

Argumentative Essay Writing with ChatGPT

An Experimental Workshop at UCG

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ChatGPT in Different Disciplines

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**Which other uses of ChatGPT can you imagine in these or other disciplines?
Discuss with your neighbour!**

Poll: How would you use ChatGPT?

If you were allowed to use ChatGPT in any way you liked, how would you use it?



www.pollev.com/benbew

Learning Outcomes of the Workshop

Today, we will discuss

1. when the use of ChatGPT is considered fraud,
2. how ChatGPT works,
3. potential problems with using ChatGPT for essay writing,
4. how we can use ChatGPT effectively for argumentative writing,
5. how using ChatGPT affects your learning.

1. ChatGPT and Fraud

ChatGPT and Fraud

Using ChatGPT (or similar programs) to generate responses to assignments is currently considered fraud by UCG's BoEx unless this is otherwise specified in the syllabus of the course.

If you are unsure, whether you are allowed to use ChatGPT for an assignment in a course, consult the syllabus and discuss this with your lecturer.

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Do you think any use of ChatGPT in the process of generating a response to an assignment should be considered fraud? Discuss with your neighbour!

2. How does ChatGPT work?

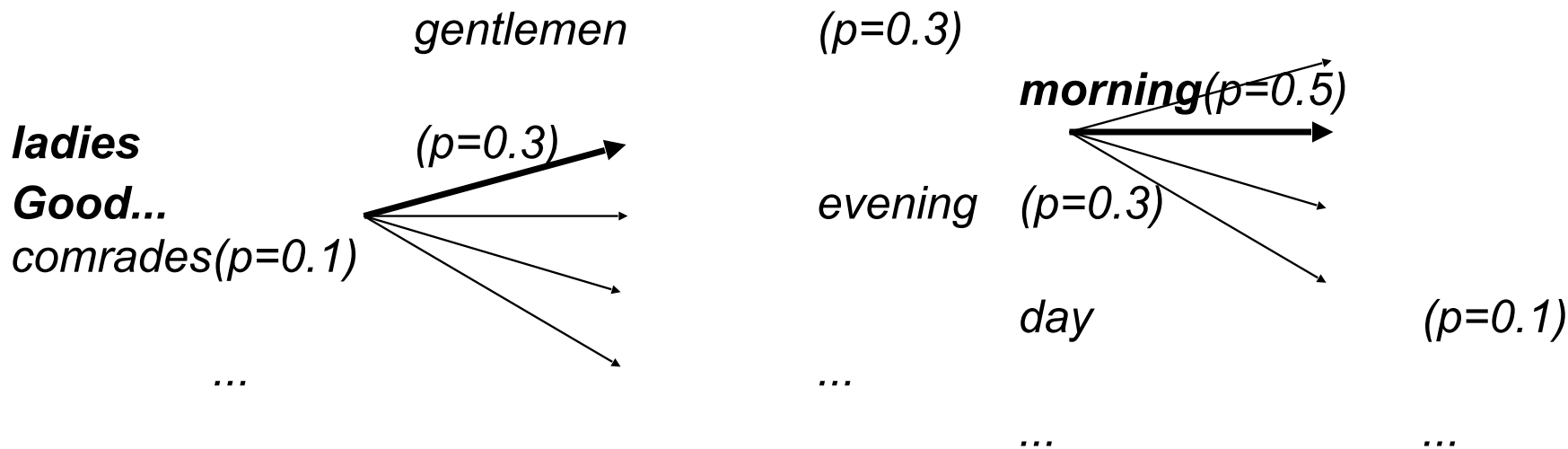
How does ChatGPT work?

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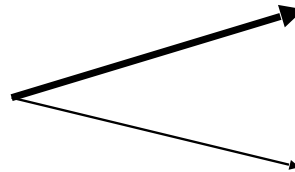
3. Bias and Hallucinations

Bias in Training Data

ChatGPT's training data is biased in multiple ways, this bias carries over to ChatGPT's probabilities.

He... (p=0.8)

The doctor entered the room.



She... (p=0.2)

Human feedback is intended to weed out these biases. However, since the biases are part of the original training data, they will still taint the responses of ChatGPT.

Similarly, perspectives of marginalized groups barely represented in the training data and are therefore less likely to pop up in ChatGPT's responses.

Hallucinations

ChatGPT is not google. It does not retrieve information from the internet, it makes stuff up (how likely is it that a particular word is the next one given the context).

For example if you ask it for an article on a particular topic, it will look for names that are likely to occur in this context. This can result in a real article, but it can also result in an article that does not exist but sounds plausible.

If you ask whether articles are real it might even reply something like:

"I am sorry for the confusion, these articles were made up..."

Moar Shrooms!

In previous versions of ChatGPT it would generate very plausible sounding stories about fictitious events (including references to made up news articles if asked) when prompted.

However, newer versions seem to have improved factuality and might reply *"I'm sorry, but I couldn't find any information about a person named Ben Bewersdorf or his climb of Mount Everest. It's possible that the person's name is misspelled or that the climb did not receive significant media coverage."*

Work in pairs and try to make ChatGPT tell a false story!

4. Using ChatGPT for Essay Writing

Using ChatGPT for Brainstorming

ChatGPT can generate ideas for thesis statements, arguments for and against a claim and different perspective on a topic.

It is important to keep in mind that while ChatGPT might introduce you to new ideas, it will likely output the most standard perspectives on a matter.

Students like to use ChatGPT to find academic sources. At this point, we suspect this to produce worse results than wordcat.

It is worth mentioning that there also exist a LLM for academic sources which is designed to only respond with real academic sources called Elicit.

Using ChatGPT for Editing

ChatGPT can be used to change the writing style of a text.

It can

- turn a rough draft into a proper text
- improve grammar and spelling
- rewrite an informally written text in a more academic language
- rewrite a difficult text in easier language

Using ChatGPT for Feedback on Your Work

Take one of your old essays and ask ChatGPT for feedback.

- 1. Do you agree with the feedback?**
- 2. Do you think that incorporating the feedback would have helped improve your essay and/or get you a higher grade?**
- 3. Compare the feedback you received from ChatGPT with feedback you received from your instructor (if you received any). Does it align with the feedback of your instructor? Did ChatGPT miss something your instructor criticised about your essay/or that you have since then observed? Did ChatGPT find something your instructor missed?**

Discuss your findings with your neighbour.

Using ChatGPT to Write a Draft Essay

Work in Pairs.

1. Ask ChatGPT to write an essay on a topic of your choice.
 2. Review and grade it based on the rubric (see handout) from academic skills.
 3. Try revising your prompt to receive a better essay.
 4. Factcheck the essay: do the sources exist, are they reliable, do they say what ChatGPT says they do...
 5. Finalize the essay by manually fixing remaining issues such as extending short paragraphs, removing bad sources, adding evidence, fixing strange formulations, ...
- Exchange "your" essay with your neighbouring pair and review it.

5. ChatGPT and Learning

Hero or villain?

Argumentative essay writing is a time honored tradition in university education.

Discuss with your neighbour potential effects of using ChatGPT for essay writing for students learning.

Education Festival

Are you interested in how AI can and should be used in education?

We are looking for **student participants** for the following event of the Education Festival:

An educational expedition into new A.I. Territory

March 29th, 14-17