



Exploring the use ChatGPT in improving students' paragraph compositions skills

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ABSTRACT

This investigation aims to examine the dual aspects of this AI tool's implementation in educational contexts, as reflected in student experiences. By identifying both the benefits and challenges of using ChatGPT as an educational tool in writing courses, the research addresses a significant gap in the literature regarding AI-driven tools in writing pedagogy. The study employs a qualitative research framework, focusing on an in-depth exploration of students' experiences and perceptions. Five students from the English Language Education Department who have completed a Paragraph Writing course participated in the study, making them ideal for providing relevant insights. Data was collected through interviews, chosen for their ability to elicit detailed, qualitative information directly from the participants. The findings reveal that ChatGPT serves as a valuable resource for students, aiding in the understanding of paragraph writing theories and providing feedback on their writing. However, challenges such as discrepancies between the questions asked and the answers provided by ChatGPT were noted, which could affect its effectiveness as a learning tool. The study underscores the potential of ChatGPT to enhance paragraph composition skills, suggesting its integration into educational settings. It also highlights the need for educators to be aware of the limitations and challenges of using ChatGPT, ensuring that it complements traditional teaching methods effectively. The findings offer a foundation for further research on optimizing the use of AI tools in education, contributing to the development of innovative teaching strategies.

Keywords

artificial intelligence (AI),
ChatGPT,
writing skills,
paragraph composition.

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Introduction

The mastery of adept writing skills devoted to the construction of paragraphs is essential for the effective presentation of ideas and knowledge in a well-structured manner. The creation of coherent paragraphs is of utmost importance as it allows individuals to convey their thoughts clearly and logically, thereby aiding in understanding for the readers (Fitria et al., 2024; Maheswari, 2024). Competence in crafting well-structured paragraphs is pivotal for capturing and retaining the audience's focus, leading to improved overall effectiveness in communication (Lestari, et al., 2023; Sundram, 2023). Skill in paragraph formation is crucial for developing a composition that is not only well-organized but also convincing. According to Pelenkahu et al., (2024), these competencies enable the writer to present their viewpoints in a structured and

convincing, culminating in a more persuasive and influential written work. In a professional context, the ability to compose coherent paragraphs can greatly support individuals in effectively conveying intricate concepts and information to colleagues or clients (Suseno, 2024). While possessing strong paragraph construction skills is essential for effective communication, it is vital to recognize that elements such as tone, clarity, and relevance of content all contribute significantly to engaging an audience (Garcia & Bondoc, 2024; Susilowati & Fachriza, 2024). Merely organizing paragraphs, without ensuring the clarity and engagement of the content, does not guarantee effective communication. Achieving clarity in communication, whether through writing or speech, heavily relies on the construction of well-structured paragraphs. Nonetheless, it is equally imperative to ensure that the material is of superior quality and relevant to the intended audience for effective engagement of readers or listeners. Concentrating exclusively on paragraph organization may lead to a failure to acknowledge the importance of additional elements that are essential for effective communication (Barasa, 2024). Employing a compelling demeanor can effectively capture the attention of the audience and maintain their interest throughout the communication process. Moreover, ensuring that the content aligns with the audience's interests or needs can enhance the effectiveness and significance of the conveyed message (Heryadi et al., 2024). Through the consideration of these variables, along with the arrangement of paragraphs, communicators can optimize the impact of their message and engage their audience proficiently. To accomplish effective communication, it is essential to combine various elements that synergistically work together to present a coherent and compelling message.

ChatGPT is an advanced language model that uses artificial intelligence to generate human-like text responses in real time. This technology has the potential to revolutionize the way students approach writing assignments by providing instant feedback, suggestions, and guidance (Taskiran et al., 2024; Wale & Kassahun, 2024). By utilizing ChatGPT, students can improve their writing skills, expand their vocabulary, and develop a stronger understanding of grammar and syntax. Additionally, ChatGPT can help students brainstorm ideas, organize their thoughts, and overcome writer's block, making the writing process more efficient and enjoyable. For example, a student working on an essay about climate change could use ChatGPT to generate ideas for their introduction, provide examples for supporting arguments, and offer suggestions for a compelling conclusion. As the student types out their essay, ChatGPT can also help them refine their language, suggest alternative wording, and correct any grammatical errors in real time. As stated by Kaur et al. (2024), this personalized feedback and support can ultimately lead to a more polished and well-written final product. However, it is important to note that ChatGPT may not always provide accurate or reliable information, particularly in complex or technical subjects (Azaria et al., 2024). For instance, relying solely on ChatGPT for facts and data could result in the inclusion of misinformation or inaccuracies in the essay, ultimately undermining the credibility of the argument presented. While ChatGPT can offer valuable suggestions for improving language and structure, it is not a substitute for thorough research and fact-checking in technical subjects (Haque & Shuai, 2024). It is important to verify information from reliable sources to ensure accuracy and credibility in the final work (Heuer & Glassman., 2024). By consulting reputable sources and conducting

thorough research, writers can ensure that their arguments are based on accurate and up-to-date information. Utilizing a variety of sources and cross-referencing information can help to strengthen the credibility of the essay and make it more persuasive to readers. Ultimately, while ChatGPT can be a useful tool for generating ideas and refining language, writers must supplement its suggestions with reliable research to produce a well-informed and credible piece of work.

The role of feedback in improving writing skills

Feedback is essential for improving writing skills, especially in education. It provides specific insights into errors and areas for development, helping writers reflect critically on their strengths and weaknesses (Darwin et al., 2024). Constructive feedback guides idea development, argumentation, and overall quality, promoting skill growth. Positive reinforcement and constructive criticism build confidence and make the writing process less intimidating. Feedback encourages active learning and ownership of work, enhancing audience awareness and effective communication (Evans, 2013). Peer review fosters collaboration and idea exchange. Effective feedback is timely, specific, actionable, and balanced, helping writers set achievable goals and stay motivated for continuous improvement.

Feedback is essential for improving writing skills in language learning, as it helps students identify weaknesses and correct errors (Batubara et al., 2023). Combining feedback with explicit rhetorical instruction enhances writing proficiency, as shown by a study where students receiving both treatments outperformed others (Rodríguez & Mosquera, 2020). Effective feedback involves feed-up, feedback, and feed-forward, with teacher-reflective feedback being the most effective (Schillings et al., 2018; Kulprasit, 2018). Peer-assisted learning also improves writing without overburdening faculty, as evidenced by medical students' positive experiences with peer feedback (Nagoshi et al., 2019). In ESL contexts, feedback fosters autonomy and confidence (Alisoy, 2024), while immediate feedback enables error correction and continuous improvement (Tiwari, 2024). The integration of technology, such as social media and automated writing tools, has been shown to enhance writing accuracy and fluency (Rahmanova et al., 2024; Pariyanto & Tungka, 2024). Online platforms and dialogic feedback also support writing development (Alias et al., 2024; Rahman et al., 2024). Teacher feedback, both direct and indirect, significantly improves writing abilities, as seen in increased essay scores (Renata et al., 2024). Interactional feedback, through peer review and collaboration, further enhances writing skills (Masrul et al., 2024).

In conclusion, feedback is indispensable for improving writing skills, especially in educational contexts. It provides critical insights, fosters self-reflection, and promotes the development of ideas and argumentation, contributing to overall skill growth. Research shows that combining feedback with explicit rhetorical instruction enhances writing proficiency significantly. Effective feedback should include elements of feed-up, feedback, and feed forward, with teacher-reflective feedback being the most impactful. Peer-assisted learning frameworks also prove beneficial, offering a collaborative approach to skill enhancement

without overburdening instructors. Ultimately, a multifaceted approach that integrates various feedback types and instructional methods is essential for optimizing writing proficiency.

The use of ChatGPT in language education

ChatGPT enhances language education by offering personalized lessons, round-the-clock availability, and interactive practice (Heathen & Lin, 2024). It delivers immediate feedback, supports educators with resources, and aids in translating and explaining language concepts. This AI tool adapts to various learning styles and boosts engagement, providing supplemental practice and cultural insights (Bhutoria, 2022). However, its integration should complement human instruction and address issues of data privacy and equitable access.

The use of ChatGPT in language education offers both opportunities and challenges. While faculty members in EFL classrooms have expressed concerns about potential issues such as plagiarism and overreliance on chatbots, which might reduce student effort and critical thinking (Elsaadany, 2024; Pham & Le, 2024), ChatGPT is recognized for its ability to provide personalized feedback, facilitate customized lesson planning, and enhance language proficiency through individualized learning experiences (Thanh & Loan, 2024). Students generally view ChatGPT as a useful tool for engaging in the learning process and supporting language acquisition, although excessive use could limit creativity and critical thinking (Pham & Le, 2024). In practical applications, ChatGPT assists in source-based writing tasks, helping students synthesize information from texts, though its use has been linked to a decrease in the inclusion of literal source-text information in written products (Christian et al., 2024). Additionally, exercises such as authentic conversations and error correction demonstrate ChatGPT's potential to make language learning more interactive and effective (Heathen & Lin, 2024). ChatGPT's ability to provide immediate, individualized feedback has been shown to improve language proficiency, particularly in vocabulary and grammar, benefiting socially vulnerable populations like refugees and migrants (Kavak et al., 2024; Athanassopoulos et al., 2023). It also aids teachers in lesson planning, instructional material creation, and streamlining assessment processes (Stognieva, 2024; Nguyen, 2023). However, its integration into language education requires strategic planning and educator training to address concerns about misinformation, ethical issues, and the lack of human connection (Thanh & Loan, 2024). Despite these challenges, ChatGPT's ability to generate diverse text forms and provide translations quickly makes it valuable for language learning, with students showing critical judgment in evaluating and modifying its outputs to maximize learning benefits (Xiao & Zhi, 2023). To fully harness ChatGPT's potential, educational institutions must enhance tech literacy among both educators and students, integrating technological skills into curricula and offering comprehensive training on technology usage (Çobanoğulları, 2024; Dong, 2023).

In conclusion, ChatGPT offers valuable benefits for language education, including personalized feedback, customized lesson planning, and enhanced engagement through interactive practice. While it supports individualized learning and assists with tasks like source-based writing and error correction, concerns about plagiarism, overreliance, and potential impacts on critical thinking must be addressed. Successful integration of ChatGPT requires careful planning and educator training to ensure ethical use, prevent misinformation, and

maintain human connection. Balancing AI tools with traditional teaching methods can maximize the effectiveness of language education and foster comprehensive learning outcomes.

Previous studies on the effectiveness of using AI in writing instruction

Previous studies have extensively explored the effectiveness of using AI in writing instruction, revealing a range of benefits and challenges. Aljuaid (2024) highlights that while AI tools like ChatGPT can assist with grammar and style, they fall short in fostering creativity and critical thinking, which are essential components of academic writing courses that teach research, citation, argumentation, and ethics. Wale and Kassahun's (2024) study demonstrated that integrating AI tools such as Writerly and Google Docs significantly improved EFL students' writing performance, particularly in areas like task achievement, coherence, cohesion, lexical resource, and grammatical accuracy. Students also had positive perceptions of these tools, finding them interesting and supportive. Wu, (2024) investigated the use of ChatGPT and other AI tools for college students studying English and found that these technologies provided personalized writing guidance and feedback that improved students' discourse writing skills. However, challenges remain, such as AI's limited understanding of academic language and specialized terminology, and the need for technical adaptation in teaching practices. Nazim's (2024) study on the perspectives of EFL teachers in Arab universities revealed that teachers perceive AI writing assistants as beneficial for student involvement and the facilitation of student-centered learning. Nonetheless, they expressed concerns about overreliance, bias, and the digital divide, emphasizing the need for professional development and ethical considerations. Collectively, these studies suggest that while AI tools can enhance certain aspects of writing instruction, they cannot fully replace the comprehensive learning experience provided by traditional academic writing courses. A balanced approach that integrates AI support while maintaining core educational elements appears to be the most effective strategy for preparing students for diverse writing challenges.

This research proposes a novelty to improving paragraph composition skills by integrating ChatGPT with overcoming its limitations. It suggests the development of benefit and barrier analysis research to complement the AI tool, focusing on activities that promote unique idea generation, complex argument construction, and research skills. By combining real-time AI feedback with structured instructor-led discussions and peer review, this approach seeks to connect the advanced capabilities of AI with the essential educational aspects of academic writing. The efficient system can improve paragraph composition and upholds traditional educational values, ensuring balanced and effective integration of artificial intelligence in writing instruction. This investigation aims to examine the dual aspects of this AI tool's implementation in educational contexts, as reflected in student experiences. Therefore, the author formulates the following research question:

- 1) What are the advantages of using ChatGPT to improve paragraph composition skills in a paragraph composition course?

- 2) What impediments do students face when using ChatGPT as a tool for developing paragraph composition skills in a paragraph composition course?

Methodology

Ethical Considerations

Ensuring ethical consideration was crucial in this study, with participants' anonymity safeguarded through the use of initials. The researchers sought voluntary participation and held one-on-one sessions with each volunteer to secure both verbal and written agreement. Participants were made aware that their experiences with ChatGPT would be utilized as research data. Given the pre-existing relationship between the primary researcher and the students, the former took on an observational role to ensure the participants felt at ease and protected throughout the study. The researcher conducted individual, face-to-face interviews with each participant, posing 4 sections of open-ended questions verbally. These enquiries were designed to investigate the benefits and challenges of incorporating ChatGPT into the Paragraph writing course, with the objective of accurately collecting their learning data. The duration of these interviews ranged from 10 to 15 minutes.

Research Design

This qualitative study, employing a case study approach, investigates the benefits and challenges students face when using ChatGPT to enhance their paragraph writing skills in a paragraph composition course. According to Creswell (2013), qualitative research involves an in-depth exploration of issues from the perspectives of participants to gain comprehensive insights. Similarly, Mohajan (2018) emphasizes that qualitative methods focus on understanding individuals' beliefs, experiences, and perspectives. The case study approach allows for a focused examination of a specific group of students, providing rich, contextualized insights into their interactions with ChatGPT. By capturing the perceived advantages and drawbacks of AI integration, this study offers a nuanced understanding of ChatGPT's role in supporting writing skill development within the framework of a paragraph composition course.

Contexts and participants

The research was conducted in Indonesia, where English is regarded as a foreign language, and citizens are still in the process of acquiring proficiency. Specifically, the study took place at an Indonesian private Islamic university, Universitas Muhammadiyah Malang, which is recognized for its commitment to providing holistic and value-based education. The participants of the study were students ranging from 19- 21 years old, who enrolled in the Paragraph Writing course, a compulsory subject within the English Language Education Department (ELED) curriculum. This course emphasizes the precise structuring of paragraphs, including both narrative and descriptive elements. Students are expected to grasp foundational principles of paragraph construction to produce well-organized and coherent writing. Additionally, learners are encouraged to utilize diverse resources, including innovative tools such as ChatGPT, to enhance their learning and improve their writing skills.

ChatGPT was chosen due to its popularity among students, who appreciate its ease of use and practicality in accessing information. ChatGPT offers the potential to assist students in understanding the theories of paragraph writing and providing feedback that could enhance their writing skills (Zebua et al., 2024). However, the use of ChatGPT also encounters some challenges, such as discrepancies between the questions asked and the answers provided, which may impact the effectiveness of this tool in the learning process (Kolade et al., 2024; Kurban & Şahin, 2024). Through individual interviews, this study seeks to gain a deeper understanding of students' experiences with ChatGPT, identifying both the benefits and the obstacles they encounter. This qualitative exploration will provide insights into how ChatGPT can be effectively integrated into paragraph writing courses and offer recommendations for optimizing its use in educational settings.

The research subjects consisted of five undergraduate students in their fourth semester at Universitas Muhammadiyah Malang, enrolled in the Elementary Education (ELED) program. These individuals were taking a paragraph composition course and had been utilizing ChatGPT for a minimum of three months. The selection of participants was based on their extended experience with ChatGPT, ensuring they could offer valuable perspectives on its use. These learners, who were non-native English speakers, exhibited diverse English proficiency levels, yielding a comprehensive dataset. Researchers observed students' challenges and benefits of utilizing ChatGPT in paragraph composition skills. Findings offered insights into potential curriculum enhancements for the course. The data of demographic participants are presented below:

Table 1. Demographic of participants

No	Initial name	Age	Gender	Department
1	SKW	19	Woman	English Language Education Department
2	AS	20	Woman	English Language Education Department
3	SKS	21	Woman	English Language Education Department
4	HAAZ	20	Woman	English Language Education Department
5	ASF	20	Woman	English Language Education Department

Data collection and analysis

This study employed interviews as the primary data collection method to obtain comprehensive insights into the benefits and challenges faced by students utilizing ChatGPT for improving their paragraph composition skills. The choice of interviews was based on their capacity to elicit rich, firsthand information from participants. As noted by Moha and Sudrajat (2019), interviews play a crucial role in confirming information and capturing genuine experiences, which aligns with the research objective to thoroughly understand student perspectives. By allowing participants to articulate their thoughts and experiences in their own words, interviews facilitate the collection of nuanced and detailed responses. The researcher posed the following interview questions:

1. How often do you use ChatGPT for your paragraph composition course?

2. For what tasks do you use ChatGPT? (e.g., paragraph structure, grammar correct)?
3. What are the main advantages you find in using ChatGPT for writing paragraphs?
4. What impediments have you faced using ChatGPT for paragraph writing?
5. Have you ever been confused or dissatisfied with the suggestions from ChatGPT? Can you explain?
6. Are there times when ChatGPT couldn't help you? If so, why do you think that was?

Data analysis in this research was conducted using thematic analysis, a method widely recognized in contemporary qualitative research for its effectiveness in interpreting textual data (Wiltshire & Ronkainen, 2021). Thematic analysis involves coding the data and identifying themes that reflect the core findings of the study (Kiger & Varpio, 2020). According to research by Clarke and Braun (2016), thematic analysis is an approach to recognizing, analyzing, and reporting data patterns (themes). This method was selected for its interpretive nature, allowing for a thorough exploration of the advantages and impediments associated with using ChatGPT to enhance paragraph composition skills.

Following the data collection process, which exclusively involved interviews, the researcher proceeded to analyze the data using the following steps outlined by Kiger & Varpio (2020):

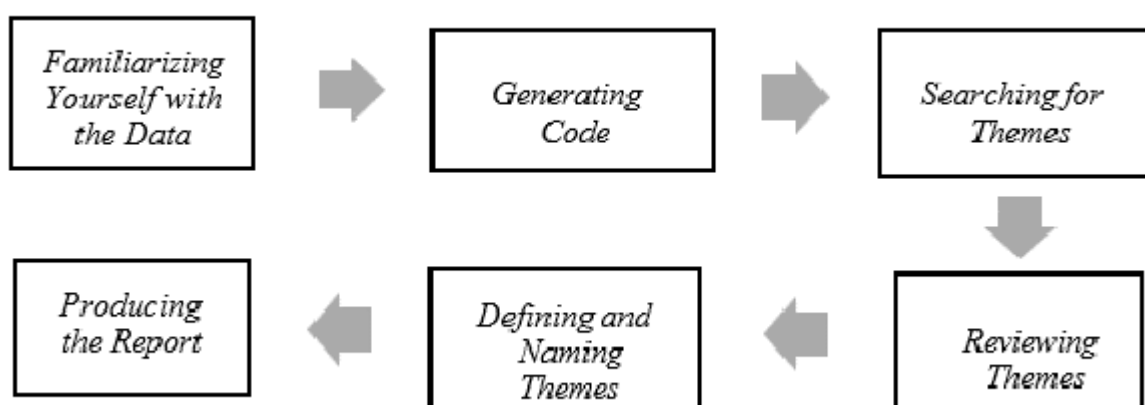


Figure 1. Thematic analysis framework by Kiger & Varpio (2020)

1. Familiarizing with the Data: The interview transcripts were thoroughly reviewed to gain a comprehensive understanding of the participants' perspectives on using ChatGPT.
2. Generating Initial Codes: Initial codes were generated from the interview data, capturing key concepts and themes relevant to the research question.
3. Identifying Themes: The data was systematically analyzed to identify recurring themes and patterns pertaining to the advantages and impediments of utilizing ChatGPT for paragraph composition skills enhancement.
4. Reviewing Themes: The identified themes were critically reviewed and refined to ensure their accuracy and relevance to the research objectives.
5. Defining and Naming Themes: Each theme was defined and given descriptive names that accurately reflected its content and significance.

6. Producing the Report/Manuscript: Finally, the findings were synthesized and presented in a comprehensive report, highlighting the key advantages and impediments encountered by students when utilizing ChatGPT for paragraph composition within the scope of a paragraph composition course.

Trustworthiness and credibility

To ensure trustworthiness and credibility in this study, member checking and expert validity will be employed. Member checking involves sharing preliminary findings or interpretations with participants to confirm the accuracy and resonance of the data with their experiences, enhancing the study's authenticity. Expert validity will be established by consulting with experienced researchers or domain experts to review the research design, instruments, and findings, ensuring alignment with academic rigor and relevance. Together, these strategies strengthen the reliability of the data and the credibility of the interpretations, ensuring that the study findings are both accurate and trustworthy.

Results

4.1. Advantages of using ChatGPT in a paragraph composition course

4.1.1. Enhanced writing efficiency

The participant highlighted a notable enhancement in their writing productivity due to the use of ChatGPT. The tool's ability to provide immediate feedback and suggestions enabled them to swiftly generate ideas and polish their paragraphs, bypassing the often time-consuming processes of brainstorming and research. A student shared their experience, stating:

"Using ChatGPT helped me write more efficiently. I could quickly generate ideas and refine my paragraphs without spending too much time brainstorming or researching." (HAAZ)

The use of ChatGPT as a writing aid has significantly streamlined the writing process for participants, enhancing their productivity. This efficiency is largely attributed to AI's capacity to offer instant feedback and suggestions, which helps writers bypass lengthy brainstorming and research stages (Tsufim & Pomerleau, 2024). AI writing assistance can provide writers with exactly what they need to complete a project (Fang et al., 2023) The participant's experience underscores the potential of AI tools like ChatGPT to facilitate a more efficient writing process. This will enable users to quickly generate and refine content. This suggests a broader implication for educational and professional settings, where such tools can be leveraged to improve writing efficiency and overall productivity.

4.1.2 Access to diverse writing styles

The participants valued the variety of writing styles that ChatGPT provided. Engaging with the AI allowed them to explore different tones, structures, and vocabulary, thereby improving their adaptability in composing paragraphs. A student remarked:

"ChatGPT exposed me to various writing styles, which improved my versatility in paragraph composition. I could experiment with different tones and structures, enhancing my writing skills." (ASF)

The participant's interaction with ChatGPT revealed an appreciation for the AI's ability to offer a broad spectrum of writing styles. This exposure allowed them to experiment with and adopt various tones, structures, and vocabulary, significantly enhancing their writing versatility (Selim, 2024). The student's experience indicates that AI tools like ChatGPT can serve as valuable resources for writers seeking to diversify their stylistic approaches and improve their overall writing skills (Faiz et al., 2023). This implies that such tools can play a crucial role in educational settings, helping students develop a more versatile and refined approach to writing.

4.1.3. Immediate feedback and improvement

The immediate feedback from ChatGPT enabled students to detect and correct mistakes as they occurred. This real-time feedback loop promoted ongoing enhancement of their paragraph composition abilities. One student mentioned:

"Getting immediate feedback from ChatGPT was invaluable. It helped me identify and correct errors on the spot, leading to continuous improvement in my writing." (SKS)

The provision of instant feedback by ChatGPT proved to be a significant asset for students, as it allowed them to promptly identify and address errors. This real-time correction process fostered continuous improvement in their writing skills (Zhou, 2024). The student's experience underscores the value of immediate feedback in the learning process, highlighting how tools like ChatGPT can contribute to the development of better writing practices. This suggests that incorporating AI-driven feedback mechanisms in educational contexts can greatly enhance students' writing proficiency by enabling consistent and timely improvements.

4.1.4. Assisting in grammar composition.

In academic courses focusing on writing, such as Paragraph Writing, mastering grammar is essential for clear and effective communication. Leveraging tools that aid in grammar correction can be beneficial for students striving to improve their writing skills. Opinions also suggest that ChatGPT can help with grammar in a Paragraph Writing course.

"ChatGPT can assist with our grammar in the Paragraph Writing course." (SKS)

The sentiment expressed by the student points to ChatGPT's potential as a useful tool for enhancing grammatical skills in a Paragraph Writing course. This suggests that, beyond aiding in the generation and refinement of ideas, ChatGPT can also serve as a grammar assistant, helping students to produce grammatically correct paragraphs (Tseng & Lin 2024). This highlights the multifunctional capability of AI tools in educational settings, where they can support various aspects of writing, from content creation to grammatical accuracy (Selim, 2024). The integration of such tools can thus provide comprehensive support for students, leading to overall improvements in their writing abilities.

4.1.5. ChatGPT can refine paragraph structure and improve vocabulary effectively.

When crafting written content, the quality of paragraph structure, vocabulary, and grammar significantly impacts readability and clarity. Utilizing tools like ChatGPT can greatly enhance these aspects of writing. This assistance is particularly valuable for those looking to refine their text for better organization and overall coherence. ChatGPT provides suggestions to develop sentences for better organization.

"In my opinion, ChatGPT usually helps refine paragraph structure, improve vocabulary and grammar, and offers suggestions to make sentences more organized." (SKW)

The provided excerpt highlights the effectiveness of ChatGPT in improving written content. Specifically, the tool refines paragraph structure, enhances vocabulary, and corrects grammar (Pitukwong & Saraiwang, 2024). Additionally, it offers suggestions that help make sentences more organized, ultimately leading to clearer and more cohesive writing. This indicates that ChatGPT serves as a valuable resource for writers aiming to polish their work and achieve a higher standard of communication.

4.1.6. Helping to achieve better grades.

In the academic journey, understanding course material thoroughly is crucial for achieving good grades. Utilizing resources like ChatGPT can provide detailed explanations and definitions that enhance comprehension, enabling students to engage more effectively in class discussions and improve their performance. ChatGPT also helps in obtaining better grades by providing detailed explanations of the material presented by the lecturer.

"By searching for definitions of the material I don't understand when the teacher explains it, **I can immediately comprehend it and then discuss it with the lecturer, potentially earning extra points in the course.**" (AS)

The excerpt underscores the value of ChatGPT in academic success. By searching for definitions of material that is unclear during lectures, students can quickly grasp the concepts (Zhang et al., 2024). This immediate understanding allows them to participate in discussions with the lecturer, demonstrating their knowledge and potentially earning extra points in the course. This highlights how ChatGPT not only aids in comprehension but also contributes to better grades through active engagement and improved performance in academic settings.

4.1.7. Cost-effectiveness.

Access to valuable educational resources is often a key consideration for students and researchers. The availability of free tools can significantly reduce financial barriers and provide widespread access to support and information. ChatGPT is easily accessible without incurring any costs, allowing users to utilize the service without needing to spend any money.

"Of course, it's also free so you can use this service without needing to spend any money." (HAAZ)

The excerpt emphasizes that ChatGPT is freely accessible, allowing users to benefit from its services without financial constraints. This cost-free access makes it an attractive

option for individuals seeking assistance with their studies or research, as it eliminates the need for monetary investment while still offering valuable support (Watermeyer et al., 2023). This cost-free access democratizes educational resources by making high-quality assistance available to everyone, regardless of their economic background. It ensures that students from underprivileged communities have the same opportunities to excel as those from more affluent areas (Watermeyer et al., 2023). Consequently, it helps bridge the educational gap and promotes equality in learning. This feature underscores ChatGPT's practicality and inclusivity as an educational resource.

4.2. Impediments of using ChatGPT in a paragraph composition course

4.2.1. Contextual and Interpretive Challenges

In the realm of educational technology, the effectiveness of AI tools like ChatGPT can be hindered by their limitations in contextual understanding. This challenge becomes particularly evident when addressing complex topics or nuanced language, which can impact the relevance and accuracy of the suggestions provided. A student highlighted:

"ChatGPT's lack of contextual understanding was frustrating. It often provided irrelevant suggestions, particularly when I needed to convey complex ideas or nuanced language." (SKW)

The excerpt reveals a key issue with ChatGPT: its difficulty in fully understanding context. This limitation can result in suggestions that are irrelevant or inaccurate, particularly when students are trying to articulate intricate ideas or nuanced language. The student's frustration emphasizes the need for critical evaluation of AI-generated content and suggests that while ChatGPT can be a helpful tool, it may not always provide the depth of understanding required for more sophisticated academic tasks. Moreover, ChatGPT is a valuable tool for obtaining information and explanations, there are instances where the responses may fall short in detail or accuracy. Understanding these limitations is crucial for users to effectively utilize the tool and seek additional clarification when needed. Sometimes when using ChatGPT, there is some information that is not detailed enough or even misinterpreted.

"Sometimes in GPT itself, the explanations are lacking in detail or occasionally incorrect." (AS)

The excerpt highlights those responses from ChatGPT may occasionally lack sufficient detail or contain inaccuracies. This suggests that while ChatGPT can provide helpful insights, the explanations it offers might not always be comprehensive or perfectly accurate. Users should be aware of this limitation and be prepared to seek further information or clarification from additional sources to ensure a thorough understanding of the subject matter (Kallio et al., 2016). Overall, ChatGPT can be a useful tool, but users should be aware of its limitations and seek out other sources to ensure the accuracy of their understanding.

4.2.2. Dependency on AI assistance

As AI tools like ChatGPT become increasingly integrated into educational practices, concerns about their potential impact on students' skill development have emerged. One significant worry is the possibility of students becoming overly reliant on these tools, which could affect their ability to develop independent writing skills. One student expressed:

"While ChatGPT is helpful, I worry about becoming too dependent on it. Relying too much on AI assistance might impede my ability to develop independent writing skills." (SKW)

The excerpt reflects a common concern among students regarding the use of ChatGPT: the fear of becoming too dependent on AI assistance. While ChatGPT can be a valuable aid in paragraph composition, the student expresses apprehension that excessive reliance on the tool might impede their growth in developing independent writing skills (Gozali et al., 2024). This concern highlights the need for a balanced approach to using AI resources, ensuring that students continue to practice and enhance their writing abilities alongside utilizing technological support.

4.2.3. Response Quality Issues

While ChatGPT offers a wealth of information and support, it is essential to approach its outputs with a critical eye. The accuracy of the information provided can vary, and discrepancies may arise between the responses generated by ChatGPT and expert insights. The information provided by ChatGPT is not always accurate.

"Sometimes the information given by ChatGPT is not as accurate, like the differences between a lecturer and ChatGPT itself, so you have to sort things out." (HAAZ)

The excerpt points out that the accuracy of information from ChatGPT can sometimes be inconsistent. Unlike a lecturer, who provides expert, vetted knowledge, ChatGPT may offer information that isn't always precise (Jung et al., 2024). This variability underscores the importance of cross-checking and verifying details obtained from ChatGPT, ensuring that users sort out any discrepancies and rely on multiple sources for accurate and reliable information. Moreover, ChatGPT is a powerful tool for retrieving and processing information, it is important to recognize that it may not be able to provide all types of data or answers. Understanding the limitations of such tools is crucial for effective research and information gathering. Not all information can be obtained from ChatGPT.

"Some information cannot be obtained from ChatGPT." (HAAZ)

The excerpt acknowledges that ChatGPT has limitations in the scope of information it can provide. There are certain types of information or specific details that might not be accessible through this tool (Shah & Bender, 2024). This awareness is essential for users, as it encourages them to seek additional sources and methods for comprehensive research and knowledge acquisition. Recognizing these limitations helps in setting realistic expectations and ensures a more balanced approach to using ChatGPT as a resource.

4.2.4. Impediments of connectivity.

While digital tools offer significant advantages in enhancing academic and writing skills, their effectiveness can be impacted by the quality of internet connectivity. Access to resources like ChatGPT relies on a stable online connection, which may pose challenges in areas with unreliable networks. Due to ChatGPT requiring a good connection, it's not always accessible in places with poor network connections.

"You have to be online, sometimes the internet connection is uncertain, like when the network is bad." (ASF)

The excerpt highlights a limitation of ChatGPT: the necessity for a reliable internet connection. In situations where the network is poor or unstable, access to ChatGPT may be compromised, potentially affecting users' ability to utilize the tool effectively (Santiago-Ruiz, 2023). This underscores the importance of considering connectivity issues when relying on online resources, as they can impact the overall user experience and accessibility of valuable educational support.

Discussion

The incorporation of ChatGPT into educational courses centered on teaching paragraph composition reveals a diverse environment defined by various benefits and challenges that significantly impact students' learning journeys. The increased writing efficiency reported by students aligns with theories of cognitive load reduction (Kosch et al., 2023; Rudolph et al., 2023; Sweller, 1988). ChatGPT can automate routine tasks such as brainstorming and initial drafting, allowing students to focus their cognitive resources on higher-order writing skills like critical thinking and argument development. In line with Vygotsky's theory of social development are encouraged through access to a variety of writing styles through ChatGPT (Vygotsky, 1978). However, teachers need to ensure that students remain engaged in the creative and cognitive processes essential for deep learning, and to critically evaluate different writing styles to avoid inappropriate or insensitive elements in general (Liu et al., 2024; Ma et al., 2024; Wang et al., 2024).

Immediate feedback provided by ChatGPT supports formative assessment practices, enabling students to identify and correct errors in real time. This is consistent with Black and Wiliam's (1998) principles of formative assessment, which emphasize the role of timely feedback in promoting student learning. However, the quality of this feedback needs scrutiny. While ChatGPT can highlight grammatical and syntactical errors, its ability to provide nuanced feedback on more complex aspects of writing, such as argument coherence and persuasive strategies, is limited (Hikmah & Walida, 2024; Minh, 2024; Wang, 2024). Therefore, educators should complement AI feedback with human oversight to ensure comprehensive and contextually relevant guidance. ChatGPT's role in assisting with grammar and refining paragraph structure also supports the traditional focus on linguistic accuracy in language education (Guba et al., 2024; Mohammadi et al., 2023; Rababah & Talafha, 2024). However, reliance on AI for grammar correction must be balanced with the development of students' own grammatical understanding to avoid dependency and foster independent linguistic competence (Krashen, 1992).

Moreover, the reported improvement in grades due to ChatGPT's assistance highlights its potential impact on academic performance (Chaudhry et al., 2023; Malik et al., 2023). ChatGPT can help students understand complex materials, aligning with Bloom's Taxonomy (Bloom, 1956). However, educators must ensure that the use of AI does not lead to surface learning or mere reproduction of AI-generated content. Challenges such as the lack of contextual understanding and dependency on AI underscore the importance of human oversight and students' critical evaluation skills (Paul & Elder, 2006; Yu, 2024). Academic considerations also arise regarding the potential for reliance on AI assistance, which brings to mind the discussion of technology in education. Additionally, digital infrastructure and connectivity issues need to be addressed to ensure that technological advancements in education do not deepen existing inequalities but rather enhance educational opportunities for all students (Karam, 2023; McCowan, 2015). Combining optimal human and AI capabilities, as reflected in the concept of augmented intelligence, is the ideal approach to maximize benefits and address these challenges.

Conclusions

Research among students in the English Language Education Department at the University of Muhammadiyah Malang reveals both the benefits and challenges of using ChatGPT to enhance paragraph composition skills in a composition course. While ChatGPT is a powerful tool for improving writing efficiency by providing instant feedback and suggestions, it also exposes students to diverse writing styles, enhancing their versatility. Immediate feedback helps students identify and rectify errors in real-time, improving grammar, vocabulary, and paragraph structure. The AI's detailed explanations aid comprehension and academic performance, and its free accessibility makes it a cost-effective tool.

However, challenges include the AI's lack of contextual understanding, leading to irrelevant or inaccurate suggestions, especially with complex topics. Dependency on AI assistance could hinder the development of independent writing skills. Misinterpretation and inaccuracies in information require students to critically evaluate and verify content. Additionally, incomplete information and the need for a stable internet connection pose challenge, particularly in areas with poor connectivity.

To optimize ChatGPT's use in educational settings, overcoming these barriers through supplemental use, critical evaluation of AI-generated content, enhanced contextual training for AI, and ensuring reliable internet access can improve students' learning experience and writing proficiency.

Suggestions

To maximize the benefits of ChatGPT while mitigating its drawbacks, several approaches can be adopted. Encouraging students to use ChatGPT as a supplementary tool rather than a primary resource will help them develop independent writing skills while still benefiting from the AI's assistance. Educating students on the importance of critically evaluating the suggestions and information provided by ChatGPT is crucial. They should cross-check facts and verify the accuracy of content to avoid response quality issues. Incorporating

exercises that enhance the contextual and interpretive of ChatGPT by providing more specific prompts and feedback could improve the AI's ability to handle complex and nuanced language more effectively. Ensuring that students have access to reliable internet connections to utilize ChatGPT seamlessly is also important. Institutions could consider providing resources or creating dedicated spaces with stable internet connectivity for students to use AI tools effectively. Balanced integration of AI tools into the curriculum, combining traditional teaching methods with advanced technologies such as ChatGPT, ensures that students gain a comprehensive understanding and develop strong writing skills.

Despite its benefits, this study has several limitations that must be addressed. Firstly, the limitation lies in the small number of participants involved, which restricts the diversity of perspectives captured. Secondly, the limited participant pool may reduce the generalizability of the findings and hinder a comprehensive understanding of the phenomenon under study. Increasing the number of participants in future research would provide more varied and richer insights, enabling a broader and more nuanced exploration of the topic. To address these limitations, researchers should aim to involve a more diverse and substantial participant pool to enhance the robustness and depth of the study's conclusions.

Future research should explore these challenges by examining ChatGPT's effectiveness in various contexts, utilizing quantitative and mixed-method approaches. Studies involving diverse participant groups could provide insights into its impact on learning outcomes, including how it enhances writing skills compared to traditional methods. Additionally, research focusing on the long-term effectiveness of ChatGPT and its performance across different educational environments would be highly beneficial. Investigating strategies to prevent AI misuse, such as plagiarism, and evaluating its adaptability across disciplines, languages, and cultural backgrounds can further optimize its educational applications while promoting ethical and independent learning.

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