



Analyzing the Effectiveness of ChatGPT to Improving Student Writing Proficiency in Recount Texts

Khairun Niswa¹, Sholihatul Hamidah Daulay²

khairunniswa@umsu.ac.id¹, sholihatulhamidah@uinsu.ac.id²

¹English Education of Muhammadiyah University North Sumatra

²English Education, State Islamic University of North Sumatra

Received: 2024-10-01 Accepted: 2024-12-15

DOI: 10.2456/ideas.v12i2.5646

Abstract

This research investigates the effectiveness of integrating ChatGPT, an AI language model, in enhancing students' proficiency in writing recount texts. By analyzing the impact of ChatGPT on students' writing skills, the study aims to evaluate the quality, coherence, and language proficiency of student-written outputs before and after incorporating the tool. Additionally, it seeks to identify and propose strategies to overcome potential barriers to maximize ChatGPT's impact on students' ability to write recount texts. The study's findings hold theoretical significance in advancing knowledge on AI integration in language education and practical implications for researchers, students, and teachers alike, offering insights into the potential benefits of AI technologies in writing instruction.

Keywords: *ChatGPT, artificial intelligence, writing proficiency, recount texts*

Introduction

ChatGPT is a model that enables users to pose enquiries, which are then responded to by artificial intelligence that has been trained using both supervised and reinforced machine learning techniques. The outcome is contingent upon the input that the algorithm receives from the user, as well as the content that is delivered. ChatGPT is trained on a lot of data from many sources, so it may use a variety of facts to respond. This training data helps ChatGPT understand subjects and offer accurate and informative answers. ChatGPT improves its understanding and reaction to user questions through this repeated training process. ChatGPT efficiently forms student groups that work together on tasks and fostering problem-solving and teamwork skills Dwivedi et al. (2023).

Using ChatGPT can help students improve their ability to develop a clear storyline, arrange events in the right time sequence, and form strong character development. This can provide a new perspective on the role of technology in education and open up the possibility of developing unique teaching practices. Rejeb.et.al (2024) ChatGPT may help students organize their thoughts, use suitable vocabulary, and write coherently.

We can explore the efficacy of students' narrative writing by using recount text as a research topic because Recount texts have a well-defined structure consisting of orientation, a sequence of events that occur, and reorientation. Students composing recount texts have a clear framework because of this structure. Recount text is a type of text that describes past experiences. This research focuses on providing events that occur sequentially. Meanwhile, Knapp and Watkins (2005) define recount text as the most basic type of text it is formal sequential writing that does more than simply record events in chronological order. We can explore the efficacy of students' narrative writing by using recount text as a research topic because Recount texts have a well-defined structure consisting of orientation, a sequence of events that occur, and reorientation. Students composing recount texts have a clear framework because of this structure.

By focusing on recount text, students can develop writing skills gradually, because composing recount text is one of the writing skills that students must master. Sari (2017). Writing recount narratives requires the ability to sequence events chronologically and build coherent relationships between phrases and paragraphs. Using ChatGPT can help students improve their ability to develop a clear storyline, arrange events in the right time sequence, and form strong character development. This can provide a new perspective on the role of technology in education and open up the possibility of developing unique teaching practices.

Regarding research that is still relevant to the subject of recount texts, Hana Habibah (2018) described how students' writing abilities in recount texts can be enhanced by using holiday images as a media tool. The usefulness of employing vacation photographs as media was tested in this study by Hana Habibah using the classroom action research technique. The findings of the study demonstrate an increase in students' writing in recount texts.

Themes presented in prior studies have commonalities, but there are also distinctions in the media and instruments used. The purpose of this study is to determine if using ChatGPT, an OpenAI language model, may help students write recount texts more effectively. On the other hand, Pirman et al (2023) study sought to determine whether or not holiday picture-taking might enhance students' recall text writing skills.

As a result, employing holiday images as a teaching tool might stimulate students' visual senses and inspire them to write recount text.

Text research regarding the effectiveness of ChatGPT in improving students' writing skills in recount text is very important to research. New perspectives on the possible application of artificial intelligence technologies in educational settings can be gained from this research. Writers can investigate novel approaches to integrating technology into the teaching and learning process by knowing how well ChatGPT works to enhance students' writing abilities. ChatGPT assist students in becoming better communicators and thinkers by helping them to write better.

Additionally, this research may aid in the creation of more creative and efficient teaching strategies. We can make writing lessons more dynamic and interesting for students by including ChatGPT into the lessons. This study can help us comprehend the potential applications of technology.

Method

The research design employed in this study by quantitative experimental design. The study entails comparing the writing proficiency of two cohorts: an experimental group that receives training with ChatGPT and a control group that receives conventional teaching without ChatGPT. This methodology facilitates a comparison between the two groups to ascertain the efficacy of ChatGPT in enhancing students' writing proficiency in recount texts.

The pre-test is given to both the experimental and control groups prior to the implementation of the intervention. The pre-test serves to evaluate the participants' initial writing proficiency. It serves as an initial assessment of their writing abilities in recount texts prior to any instructional intervention. The post-test is delivered to both the experimental and control groups after the intervention period concludes. The post-test is designed to assess the participants' writing skills in recount texts following the instructional interventions they have received. The post-test should include standardized writing activities or prompts that evaluate the specific writing skills being addressed, just like the pre-test. The researchers can assess the efficacy of ChatGPT in enhancing students' writing proficiency by comparing the scores achieved in the post-test with those from the pre-test.

The population of this study comprises 47 tenth-grade students from Yayasan Pendidikan Harapan Bangsa Kuala, namely from the academic year 2023/2024, encompassing both. (XI-1 and XI-2) classes.

Table 3.1
Population of Research

N o	Class	Population
1	XI-1	22
2	XI-2	25
Total		47

Sampling technique where the number of samples is the same as the population. (Sugiyono,2017). Sample refers to a representative portion of a larger whole that's taken for analysis, testing, or observation. Think of it like taking a small part of something to understand or make judgments about the whole. Sample is a subset of individuals or items from a larger population.

The researcher uses a written test as an evaluation method in this research, by giving a test as the evaluation method to assess the effectiveness of ChatGPT in improving students' proficiency in writing recount texts. The written test serves as a means to measure students' writing abilities both before and after the implementation of ChatGPT. The test consists of carefully designed writing prompts or tasks that require students to produce recount texts. These prompts are specifically constructed to elicit a recount of past experiences or events. By utilizing a similar written test format before and after the usage of ChatGPT, the researcher aims to compare and evaluate the changes or improvements in students' writing abilities over the course of the study.

Results

Writing abilities are greatly impacted by the use of ChatGPT when creating recount texts. This indicates that students who learn recount text using ChatGPT receive better scores than those who do not use ChatGPT. This is demonstrated by test results that result in higher scores. Therefore, it is intended that this research demonstrate that utilizing ChatGpt can produced better outcomes than not using it, in order to enhance students' writing recount text skills and enable them to used ChatGPT in their learning.

So, the researcher concluded that the alternative hypothesis was accepted that "The integration of ChatGPT as a teaching tool has a significant impact on improving students' writing skills in recount texts.". In other words, students who those taught using ChatGPT were better than those who used the conventional method.

The data was the result of students' achievement in writing test. The data consist of 22 students at XI-1 and 25 students at XI-2 and the total is 47 students. The class was divided into two group, namely experimental group (XI-1) and Control Group (XI-2). Both of groups were given the same essay on writing form on the pretest and posttest.

After the data were calculated by using t-test formula, it was found the result that observed was 9.1124. Then after seeking the table of distribution of t-observed as the basic of counting critical in certain of degree of freedom (df), the caution showed that df were 45 (N_1+N_2-2) or ($22+25-2=45$).

Discussion

are two groups in this study, namely the experimental group and the control group. Prior to receiving treatment, the experimental group underwent a pre-test. Next, a therapy using ChatGPT was administered to the experimental group. Following the treatment, the experimenter received a post-test. According to the experimental group's pre- and post-test table above, the pre-test with the lowest score, which was 65 is 7 people and the highest pre-test score with a value of 75 is 7 people. Meanwhile, there were 8 people with the lowest post-test score with a score of 95 and people with the highest post-test score with a score of 99 is 8 people.

The control group was given a pre-test before being given treatment. Then the control group was given treatment with the conventional media. After giving the treatment, the control group was given a post-test. Based on the pre-test and post- test table for the control group above, it shows that the lowest pre-test score with a score of 60 is 8 people and the highest pre-test score with a score of 75 is 7 people. Meanwhile, the lowest post-test score with a score 80 of is 9 people and the highest post-test score with a score of 87 was 9 people.

The Experimental Group, which received some intervention or treatment, showed a significant improvement in their writing skills from the pre-test to the post-test. The Control Group also showed improvement, albeit to a lesser extent compared to the Experimental Group. The data suggests that the use of ChatGPT have positively influenced the writing skills of the students in the Experimental Group.

Based on previous related study conducted by Fauzi, A. (2017), entitled "The Effect of Edmodo on Students' Writing Skill in Recount Text" Fauzi statement has similarities with what researchers found in fauzi research. Fauzi observations aims to improve students' writing skills in the recount text genre, seeks to identify methods or technologies that can help students develop their writing skills, they were divided into experimental and control groups, with the experimental group using Edmodo for writing instruction.

Data was carried out in this research and what I did was to use class learning outcomes tests in the form of pretest and posttest, and the similarities in the research results have a significant influence on improving students' writing skills. The difference between these two research lies in the approach and technology used. Research using Edmodo focuses more on online classroom teaching and management, in improving students' writing skills in recount texts, while this research focuses on natural language interactions with users to provide information and assistance based on the given context, for a similar purpose.

Conclusion

This research focuses at the issues faced by students who struggle with idea generation, organization, and proper paragraph construction in sentence texts. This is evident from research findings during the process of teaching and learning. The teacher who still using conventional methods, their students get bored and are unable to express their ideas and feelings in writing. The eleventh-grade students of Yayasan Harapan Bangsa Kuala are impacted by this research.

After utilizing ChatGPT, students writing skills are significantly improved. Using this teaching method, students' interest in ChatGPT increases while they are studying in class. Research has consequences as a source of data and a guide for additional research, enabling it to be expanded upon in future research products to raise the standard of instruction. There are undoubtedly a lot of restrictions on the research that has been done, including a short research period.

One of the things that can limit the amount of area available for research is this short time frame. This, it may have an impact on the findings of the conducted research. Based on study findings, this study offers crucial information on ChatGPT's impact on the creation of recount texts' t test is rejected and H_a is accepted. This, it can be said that there is the pretest and posttest questions differ significantly, indicating that ChatGPT has an impact on students' capacity to produce recount texts.

References

- Annisa, N., Syam, A. T., & Masruddin, M. (2022). Teaching vocabulary through Round Robin Brainstorming Technique. *English Education Journal*, 13(1), 46-55.
- Dwivedi, Y. K., Kshetri, N., Hughes, L., Slade, E. L., Jeyaraj, A., Kar, A. K., ... & Wright, R. (2023). "So, what if ChatGPT wrote it?" Multidisciplinary perspectives on opportunities, challenges and implications of generative conversational AI for research, practice and policy. *International Journal of Information Management*, 71, 102642.
- auzi, A. (2017). The effect of Edmodo on students' writing skill in recount text. *International Journal of Pedagogy and Teacher Education*, 1(2), 73-79.
- Habibah, H. (2018). *The Use of Holiday Picture as a Media In Writing Recount Text at The Eight Grade Of SMP N 4 Percut Sei Tuan 2017/2018 Academic Year* (Doctoral dissertation, Universitas Islam Negeri Sumatera Utara).
- Henny Mardiah, Khairun Nissa.(2024) Generation Z students' perspectives on Artificial Intelligence (AI) technology in English language learning.*New Language Dimensions*.5(11)
- Husnaini, H. (2022). Development of Self Esteem-Oriented Micro Teaching Materials for IAIN Palopo English Education Students. *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature*, 10(1), 538-560.
- Husnaini, H., Iksan, M., & Wiwin, W. (2023). Students' Anxiety in Learning English Writing Skills in Senior High School Level. *FOSTER: Journal of English Language Teaching*, 4(2), 93-110.
- Ismayanti, D., Said, Y. R., Usman, N., & Nur, M. I. (2024). The Students Ability in Translating Newspaper Headlines into English A Case Study. *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature*, 12(1), 108-131.
- Masruddin, M. (2019). Omission: common simple present tense errors in students' writing of descriptive text. *Ethical Lingua: Journal of Language Teaching and Literature*, 6(1), 30-39.
- Masruddin, M., & Nasriandi, N. (2022). Lexical and Syntactical Errors Performed by Junior High School Student in Writing Descriptive Text. *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature*, 10(1), 1094-1100. doi: <https://doi.org/10.24256/ideas.v10i1.3024>
- Pirman Ginting, Haris Muda Batubara, Yenni Hasnah. (2023) Artificial Intelligence Powered Writing Tools as Adaptable Aids for Academic Writing: Insight from EFL College Learners in Writing Final Project Authors.*International Journal of Multidisciplinary Research and Analysis*.6(10),4640-4650
- Rejeb, A., Rejeb, K., Appolloni, A., Treiblmaier, H., & Iranmanesh, M. (2024). Exploring the impact of ChatGPT on education: A web mining and machine

- learning approach. *The International Journal of Management Education*, 22(1), 100932
- Sari, E. D. P., & Agustina, M. F. (2022). Thematic Development in Students Argumentative Essay. *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature*, 10(1), 166-174.
- Sari, M. K. (2017). An analysis of students' problem in writing recount text. *Jurnal Educative: Journal of Educational Studies*, 2(1), 14-21.
- Zhang, J., Abbas, Z., Ali, T., Liu, Q., & Wang, Y. (2024). *International Journal of Artificial Intelligence and Machine Learning*.