

EXPLORING EFL STUDENTS' EXPERIENCE IN ESSAY WRITING USING ARTIFICIAL INTELLIGENCE APPLICATIONS

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Abstract

Artificial intelligence (AI) has become a powerful tool in education, enabling students to complete tasks more efficiently and effectively. This study aims to examine the positive and negative experiences of EFL students in essay writing using AI applications, as well as their writing outcomes. A qualitative approach, employing a case study design, was used to achieve this objective. The research involved eight-semester students, consisting of seven participants from the English Education Department at the Islamic State University. The findings highlight several benefits of using AI tools, such as ChatGPT and Grammarly, for essay writing, including convenience, speed, accuracy, and effectiveness. However, some drawbacks were also identified. The ease of AI use has led some students to become overly dependent on it, affecting their writing skills and fostering a sense of laziness in completing assignments. This study provides educators with valuable insights, enabling them to guide students in using AI responsibly and professionally. Additionally, it raises awareness among teachers about the potential negative consequences of AI usage in the classroom, ensuring its integration supports learning rather than hinders skill development.

Keywords: Essay Writing, Artificial Intelligence, ELT

INTRODUCTION

Artificial intelligence (AI) is poised to revolutionize the education system by enabling students to complete their tasks more efficiently in the near future. AI can assist humans in various activities, such as providing learning materials, answering questions, completing assignments, and even writing theses. Bhutoria et al. (2022) highlight how AI applications enhance personalized learning by analyzing students' writing weaknesses.

Essay writing is one of the most common tasks in higher education. Artificial intelligence applications support students in writing and editing assignments since students are often required to produce essays or papers for nearly all courses. However, with technological advancements, many AI applications now offer instant assistance. Chatterjee and Bhattacharjee (2020) describe AI as a modern innovation that integrates computing, technology, and communication systems. By using AI-powered writing applications, students can identify grammatical and structural errors in their work and also improve their writing based on the provided suggestions.

Several previous studies have explored this topic. First, Fauziah (2023) examined the use of AI writing applications to enhance academic writing skills. The study found that AI tools are highly beneficial in improving students' writing abilities, making academic writing more effective compared to conventional methods. Second, Puspita & Hasyim (2023) investigated students' attitudes toward using AI-powered essay generators. The findings suggest that AI significantly aids students in generating ideas when drafting their essays. Third, Malik et al. (2023) explored students' perceptions of AI usage in academic writing. The results suggest that AI has a positive impact on students by improving their writing skills, boosting their self-efficacy, and enhancing their understanding of academic integrity.

However, this study is different from previous research. Previous studies have concluded that AI applications have a positive impact on students by assisting them with essay writing and enhancing their skills. This research specifically examines both the positive and negative experiences students encounter when using AI for essay writing. Additionally, it employs a case study approach to examine how AI impacts students' writing outcomes. This study was conducted with eighth-semester students from the English Education Department at UIN Sunan Gunung Djati Bandung.

METHOD

This research employed a qualitative method with a case study design to investigate the experiences of EFL students in writing essays using artificial intelligence applications. According to Creswell (2014), qualitative research is a human-centered approach that investigates the meanings individuals or groups assign to social or human issues. This study collected data on EFL students' experiences with AI applications through interviews and document analysis.

To address the first research question, open-ended interviews were conducted to gather students' perspectives on using AI for essay writing—this involved survey questions and interview transcripts, as suggested by Bell & Bryman (2007). The researcher conducted interviews with a total of ten participants, allowing them to share their insights, which directly contributed to answering the research question. Additionally, screenshots and screen recordings were collected as part of the documentation process.

To answer the second research question, secondary data was utilized. According to Clark (2013), secondary data refers to information that has been previously collected by others and can be used for further research. In this study, the results of students' essays were examined through document analysis to gain deeper insights into the impact of AI applications on their writing.

FINDING AND DISCUSSIONS

Findings

1) EFL students' experience in essay writing using artificial intelligence applications

Student's 1

While AI provides convenience in generating essay material quickly, it also comes with limitations. Users may underestimate the complexity of writing, and AI-generated content often lacks coherence between paragraphs. Although AI can be helpful, especially under time constraints, it does not always provide accurate or relevant responses. Therefore, AI should be used as a tool for brainstorming and structuring essays rather than a complete writing solution. Additionally, premium features and citation issues may limit its effectiveness, requiring users to refine and paraphrase the content for better quality.

Student's 2

AI tools like ChatGPT and Grammarly significantly improve writing efficiency by providing quick answers, generating ideas, and assisting with grammar corrections. It helps users find keywords, expand vocabulary, and structure paragraphs, making the writing process more effective. However, these tools have limitations, such as occasional inaccuracies in responses and restrictions on premium features. While ChatGPT helps with idea generation, its specificity depends on the input keywords. Similarly, Grammarly is useful for grammar checks, but sometimes makes wrong corrections. Overall, AI tools are valuable for writing support, but they should be used in conjunction with critical thinking and manual refinement to ensure effective results.

Student's 3

ChatGPT and Grammarly offer valuable assistance in writing essays by generating summaries, key points, and correcting grammar. They are especially helpful for those who struggle with essay writing, making the process faster and more structured. While ChatGPT offers quick responses and idea generation, its accuracy is not always reliable. Grammarly helps refine grammar and sentence structure, but its free version has limitations. Despite these drawbacks, AI tools serve as useful references for essay writing, allowing users to enhance their work with their own words and understanding.

Student's 4

ChatGPT and Grammarly significantly aid in essay writing by streamlining the process and making it more structured, particularly for individuals who struggle with writing. ChatGPT provides useful ideas and key points, while Grammarly helps refine grammar and sentence structure. However, ChatGPT's answers are not always accurate, making it unreliable as a sole reference, and Grammarly's most useful features require a premium subscription. Despite these limitations, both tools are valuable for generating ideas and improving writing, provided users refine the content in their own words.

Student's 5

AI makes essay writing significantly easier by providing inspiration, references, and grammar corrections. It is useful when we are struggling to start or structure an essay. However, the convenience of AI can sometimes lead to overreliance and a reduction in effort in writing. Additionally, both tools have limitations—ChatGPT's responses are not always accurate, and Grammarly's most advanced features require a paid subscription. Despite these disadvantages, AI offers a valuable point in essay writing, provided users refine and personalize the content themselves.

Student's 6

ChatGPT and Grammarly significantly facilitate the essay-writing process by providing rapid responses, generating ideas, and enhancing grammatical accuracy. Their efficiency enables students to complete assignments more smoothly, particularly under strict deadlines. Furthermore, these tools have inherent limitations, including the necessity of a stable internet connection and restricted access to advanced features without a premium subscription.

2) EFL students' essay writing results using Artificial Intelligence Applications

To determine the results of essay writing tasks completed by students using artificial intelligence (AI), the researcher employed a document analysis approach.

The essays reviewed demonstrate strong academic writing skills in terms of content organization, language use, and writing mechanics. Each essay follows a structured format, beginning with an introduction that establishes the topic, a body that elaborates on key ideas, and a conclusion that synthesizes the main points. The use of academic vocabulary and well-researched references further enhances the credibility and depth of the discussions. However, there are areas for improvement, particularly in the use of signal words to ensure smooth transitions between sections.

While most essays maintain coherence, some struggle with logical flow due to abrupt shifts in ideas. The inclusion of transitional phrases such as "first," "next," and "finally" would help guide readers through different sections more effectively. Additionally, certain essays could benefit from a more explicit thesis statement in the introduction to clarify their central argument. Strengthening these structural aspects would contribute to a more engaging and reader-friendly presentation of ideas.

In terms of writing mechanics, the use of Grammarly has significantly reduced grammatical errors, punctuation mistakes, and typos. This demonstrates the effectiveness of digital writing tools in refining academic writing. However, a few minor errors persist, indicating that automated tools should be complemented with manual proofreading for optimal accuracy. Consistent use of active voice, rather than passive constructions, could further enhance readability and clarity.

Creativity is another aspect that varies across the essays. While some successfully integrate expert citations and real-world examples to support their arguments, others lack engaging introductions or innovative perspectives. Incorporating case studies, personal insights, or visual aids such as diagrams could make the essays more compelling. Additionally, making connections to contemporary issues could enhance relevance and reader engagement.

Overall, the analyzed essays demonstrate strong academic writing skills, characterized by well-structured arguments and precise language use. However, there is room for improvement in transitions, creativity, and the use of the active voice. By addressing these aspects, students can further refine their writing and produce more cohesive, engaging, and academically rigorous essays. The combination of AI-based tools, such as ChatGPT and Grammarly, along with critical self-review, can significantly support the development of high-quality academic writing.

Discussion

Technology has revolutionized and impacted education in learning practices. Artificial Intelligence is a highly developed technology that can improve essay writing, making assignments faster and more efficient. The innovation and use of AI applications became more common during the COVID-19 pandemic, particularly between 2020 and 2022, as online learning became a standard part of education. Students from semesters 3 to 5 utilized AI applications, such as ChatGPT and Grammarly, to assist with writing courses. This supports Al-Tkhyaneh et al.'s (2023) statement that artificial intelligence (AI) is introduced as a technological innovation that can revolutionize various aspects of human life, including education.

Furthermore, students have gone through four stages in writing an essay using ChatGPT and Grammarly, as Seow (2002) has explained. First, we plan to gather information, topics, ideas, help, and suggestions using ChatGPT as a reference source. The second step is drafting. After collecting references through ChatGPT, students begin writing an essay draft by using the gathered ideas and paraphrasing them independently. Lastly, during editing and revising,

students use Grammarly as an application to identify minor errors, such as punctuation and capitalization, and to enhance their writing, thereby avoiding common mistakes.

Moreover, the students had both positive and negative experiences when using AI to create essays. The positive experience that students encountered was that the AI application significantly eased their essay writing process. The ease of generating ideas, content, and suggestions, as well as the structure of an essay, were major advantages. The AI application has been praised for its speed in helping to complete tasks more efficiently and is particularly beneficial for dealing with tight deadlines. By simply typing the keywords that students request, the results of the essay will appear in a matter of seconds. A student can create a complete essay in a matter of seconds (Sharples, 2022).

However, all the students agreed that they had also faced negative experiences with AI. They became addicted to those applications because of their convenience. It caused a lack of effort and engagement in the writing process. S4, S5, and S6 stated that laziness is the negative aspect that AI provides. It undermines their creativity, problem-solving skills, and underestimates academic tasks. Students might become overly dependent on AI for generating content, which could affect their creativity and originality in writing (Cao & Chong, 2021). Despite its convenience, students also found that the AI tool could sometimes generate responses that were irrelevant or inaccurate. This case appears when the questions asked are not specific enough or when the AI's interpretation of the context is incorrect.

In their usage, all students indicated that the AI applications (ChatGPT and Grammarly) had limitations in helping them complete their essays. It is related to their free versions, which restrict access to advanced features. S3 also noted that a stable internet connection can be a barrier because they need to stay online while using those applications. S3 and S5 reported issues with response accuracy and inconsistencies in the AI tools. ChatGPT occasionally provides repetitive or irrelevant responses. This is supported by Kalla and Kuraku (2023), who note that ChatGPT has a limited library of information, which is also an issue. Its responses are limited to the knowledge obtained from training data; thus, it may require assistance with unfamiliar or highly specialized topics. Meanwhile, Grammarly may miss some advanced grammar issues unless you upgrade to the premium version. Ghufroon and Rosyida (2018) noted that the complex nature of some feedback answers provided by Grammarly may inadvertently contribute to user misinterpretation, adding a further level of difficulty to its efficiency.

To accomplish the second research question, the researcher used document analysis. Document analysis was used to analyse the results of academic essays made by seven students. According to Malik et al. (2023), an academic essay is a cohesive synthesis that helps overcome language and cultural barriers, encouraging the development of well-supported and logical arguments. This analysis comprises four aspects adapted from Ibnian (2011).

First, content and organization. According to Marzuki et al. (2023), the content of an essay encompasses the ideas, thoughts, and messages the writer intends to communicate. Meanwhile, the organization is the structure of the writing. The researcher found that students provided clear content when writing essays, which was in line with the title. The organization of their essay is also well-structured, comprising an introduction, body, and conclusion. However, not all students use signal words such as first, second, and third to indicate a new paragraph.

Second, the mechanics of writing refer to the aspects and rules that govern the use of language in written form. The aspects of writing mechanics are punctuation, capitalization, and spelling (Sandrawati & Jurianto, 2021). According to the student's essay, their writing is well written in terms of punctuation, capitalization, spelling, and grammar. The use of Grammarly makes their essay less prone to typos and mistakes. It means that Grammarly is extremely helpful for editing and refining students' essays. However, due to bugs in the Grammarly

application, S4 and S5 still have a few mistakes in writing mechanics, but this does not affect the entire essay. Therefore, students must be more careful in checking their writing results.

Third, language use. All students use academic language that strongly supports the type of essay they write, which is an Academic Essay. The use of tone and academic vocabulary also makes the essay easier to understand and enhances its quality. This aligns with Ibnian's (2011) language use, which refers to the correct selection of words and the precise application of expressions.

Fourth is creative ability, which refers to the capacity to utilize imagination, originality, and innovation in writing. The researcher found that S1, S2, S3, S4, S5, and S6 provided theoretical frameworks by the experts. It can be further enriched through more interesting examples. This study, supported by Ibnian (2011), suggests that creative ability encompasses fluency, flexibility, originality, and elaboration. However, students have not fully developed all aspects of their creative ability.

In conclusion, ChatGPT and Grammarly applications have overcome the difficulties that students faced when writing an essay, especially in terms of time. Their essay writing results are almost perfect, looking at the aspects of content and organization, writing mechanics, and language. However, students should further develop their creative aspects because they have not fully utilized all their creative abilities.

CONCLUSION

The purpose of this study is to explore EFL students' experiences in essay writing using artificial intelligence applications. The researchers analysed positive and negative experiences that students had while using ChatGPT and Grammarly to create essays in the Academic Writing and Psycholinguistics course. In addition, the results of the essays written by the students were also analysed.

Based on the students' answers, their positive experiences are characterized by convenience, speed, accuracy, effectiveness, efficiency, and helpfulness. This significantly impacts the quality of the essays they write, especially when they receive assignments on short notice. AI helps them complete essay assignments quickly. However, besides the positive experience, AI certainly brings negative experiences for students. With the convenience offered by ChatGPT and Grammarly, students become increasingly reliant and less motivated to complete essay assignments. This significantly impacts students' ability to think critically and solve problems independently, without relying on technology.

Moreover, the essay writing results based on their experiences in using ChatGPT and Grammarly were analysed in four aspects: 1) content and organization, 2) writing mechanics, 3) language used, and 4) creative ability. All of the students' organization is well organized. In addition, the use of Grammarly makes their writing mechanics less prone to mistakes and errors, such as punctuation, capitalization, spelling, and grammar. Thus, the consistency of language use in the essay can provide readers with a clearer understanding, especially in the academic sector. In terms of creative ability, students have provided detailed sources to support their statements. However, creativity can still be improved, especially in terms of fluency, flexibility, originality, and elaboration.

BIBLIOGRAPHY

- Al-Tkhayneh, K. M., Alghazo, E. M., & Tahat, D. (2023). The advantages and disadvantages of using artificial intelligence in Education. *Journal of Educational and Social Research*, 13(4), 105-117. <https://doi.org/10.36941/jesr-2023-0094>
- Bell, E., & Bryman, A. (2007). The ethics of management research: An exploratory content analysis. *British Journal of Management*, 18(1), 63–77.
- Bhutoria, A. (2022). Personalized education and artificial intelligence in the United States, China, and India: A systematic review using a human-in-the-loop model. *Computers and Education: Artificial Intelligence*, 3, 100068.
- Cao, X., & Chong, S. (2021). ChatGPT as a writing tutor: An exploratory study on students' writing experience. *Proceedings of the 28th International Conference on Computers in Education (ICCE 2020)*.
- Chatterjee, S., & Bhattacharjee, K. K. (2020). Adoption of artificial intelligence in higher education: a quantitative analysis using structural equation modelling. *Educ Inf Technol*, 25, 3443–3463. <https://doi.org/10.1007/s10639-020-10159-7>
- Clark, G. (2013). Secondary data. In Flowerdew, R., & Martin, D.M. (Eds.), *Methods in human geography: A guide for students doing a research project (2nd ed.)* (pp. 57–73). Routledge.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods*. SAGE
- Fauziah, Z., & Minarti, S. (2023). Artificial intelligence-assisted writing application for improving writing skills of Islamic education students. *Jurnal Kependidikan Islam*, 13(2), 119-123.
- Ghufron, M. A., & Rosyida, F. (2018). The role of Grammarly in assessing English as a Foreign Language (EFL) writing. *Lingua Cultura*, 12(4), 395–403. <https://doi.org/10.21512/lc.v12i4.4582>
- Ibnian, S. S. K. (2011). *Brainstorming and essay writing in the EFL class*, 1(3), 263–272. <https://doi.org/10.4304/tpls.1.3.263-272>
- Kalla, D., & Kuraku, S. (2023). Advantages, disadvantages, and risks associated with ChatGPT and AI on cybersecurity. *Journal of Emerging Technologies and Innovative Research*, 10(10).
- Malik, A. R., Pratiwi, Y., Andajani, K., Numertayasa, I. W., Suharti, S., Darwis, A., & Marzuki, M. (2023). Exploring artificial intelligence in academic essay: Higher education students' perspective. *International Journal of Educational Research Open*, 5(100296), 1-11. <https://doi.org/10.1016/j.ijedro.2023.100296>
- Marzuki, M., Widiati, U., Rusdin, D., Darwin, D., & Indrawati, I. (2023). The impact of AI writing tools on the content and organization of students' writing: EFL teachers' perspective. *Cogent Education*, 10(2). <https://doi.org/10.1080/2331186X.2023.2236469>

- Puspita, N., & Hasyim, U. A. A. (2023). Exploring students' attitudes of using essay maker in essay writing class. *Proceedings of the 4th International Conference on Progressive Education 2022 (ICOPE 2022)*, 195–204. DOI. 10.2991/978-2-38476-060-2_20
- Sandrawati, A. A., & Jurianto, J. J. (2021). Investigating errors in writing mechanics in university students' essays. *Linguamedia Journal*, 2(1).
- Seow, A. (2002). The Writing Process and Process Writing. In Richards, J. and Renandya, W. (Eds.) *Methodology in language teaching: An anthology of current practice* (pp. 315-320). Cambridge University Press.
- Sharples, M. (2022). Automated essay writing: An AIED opinion. *International journal of artificial intelligence in education*, 32(4), 1119–1126.