

Optimizing Students' Writing by Using Chat GPT

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Abstract

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ChatGPT has become increasingly popular in recent times due to its utilization of AI technology, surpassing Google in terms of effectiveness. It is also widely used by students as a valuable learning tool. When learning English, ChatGPT can aid in translating passages and evaluating students' writing. This study aimed to assess the impact of ChatGPT on students' writing skills. The results demonstrated that students were able to identify their writing mistakes through the use of ChatGPT. Not only did ChatGPT provide corrections, but it also offered comments on their writing, facilitating easy revision. Furthermore, students exhibited improved writing when compared to using Google Translate. While Google Translate merely translates the text, ChatGPT provides suggestions for enhancing the writing, resulting in more cohesive compositions. However, students argued that Google Translate was more convenient because it allowed for automatic translation by simply taking a picture of their writing. In contrast, ChatGPT requires manual typing of the text. It is worth noting that although Google Translate offers convenience, ChatGPT provides valuable guidance for better writing. In conclusion, ChatGPT can serve as an alternative for teaching writing. Teachers can encourage students to utilize ChatGPT to evaluate their writing, ensuring that they do not overly rely on it and make progress in learning English. By striking a balance between independent writing skills and the assistance of ChatGPT, students can enhance their overall language proficiency.

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INTRODUCTION

The advancement of AI technology has altered not only the technological landscape but also how people live today. According to Tai (2020), the introduction of AI technology has had a significant impact on human interactions and lives in addition to revolutionising the technological landscape. Education, too, has been greatly influenced by this transformative technology, with ChatGPT emerging as one of the most popular AI tools in the field. As highlighted by Su and Yang (2023), ChatGPT offers effective learning capabilities and valuable

feedback to users. Lo (2023) further supports this notion by emphasizing that ChatGPT serves as a valuable assistant for instructors and tutors in educational settings. The research conducted by Farrokhnia, Banihashem, Noroozi, and Wals (2023) reveals that ChatGPT excels in providing prompt responses, making it a valuable resource for students. Additionally, it aids students in accessing information in a simplified language, as observed in the same study.

The popularity of ChatGPT as a learning assistant could not be separated from the

characteristic of the students, which is categorized as Gen Z, which are very immersed to the development of technology. One of the most crucial action in teaching Gen Z is to invest in technological resources for the students to extensively utilize technology to enhance and expedite the academic journey (Hernandez-de-Menendez et al, 2020). According to Dolot (2018), one of Gen Z traits is the adaptation to the new technology. That's why Gen Z is known as Digital Natives. They use many kinds of mobile devices and are accustomed to use the internet in daily lives. Mosca et al (2018) found that the way students receive and understand information has been transformed by the swift advancement and widespread usage of mobile communication technology.

Although ChatGPT offers significant advantages for education, it is important to acknowledge its limitations. Farrokhnia, Banihashem, Noroozi, and Wals (2023) point out that while ChatGPT facilitates quick access to information, it may undermine students' comprehension and critical thinking skills, which are crucial aspects of the learning process. Additionally, Lo (2023) highlights concerns regarding the use of ChatGPT, including the potential for fake information and plagiarism. As ChatGPT can bypass plagiarism checkers, developers must address these challenges to ensure responsible use of the technology.

The use of ChatGPT in the learning process is a topic of debate among educators. However, it is evident that teachers need to adapt to the presence of this technology. Particularly in language learning, ChatGPT is often deemed more accurate compared to Google products such as Google Search and Google Translate. Zhai (2022) asserts that ChatGPT has the potential to bring about significant changes in learning goals, activities, as well as assessment and evaluation practices within the education system. Moreover, Cotton, Cotton, and Shipway (2023) argues that ChatGPT is vulnerable to cheating. Huang in Abramson (2023) stated that *New York Times* found many of the colleges started to redesigning their curricula to prevent cheating by using ChatGPT.

On the other hand, Ellis and Slade (2023) argue that the focus should not solely be on the drawbacks of ChatGPT, but also on its benefits. They highlight the capacity of ChatGPT to assist in creating educational resources and providing recommendations to educators, thereby facilitating responsible student engagement with the system. ChatGPT may have some issues in

cheating area, but it also has some benefits for teaching and learning process, especially in finding information.

Indeed, many students rely on ChatGPT to assist them with their English assignments, including writing tasks. Teaching writing has long been considered a challenge in English as a Foreign Language (EFL) instruction. As noted by Brown (2000), writing plays a crucial role in language learning. He further emphasized that an instructional approach that focuses on learner-centered instruction, student-student negotiation, and strategies-based instruction creates an appropriate learning environment that acknowledges and respects the diverse pathways students take to achieve success. Brown (2004) also highlighted that English competence encompasses various aspects, especially in relation to writing. This includes the learners' grammatical proficiency, vocabulary mastery, and their ability to effectively structure well-written English paragraphs. To overcome the problems in teaching writing, El, Sidi, and Baghdadi (2022) suggest that teachers may give model analysis, writing exercises, and structured teacher-student feedback sessions. ChatGPT can be a good alternative for the teachers because it provides direct feedback to the students.

Several studies have become the background of this research. In a research done by Hidayati (2018), it is found that there are various factors that contribute to the difficulties in writing, including linguistic competence, interference from the native language, the motivation and reading habits of learners. Additionally, external factors such as the classroom environment, available teaching aids for writing, and the amount of time available also play a role. Graham (2019) found that in teaching writing, many teachers do not give clear instructions the students' need.

Relating to the use of ChatGPT in writing, Chinonso, Theresa, and Aduke (2023) found that ChatGPT provides swift and immediate answers to search inquiries, along with the ability to generate text that mimics conversational replies. However, Baron (2023) in his article, found that using ChatCPT for writing may causes losing spelling ability and reduce the power of writing as a form of mental activity and personal expression.

Most of the studies related to teaching writing and ChatGPT focused on the problem in teaching writing and how to solve the problem in teaching writing. The results of those studies show that there were many factors influence the process of teaching writing and many teachers

need to provide a model in order for the students to write better. Moreover, relating to the use of ChatGPT, most of the studies focused on the weakness and the strength of ChatGPT in education. So far, the researcher did not find any studies related to the use of ChatGPT in teaching writing.

This study is important to maximize the use of technology, especially AI, in teaching writing. By interviewing the students and analyzing students' writing by using ChatGPT and other language tools, this study was aimed to know the students' opinion on ChatGPT, students' writing by using ChatGPT and other language assistant tools, and students' opinion about using ChatGPT in writing.

METHOD

This study is a case study, thus considered as qualitative study. Kothari (2004) defined case study as a widely favored qualitative analysis method entails meticulous and comprehensive observation of a social entity, which can range from an individual, family, institution, cultural group, to even the entire community. Qualitative study was chosen because this study explains the quality of ChatGPT in English teaching, especially in writing. It also explains students' perspectives on ChatGPT compared to other English learning assistant tools. Cohen et al (2007) stated that qualitative research related to the consideration of the alternative perspective of social reality, which emphasizes the significance of individuals' subjective experiences in shaping the social world, the pursuit of comprehension revolves around distinct matters and adopts diverse methodologies. Creswell (2012) argued that there is a necessity for a qualitative research study to investigate this phenomenon through the lens of distance education students' perspectives. For those reasons, this study was presented descriptively.

There were 40 students who took a part in this research. In collecting the data, questionnaire, interviews and study reports were used. Kothari (2004) explained that depending on the prevailing circumstances, the researcher has the flexibility to employ various research methods within the case study approach. This includes options like conducting in-depth interviews, administering questionnaires, analyzing documents, studying individual reports, and examining letters, among other possibilities. Questionnaire was used to know the students' perspective towards ChatGPT and other English learning assistant tools. After knowing students' perspective towards ChatGPT,

I collected their writing to analyze the use of ChatGPT in teaching writing. There were two kinds of writing; the first one was students' writing by using English learning assistant tools they had chosen, and the second one was using ChatGPT. The last data collection was individual interviews. In this step, I did not interview all the students, but only 20 students randomly.

RESULTS AND DISCUSSIONS

Initial Research

Based on preliminary research and information gathered from a survey given to the students, it was discovered that very few of them were aware of ChatGPT as a teaching tool. Ten students—a small percentage of the overall number of respondents—knew about ChatGPT, but the bulk of respondents (the other students) were unaware of it. This data suggests that despite ChatGPT's popularity in recent years, it has not reached a significant portion of the student population surveyed. The lack of awareness could be attributed to various factors, such as limited exposure to technology, lack of promotional efforts, or inadequate information dissemination about ChatGPT as a useful English learning assistant tool. Further research and outreach efforts may be required to increase students' awareness of ChatGPT's benefits for English learning and other educational purposes.

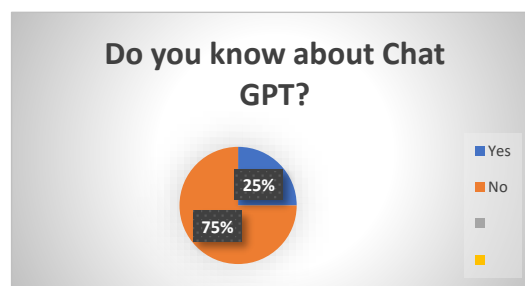


Figure 1. Students' preferences on ChatGPT

The diagram showed represents the awareness level of people regarding "ChatGPT." 25% of the individuals surveyed are aware of "ChatGPT." These people have some knowledge or information about it. On the other side, 75% of those polled were unaware of "ChatGPT." These people are unfamiliar with it or have never heard of it.. It showed that the development of the technology haven't reach many students.

The second question was about the use of ChatGPT for learning. 6 students admitted that they had never used ChatGPT for learning. Meanwhile, 4 students said that they use

ChatGPT occasionally. The rest of the students only know ChatGPT after being told about it when the research began. The diagram can be seen below.

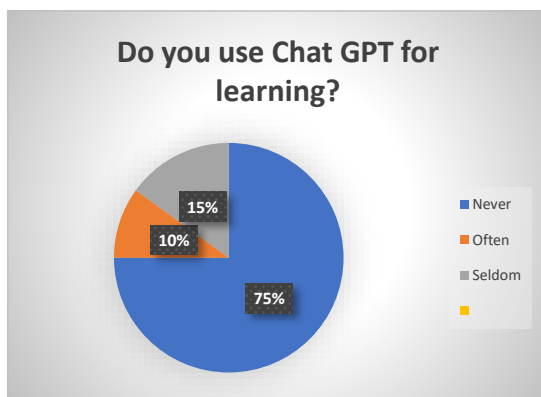


Figure 2. Students' preferences on English learning tools

From the provided information, it seems that only a small percentage (10%) of students actively used ChatGPT for learning purposes, while a slightly larger percentage (15%) used it randomly without fully benefiting from its potential. This suggests that a significant portion of students did not fully take advantage of the AI program's capabilities, including ChatGPT, which could be helpful for various purposes. The passage also mentions that students in rural areas or small districts showed little interest in exploring the advancements of technology. This lack of intention to explore technology was reflected in their responses to the first and second questions, presumably related to their usage of ChatGPT.

It's crucial to take into account the causes of this lack of interest. Given that students in rural locations do not have the same resources and opportunities as those in urban or developed areas, access to technology and internet connectivity may be important concerns. Students' views towards using technology may also be influenced by cultural or educational barriers. Initiatives could be conducted to close the digital gap and improve access to technology in rural and underserved areas in order to address this problem. Teachers might also need to implement awareness programs to demonstrate the potential benefits of AI programs like ChatGPT and encourage students to use them for their educational and personal growth.

The last question in this questionnaire was the use of English learning tools to help the students in class. All of the students used google translate and dictionary to help them learning English. It is important to note that all of the

survey participants reported using other English language learning resources, notably dictionaries and Google Translate, to support their study of the English language, despite the limited knowledge of ChatGPT as a learning tool. It might be helpful to use dictionaries and Google Translate since they instantly translate and define words and phrases, which helps pupils learn new vocabulary. But it's important to understand that while these tools can be useful for translating a single word, they might not always provide precise translations or explanations based on the context, especially for more intricate sentence structures and idiomatic expressions.

Considering that the students already utilize language learning tools, there might be an opportunity to introduce ChatGPT as an additional resource to further enhance their language learning experience. ChatGPT, being an AI-powered language model, can provide more contextually relevant responses, simulate conversational English practice, and offer explanations in a way that's closer to human interaction. Introducing students to such AI language models can expand their language learning capabilities beyond simple word translations. To promote the use of ChatGPT or similar AI language models, educational institutions or providers could organize workshops, training sessions, or informational campaigns to familiarize students with these tools' advantages and how they can effectively integrate them into their English learning journey. Additionally, incorporating AI-based language learning tools into the curriculum or providing access to them through educational platforms can further encourage their usage and improve students' language skills in the long run.

ChatGPT in Teaching Writing

The study you described seems to focus on observing how students approach writing a discussion text on a topic of their interest and how they utilize learning tools during the process. From the information provided, it appears that the students were given the freedom to choose their own topic for the discussion text and were allowed to use any learning tools they desired.

Here's a breakdown of the study process:

1. **Topic Selection:** The students were asked to choose a topic that interested them. This step aimed to engage the students and encourage them to write about something they were passionate about.

2. Writing in Bahasa Indonesia: Once the students selected their topics, they proceeded to write the discussion text in Bahasa Indonesia, which is their native language. Writing in their native language allowed them to express their thoughts and ideas more comfortably and effectively.
3. Utilization of Learning Tools: The study allowed the students to use any learning tools they wanted during the writing process. These learning tools could include various resources, reference materials, online articles, textbooks, etc. It appears that Google Translate was one of the learning tools the students opted to use.
4. Translation into English: After completing the text in Bahasa Indonesia, the students then translated their work into English using Google Translate. The reason for this step might be to practice their English writing skills or to create a bilingual version of their discussion text.

The purpose of this study might have been to explore how students approach the writing process when given the freedom to choose their own topics and use learning tools of their choice. Additionally, it could investigate the efficacy of using machine translation (Google Translate) for translating text from one language to another.

However, it's essential to note that relying solely on machine translation might have limitations, as automatic translations can sometimes be inaccurate or fail to capture the nuances of the original text. Human editing or review would be crucial to ensure the accuracy and coherence of the final translated texts.

After the translation process, the students were asked to evaluate their English-text using ChatGPT. To do this, they were required to type the word "feedback" in ChatGPT, presumably prompting the model to provide feedback on their work. The purpose of this step was likely to allow the students to assess their English writing skills and identify any mistakes or areas for improvement. By interacting with ChatGPT, the students might have received feedback on grammar, syntax, vocabulary, and overall coherence in their English text.

It's worth mentioning that while ChatGPT can provide valuable feedback, it is not infallible, and its suggestions may not always be perfect.

The students should have been encouraged to critically assess the feedback provided by ChatGPT and compare it with their own understanding and knowledge of the English language. This way, they can learn from their mistakes and make necessary corrections to improve their English writing skills further. Overall, the study design appears to foster a self-directed learning approach, allowing the students to actively engage in the writing process, translation, and self-evaluation, leading to an opportunity for continuous improvement in their English language proficiency. The example can be seen below.

Student A wrote:

"According to law number 33 of 2014, all food products, beverages, food additives for slaughter products, and slaughter services must be halal certified; otherwise, there will be sanctions"

Then, ChatGPT would give the feedback as follows:

Feedback:

The sentence you provided is well-written and effectively conveys the message about the legal requirement for halal certification. It is clear, concise, and includes all the necessary information. However, to further improve the sentence, consider the following suggestions:

1. Punctuation: Consider adding a comma after "2014" to separate the introductory clause from the main clause. This helps improve readability.
2. Capitalization: In the phrase "food additives for slaughter products," it is advisable to capitalize "slaughter products" to maintain consistency in the list of items.

Here's the revised version with the suggested changes:

"According to Law Number 33 of 2014, all food products, beverages, food additives for slaughter products, and slaughter services must be halal certified; otherwise, there will be sanctions."

This revised version maintains the clarity and effectiveness of the original sentence while addressing minor punctuation and capitalization improvements. Overall, it remains a well-structured and informative sentence.

Student B wrote:

Not everyone can bear responsibility of having children. Because having children is a big responsibility that must be fulfilled.

ChatGPT feedback:

Feedback:

The statement you provided emphasizes the significant responsibility that comes with having children and acknowledges that not everyone may be able to bear this responsibility. It highlights the importance of fulfilling the responsibilities associated with parenthood.

To further improve the statement, consider the following suggestions:

1. Consider Inclusive Language: While the statement is well-written, using more inclusive language like "not everyone may be able to bear" instead of "can" can be more sensitive to those who might face fertility challenges or other personal circumstances preventing them from having children.
2. Provide Context: Depending on the context or purpose of the statement, providing more context or elaborating on the challenges and responsibilities of parenthood could add depth to the message.

Here's the revised version, considering the suggestions:

"Not everyone may be able to bear the responsibility of having children, as it is a significant responsibility that must be fulfilled. Parenting requires commitment and consideration of various factors that impact an individual's ability to care for and support a child."

The revised version maintains the essence of the original statement while incorporating inclusive language and providing a bit more context. Overall, the statement highlights the importance of responsible parenting while respecting individual differences and circumstances.

The use of ChatGPT to provide feedback to the students allowed them to engage in self-reflection and receive the feedback they needed to improve their work. This process likely facilitated

a more personalized and interactive learning experience for the students. By interacting with ChatGPT, the students had the opportunity to compare their work with the model's suggestions, identify areas for improvement, and gain insights into potential mistakes or areas where they could enhance their writing skills. This self-reflective approach encourages students to take ownership of their learning and actively seek ways to enhance their writing abilities.

Moreover, the feedback provided by ChatGPT was likely based on language models and natural language processing capabilities, enabling it to evaluate aspects such as grammar, sentence structure, coherence, and vocabulary usage. This feedback mechanism likely helped the students understand specific areas they excelled in and areas where they needed more practice.

It's important to note that while ChatGPT can be a valuable tool for providing feedback, it may not replace human feedback entirely. Human feedback from teachers or instructors can offer a deeper level of analysis, explanation, and understanding of writing strengths and weaknesses. Therefore, a combination of AI-generated feedback and human guidance can provide a more comprehensive learning experience for the students. Overall, the use of ChatGPT to facilitate self-reflection and provide feedback appears to be a valuable approach in fostering students' learning and growth in their writing abilities.

Post Interview

After collecting the main data which was in the form of students' writing report, I did post interview. This interview was aimed to know students' perspective after using ChatGPT in writing. The interview was done to 10 students. They were chosen randomly for reliability and validity purposes. There were 3 questions in the interview; those were: 1) What do you think about ChatGPT in learning English?; 2) What kind of learning assistant tool do you prefer? Google translate or ChatGPT?; and 3) Why do you think so?

For the first question, all of the students interviewed answered that ChatGPT helped them in learning English, since they could get the feedback. As a result, they knew their mistakes and did self-reflection. In the next two questions, 80% of the students because they felt like google translate was more effective and easier to use.

They only needed to capture their writing and google translate automatically provided the translation. Meanwhile, they had to type the whole sentences or text in ChatGPT to get the translation.

CONCLUSION

The study you described involves using ChatGPT as a learning assistant tool for students in learning English writing. After collecting the main data in the form of students' writing reports, you conducted post-interviews with 10 randomly selected students to gain insights into their perspective on using ChatGPT in their English learning process. The interviews consisted of three questions to assess their thoughts and preferences. The study highlights that all students perceived ChatGPT positively, noting that it helped them in learning English by providing feedback, identifying mistakes, and facilitating self-reflection. This positive feedback reflects the potential value of using AI language models as learning aids.

The result of the study shows that 80% of the students preferred Google Translate over ChatGPT. They cited the ease and efficiency of using Google Translate, primarily due to the simplicity of capturing text for translation compared to typing entire sentences or text into ChatGPT. The study could benefit from addressing potential limitations, such as the relatively small sample size and potential biases that may arise from using a single language model (ChatGPT) for translation comparison. Additionally, further investigation into specific language learning outcomes would provide a more comprehensive understanding of the effectiveness of ChatGPT in comparison to other tools.

In conclusion, the study demonstrates positive feedback from students regarding the use of ChatGPT in English learning, particularly for its feedback and self-reflection benefits. However, the students' preference for Google Translate as a learning assistant tool due to its ease of use highlights the importance of considering user-friendliness and efficiency when implementing AI tools in educational settings. Addressing the study's limitations and conducting further research would strengthen the findings and contribute to the understanding of AI-based language learning tools' effectiveness.

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