

## EN\_81341497 Research Introduction

The meteoric rise of large language models (LLMs) like ChatGPT has brought both excitement and trepidation to the academic landscape. These AI tools possess an uncanny ability to generate human-quality text, sparking the question: Should universities allow students to leverage this technology for writing academic texts? While ChatGPT offers a seemingly efficient way to tackle assignments, a closer examination reveals significant drawbacks that undermine the core principles of university education. This essay argues against the unfettered use of ChatGPT for academic writing, highlighting concerns about plagiarism, hindered critical thinking, and the potential for factual inaccuracies.

One of the most pressing concerns arises from the realm of plagiarism. As Bender et al. (2021) point out in their seminal paper on "Stochastic Parrots," LLMs, including ChatGPT, are trained on massive datasets of text and code. While this allows them to mimic human language with impressive fluency, it also raises the risk of unintentional plagiarism. The very nature of LLM training, where they learn by statistically predicting the next word in a sequence, can lead to the inadvertent incorporation of existing text without proper attribution. This can be particularly problematic in fields where specific terminology and phrasing are commonplace. Additionally, as De Bos (n.d.) emphasizes in his chapter on plagiarism, academic integrity hinges on originality and the ability to synthesize existing knowledge with independent thought. ChatGPT, by simply regurgitating pre-existing information, undermines this vital learning process.

Furthermore, uncritical reliance on ChatGPT can stifle the development of critical thinking skills, a cornerstone of university education. Writing academic texts is more than just assembling grammatically correct sentences. It requires the ability to analyze information, evaluate sources, and construct well-reasoned arguments. As argued by Davis (2023), the very act of crafting an essay or research paper forces students to grapple with complex ideas, identify their own stance, and articulate it persuasively. When students offload this process to ChatGPT, they relinquish the opportunity to develop these crucial intellectual abilities. The long-term consequences of such a practice can be detrimental, as students enter the workforce lacking

the critical thinking skills necessary for success in a complex and ever-evolving world.

Another cause for concern is the potential for factual inaccuracies with AI-generated text. LLMs, despite their sophistication, are not fail-proof systems. As detailed in a recent study by Shu et al. (2023), these models can generate text that is factually incorrect, even when prompted with seemingly straightforward questions. This is because LLMs prioritize fluency and coherence over factual accuracy. In the academic setting, factual accuracy is paramount. When students rely on ChatGPT for essays or reports, they risk perpetuating misinformation and undermining the credibility of their work.

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