
| RESEARCH ARTICLE

ChatGPT and Writing Skills: The College of Education Experience

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| ABSTRACT

Writing skills are essential for academic success and communication. With the rise of technologies like AI language models (ChatGPT), their impact on academic writing is still unclear. There is ongoing debate about both the potential benefits and the risk of misuse for academic dishonesty. This descriptive-correlational study determined the impact of ChatGPT on the level of writing skills, assess perception, ChatGPT usage and the problems encountered of the English Students. Sixty students at Mindanao State University-Lanao del Norte Agricultural College, completed self-administered Questionnaires and their responses were analyzed using statistical package for the Social Sciences (SPSS). Results indicated that the intervention (ChatGPT) applied in Experimental Group was effective in enhancing their writing skills compared to the traditional methods used with the control group. The study also found that the highest-rated statement, *"ChatGPT can enhance writing essays"* (3.13), The most used feature is *"How often do you use ChatGPT to generate outlines for your writing tasks?"* (3.10 and the highest-rated issue is *"I have difficulties in improving my writing skills"* (2.76). Based on the findings of the study, exposure to ChatGPT significantly improves respondents' writing skills, Frequent use of ChatGPT positively correlates with improved writing skills, indicating its potential as a learning enhancement tool. Thus, productive use of ChatGPT into their academic writing is recommended while minimizing its negative impact.

| KEYWORDS

artificial intelligence language models, educational technology, ChatGPT, writing skills

| ARTICLE INFORMATION

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1. Introduction

In the realm of education, writing skills hold immense importance as it is fundamental to academic success and effective communication. As student progress through their college education, developing strong writing abilities becomes crucial for their academic achievements and future professional endeavors. To support students in enhancing their writing skills, various technological advancements have been introduced, including the emergence of AI language models like ChatGPT. This chatbot is powered by OpenAI's advanced language processing algorithms. It has gained attention as a potential tool to assist students in their writing endeavors.

ChatGPT is an artificial intelligence language model that can generate human-like text based on prompts provided by users. It has been trained on a vast corpus of text from diverse sources, enabling it to generate coherent and contextually relevant responses. While originally developed for conversational purposes, ChatGPT has been increasingly explored as a tool to support writing skills. Its ability to provide immediate, need-based, and tailored feedback can be leveraged to assist students in their writing tasks. By interacting with ChatGPT, students can receive suggestions, guidance, and clarification on various aspects of writing, including grammar, mechanics, spelling, organization, and content.

The impact of ChatGPT on academia has also been a topic of significant interest to various scholars and researchers. It is stated that the full extent of ChatGPT's influence on academic writing, particularly in application essays, has yet to be fully understood (Karp, 2023). On the other hand, it is acknowledged that the use of ChatGPT by students to outsource their writing may raise concerns among educators (Bushard, 2023). These dual perspective underscores the ongoing debate surrounding the integration of AI tools like ChatGPT in educational settings, highlighting both the fascination and apprehension within the academic community about its implications for writing and learning processes.

In the context of university education, discussions about ChatGPT revolve around its potential uses and misuse, especially for academic dishonesty (Cotton, 2023 King, 2023 Stutz 2023). Amidst these concerns, a critical question to ask is how reliant are students on ChatGPT? This is an aspect of students' ChatGPT practices that lacks in-depth exploration (Stojanov, 2023).

Reliance connotes a degree of dependence and reliance on ChatGPT indicates the extent to which individuals are dependent on it to perform their tasks. Reliance on ChatGPT is conceptually different from frequency of use. It is concerned with how central ChatGPT is to students' performance of a task. One student may frequently use ChatGPT together with literature search to generate ideas for assignments while another may use ChatGPT occasionally. However, to the latter student, ChatGPT may play a more crucial role in idea generation. Reliance on ChatGPT is therefore concerned with the extent that students consider it to be integral to their learning processes.

Incorporating ChatGPT into language learning in higher education offers many opportunities for exploration and research (Rasul et.al 2023). One of the most significant areas of research would be to evaluate the contribution of ChatGPT in language learning through empirical studies. By comparing language learners who use ChatGPT with those who do not, researchers could identify the advantages of this technology. These studies could measure various language proficiency metrics such as vocabulary, grammar, reading comprehension, or speaking abilities. Additionally, evaluating the accuracy and coherence of ChatGPT's generated text and detecting and mitigating potential biases or stereotypes in its output could enhance the safety and efficiency of utilizing ChatGPT in language learning.

Moreover, further research must also emphasize the ethical and social ramifications of utilizing ChatGPT in language learning. Such research would investigate the impact of ChatGPT on language teachers, learners, and society at large, through techniques such as surveys, interviews, focus groups, or other qualitative or quantitative methodologies. The outcomes of this research could shed light on the ethical and social implications of using ChatGPT in language learning and provide valuable insights into this subject. Furthermore, studying the limitations of ChatGPT in processing complex or abstract concepts and investigating its potential applications in language learning games, providing feedback on learners' writing, and assisting with language translation, among others, could open new possibilities in language learning. This study aimed to explore the utilization of ChatGPT as a writing tool in the College of Education, specifically, the Bachelor of Secondary Education majoring in English, focusing on its potential to enhance writing skills, facilitate the writing process, and contribute to student learning outcomes.

2. Literature Review

2.1 ChatGPT: An Overview

To begin, it is important to grasp the concept of ChatGPT. ChatGPT is a chatbot based on the GPT (Generative Pretrained Transformer) model, that is trained to understand natural language and generate human-understanding texts based on prompts (Cheng 2023). Since then, its learning parameters, as well as its neural network, have expanded, enabling it to generate texts of progressively higher quality (Floridi and Chiriatti, 2020). Since its initial release, ChatGPT has undergone iterative enhancements, refining its language generation capabilities to create contextually relevant and coherent responses. Through continuous training on vast datasets from various sources, ChatGPT has expanded its knowledge base and linguistic proficiency. This iterative learning process has enabled ChatGPT to adapt to diverse prompts and generate responses that align closely with human language patterns. the development of ChatGPT represents a milestone in natural language processing and artificial intelligence, showcasing the potential of transformer-based models in conversational AI applications. By leveraging the power of deep learning and neural networks, ChatGPT has been able to engage users in meaningful conversations, provide informative responses, and mimic human-like interaction successfully. The advancements in learning parameters and neural network architecture have played a crucial role in enhancing the text generation capabilities of ChatGPT, making it a valuable tool for various applications, including customer service, education, and content generation. As ChatGPT continues to evolve and expand its capabilities, it remains at the forefront of AI-driven conversational agents, shaping the future of human-computer interaction and language understanding.

2.2 Utilizing Technology in Education

Technology integration into education has been a transformative force in the 21st century, significantly shaping how we teach and learn (Zakrzewski & Newton, 2022). Moreover, Katemba (2022) claimed in her study that English teachers are now using computer technology to grab students' attention and pique their enthusiasm in learning the language. People now have access to

information and technologies that can greatly improve their writing skills, which will increase their English communication proficiency thanks to technological improvements. These advancements in technology have highlighted how crucial it is to improve writing abilities to keep up with the ever-evolving communication scene. E-learning platforms and online writing tools have revolutionized the acquisition and refinement of writing skills, providing a novel and creative avenue for skill development. Writing communities facilitated by technology enable students to share their work and receive feedback, enhancing the learning process (Manullang, H. E., & Katemba, 2023;). The relationship between artificial intelligence (AI) and education has been closely intertwined since the inception of AI. Numerous pioneers of AI in its early days were also cognitive scientists who made significant contributions to education. These researchers viewed AI as a valuable instrument for contemplating human learning, utilizing their insights into the learning process to propel the development of AI. According to Abimanto (2023),

2.3 The Writing Skill

Writing skill remains a critical competency in education and professional communication, evolving with new pedagogical insights and technological advances. Recent studies have focused on how writing is learned, taught, and improved in various contexts, emphasizing both cognitive processes and external factors that shape writing development. Writing skill continues to be understood as a complex, multifaceted ability involving linguistic accuracy, coherence, content organization, and the strategic use of language (Graham & Harris, 2019). Current research stresses the integration of digital literacy and multimodal elements into traditional writing skills, reflecting the changing nature of communication in the digital age (Hsieh et al., 2021). Recent investigations underscore the role of writing as a tool for critical thinking and knowledge construction, particularly in academic settings (Kim & Lee, 2022). Furthermore, effective writing is highlighted as essential in professional environments where clear, persuasive communication impacts organizational success (Zhao & Hu, 2020). Studies highlight that writing development depends on cognitive abilities, motivation, instruction quality, and socio-cultural factors (Wang & Wen, 2019). The process approach to writing, which encourages drafting, revising, and peer feedback, remains widely endorsed (Lee et al., 2020). Moreover, motivation and learner autonomy are identified as key to sustained writing improvement (Sato, 2021). Recent research points out ongoing challenges such as writer's anxiety, limited vocabulary, and difficulties with cohesion and coherence in second language writing (Nguyen & Boers, 2020). Additionally, disparities in digital access and proficiency can create gaps in writing skill acquisition (Park & Kim, 2022). The integration of technology into writing instruction has been transformative. AI-based tools and automated feedback systems offer immediate, personalized support, helping learners refine grammar, style, and structure (Chen et al., 2021). Online collaborative writing platforms facilitate peer interaction and iterative improvements, supporting socio-constructivist approaches to writing (Garcia & Bae, 2020).

2.4 ChatGPT as a Writing Support Tool

ChatGPT has emerged as a powerful digital assistant in the realm of writing, offering users real-time feedback and support that can enhance various aspects of the writing process. As an AI language model, ChatGPT is capable of generating coherent sentences, suggesting vocabulary improvements, and providing structural organization, which are essential components for developing effective writing skills. Studies have shown that learners utilize ChatGPT to brainstorm ideas, draft outlines, and improve grammatical accuracy, making the tool especially beneficial for students who struggle with generating content independently (Davis, Wang & Martinez, 2024). ChatGPT's ability to offer immediate suggestions helps reduce the cognitive load associated with writing, allowing students to focus more on expressing their thoughts clearly and logically (Mohammadi & Hashemi, 2024). Furthermore, ChatGPT supports iterative writing practices, where students can engage in multiple rounds of drafting and revision based on the AI's feedback. This dynamic interaction fosters deeper engagement with the writing process, encouraging learners to refine their work continuously rather than settling for initial drafts (Shahsavari & Kafipour, 2024). Additionally, ChatGPT's personalized assistance caters to individual learner needs, providing scaffolding that adapts to different proficiency levels. For non-native English speakers, this means enhanced opportunities to expand vocabulary, improve sentence structure, and adhere to academic writing conventions (Mohammadi & Hashemi, 2024; Shahsavari & Kafipour, 2024). However, it is important to recognize that while ChatGPT offers valuable support, it functions best when integrated with human oversight. Teachers play a critical role in guiding students on how to use AI feedback critically, ensuring that learners develop autonomy and avoid over-dependence on automated suggestions (Brown & Nguyen, 2025). When used thoughtfully, ChatGPT can act as a collaborative writing partner that complements traditional instruction, ultimately contributing to improved writing skills and confidence (Mahapatra, 2024).

2.5 Impact of ChatGPT on Writing Quality and Student Performance

Empirical research increasingly shows that ChatGPT can positively influence the quality of student writing by enhancing various key components such as structure, coherence, vocabulary, and mechanics. Studies involving college students reveal that ChatGPT's real-time feedback helps learners organize their ideas more logically, improving the overall flow and clarity of their texts (Mahapatra, 2024; Shahsavari & Kafipour, 2024). For example, a field experiment with Iranian EFL students demonstrated that combining ChatGPT with teacher feedback led to significant improvements not only in grammar and vocabulary but also in task achievement and cohesion compared to teacher-only feedback groups (Mohammadi & Hashemi, 2024). Additionally, medical undergraduates using ChatGPT produced richer content and better-organized essays than their peers who did not use the tool,

highlighting ChatGPT's potential to support domain-specific academic writing (Shahsavari & Kafipour, 2024). Students also reported increased confidence in their writing abilities when guided by ChatGPT, attributing this to the AI's prompt suggestions for vocabulary enhancement and error correction (Davis, Wang, & Martinez, 2024). However, it is essential to note that the quality improvements are maximized when ChatGPT is integrated thoughtfully with human instruction. The combination of AI support and teacher guidance creates a balanced learning environment that fosters both technical skill development and critical thinking. This synergy ensures that ChatGPT acts as a catalyst for improved writing performance rather than a replacement for foundational writing skills.

2.6 Coping Mechanisms Adopted to the Difficulty in Writing

A good and fluent English writer can establish broader connections with a diverse population. The acquisition of these language skills has become a requirement for survival in the modern era. There were some gaps in the acquisition of these skills, particularly writing, which is regarded as a herculean task by many teachers and students. The study findings revealed several problems in grammar, syntax, spelling, punctuation, and vocabulary choice. In addition to these problems, redundancy of content, mother tongue interference, and genre identification were also identified (Peter & Singaravelu, 2021). Students coped with difficult text or words that are hard to comprehend by avoiding reading such words whenever possible and staying quiet during discussions that had involved prior reading either by themselves or by the teacher (Anderson, 2021). Moreover, the coping strategies used by students to overcome writing difficulty are preparation, positive thinking, relaxation, peer-seeking, and resignation (most frequent to least frequent, respectively) (Wahyumi, Oktavia & Marlina, 2019).

2.7 Challenges and Ethical Considerations in Using ChatGPT for Writing

While ChatGPT offers significant support for developing writing skills, its use also raises several challenges and ethical concerns that educators and students must carefully consider. One major issue is plagiarism and academic integrity. Because ChatGPT can generate entire paragraphs or essays instantly, there is a risk that students might submit AI-produced work as their own, bypassing the critical thinking and learning processes essential for skill development (Brown & Nguyen, 2025). This misuse undermines educational goals and raises questions about authorship and originality. Over-reliance on ChatGPT is another concern. Studies warn that students may become dependent on AI tools for writing tasks, which can lead to reduced effort in learning fundamental writing skills such as idea generation, organizing arguments, and proper citation (Smith, Johnson, & Lee, 2025). This dependency may hinder long-term cognitive growth and creativity, an effect sometimes described as "metacognitive laziness." Authenticity in student writing is also debated. While ChatGPT can assist in grammar and structure, it may produce outputs lacking a personal voice or critical depth, which are crucial for academic and professional writing (Davis, & Martinez, 2024). Thus, educators emphasize the importance of teaching students to use ChatGPT as a tool for inspiration and revision rather than a shortcut. To address these challenges, many educators advocate for integrating AI-aware policies, promoting transparency about AI use, and designing assignments that encourage original thought and critical engagement with technology (Garcia & Thompson, 2024; Brown & Nguyen, 2025). Combining ChatGPT with oral assessments, reflective writing, and personalized feedback helps maintain academic integrity while harnessing AI's benefits in writing education.

3. Methodology

3.1 Research Design

The descriptive-correlational method was employed in this study which involved collection of data to answer the questions concerning the study and attempts establish the relationship between the independent and dependent variables. In this study, the participants were grouped into two groups which are the control and experimental group. Both groups took the pretest and posttest. The Experimental group took pre-test through essay provided with the writing prompt in a span within forty minutes; after having the pretest they were orientated for thirty minutes and use ChatGPT for forty-five minutes. While the control group were having lecture about basics on how to write essays about life. Afterwards, both groups took posttest through essay provided with the writing prompt in a span of forty minutes. Lastly, experimental answered a survey questionnaire to elicit data about their perception towards ChatGPT.

3.2 Research Environment

The study was conducted at Mindanao State University Lanao Del Norte Agricultural College. The school is located at Ragain, Sultan Naga Dimaporo-Lanao del Norte, Mindanao, Philippines only 0.06 miles away from the main office of the Municipality of Sultan Naga Dimaporo. The school offers Academic Track and Technical Vocational Track for Senior High School enrollees. With an eco-friendly and conducive learning environment, the school also accepts bachelor's Programs in Education, Information Technology, Computer Studies and Agriculture. The school was in the inner part of Ragain, Sultan Naga Dimaporo. The place was inhabited by people from various cultural backgrounds who coexisted peacefully and harmoniously, primarily Christians and Muslims. In the southwest of the province of Lanao del Norte is Sultan Naga Dimaporo. The municipalities of Tukuran and Aurora, both in Zamboanga del Sur, border it on west. Its southeast border is with the municipality of Picong, Lanao Del Sur. Most of the students at the school are Christians and Muslims. This Institution is one of the eleven campuses of the of Mindanao State

University system. The focus of the school is Agriculture. This institution has a welcoming atmosphere and is surrounded by trees, which can make it conducive to learning for the students. The goal of this university is to create self-reliant students and high-quality educators

3.3 Respondents of the Study and Sampling Technique

The respondents of this study were the 1st year to 3rd year students from the College of Education majoring in English at Mindanao State University-Lanao del Norte Agricultural college who are officially enrolled in the school year 2024-2025 and the official enrolled students were seventy-four. The researchers chose the 1st year to 3rd year students from the College of Education through stratified random sampling technique where sixty students of the target population involved in this study. In first year, there were nineteen students, 2nd year level there were 21 and 3rd year there were twenty participants were equally divided to control and experimental groups. Smartphone ownership and ChatGPT installation was assessed before the distribution to the control and experimental group.

3.4 Research Instrument

The instruments used in this study were questionnaire and writing test which consisted typically of a series of printed questions classified according to the variables raised in this study. Rubrics were also utilized in rating the writing tests. The questionnaire and writing test were the vital tools needed for this research venture. Writing test is an essay which were checked by three raters who are in the field of English Language Teaching. The questionnaires used was divided into Four parts, the parts are the following. Part I of the questionnaires focused on the level of writing skills the pretest and the post test of the respondents. Part II focused on the survey of the respondent's perception of ChatGPT usage to writing skills, Part III focused on how Frequent the respondents use ChatGPT. Part IV survey on the challenges encountered by the respondent's in using ChatGPT

3.5 Data Gathering

The researchers employed the following steps in gathering the data in this study. First the researchers secured permit and approval from the CREC committee, Dean of Instruction, College of Education Coordinator, College of Education Chairperson and Thesis Adviser. Second, the questionnaires underwent pilot testing and reliability test. Third, the researchers conducted an orientation to the respondents and execute consent signing for their participation to this study. forth, the respondents were grouped into two groups the control and experimental groups. Fifth, the researchers administered the writing pretest. Sixth, the experimental respondents were exposed to ChatGPT while the control group had lecture. Seventh, the respondents administered the posttest. Eight, the researchers administered the survey questionnaire to the experimental group. And lastly, the written composition of the respondents is rated by the three requested raters. After that, the researchers checked and record the written test for data analysis.

3.6 Data Analysis

The data that were gathered from the respondents' responses to the questionnaires and other facts that were presented served as the basis for the analysis, interpretation and investigation. To make accurate interpretation of the data, the following statistical tools were used.

1. Weighted Mean. This was used by getting the average score of the respondent response on the levels of writing skills of the respondents during pretest, this was also used to determine the levels of writing skills of the respondents during posttest, what are the perceptions of the respondents on the use of ChatGPT, the frequency of using ChatGPT, and the problems encountered by the respondents during use of ChatGPT.

2. T-test. This was used to calculate the mean and the standard deviation (SD) of the pre-test and post test to determine the significant difference in the levels of writing skills during the pretest and posttest of the respondents who have no exposure to ChatGPT, significant difference in the levels of writing skills during pretest and posttest of the respondents who have exposure to ChatGPT and, significant difference between the Posttest scores of the control group and the Experimental group.

3. Chi Square. This was used in obtaining the significant relationship between the perception of the respondents on ChatGPT and the levels of writing skills of the respondents, relationship between the frequency of the use of ChatGPT and the levels of writing skills of the respondents and significant relationship between the problems encountered in using ChatGPT to the levels of writing skills.

All the computation will be done through micro statistics software, the statistical package for the social sciences, SPSS from the statistician.

4. Results

4.1 Levels of Writing Skills of the Respondents During Pretest

The pretest results reveal that both the control and experimental groups demonstrated similar levels of writing skills across most criteria as shown in table 4.1 Regarding grammar, both groups scored a mean of around 1.72 to 1.73, which corresponds to a "Fair" level, indicating that their grammar skills were average before any intervention. Mechanics, which includes punctuation and capitalization, was also rated as "Fair" for both groups, with means slightly below grammar scores. Spelling was a strong point for both groups, though the control group performed better, achieving an "Excellent" rating with a mean score of 3.73, compared to the experimental group's "Very Good" rating with a mean of 3.34. The organization of ideas was similarly rated "Fair" in both groups, suggesting a moderate ability to structure their writing logically. For content, both groups scored at a "Good" level, showing they were fairly capable of developing ideas and delivering meaningful content. Overall, the grand weighted means indicated that both groups possessed "Good" writing skills during the pretest, with the control group scoring slightly higher (2.10) than the experimental group (2.05). These findings suggest that before any instructional intervention, the writing abilities of both groups were fairly comparable, with spelling being a notable strength and Grammar, mechanics, and organization are crucial areas that require focused attention, support and needed intervention to enhance the current proficiency levels in writing skills.

This result justifies the study of Graham and Harris (2023) who examined the effectiveness of instructional interventions in various writing skills among students with learning disabilities. Their research found that while students often exhibited strengths in spelling, they faced significant challenges in areas such as grammar and composition. The study suggests that instructional efforts may be more beneficial when focused on these areas of weakness, rather than on spelling, to enhance overall writing proficiency.

Table 4.1 Levels of Writing Skills of the Respondents During Pretest

CRITERIA	CONTROL GROUP		EXPERIMENTAL GROUP	
	MEAN	VERBAL INTERPRETATION	MEAN	VERBAL INTERPRETATION
Grammar	1.72	Fair	1.73	Fair
Mechanics	1.45	Fair	1.58	Fair
Spelling	3.73	Excellent	3.34	Very Good
Organization	1.47	Fair	1.54	Fair
Content	2.11	Good	2.06	Good
GRAND WEIGHTED MEAN	2.10	Good	2.05	Good

4.2 Levels of Writing Skills of the Respondents During Posttest.

The post-test results reveal a marked improvement in the writing skills of the experimental group compared to the control group across all assessed criteria. As shown in table 4.2 The experimental group achieved an overall grand weighted mean of 3.49, interpreted as "Excellent", while the control group attained only 2.39, rated as "Good". This score difference suggests that the intervention applied to the experimental group was effective in enhancing their writing proficiency. Specifically, the experimental group excelled in grammar (3.66), organization mechanics (3.40), (3.31), and content (3.08), with all scores ranging from "Very Good" "to "Excellent". In contrast, the control group only reached "Good" in grammar (2.17) and content (2.42), and "Fair" in mechanics (1.71) and organization (1.7). Although both groups performed excellently in spelling (3.96) for control and (4.00) for experimental), this was the only criterion where their performances were nearly identical. These findings imply that the instructional intervention implemented with the experimental group had a strong positive impact on multiple aspects of their writing skills, particularly in grammar, mechanics, and organization, areas where the control group lagged. This improvement supports the effectiveness of the pedagogical approach used and justifies its potential application in broader educational settings to enhance student writing proficiency. Moreover, the consistently higher ratings across all criteria for the experimental group demonstrate that the observed improvements are not isolated to one area but rather reflect a comprehensive advancement in writing abilities.

This result is similar to the study by Jahan et al. (2024) titled "Enhancing Practical English Grammar Skills through AI: A Study on the Impact of ChatGPT-Assisted Feedback on Student Writing" examined the effectiveness of ChatGPT in improving students' English grammar skills. The research involved ten students from the University of Education, Lahore, who received AI-assisted feedback on their writing over one month. The study found that integrating ChatGPT into educational strategies significantly enhanced learners' grammar skills. It also suggested that such tools could complement traditional teaching methods by offering interactive, personalized, and consistent support for learners. Additionally, according to Technological determinism theory by Thorstein Veblen (1857-1929), believes that technology is the principal initiator of society's transformation. This theory holds

significant relevance to the impact of ChatGPT on writing skills play a central role in shaping social change and development. By utilizing ChatGPT, students are exposed to a powerful tool that not only aids in the writing process but also transforms their approach to composition, reflecting the theory's premise that technology drives societal evolution and influences the way individuals interact with written communication.

Table 4.2 Levels of Writing Skills of the Respondents During Post-test.

CRITERIA	CONTROL GROUP		EXPERIMENTAL GROUP	
	MEAN	VERBAL INTERPRETATION	MEAN	VERBAL INTERPRETATION
Grammar	2.17	Good	3.66	Excellent
Mechanics	1.71	Fair	3.40	Excellent
Spelling	3.96	Excellent	4	Excellent
Organization	1.7	Fair	3.31	Excellent
Content	2.42	Good	3.08	Very Good
GRAND WEIGHTED MEAN	2.39	Good	3.49	Excellent

4.3 The Difference Between the Pretest and Posttest of the Control Group

The data in Table 4.3 shows the comparison of writing performance between the pretest and posttest scores of the control group. The p-value of 0.001 indicates that there is significant difference in the writing performance between the two tests, as it is below the chosen level of significance (0.05) with a degree of freedom (df) of 29, the result suggests that some improvement in writing occurred between the pretest and posttest for the control group. Therefore, the study failed to accept the null hypothesis stating that there is no significant difference between the pretest and posttest scores of the control group.

The significant difference in writing skills between the pretest and posttest for the control group implies that the respondents made measurable progress during the study period, even without exposure to an intervention like ChatGPT. This improvement may be attributed to regular writing practice, traditional instructional methods, or other external factors that contributed to their skill development. This result is similar to the study by Graham and Harris (2019) which conclude that traditional instructional methods and regular writing practice can lead to significant improvements in students' writing skills, even without the integration of advanced technological tools like ChatGPT.

Table 4.3 The Difference Between the Pretest and Posttest of the Control Group

Variables	Posttest p-value	Degrees of freedom	Verbal Interpretation
Pretest	0.001	29	Significant

Level of Significance: 0.05

4.4 The Difference Between the Pretest and Posttest of the Experimental Group

Table 4.4 presents the data that indicates the difference between the pretest and posttest scores of the experimental group. The p-value of 0.001 is highly significant ($p < 0.05$), which means that the difference between the pretest and posttest scores is statistically significant. Hence, there is an improvement in the performance from the pretest to the posttest is unlikely to have occurred by chance. The degrees of freedom (58) represent the sample size minus one, which helps determine the statistical significance of the results. Since the p-value is lower than the level of significance (0.05), we failed to accept the null hypothesis stating that there is no significant difference between the levels of writing skills during pretest and posttest scores of the experimental group. Hence, the result shows that the intervention or treatment applied to the experimental group had a meaningful impact to the writing skills of the respondents. This indicates that the experimental group showed a statistically significant improvement in performance between the pretest and posttest, reflecting the effectiveness of the intervention.

The significant difference between the pretest and posttest scores of the experimental group implies that exposure to the intervention in the experimental group had a substantial positive impact on their writing skills. This suggests that the use of AI tools like ChatGPT can enhance writing performance more effectively than traditional instructional methods alone. writing of respondent Joke from Experimental Group during the pretest and posttest of as shown in figure 4.4

This study is similar by Beck and Levine (2023) who examined the impact of ChatGPT on writing instruction. The research found that students using ChatGPT as a writing support tool demonstrated significant improvements in their writing skills compared to those who did not use the AI tool. This suggests that integrating AI tools like ChatGPT can enhance writing performance more effectively than traditional instructional methods alone.

Table 4.4 The Difference Between the Pretest and Posttest of the Experimental Group

Variables	Posttest	Degrees of Freedom	Verbal Interpretation
	p-value		
Pretest	0.001	58	Significant

Level of Significance: 0.05

4.5 The Difference in the Posttest Scores of the Respondents Between the Control Group and Experimental Group.

In Table 4.5, the data compares the posttest scores of the experimental group and the control group. The p-value of 0.001 indicates a statistically significant difference in the writing performance between the two groups, as it is lower than the chosen level of significance (0.05). With a degree of freedom (df) of 58, this result suggests that the experimental group, which was exposed to the intervention (ChatGPT), outperformed the control group in the posttest. The significant difference between the posttest scores of the experimental and control groups implies that the intervention applied to the experimental group, (ChatGPT), was effective in enhancing their writing skills compared to the traditional methods used with the control group. This suggests that innovative teaching tools, like AI-driven platforms, can have a meaningful impact on student performance by providing personalized feedback, idea generation, or grammar support.

Zhang et al. (2024) support the results when they examined the effectiveness of ChatGPT in enhancing English as Foreign Language in students' writing skills. The research found that students who received feedback from ChatGPT demonstrated significant improvements in their writing abilities compared to those who did not use the AI tool. This suggests that integrating AI-driven platforms like ChatGPT can have a meaningful impact on student performance by providing personalized feedback, idea generation, and grammar support.

Table 4.5 The Difference in the Posttest Scores of the Respondents Between the Control Group and Experimental Group.

Variables	p-value	Degrees of Freedom	Verbal Interpretation
Posttest Score	0.001	29	Significant

Level of Significance: 0.05

4.6 Perception of the Respondents in using ChatGPT

Table 4.6 reveals the perceptions of participants regarding the use of ChatGPT to enhance writing skills. Based on the responses, the three highest-scored statements reflect a more positive perception of ChatGPT's impact on writing abilities. The highest-rated statement, *"ChatGPT can enhance writing essays"* (3.13), This was the most agreed-upon statement, suggesting that users find ChatGPT particularly helpful in structuring and composing essays. It likely reflects how the tool assists with organization, coherence, and idea development, key components of essay writing. The next statement with the highest mean is *"ChatGPT can enhance vocabulary"* (3.10), suggests that participants value ChatGPT's ability to expose them to a wider range of vocabulary, potentially offering synonyms, varied word choices, and context-specific language that may not come naturally to all writers. The third-highest score, *"I believe that ChatGPT can enhance overall writing proficiency"* (2.83), While this score is slightly lower, it still reflects a positive perception that extends beyond specific skills (like essays or vocabulary) to a broader belief that ChatGPT contributes to general writing development. On the other hand, the three lowest-rated statements reveal more skepticism about ChatGPT's impact. The lowest-rated statement, *"I feel more confident in my writing abilities after using ChatGPT"* (2.66), This was the lowest-rated item, indicating that while ChatGPT may assist in the writing process, it does not necessarily translate into increased self-confidence. This might point to a dependency on the tool rather than an internalization of writing strategies. Similarly, *"I recommend ChatGPT to others for incorporating writing skills"* (2.73) suggests hesitation in endorsing ChatGPT to peers, perhaps due to limitations in critical thinking development, lack of human feedback, or concerns about overreliance on AI-generated content. The third-lowest score, *"ChatGPT plays a crucial role in learning"* (2.70), participants appear unsure about its significance in their broader learning experience. This reflects the idea that while it is a helpful supplement, it may not be seen as essential to academic growth or learning autonomy. The grand weighted mean of 2.84 suggests that, on average, participants agree that

ChatGPT has a positive influence on writing, although there is some hesitation, particularly in areas of confidence-building and recommending its use to others. This indicates that while ChatGPT is seen as a useful tool for enhancing writing skills, there are areas of concern, particularly regarding its long-term impact on confidence and its crucial role in learning.

Integrating AI tools like ChatGPT into writing instruction has been shown to enhance students' writing abilities, particularly in content development. A study by David James Woo et al. (2023) titled "Exploring AI-Generated Text in Student Writing: How Does AI Help?" examined how English as a Foreign Language (EFL) students utilized AI-generated text in their writing. The research found that incorporating AI-generated content significantly improved the quality of both high-scoring and low-scoring students' writing, suggesting that AI tools can be valuable in enhancing specific aspects of writing, such as content development.

Table 4.6 Perception of the Respondents in Using ChatGPT

	FREQUENCY	MEAN	VERBAL INTERPRETATION
1.	ChatGPT can enhance writing essays.	3.13	Agree
2.	ChatGPT can enhance vocabulary.	3.10	Agree
3.	I recommend ChatGPT to others for incorporating writing skills.	2.73	Disagree
4.	ChatGPT plays a crucial role in learning.	2.70	Disagree
5.	I feel more confident in my writing abilities after using ChatGPT.	2.66	Disagree
6.	I think ChatGPT creates a negative impact on learning.	2.80	Agree
7.	I see some improvement in my writing skills using ChatGPT.	2.73	Agree
8.	I encountered a negative effect while using ChatGPT.	2.90	Agree
9.	I believe that ChatGPT can enhance overall writing proficiency.	2.83	Agree
10.	I believe that using ChatGPT will have a long-term positive impact on my writing skills.	2.80	Agree
GRAND WEIGHTED MEAN		2.84	Agree

4.7 Frequency of the Use of ChatGPT

Table 4.7 reveals how frequently participants use ChatGPT for various writing-related tasks. The three highest-rated uses of ChatGPT are associated with generating, refining, and organizing content. The most commonly used feature is "*How often do you use ChatGPT to generate outlines for your writing tasks?*" (3.10), indicating that ChatGPT is often relied upon to help structure writing projects. This is followed by "*How often do you use ChatGPT for brainstorming creative content?*" (3.06) and "*How often do you use ChatGPT to refine or revise your drafts?*" (3.06), both showing that users turn to ChatGPT frequently for content generation and improving their drafts. These activities highlight that ChatGPT plays a central role in the initial stages of writing and the revision process, helping users organize and develop their ideas effectively. In contrast, the three lowest-rated uses reflect areas where ChatGPT is used less frequently, albeit still regularly. The lowest-rated feature, "*How often do you use ChatGPT for grammar and spelling checks?*" (2.76), indicates that while users do use ChatGPT for grammar and spelling corrections, they do not rely on it as heavily as for content generation or revision. This could suggest that participants prefer other specialized grammar check tools or methods. Similarly, "*How often do you use ChatGPT for answering English homework?*" (2.86) suggests a relatively lower frequency of ChatGPT use for direct academic tasks like homework, perhaps due to concerns about academic integrity or a preference for other resources. "*How often do you use ChatGPT to receive feedback on your writing?*" (2.93) shows that participants do not rely as much on ChatGPT for feedback, potentially indicating that they value human feedback more or prefer more detailed critique. The grand weighted mean of 2.98 suggests that, on average, participants use ChatGPT "often" for various writing tasks, with a particular emphasis on generating content, organizing ideas, and refining drafts. However, tasks such as grammar checking, homework help, and receiving feedback are less frequent, which may imply that while ChatGPT is an effective tool for certain aspects of writing, it is not always seen as the go-to solution for more traditional academic functions or for receiving in-depth critique. This also suggests a potential opportunity for improvement in areas where users may still rely on other tools or human input, particularly in areas like grammar and feedback.

The data consistently shows that respondents engage with ChatGPT "often" for a variety of writing-related tasks, with generating outlines and brainstorming creative content being the most frequent activities. This indicates that ChatGPT is a regularly used tool in respondents' writing processes, enhancing various aspects of their work from drafting to refining content. To support, Javaid et al. (2023) in their study reveal that Students' perception of ChatGPT as a conversation partner contributes significantly to their writing proficiency. Beyond feedback provision, ChatGPT's conversational capabilities allow learners to engage in interactive writing practice.

Table 4.7 Frequency of the Use of ChatGPT

	FREQUENCY	MEAN	VERBAL INTERPRETATION
1.	How frequently do you use ChatGPT for writing purposes?	3.03	Often
2.	How frequently do you use ChatGPT for research and gathering information?	2.96	Often
3.	How frequently do you use ChatGPT for grammar and spelling checks?	2.76	Often
4.	How frequently do you use ChatGPT to answer English homework?	2.86	Often
5.	How frequently do you use ChatGPT for brainstorming creative content?	3.06	Often
6.	How frequently do you consult ChatGPT for help with unfamiliar words or definitions?	3.03	Often
7.	How frequently do you use ChatGPT to generate outlines for your writing tasks?	3.10	Often
8.	How frequently do you use ChatGPT to refine or revise your drafts?	3.06	Often
9.	How frequently do you use ChatGPT to receive feedback on your writing?	2.93	Often
10.	How frequently do you use ChatGPT to enhance the tone or style of your writing?	3.00	Often
GRAND WEIGHTED MEAN		2.98	Often

4.8 Problems Encountered by the Respondents in Using ChatGPT

Table 4.8 shows the various challenges participants face when writing in English, with some difficulties occurring more frequently than others. The three highest-rated problems are related to common writing challenges, particularly those that reflect a lack of confidence or proficiency. The highest-rated issue is *"I have difficulties in improving my writing skills"* (2.76), indicating that participants often struggle with enhancing their writing abilities. This is followed by *"I faced a difficulty in my grammar in English"* (2.76), suggesting that grammar remains a persistent area of difficulty. Another common challenge is *"I cannot easily use the words on how to apply it in a sentence"* (2.63), highlighting struggles with vocabulary application and sentence construction. On the other hand, the three lowest-rated problems indicate challenges that are less frequently encountered. The lowest-rated issue, *"I feel stressed when writing a text in English in the classroom"* (2.46), shows that stress is not as significant a barrier for most participants, suggesting a relatively comfortable environment when writing in English. Similarly, *"I faced difficulty in writing because of lack of focus"* (2.46) and *"I faced difficulty in writing because of my lack of interest in writing"* (2.63) show that while participants may occasionally face focus or interest-related challenges, these are not as pervasive as issues related to skills and grammar. The grand weighted mean of 2.62 implies that participants "agree" that they face challenges when writing in English, particularly in areas like improving writing skills, grammar, and applying vocabulary in sentences. These difficulties are significant enough to impact their confidence and performance in writing tasks. The relatively lower scores for stress, focus, and interest imply that while these factors contribute to challenges, they are not as critical as the need for better skills and grammar understanding. This highlights a potential area for intervention: providing more targeted support for improving grammar, writing skills, and vocabulary application could significantly help participants overcome these common writing challenges. Additionally, addressing issues related to focus and interest may further support participants in engaging more effectively with writing tasks.

As stated by Peter & Singaravelu (2022), a good and fluent English writer can establish broader connections with a diverse population. The acquisition of these language skills has become a requirement for survival in the modern era. There were some gaps in the acquisition of these skills, particularly writing, which is regarded as a herculean task by many teachers and students.

The study findings revealed several problems in grammar, syntax, spelling, punctuation, and vocabulary choice. In addition to these problems, redundancy of content, mother tongue interference, and genre identification were also identified.

Table 4.8. Problems Encountered by the Respondents in Using ChatGPT

PROBLEMS ENCOUNTERED	MEAN	VERBAL INTERPRETATION
1. I have difficulties in improving my writing skills.	2.76	Often
2. I cannot easily use the words on to apply it in a sentence.	2.63	Often
3. I faced a difficulty with my grammar in English	2.76	Often
4. I faced a difficulty in writing because of my lack of interest in writing.	2.63	Often
5. I faced difficulty spelling words in English correctly.	2.53	Often
6. I faced difficulty in writing because of a lack of focus.	2.46	Rarely
7. I feel stressed when writing a text in English in the classroom.	2.46	Rarely
8. I faced difficulty in summarizing the main ideas of the text.	2.70	Often
9. I faced a problem in figuring out the meanings of some new words in reading text.	2.56	Often
10. I faced a problem in decoding the text I read.	2.73	Often
GRAND WEIGHTED MEAN	2.62	Often

4.9 The Relationship Between Perception of ChatGPT to the Levels of Writing Skills

Table 4.9 examines the relationship between the respondents' perception of ChatGPT and their level of writing skills. The p-value of 0.001 is below the level of significance (0.05), indicating a statistically significant relationship between the two variables. With 29 degrees of freedom, the results suggest that respondents' perceptions of ChatGPT have a meaningful impact on their writing skills. This finding implies that positive perceptions of ChatGPT may correlate with better writing performance, highlighting the importance of user attitudes toward technology in educational outcomes. It suggests that fostering a favorable view of ChatGPT as a writing tool could enhance its effectiveness in improving writing skills. Therefore, the hypothesis is rejected.

To support, Javaid et al. (2023) in their study reveal that Students' perception of ChatGPT as a conversation partner contributes significantly to their writing proficiency. Beyond feedback provision, ChatGPT's conversational capabilities allow learners to engage in interactive writing practice.

Table 4.9. The Relationship Between Perception of ChatGPT to the Levels of Writing Skills

Variables	p-value	Level of Writing Skills Degrees of freedom	Verbal Interpretation
Perception	0.001	29	Significant

Level of Significance: 0.05

4.10 The Relationship Between the Frequency of Use of ChatGPT to the Levels of Writing Skills of Respondents

Table 4.10 examines the relationship between ChatGPT use and the respondents' levels of writing skills, as indicated by a p-value of 0.001, which is below the level of significance (0.05), with 29 degrees of freedom suggests that how often respondents use ChatGPT is meaningfully connected to improvements in their writing skills. Higher usage likely corresponds to greater skill development, reflecting the impact of regular engagement with the tool. The results emphasize the importance of consistent usage of ChatGPT as a learning and writing enhancement tool. Educators can encourage students to integrate ChatGPT into their writing processes more frequently to maximize its benefits. Moreover, institutions might consider promoting structured activities or

assignments that require regular use of ChatGPT to foster writing skill improvement. This finding also underscores the potential for AI-based tools to serve as valuable supplements to traditional learning methods. Therefore, the Null hypothesis is rejected.

A study by Al-Zaghir et al. (2023) examined the challenges and strategies associated with using ChatGPT in professional writing instruction. The research identified that while ChatGPT can enhance writing performance, students often face difficulties in effectively incorporating AI-generated content into their tasks. The authors suggest that targeted interventions, such as additional guidance, tutorials, or practice sessions, are essential to help users navigate ChatGPT's features and address specific issues like grammar, content, spelling, organization, and mechanics. By mitigating these challenges, the potential of ChatGPT to enhance writing skills can be maximized, leading to improved educational outcomes and user experience

Table 4.10 The Relationship Between the Frequency of Use of ChatGPT to the levels of Writing Skills of Respondents

Variables	p-value	Level of Writing skills	
		Degrees of freedom	Verbal Interpretation
Frequency	0.001	29	Significant
Level of Significance: 0.05			

4.11 The Relationship Between the Problems Encountered in Using ChatGPT to the Levels of Writing Skills of Respondents

Table 4.11 shows a statistically significant relationship between the problems encountered in using ChatGPT and the respondents' levels of writing skills, as indicated by a p-value of 0.001, which is below the level of significance (0.05). With 29 degrees of freedom. This result suggests that the challenges faced by respondents while using ChatGPT are closely related to their writing skill levels. Difficulties in effectively using the tool may hinder writing skill improvement, while overcoming such problems could lead to better performance. Therefore, the hypothesis is rejected. This finding highlights the need for targeted interventions to address the common challenges faced by users of ChatGPT. Educators and trainers can provide additional guidance, tutorials, or practice sessions to help respondents effectively navigate the tool's features and address specific issues such as grammar, content, spelling, organization, and mechanics. By mitigating these problems, the potential of ChatGPT to enhance writing skills can be maximized, leading to improved educational outcomes and user experiences.

According to Stepanechko & Kozub, (2023). ChatGPT has potential benefits and unique challenges in dealing with many academic tasks at different levels. Students face a unique set of challenges as they need to develop enough strategies for incorporating ChatGPT-generated responses into writing tasks.

Table 4.11 The Relationship Between the Problems Encountered in Using ChatGPT to the Levels of Writing Skills of Respondents

Variables	p-value	Level of Writing skills	
		Degrees of freedom	Verbal Interpretation
Problems Encountered	0.001	29	Significant
Level of Significance: 0.05			

5. Conclusion

This study investigated the impact of ChatGPT on students' writing skills by comparing the performance of a control group that received traditional instruction and an experimental group that used ChatGPT as a writing support tool. The results revealed that both groups showed significant improvement in their writing skills from the pretest to the posttest, indicating that writing practice and instructional exposure, even without AI intervention, can lead to measurable progress. However, the experimental group exhibited a significantly greater improvement, suggesting that the use of ChatGPT had a substantial positive effect on writing performance. This demonstrates the effectiveness of integrating AI tools into writing instruction, as they provide immediate feedback, idea generation, and grammar support that enhance students' writing abilities more efficiently than traditional methods alone.

Furthermore, a significant difference in posttest scores between the control and experimental groups affirmed the impact of the intervention, indicating that ChatGPT contributed more meaningfully to writing improvement. The study also found a statistically significant relationship between the respondents' perception of ChatGPT and their writing skills, with a p-value of 0.001. This suggests that students who viewed ChatGPT positively were more likely to perform better in writing, highlighting the influence of user attitudes on educational outcomes. Additionally, a significant relationship was found between the frequency of ChatGPT use

and writing performance. The data indicated that students who used ChatGPT more frequently demonstrated greater skill development, emphasizing the importance of consistent engagement with the tool.

Another important finding of the study was the significant relationship between the problems encountered while using ChatGPT and the students' writing skills. Difficulties in navigating the tool—such as challenges with grammar, organization, spelling, and mechanics—were associated with lower writing performance. This implies that unresolved issues in using ChatGPT can hinder its effectiveness and limit students' progress. These findings underscore the need for targeted support to help learners maximize the benefits of AI-assisted writing tools.

The study provides clear evidence that ChatGPT is an effective tool for improving writing skills, offering advantages beyond those of traditional instruction alone. Positive attitudes and regular use of ChatGPT contribute significantly to better writing performance, while difficulties in using the tool may reduce its impact. As a result, the null hypotheses regarding the absence of significant relationships between ChatGPT and writing skills are rejected.

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