Who wrote my paper? Challenging AI authorship to maintain human writing authority and academic integrity in the age of GenAI.

Yaoko Matsuoka[1,2], Hiroyuki Ida[3]

[1]Open University UK, London, United Kingdom. [2]University of the People, Pasadena, USA. [3]The University of Kitakyushu, Fukuoka, Japan

Research Domains

Digital University and new learning technologies (DU)

Abstract

This study investigates students' actual usage of AI in academic English writing based on the results of a questionnaire, "AI Use Disclosure," to challenge AI authorship and raise students' self-reflection. The questionnaire was administered to 21 undergraduates in an online US university's academic writing class in 2024. The findings showed that students used various generative AI (GenAI) tools to understand assignments, brainstorm ideas, gather information, proofread, and edit grammar. These decreased significant language mistakes but increased similar topics and noncommittal arguments. It is a concern that students failing to engage in such writing processes themselves may decline their academic writing abilities. Notably, despite GenAI having significantly changed their original writing, students still believed that using GenAI did not infringe on their authorship of writing. This study clarifies the students' AI use in writing, which will help teachers coach students with over-AI dependence and improve the English writing instruction.

Full paper

Research Background

Recently, utilizing Artificial Intelligence (AI)-assisted writing tools has become increasingly common in higher education. Those AI tools are expected to revitalize academic writing because they produce almost perfect grammar and generally appropriate language expressions. However, students' misuse of them in writing assignments has raised the issue of AI-induced plagiarism, a state where students submit AI-generated assignments as their original work (Kovari, 2025). It violates academic ethics and deprives students of learning opportunities. This issue is particularly significant when it comes to English as L2 writing. This study investigates university students' actual usage of AI in academic English

writing based on the results of a questionnaire, "AI Use Disclosure," aiming to challenge the AI's authorship by sounding the alarm about students' excessive use of generative AI (GenAI) and making them self-aware of the significance of writing on their own.

In higher education, students, instructors, and researchers are already familiar with writing using GenAI tools. However, GenAI's rapid progress in producing extensively human-like language makes detecting AI-generated content further challenging (Perkins et al., 2024). To maintain the transparency and reliability of academic writing, disclosing the usage of generative AI tools seems essential and effective (Tang et al, 2024 . Major publishers, e.g., Elsevier for one, have started to ask authors to declare the usage of GenAI tools in their manuscripts Van Teijlingen et al., 2024 . Bao & Zeng (2024) suggest that AI cannot be a co-author because it lacks unique human experiences for writing and violates the author's responsibility in writing. Applying the same approach to student assignments is also expected to be highly effective.

Methods

The study conducted "AI Use Disclosure," a Google Form questionnaire, in an online US university's academic writing class in 2024, where twenty-one out of thirty-four students, including ten females, participated in the research. The research followed academic ethics, including spontaneous participation, informed consent, and participants' anonymity. The questions asked whether they used AI tools for assignments, what tools they used, how and in which processes they used AI tools, and who they recognized as the author of their writing, with a free comment section for detailed explanation. Numerical results were analyzed statistically, and students' descriptions were interpreted using non-coding thematic analysis.

Findings

The questionnaire results indicated that 76.2 % of students used various AI tools, e.g., from common GenAI tools like ChatGPT and Copilot to AI-integrated writing assistance tools like Grammarly and Paper-Rater in most writing processes. About 50% of them used AI to brainstorm ideas, and 70% did so to edit the final draft. They also used AI to understand the assignment prompts correctly, gather relevant information, outline the draft, proofread, and check grammar and word choice. Among 23.8% who answered they did not use any AI tools, some seemingly did not recognize that translation apps were AI-integrated. According to the free descriptions, some participants showed their rigid reliance on AI, especially the benefit of the reduced time for topic selection, while others expressed their concern about the reliability of the sources provided by AI. It was reported that AI proposed sources with wrong authors, titles, and journal names, and the DOI or URL often did not work. For the final question regarding authorship, 40% chose it was "AI and me," while 60% chose "Me" as the only author of their writing, despite the intense use of AI tools.

Discussion and Conclusion

The growing use of AI in university students' writing processes decreased significant language mistakes and fatal misunderstanding of the assignment requirement, but increased arguments lacking originality and uniqueness, without personal experiences and viewpoints. Moreover, some students' topics were quite similar, and discussions often ended with noncommittal conclusions. These are likely the result of the students creating text based on the topics, formats, outlines, and approaches suggested by GenAI. It is a concern that students failing to engage in such writing processes themselves might decline their academic writing ability. Most remarkably, despite GenAI having significantly changed their original writing by overcorrecting language and adding new sentences, students still believed that using GenAI did not infringe on their authorship of their writing. These findings suggest that even if not intentional, the use of AI features may gradually change the content and style of many university essays. This study clarifies the students' AI use in writing in detail, which will prompt students to reflect on their own AI use and help teachers coach students with over-AI dependence and improve the English writing instruction and assignment evaluation procedure.