



# AI Drawbacks

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**Artificial Intelligence (AI)** can be a powerful tool for productivity when used appropriately. However, when used inappropriately, AI tools can have a number of serious drawbacks for both the user and society at large. **Using Artificial Intelligence tools such as ChatGPT and other large-language model Chatbots at any stage of the writing process is inappropriate in Dr May's courses**, and it represents a potential departure from Academic Integrity as articulated in Regulation 1 of the Queen's University Arts and Science Calendar. And that's just part of it. Here are some other ways in which the use of AI can be a major drawback in an academic setting.

## It's contributing nothing to your critical-thinking skills

**AI does not create or explore new ideas, it simply reassembles and reorganizes already existing ideas**

"As the linguist Emily M. Bender has noted, teachers don't ask students to write essays because the world needs more student essays. The point of writing essays is to strengthen students' critical-thinking skills; in the same way that lifting weights is useful no matter what sport an athlete plays, writing essays develops skills necessary for whatever job a college student will eventually get. Using ChatGPT to complete assignments is like bringing a forklift into the weight room; you will never improve your cognitive fitness that way."

(<https://www.newyorker.com/culture/the-weekend-essay/why-ai-isnt-going-to-make-art>)

## It's robbing you of your educational experience

**Students who rely on AI technology in their studies are robbing themselves of the value of pursuing a higher education**

"If you choose to let AI do your reading, thinking, and writing, you might pass your courses; you might even get a piece of paper at the end of three or four years that says you are an educated person. But you'll have missed the point of an education entirely. It's not to jump through academic hoops. The point is what studying the humanities has always offered: the chance to develop your own humanity. In a world where authentic human thinking is becoming both rarer and more valuable, this matters more than any grade or diploma."

(<https://www.theglobeandmail.com/opinion/article-artificial-intelligence-university-humanities-critical-thinking/>)

## It's destroying the planet

**AI servers consume an enormous amount of power, emitting carbon and contributing directly to climate change**

"But when it comes to the environment, there is a negative side to the explosion of AI and its associated infrastructure, according to a growing body of research. The proliferating data centres that house AI servers produce electronic waste. They are large consumers of water, which is becoming scarce in many places. They rely on critical minerals and rare elements, which are often mined unsustainably. And they use massive amounts of electricity, spurring the emission of planet-warming greenhouse gases."

(<https://www.unep.org/news-and-stories/story/ai-has-environmental-problem-heres-what-world-can-do-about>)

## It's adversely affecting your mental health

**Experts are seeing increasing numbers of "AI Psychosis" cases among frequent users of AI Chatbots**

"Mental health professionals are calling it 'AI Psychosis': turning to the AI models for advice, users soon become entranced by the sycophantic machine's human-like responses. It becomes not just a tool but a companion—and the worst kind, constantly plying you with what you want to hear and validating anything you say, no matter how wrong or unbalanced.... Whether 'AI Psychosis' ... will continue to be the preferred term is an open question. But experts do emphasize that there's something unique, bizarre, and deeply alarming happening in these AI interactions, with many of the reported cases involving people with no history of mental illness...."

(<https://futurism.com/psychologist-ai-new-disorders>)

## It's notoriously unreliable

**Writing created by AI language models may sound impressive, but is it often rife with errors that make you sound foolish**

"AI initially seemed amazing with its many capabilities including answering questions, summarizing documents, and even writing code. But there are increasing concerns about how frequently AI systems invent false information—AKA hallucinations—with error rates in some tests reaching as high as 79%."

(<https://www.eweek.com/news/ai-hallucinations-increase/>)

## It's making you less intelligent

**Lower IQ scores and other indicators of cognitive decline have been reported among frequent users of AI technologies**

"A new study has found that those who use LLMs like ChatGPT to write essays have lower brain activity than those who just used their own thoughts to write similar essays.... '[Electroencephalography] revealed significant differences in brain connectivity: brain-only participants exhibited the strongest, most distributed networks; search-engine users showed moderate engagement; and LLM users displayed the weakest connectivity. Cognitive activity scaled down in relation to external tool use.'"

(<https://tech.co/news/another-study-ai-making-us-dumb>)

## It's potentially illegal

**Copyright holders are currently involved in litigation against AI companies for stealing their intellectual property**

"Over the past two years, dozens of ... copyright lawsuits against AI companies have been filed at a rapid clip. The plaintiffs include individual authors like Sarah Silverman and Ta Nehisi-Coates, visual artists, media companies like The New York Times, and music-industry giants like Universal Music Group. This wide variety of rights holders are alleging that AI companies have used their work to train what are often highly lucrative and powerful AI models in a manner that is tantamount to theft.... Nearly every major generative AI company has been pulled into this legal fight, including OpenAI, Meta, Microsoft, Google, Anthropic, and Nvidia."

(<https://www.wired.com/story/ai-copyright-case-tracker/>)

## It's negatively impacting the global economy

**The only ones reaping the economic benefits of AI are a small handful of big-tech executives**

"Corporate America is rapidly adopting artificial intelligence to automate work once exclusively done by humans. More than half (61%) of large US firms plan to use AI within the next year to automate tasks previously done by employees, according to a survey of finance chiefs.... That's in addition to creative tasks for which some businesses are already relying on ChatGPT and other AI Chatbots to assist, including crafting job posts, writing press releases, and building marketing campaigns. The findings show companies are increasingly turning to AI to cut costs, boost profits, and make their workers more productive."

(<https://www.cnn.com/2024/06/20/business/ai-jobs-workers-replacing>)

In addition to these many drawbacks, using AI tools at any stage of the writing process represents a potential departure from Academic Integrity equivalent to plagiarism. **Departures from Academic Integrity can result in serious adverse consequences for you, including a failing grade on the assignment and/or in the course in question, a requirement to withdraw from the course and/or the programme in question, documentation of the departure placed in your permanent record, among other penalties.** It is therefore crucial that you endeavour to uphold the principles of Academic Integrity as outlined in Regulation 1 of the Queen's University Arts and Science Calendar (<https://www.queensu.ca/academic-calendar/arts-science/academic-regulations/>), which include not using AI tools in the planning, composition, or revision of essays or other writing assignments in academic courses. Instead, write your own essays, and thereby develop and hone the critical-thinking and -writing skills that will benefit you when you graduate from Queen's and begin the next chapter of your life.