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Using ChatGTP to illustrate the limits of ChatGTP

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Teaching Goal

Everyone on campus has been talking about ChatGTP, from students to staff alike, and this trend shows little sign of stopping. At the same time, there seems to be a lack of consensus about how (or indeed if) it should be used in higher education. At the same time, a growing number of students are (admitting) to using it in their written assignments.

At my university, students cover good academic practice near the start of their studies, yet ChatGTP is still being mentioned as more of a footnote. Moreover, my students have been asking me about it more and more in class – especially as their essay deadlines draw nearer and nearer.

Since it is not possible to bury my head in the sand and ignore this issue, I thought it would be better to address the (artificial) elephant in the room. So, rather than seeing it as a problem, I viewed it as an opportunity to reinforce good academic practice and critical thinking. In this way, my goal was simply to illustrate the limits of ChatGTP and other chatbots in an academic context.

183 / 75-200 words

Approach

Just as you would be shown the safety features of a boat or a plane before travel, I wanted to show my students the limitations of ChatGTP (and save myself valuable time when it comes to marking later, of course). With that in mind, I identified a number of ways that I found useful in the classroom to illustrate the limitations of ChatGTP to my students.

Step 1: Limitations in terms of initial search results

Show students the results of a search based on answers from ChatGTP compared to results from a search engine such as Google (others are of course available). Ask students:

(a) Which information they think is more useful (and why)

(b) If they can identify which is which (and justify their decision)

Note: I have simply taken a common essay question and used the top search result on Google which can be found here.

Example Question:

When was the death penalty abolished in the UK?

Result 1 (R1): ChatGTP

"The death penalty was abolished in the United Kingdom for murder in 1965, with the passage of the Murder (Abolition of Death Penalty) Act 1965. However, the death penalty for other crimes, such as treason, piracy with violence, and espionage, was not completely abolished until 1998 with the enactment of the Human Rights Act. Since then, the UK has been fully committed to the abolition of the death penalty and is a member of international organizations that advocate for its global abolition."

Result 2 (R2): Google

"Prior to World War II, an attempt was made in Britain to abolish the death penalty, but the outbreak of war, defeat in the Lords and fears about public reaction caused the government to shelve the proposal. In 1957, public doubts about high profile cases such as Timothy Evans and Derek Bentley eventually led to the 1957 Homicide Act that reduced the categories of murder that could be punishable by death. In 1965, the death penalty for murder in Britain was suspended for five years and in 1969 this was made permanent. However, it was not until 1998 that the death penalty in Britain was finally abolished for all crimes. The last people executed in the UK were Peter Allen and Gwynne Evans on 13 August 1964."

Step 2: Limitations in terms of usefulness

Discuss the pros and cons of R1 and R2. Students are likely to note that R2 provides a fuller account (as R2 explains the progression of attitudes, which were changing in the 1930s, which is something R1 completely ignores). Additionally, the final point in R1 is somewhat vague (which organisations? How active is it?). At this stage, if not earlier, a (secret) class vote could be conducted to see which one students think ChatGTP wrote.

Step 3: Limitations in terms of accuracy

Dive deeper: Show students the full Google article (R3) and additional information from ChatGTP (R4). This is intended to pre-empt potential student objections that you can simply ask ChatGTP for more information (which of course you can... but you can also continue searching on Google). Here, I was more interested in the quality of the information.

Highlight an example from R4, such as:

"The abolition of the death penalty for murder in 1965 was a landmark moment in the history of the UK's criminal justice system. It represented a significant shift in public opinion and marked a turning point towards a more rehabilitative approach to sentencing."

Subsequently, ask students to discuss whether this does indeed represent a shift in public opinion (compare to earlier definitions for previous steps) or whether it has actually been more of a gradual shift as R3 suggests.

Step 4: Limitations as an academic tool

Students compare the above ChatGTP extract to a contemporary academic source, such as Blom-Cooper's (1966) article Murder (Abolition of Death Penalty) Act 1965 from 'The Modern Law Review Vol. 29, No. 2' article (available from JSTOR). Ask students to make a comparison and discuss in pairs/small groups. Notable differences can be highlighted, contrasted and discussed.

Students may highlight the following sections:

"*The successful campaign to abolish the death penalty for murder in Britain has been achieved... by no more than a handful of ardent penal reformers, pertinacious in their lobbying and propaganda, in the face of majority opinion.*"

"...the campaign is a remarkable testament to British democracy which can convert convinced minority opinion into progressive legislative action."

The idea here is for students to discover for themselves that the use of ChatGTP should not be a substitute for academic research as a result of limitations such as these.

762 / 300-900 words

Pros and Cons

All in all, I would say that my approach succeeded in highlighting the limitations of ChatGTP. I found that my students were surprised that an AI chatbot could provide misleading, or even erroneous information, so it was certainly a useful exercise in terms of raising awareness.

Another benefit of using this approach is that it shows students the limitations in different ways. Firstly, students saw for themselves that ChatGTP is not necessarily a substitute for a regular Google search, as in many cases, such as in step 1, it does not yield better results for initial background research.

Secondly, and perhaps more crucially, my students got the point that the information from ChatGTP cannot necessarily be trusted (especially as a result of step 4). This helped to highlight the need to verify information from chatbots, as well as any other sources, and illustrated the point that using ChatGTP is not necessarily a timesaving shortcut. My students pointed out that using ChatGTP could be just as time-consuming, given that so much verification and additional research is actually required.

In terms of cons, the situation with ChatGTP is fast evolving both in relation to the technology itself as well as the rules governing it. More specifically, as technology marches on, ChatGTP may well become more competent and such inaccuracies might not be so pronounced in the future. Moreover, different institutions may take different stances on the use of Chatbots and its use could be prohibited entirely.

Additionally, it is worth noting that these results may differ based on academic discipline, or topic/subtopic covered. So, in order to replicate these results, it might require some time in order to find results that are relevant to your students and their focus of study. You are of course very welcome to simply use this example directly, as the content is simply used as a vehicle to point out the limitations of ChatGTP.

318 / 125-400 words.

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