



Artificial Intelligence: Tertiary Students Perception of Using ChatGPT in Writing Tasks

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Abstract— Artificial intelligence (AI), ChatGPT, dominates across sectors, particularly in education. Students use this AI to help them write academic tasks. This study examines the effects of OpenAI's ChatGPT on writing tasks among students. Employing a survey research design, structured questionnaires were distributed and completed by 83 first-year respondents, all Bachelor of Secondary Education majors in English, to identify areas of weakness in the respondents' writing skills, self-regulation, and engagement/motivation. The findings show that students benefit from using ChatGPT and expect increased grammar, punctuation, word formation, order of ideas, and coherence. However, the app does not help much in improving the motivation or the willingness to do the writing tasks. The results shown in the study also capture various perceptions concerning the use of ChatGPT as a learning tool and self-learning among education students. It helps track progress and handle self-assessment; however, students do not trust it to define goals, priorities, and tasks. The study implies the need to consider using AI writing tools such as ChatGPT to promote writing proficiency and design trainer programs for the relevant professions. An ethical code for the appropriate use of AI solutions in education is also suggested. The study concludes that ChatGPT enhances writing skill acquisition, but its effect on learner self-belief and self-regulation is still unknown.

Index Terms— Artificial Intelligence, ChatGPT, Education, Student Perceptions, Writing Skills.

1. Introduction

Artificial intelligence (AI) has revolutionized industries, and education is one sector that has yet to be spared. Out of all the available AI tools, ChatGPT belongs to the OpenAI company. It is a professional chatbot that stands out for its ability to produce natural language in different formats (Labadze et al., 2023). This capability has provided opportunities in more formal learning environments. However, some difficulties are also connected with students' written language usage.

AI is a system that imitates human intelligence—defined by the skill to learn, grow, solve different levels of problems, decide-making processes, and understand human language (Shidiq, 2023). It is crucial to sort out the benefits of AI integration concerning education: The future of learning is through virtual mentors, voice assistants, new content, innovative classes and teaching, automated assessment, and more personalized lessons. However, AI-based tools such as

ChatGPT can write text using different methods, including formal, informal, and written (Lancaster, 2023). These tools raise concerns in the educational context. For example, the ability of ChatGPT to process the text input undermines the authors' creativity, resulting in the absence of creativity. However, due to its comprehension of human languages, it can produce excellently written texts.

Nevertheless, there have been debates on the risks of deploying artificial intelligence, including ChatGPT, in learning; they cannot be dismissed. On the contrary, according to Muñoz et al. (2020), AI technologies like ChatGPT can positively impact motivation among students. Participation and problem-solving skills have spurred debates on their impacts on learning. Others would like it for its delivery of personalized, adaptive education (Qadir, 2022). Some people express ethical concerns, which may negatively affect the assessment (Mhlanga, 2022; Rudolph et al., 2023).

As for the studies made in Indonesia, similar arguments can be witnessed. The research on the effectiveness of the tool in expanding students' writing skills is scarce, even more so when it comes to EFL learners. In terms of Indonesian teachers or students, AI writing assistants could do a great job of enhancing students' academic results (Rahma & Fithriani, 2024). They are beneficial if used properly because they can help the subjects enhance their skills. Maybe more information about the tools and the use of AI could do the job and stop people from having misconceptions about AI. These tools emphasize the opportunities and prospects for students and teachers (Skrynnyk et al., 2022). If this tool is well adopted, ChatGPT may prove to be useful in teaching writing and lower the level of uncertainty. Despite prior studies having explored the effects of AI on students' work and the quality of their writings, more research is necessary to make exact conclusions. There is still a scarcity of studies that have explored the impact of the ChatGPT on the quality of writing.

This research aims to determine the impact of ChatGPT on a student's writing capability. By doing so, this AI writing assistant also establishes how various elements influence writing. These include grammar dictionaries. They also decode the communication and minute and high-quality writing as well. Furthermore, it focuses on Students' and teachers' cognition

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and learning processes. It includes an option to use ChatGPT functionality that enhances writing skills. It also aims to identify any capacity issues concerning implementation within an academic context. This research study will help extend the general knowledge of the effectiveness of ChatGPT and how efficient it is in enhancing writing skills among learners.

2. Methodology

A. Research Design

This study used a quantitative approach that appropriately captured how the respondents thought, acted, or felt (Almeida et al., 2017). Moreover, it is necessary to note that the choice of the quantitative approach provided better organization of the data collection process and was the most appropriate when the goal was to achieve the significance of the results. This allowed for more specific and valuable data analysis since closed-ended questions are better suited to quantitative research focusing on patterns and trends in public perceptions and responses.

B. Respondents

This study's respondents were first-year students enrolled in a BSEd (Bachelor of Secondary Education) program majoring in English. These students were studying at a community college in the province of Misamis Oriental. The researchers considered the total population of the first-year BSEd-Eng as the participants. There were 84 students enrolled in the first-year level for the second semester of the academic year 2023-2024.

C. Materials

In this study, the researcher adapted and modified a closed-ended questionnaire using a Likert scale. The questionnaire measures the students' perceptions of using ChatGPT to improve their writing skills. This modification made the questions relevant and comprehensible in the context used, enhancing the collected data's accuracy and reliability. By doing this, the researcher sought to design a questionnaire that would capture students' perceptions of ChatGPT's effectiveness in enhancing their writing skills in their respective learning

institutions.

D. Data Gathering Procedures

To ensure that ethical practice was observed during the study, the researchers had to seek permission from the institution and the program's dean before conducting the research. After obtaining the respondents' approval, the respondents duly completed and signed questionnaires, which were administered to them with their consent for their identity and personal information to remain undisclosed during the study. The researchers gathered the respondents' questionnaires and statistically used mean and standard deviation (SD), and these results were interpreted.

3. Results

This section gives results of self-generated questionnaires that captured students' insights about ChatGPT on writing. To begin with, a rating scale was used to determine a student's perspective on writing proficiency enhanced by ChatGPT. Second, conclusions were made based on data obtained from a student's perception of how engaged and motivated students would be using Chat GPT. Lastly, the student's learning is self-regulated through the use of ChatGPT. The following were the students' perceptions of using ChatGPT.

A. Writing Proficiency Using ChatGPT

Table 1 revealed that students have a positive perception of using ChatGPT as beneficial for improving their writing skills. The respondents agreed that ChatGPT helps enhance their grammar, with a mean score of 3.63 and a standard deviation of 1.39, indicating it is influential. Improvement in punctuation was also noted, with a mean of 3.93 and a standard deviation of 1.25, supporting its influential role. The impact on sentence structure received a stronger endorsement, reflected by a mean score of 4.84 and a standard deviation of 0.37, showing it is very influential. ChatGPT was also seen as significantly helping in organizing ideas more clearly, with a mean of 4.94 and a standard deviation of 0.31, categorizing it as very influential. Furthermore, students felt that ChatGPT aids in writing more

Table 1
Students' Perception of writing proficiency using ChatGPT

Indicators	Mean	SD	Description	Interpretation
<i>As a students...</i>				
ChatGPT helps improve my grammar.	3.63	1.39	Agree	Influential
ChatGPT helps improve punctuation.	3.93	1.25	Agree	Influential
ChatGPT helps improve my sentence structure.	4.84	0.37	Strongly agree	Very Influential
ChatGPT helps organize my ideas more clearly.	4.94	0.31	Strongly Agree	Very Influential
ChatGPT helps write more coherently.	3.80	1.36	Agree	Influential
Total	4.23	0.936	Strongly Agree	Very Influential

Legends: 1.00-1.79 (very uninfluential); 1.80-2.59 (uninfluential); 2.60-3.39 (neutral); 3.40-4.19 (influential); 4.20-5.00 (very influential)

Table 2
Students' engagement and motivation of using ChatGPT in writing

Indicators	Mean	SD	Description	Interpretation
<i>As a students...</i>				
Using ChatGPT makes writing more interesting.	3.80	1.17	Agree	Influential
I feel more motivated to write when I use ChatGPT.	2.21	1.05	Disagree	Uninfluential
ChatGPT encourages me to spend more time on writing assignments.	1.25	0.56	Strongly Disagree	Very Uninfluential
ChatGPT helps me stay engaged during writing tasks.	1.35	0.72	Strongly Disagree	Very Uninfluential
Enjoy writing more when I use ChatGPT.	1.43	0.71	Strongly Disagree	Very Uninfluential
Total	2.01	0.842	Disagree	Uninfluential

Legends: 1.00-1.79 (very uninfluential); 1.80-2.59 (uninfluential); 2.60-3.39 (neutral); 3.40-4.19 (influential); 4.20-5.00 (very influential)

Table 1
Students' self-regulated learning using ChatGPT

Indicators	Mean	SD	Description	Interpretation
<i>As a students...</i>				
I set specific writing goals when using ChatGPT.	1.84	1.15	Disagree	Uninfluential
I monitor my writing progress with the help of ChatGPT.	3.63	1.39	Agree	Influential
ChatGPT helps me reflect on my writing performance.	3.71	1.35	Agree	Influential
Using ChatGPT helps me become more independent in my writing.	3.63	1.39	Agree	Influential
ChatGPT helps me manage my writing tasks more effectively.	1.14	0.49	Strongly Disagree	Very Uninfluential
Total	2.79	1.154	Neutral	Neutral/Do not know

Legends: 1.00-1.79 (very uninfluential); 1.80-2.59 (uninfluential); 2.60-3.39 (neutral); 3.40-4.19 (influential); 4.20-5.00 (very influential)

coherently, with a mean of 3.80 and a standard deviation of 1.36, thus being influential. Overall, the total mean score for writing proficiency was 4.23, with a standard deviation of 0.936, concluding that ChatGPT is very influential in enhancing students' writing skills.

B. Engagement and Motivation of Using ChatGPT

Table 2 presents students' perceptions of using ChatGPT for writing tasks, which are assessed through various indicators. Students generally agree that ChatGPT makes writing more interesting, with a mean score of 3.80 and a standard deviation (SD) of 1.17, indicating an influential impact. However, students disagree that ChatGPT motivates them to write more, as reflected by a mean score of 2.21 and an SD of 1.05, deeming it uninfluential in this regard. Furthermore, students strongly disagree that ChatGPT encourages them to spend more time on writing assignments (mean: 1.25, SD: 0.56), helps them stay engaged during writing tasks (mean: 1.35, SD: 0.72), or increases their enjoyment of writing (mean: 1.43, SD: 0.71), all categorized as very uninfluential. Overall, the total mean score of 1.86 with an SD of 0.842 indicates that students generally disagree with the positive impacts of ChatGPT on their writing experiences, concluding that ChatGPT is predominantly uninfluential in enhancing their motivation, engagement, and enjoyment in writing tasks.

C. Self-Regulated Learning Using ChatGPT

The responses regarding self-regulated learning showed mixed results. Students disagreed that they set specific writing goals when using ChatGPT, with a mean of 1.84 and a standard deviation of 1.15, marking it as uninfluential. However, they agreed that ChatGPT helps them monitor their writing progress (mean of 3.63, standard deviation of 1.39) and reflect on their writing performance (mean of 3.71, standard deviation of 1.35), both categorized as influential. Furthermore, they agreed that ChatGPT helps them become more independent in their writing (mean of 3.63, standard deviation of 1.39), making it influential. Conversely, students strongly disagreed that ChatGPT helps them manage their writing tasks more effectively, with a mean score of 1.14 and a standard deviation of 0.49, indicating it is very uninfluential. The overall mean score for self-regulated learning was 2.79, with a standard deviation of 1.154, leading to a neutral or uncertain conclusion about ChatGPT's influence in this area.

4. Discussion

This current study on students' perceptions shows they have positive attitudes toward using ChatGPT to improve written

composition. Thus, it teaches them to enhance grammar, punctuation, sentence construction, the development of ideas, and the ability to make coherent pieces. The positive outlook found in the previous sub-section supports the notion that ChatGPT is a useful AI assistance for enhancing multiple elements of writing skills. The practical significance of these theoretical findings is what requires a discussion in terms of several aspects. For instance, the following teaching strategies might be used by educators who embrace AI in teaching, but not necessarily as the sole teaching strategy but as an additional approach to teaching. This could possibly mean that students would receive more individualized as well as targeted feedback about their papers and, therefore, they would also enhance their writing skills.

Table 2 captures students' attitudes toward using ChatGPT, especially in writing-related activities. They acknowledge that because of ChatGPT, it is more interesting to write, but it does not prompt them to write more. In this case, the students' percentage is low on the disagreement scale when it comes to the statement that ChatGPT enhances time for writing, enables one to remain interested, or makes writing fun. Overall, response rates suggested that using ChatGPT does not increase students' motivation, level of engagement, or enjoyment of writing. This implies that although ChatGPT can enhance the attractiveness of writing, it fosters no desire in students to spend more time or get more involved in writing tasks. Thus, educators should take these findings into consideration when employing AI in the learning environment and further look for other options influencing motivation and enthusiasm. Furthermore, learning with ChatGPT can be an auxiliary tool for students in self-learning or homework assignments and sharpening their writing ability outside of school. This could be especially valuable when students learn in large groups and receive little to no one-to-one attention from the tutors.

On the contrary, the literature review reveals conflicting findings related to self-regulated learning. Students enjoy ChatGPT's ability to oversee and criticize their performance yet fail to find it useful in defining exclusive writing objectives and organizing writing tasks. This implies that although they may improve the quality of their writing by using ChatGPT, it cannot fully assist students in self-regulation and task management. These are some of the disadvantages that teachers and curriculum developers should check and look for in how to apply ChatGPT as one of the tools in a combination of other tools that foster self-regulation and plan time management. It could mean integrating the use of AI with conventional techniques that dedicate time to student planning and assignments.

Therefore, based on the study, it is possible to conclude that ChatGPT has a high potential for enhancing students' writing in particular and academic success in general. However, it needs to be used with other learning approaches to contribute to the multiple development of learners. In the future, the use of other online tools or sources can be examined for features and ways of implementing them more effectively in the educational process regarding both the advantages and drawbacks of AI tools.

5. Conclusion and Recommendations

AI dominates and penetrates different sectors, particularly in education. Students maximize the help of these AIs when doing academic writing. The following are some of the findings of this research on the effects of ChatGPT on the composing skills of first-year college students. The aspect encompassing platforms such as Grammarly, QuillBot, Copy.ai, WordTune, and ChatGPT has ensured that students can get feedback on their work through the use of artificial intelligence platforms. However, there are limitations to this study, and it should not be generalized beyond the context in which it was undertaken with the same type and number of participants in a language learning situation. Relative to the study, it should have involved a larger number of participants from different language backgrounds as well to get a better picture of what ChatGPT has in store.

In light of this research, it could, therefore, be posited that integrating ChatGPT in writing may improve students' learning through feedback seeking, participation, and polishing of academic writing. However, it is possible to view ChatGPT's effects from a perspective other than composition proficiency, and it is critical to understand how ChatGPT affects first-year college students. Another area of concern relates to teacher perceptions about large classrooms in which ChatGPT must be effectively adopted, thus implying the need for professional development focused on using ChatGPT in combination with conventional feedback strategies. More investigations should be carried out on the impact of implementing AI varieties such as ChatGPT for learning; this needs to incorporate the pros and cons linked to users individually and in class and even the ethical implications involved. To avoid the negative aspects and

biases of ChatGPT in learning environments, it is important to practice ethics and provide guidelines on its usage in education.

To address the findings effectively, the following recommendations are proposed: Carry out short-term and huge-scale follow-up studies regarding the modifications that ChatGPT arouses in the students' performance, develop extensive professional training programs for teachers on the use of ChatGPT, with a focus on its machinist perception, usage designs, feedback strategies for massive class environments, perceptions of the teachers. Also, think about profanity and other ethical concerns that arise when using AI tools such as ChatGPT and establish ways of addressing the concerns to promote healthy use. Finally, discuss how the prolonged use of ChatGPT impacts the students' writing behaviors, habits, and conceptions of feedback in the course of their studentship.

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