

TRANSFORMING ACADEMIC WRITING PRACTICES USING AI TOOLS IN HIGHER EDUCATION

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Abstract

This study investigates the use of artificial intelligence tools, specifically QuillBot and ChatGPT, in facilitating academic writing skills among English Language Education students at University of Nusantara PGRI Kediri. The research concludes that AI tools have been successfully integrated into students' writing processes and are perceived as valuable resources for academic writing enhancement. The highest positive response was recorded for summarization tasks, indicating that AI tools are particularly effective in helping students distill and organize information. These findings contribute to the growing body of literature on AI integration in educational contexts and provide practical insights for educators, students, and policymakers seeking to implement AI tools responsibly in academic writing instruction. Furthermore, the results of this study also showed positive responses, indicating that students were familiar with grammatical and spelling error identification when using AI. Using a descriptive quantitative research design, the study surveyed 102 students from second to fourth-year levels through an online questionnaire based on a Likert scale. The research aimed to examine three main aspects: student familiarity with AI tools, the potential benefits of AI in academic writing, and the challenges students face when using these technologies.

Keywords: Artificial Intelligence, Academic Writing, QuillBot, ChatGPT, Higher Education

INTRODUCTION

Writing is a fundamental skill that allows individuals to effectively communicate their ideas and thoughts. According to Chicho K. Z. H. (2022) and Hayes & Flower (1980), it is a complex linguistic ability that utilizes a graphic sign system for interpersonal communication. This process requires not only the mastery of grammar and vocabulary but also critical and analytical thinking. However, many students, especially those learning English as a Foreign Language (EFL), face significant challenges in writing. Hyland (2019) and Qowiyuddin et al. (2023) suggest that the primary difficulty often stems from a lack of dedicated practice time. Additionally, low motivation to study English can also be a hindrance (Adam N et al., 2021).

In this digital age, artificial intelligence (AI) has emerged as a potential tool to address these challenges. The current generation of students are "digital natives" who are accustomed

to using technology in their daily lives (Afif N, 2019). This opens up new opportunities in education, where technology can facilitate innovative and collaborative learning (Maphoto et al., 2024; Qureshi et al., 2021). With the right motivation, students can leverage technological advancements to improve their writing skills independently. Among the various AI tools available, QuillBot and ChatGPT are two popular web-based platforms frequently used by students to assist with academic writing. These tools are designed to simplify the writing process and help students overcome the difficulties they face. QuillBot is well-known for its powerful paraphrasing capabilities. Its main function is to rephrase text without changing the original meaning, which helps students avoid plagiarism, improve clarity, and explore different writing styles. QuillBot offers various modes, such as standard, fluency, creative, and shorten, allowing users to adjust the level of paraphrasing to their needs. Furthermore, QuillBot can help identify grammar and punctuation errors, making the writing look more professional.

A study by Amyatun and Kholis (2023) found that QuillBot has helped students improve their writing skills through word suggestions, sentence modification, and sentence structure improvements. With its ease of access, QuillBot allows students to focus on writing practice more efficiently (Fitria, 2021). On the other hand, ChatGPT excels at generating creative and unique text. This tool can produce various writing formats, such as poems, scripts, emails, letters, and stories. This feature is highly useful for brainstorming ideas, overcoming writer's block, and exploring different narrative approaches. Additionally, ChatGPT can provide instant feedback on a student's writing, highlighting areas that need improvement, including grammar, spelling, and punctuation (Rudolph, Tan, & Tan, 2023). ChatGPT's advanced natural language processing capabilities allow students to better understand complex grammatical structures, hone their vocabulary usage, and develop their overall compositional skills (Faiz et al., 2023). Other studies, such as the one by Malik et al. (2023), also acknowledge the potential of AI tools like ChatGPT in assisting students with essay writing and content creation. While numerous studies have explored the use of AI, as conducted by Latifah et al. (2024) and Raheem et al. (2023), a knowledge gap remains regarding which specific AI tool is most frequently used by EFL students for academic writing. This study aims to fill that gap by focusing on the usage of QuillBot and ChatGPT among English language education students at Nusantara PGRI (UNP) Kediri University.

This research will identify which of the two tools is used more often, evaluate their effectiveness in academic writing, and identify the obstacles students face when using them. Thus, this study is expected to provide a clearer insight into the role and impact of AI, specifically QuillBot and ChatGPT, in helping students improve their writing skills.

METHOD

The definition of the descriptive variable in this study is "The Use Of Artificial Intelligence In Facilitating Academic Writing For Students Of English Language Education Department At University Of Nusantara PGRI Kediri." Three different indicators are included in the variable, which is divided into three research questions.

The researcher use a quantitative research. The first step was planning the main questions, which are about beliefs that can be answered most precisely through the survey method and use methods of data collection, questionnaires. The second step was to determine which population would be included in the study. The study's participants start from grade two until fourth grade students in English language department at university of Nusantara PGRI Kediri. There are about 138 students. Next, in the third step, random sampling was conducted. In addition, after obtaining samples, the researcher will use random sampling to collect accurate data. From the above explanation, it can be inferred that the purpose of this study is to provide the use of AI (artificial intelligence) like ChatGPT and QuillBot application in terms of their academic writing skills.

A population includes all members of a defined class of people, events, or objects, (Ary D. et al, 2010). Population in this research involved second until fourth grade at University of Nusantara PGRI Kediri. Each grade and the population is this research can be seen in the table below.

Tabel 1 Number of Student

No	Grade 2	Grade 3	Grade 4
Number of students	38	64	36
Total	138		

According to Ary D., et al (2010), a sample is a small group observed, while a population is the broader group used to make generalizations. Meanwhile, according to Siyoto & Sodik (2015), the sample is part of the number and characteristics possessed by the population, which is a small part of the population members taken. The researcher use simple random sampling technique for this research. The total populations in this research are 138 students, 25% of the population are used by the researcher in this research. Thus, 102 students were chosen for the sample in this research.

So, the sample size of approximately 102 individuals is needed (rounded up to get a sufficient sample size). The sample size needed to obtain a margin of error of 5% from a population of 138 students is around 102. So, researcher need around 102 respondents to achieve an error rate of 5% with a confidence level of 95%.

To analyze the data, there were several step. First, the data will get from the questionnaire

are turn into scores based on the Likert-scale in which the score for strongly agree, agree, neutral, disagree and strongly disagree were respectively 5,4,3,2, and 1 score. Then the score is calculated as a percentage of the score for each aspect. Next, the scores are interpreted using interval analysis. The following criteria are used to interpret the calculated scores so that the level of student engagement can be known (Susanti, Y. 2020).

Interval Criteria:

0% - 19.99% = Strongly Disagree

20% - 39.99% = Disagree

40% - 59.99% = Neutral

60% - 79.99% = Agree

80% - 100% = Strongly Agree

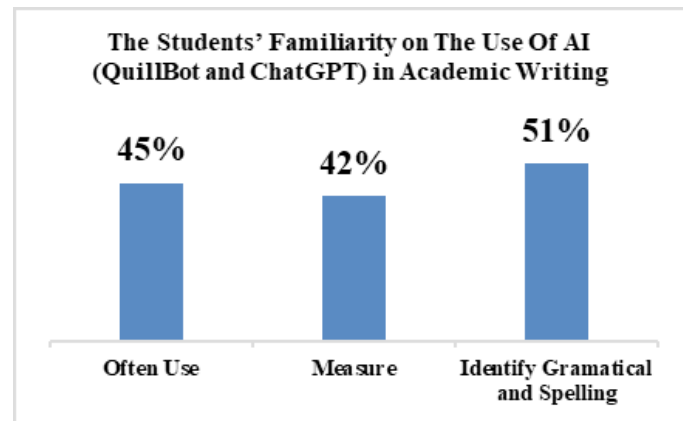
RESULT AND DISCUSSION

Result

This chapter presents the findings regarding the use of artificial intelligence (AI) in facilitating academic writing skills among students in the English language education department at university of nusantara PGRI Kediri, that were collected using closed ended questionnaire. The total of one hundred and two participants participated in filling the questionnaire that were conducted via online by using google form. The data were collected through a questionnaire administered to 102 students from second to fourth year levels . This research focuses on three main research questions: how much is the percentage of the student familiarity can get from the use of AI (QuillBot and ChatGPT) in academic writing skills, which aspects of academic writing are most assisted by QuillBot and ChatGPT in the academic writing activities, what challenges do students face when used (QuillBot and ChatGPT) for academic writing skills improvement. All respondents provided complete and valid responses to the nine questionnaire, resulting in a 100% usable response rate. Each item used a Likert scale from 5 (Strongly Agree) to 1 (Strongly Disagree).

1. The Students' Familiarity on The Use Of AI (QuillBot and ChatGPT) in Academic Writing

Student familiarity in this study includes 3 sub-indicators of students towards the use of artificial intelligence (QuillBot and ChatGPT) such as often use, measure, identify grammatical and spelling in academic writing skills. The results of the study show that students' familiarity on the use of AI in academic writing skills can be seen in the following graph:



Graphic 1 The Students' Familiarity on The Use Of AI (QuillBot and ChatGPT) in Academic Writing

From the familiarity section data presented above, it can be seen that respondents demonstrate significant experience and confidence with AI (QuillBot and ChatGPT) tools. Three main areas of AI tool familiarity that demonstrate differing degrees of user competency and involvement are identified by the research. The frequency of respondents' use of AI tools demonstrates an exceptionally high level of engagement.

The often use category, where 45% of respondents agreed that students from second to fourth year levels regularly use AI technologies in their daily tasks on academic writing activities. The large proportion of regular students indicates that the adoption of AI tools has reached a tipping point when they are no longer regarded as innovative or experimental but rather as useful tools for academic writing activities.

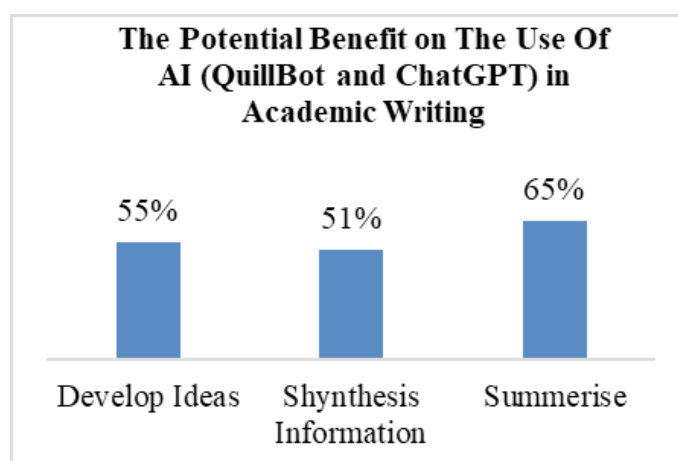
The next data is measure, which demonstrates a high level of confidence in academic writing abilities when it comes to students' capacity to their writing ability utilizing AI tools, with the results of 42% of participants concurring that using AI to assess their writing skills can be beneficial. According to this research, a sizable portion of users have grown metacognitively conscious of their writing abilities when utilizing AI tools.

The last familiarity is identify grammatical and spelling problems while using AI tools for academic writing skills. With the results of 51% of respondents agreeing that they have strong error detection skills. This is the greatest agreement among all examined categories, showing that students are most confident in the technical components of language repair.

So, based on the data analysis, the students' familiarity in grammatical and spelling error identification is shown with the high score of 51% for writing assessment capabilities. The data shows that 51% of students are familiar with the use of AI (QuillBot and ChatGPT) in academic writing activities, especially in grammatical and spelling errors. The overall high levels of familiarity across all categories indicate that AI tools have successfully integrated into students' writing processes.

2. The Potential Benefit on The Use Of AI (QuillBot and ChatGPT) in Academic Writing

This topic shows the potential benefit. The analysis reveals three key sub-indicators where AI tools provide substantial benefits to students. Each category shows AI (QuillBot and ChatGPT) capability to enhance students academic writing processes. The results of the study show that the potential benefits on the use of AI in academic writing skills can be seen in the following graph:



Graphic 2 The Students' Potential Benefit on The Use Of AI (QuillBot and ChatGPT) in Academic Writing

From the graph above, shows that AI has a positive impact on various elements of academic writing support. The research identifies three important indicator in which AI solutions deliver significant benefits to improve academic writing.

The ability to develop ideas when using AI (QuillBot and ChatGPT) to help students from second until fourth grade year levels. The data indicates that 55% of participants agreed that AI tools effectively assist in idea development.

The next potential benefit is synthesis information, the results reflect a strong positive score. Specifically, 51% of respondents agreed that AI tools improve their capacity to synthesize content in academic writing. This demonstrates how students can improve their grasp of how to best use AI for merging many sources, discovering links between distinct bits of information, and building logical arguments from diverse materials.

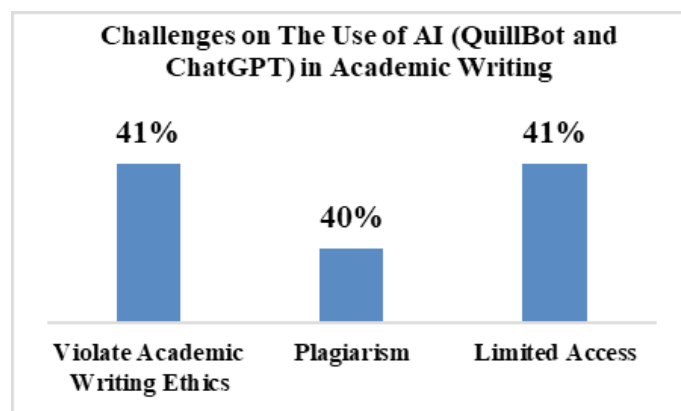
The last potential benefit is summarize. Followed by the data, summarizing reach the highest score and positive reaction across all assessed sub-indicators. A remarkable 65% of respondents concurred that AI (QuillBot and ChatGPT) helps with summarizing chores.

Thus, based on the data, the AI (QuillBot and ChatGPT) offers the greatest benefit to help the students involving summarization, concept formulation, and knowledge synthesis.

With students noticing noticeable gains in their writing procedures and results, the generally favorable response to all indicators suggests that AI support has a good effect on improving academic writing.

Challenges on The Use of AI (QuillBot and ChatGPT) in Academic Writing

This challenges section showed awareness of potential risk. The data reveals three sub indicator, there are ; academic writing ethics violation aspect, the next aspect that respondents find challenging is limited access constraints, followed by plagiarism concerns. Each category shows AI (QuillBot and ChatGPT) capability to enhance students academic writing processes, can be seen in the following graph:



Graphic 3 The Students' Challenges on The Use Of AI (QuillBot and ChatGPT) in Academic Writing

The graph above shows that respondents face a variety of obstacles and concerns when using AI tools for academic writing. The percentage above was determined based on the average findings of respondents' awareness of potential risks.

The challenges do students face first is violate academic writing ethics. Followed by the data shows of 41% participants believed that employing AI tools for writing assignments posed a serious danger of compromising academic integrity.

The second, based on the graph results above, the limited access shows similarly high concern levels, 41% of respondents experienced or anticipated significant accessibility constraints when attempting to utilize AI tools for their academic writing needs. The high level of concern indicates that accessibility issues represent another obstacle to effective AI tool implementation in academic writing. According to the data above, limited access constraints are equally challenging as ethical violations.

The last challenges on the use on AI (QuillBot and ChatGPT) is plagiarism. Followed by the data 40% of respondents experienced concerns about potential plagiarism risks when using AI tools to support their academic writing activities. Although this represents the lowest percentage among the three sub-indicator, it still indicates substantial worry about

academic misconduct. The significant concern level shows that plagiarism remains a critical consideration for responsible AI tool usage in academic writing contexts.

Thus, the main challenges of students in using AI tools to support academic writing are in the aspects of academic writing ethics violations and limited access constraints. This is indicated by the results of the average calculation percentage, with a total of 41% of respondents experiencing concerns in both the academic writing ethics violation aspect and the limited access aspect. The close percentage results across all categories, ranging from 40% to 41%, demonstrate that respondents maintain heightened awareness of multiple risk factors.

Discussion

The study findings showed substantial insights into the usage of artificial intelligence tools (QuillBot and ChatGPT), to improve academic writing skills among english language education students at the University of Nusantara PGRI Kediri. The findings revealed that students had a positive familiarity with AI tools, recognized significant potential benefits, and identified numerous implementation problems. The survey found that students showed a high level of potential benefits in summarization with AI writing tools.

4. The Students' Familiarity on The Use Of AI (QuillBot and ChatGPT) in Academic Writing

The often use category, were 45% of respondents agreed that students from second to fourth year levels regularly use AI technologies in their daily tasks on academic writing activities. Followed by the results above, shows that these results were consistent with recent research by Chan and Hu (2023), who discovered that generative AI technologies in higher education were usually viewed favorably by university students. In a similar research, Malik et al. (2023) found that ESL students had positive opinions on artificial intelligence contribution to improving their academic writing abilities.

The next data is measure, with the results of 42% of participants concurred that using AI to assess their writing skills can be beneficial. According to Marzuki et al. (2023), who observed the widespread use of AI-driven tools like Grammarly, QuillBot, Copy.ai, WordTune, and ChatGPT in academic writing environments, the high frequency of AI tool usage among students was a reflection of the growing integration of artificial intelligence in educational contexts.

The last familiarity is identify grammatical and spelling problems while using AI tools for academic writing skills. With the results of 51% of respondents agreed that they have strong error detection skills. The results of the current study also supported those of Barrot (2023), who highlighted the growing use of AI tools in EFL instruction to enhance many facets of language acquisition.

5. The Potential Benefit on The Use Of AI (QuillBot and ChatGPT) in Academic Writing

Potential benefits of academic writing, the study found significant gains in three major areas of academic writing: develop ideas, synthesis information, and summarizing. The data indicates that 55% of participants agreed that AI tools effectively assist in idea development. The overwhelming favorable response rate of positive impact in potential benefits is consistent with the findings of Berg (2023) and Chan & Zhou (2023), which recognized GenAI tools as useful research instruments for idea creation and brainstorming.

The next potential benefit is synthesis information, the results reflect a strong positive score. Specifically, 51% of respondents agreed that AI tools improve their capacity to synthesize content in academic writing. In line with studies by Gayed et al. (2022), which showed AI ability to help English language learners organize and structure complicated information. Similar benefits have been previously reported by Fitria (2023), who noted that AI tools greatly improved students capacity to synthesize difficult academic knowledge into manageable formats.

The last potential benefit is summarize. Followed by the data, summarizing reach the highest score and positive reaction across all assessed sub-indicators. A remarkable 65% of respondents concurred that AI (QuillBot and ChatGPT) helps with summarizing chores. Summarization capabilities received the greatest positive response rate (65%) which is consistent with findings from several studies that highlight AI in analyzing of textual data.

Challenges on The Use of AI (QuillBot and ChatGPT) in Academic Writing

The challenges do students face first is violate academic writing ethics. Followed by the data shows of 41% participants believed that employing AI tools for writing assignments posed a serious danger of compromising academic integrity. According to Liu et al. (2021), who found that AI supported methods significantly enhanced the writing skills of EFL students. The fact students recognized the possibility of breaking academic writing ethics by over reliance on AI tools. Cotton et al. (2023) highlighted similar hazards, stating that unedited AI generated work submitted as original invention was academic dishonesty.

The second, based on the graph results above, the limited access shows similarly high concern levels, 41% of respondents experienced or anticipated significant accessibility constraints. This results was consistent with the observations of another researcher who noticed that premium features in AI tools such as QuillBot and ChatGPT frequently needed expensive subscriptions, resulting difficulties in educational access. Access limitations surfaced as a significant practical barrier, students having difficulties accessing full AI capabilities.

The last challenges on the use on AI (QuillBot and ChatGPT) is plagiarism. Followed by the data 40% of respondents experienced concerns about potential plagiarism risks when using AI tools. Concerns regarding plagiarism were identified in the study which was

consistent with Zheng and Zhan's (2023) research, which warned about the possibility that AI could encourage academic dishonesty.

This was consistent with Kasneci et al. (2023) findings, which highlighted AI ability to automate assessment processes, offer fast feedback. The crucial difference, according to Feizi (2024), was whether AI should be used to replace creative thought or to improve idea expression. The findings of the study indicated that, when applied properly and transparently, AI technologies may be useful additions to rather than substitutes for conventional academic writing skills.

CONCLUSION

Based on the results of the survey including 102 students from second until fourth year levels at University of Nusantara PGRI Kediri, it can be inferred that the majority of students had a positive opinion of using the AI (QuillBot and ChatGPT) in academic writing. This study explored how English Language Education students at the University of Nusantara PGRI Kediri used artificial intelligence (AI) tools, specifically QuillBot and ChatGPT, for their academic writing. Furthermore, it investigated their familiarity with these tools, the specific writing aspects most supported by AI, and the challenges they encountered during use.

The findings showed that students were quite familiar with QuillBot and ChatGPT and generally viewed them in a positive light. A significant outcome was the widespread recognition of AI tools potential benefits in academic writing. Specifically, the research highlighted that summarization was the academic writing aspect most frequently and effectively assisted by these AI tools, receiving the highest positive response rate among students.

However, the study also identified some challenges that students faced when using QuillBot and ChatGPT into their writing process. Access limitations surfaced as a significant practical barrier, students having difficulties accessing full AI capabilities. This results was consistent with the observations of another researcher who noticed that premium features in AI tools such as QuillBot and ChatGPT frequently needed expensive subscriptions, resulting difficulties in educational access. Despite these hurdles, the overall impact on the academic writing skills of second to fourth-year English Language Education students was perceived as largely positive.

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