises, model solutions, exams, mock exams and resits of similar difficulty, rubrics ...)
- 2. ChatGPT can give feedback to students** (how to improve an essay, spot mistakes in math exercises, ...)
- 3. ChatGPT can grade assignments** (according to a given rubric, including justification)
- 4. ChatGPT can do many other small writing tasks** (recommendation letters, newsletters, announcements, ...)

ChatGPT is biased and unreliable, output needs to be checked!

Learning Outcomes

AI systems such as ChatGPT are here to stay and will only get better.

It is hard to predict the impact ChatGPT and more advanced systems (maybe even an AGI) will have on our life and work.

However, it is likely that it will change the way we work within and outside academia substantially.

This means that some skills we currently teach our students might soon be outdated.

We need to critically evaluate our learning outcomes and might need to adjust them.