

## Students' voices on ChatGPT: A pilot study on academic writing enhancement

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### ABSTRACT

ChatGPT is regarded as a beneficial resource for learning, as it offers feedback and support throughout the academic writing process. The current literature primarily focuses on the benefits and drawbacks of ChatGPT, with a relatively minor emphasis on the students' actual experiences in the local higher education setting. This paper is written to explore students' experiences, perceptions, and reflections in relation to their use of ChatGPT for improving academic writing performance. A pilot study was conducted using an online open-response questionnaire distributed to the second-semester students enrolled in the academic writing course in the English Literature Study Program. A total of thirty-two students were identified as the target group for participation; however, only fourteen were able to fully complete the questionnaire. The students responded to the questionnaire items addressing the integration of ChatGPT in academic writing, writing quality and confidence, students' beliefs and concerns about ChatGPT, as well as the difficulties they face concerning plagiarism. The findings indicated that students did not frequently use ChatGPT for writing assistance. In addition, the themes emerged from students' responses included the development of ideas, the provision of feedback, the autonomy of writers, grammar, vocabulary, sentence construction, structuring of paragraph and essay, awareness of the limitations of ChatGPT, and the maintenance of academic integrity. Understanding students' voices on ChatGPT can help educators in making informed decisions on the use of AI tools in academic writing instruction. A limited sample size is more susceptible to bias, and therefore future studies should involve larger samples employing a variety of research designs.

**Keywords:** academic writing; AI-assisted learning; ChatGPT; pilot study; students' voices; writing process

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|-----------------------------------------------------------|----------------------------------------------------|------------------------------------------------------|-------------------------------------------------------|
| <b>First Received:</b><br>December 7 <sup>th</sup> , 2025 | <b>Revised:</b><br>February 8 <sup>th</sup> , 2026 | <b>Accepted:</b><br>February 14 <sup>th</sup> , 2026 | <b>Published:</b><br>February 27 <sup>th</sup> , 2026 |
|-----------------------------------------------------------|----------------------------------------------------|------------------------------------------------------|-------------------------------------------------------|

### How to cite (in APA style):

Ariani, S., Rachmawaty, N., & Amalia, P. A. (2026). Students' voices on ChatGPT: A pilot study on academic writing enhancement. *Journal of Research on English and Language Learning (J-REaLL)*, 7(1), 165–184. <https://doi.org/10.33474/j-reall.v7i1.24665>

## INTRODUCTION

Artificial intelligence (AI), having been developed for over seven decades and recognized as a crucial technological innovation of the present age, has become increasingly significant in today's digital world, particularly in reshaping language education amid the rise of AI-assisted learning (Farrokhnia et al., 2024; Helm et al., 2020; Martínez-Plumed et al., 2021; Ooi et al., 2023; Pham, 2025; Vannuccini

& Prytkova, 2023). Chat generative pre-trained transformer (ChatGPT) is a widely used AI application that engages with its users conversationally by providing answers to their questions and fulfilling their requests; moreover, in the domain of education, ChatGPT is leveraged to build intelligent tutoring systems capable of delivering personalized learning assistance to students (Marr, 2023; Solovey, 2024). It has demonstrated effectiveness in language instruction by supplying learners across different proficiency levels to obtain individualized materials and assistance (Abdan et al., 2025; Baskara & Mukarto, 2023). Such a function is highly relevant in English language education, where fostering communicative competence is a primary objective (Syairofi et al., 2025).

The rapid evolution of AI technologies has unlocked new opportunities for refining language education, notably in the field of academic writing. For many EFL students, limited vocabulary and grammar understanding, insufficient exposure to various writing styles, inadequate teaching, difficulties in text comprehension, and a lack of critical thinking abilities are viewed as a few challenges in academic writing (Pham, 2025). Likewise, the obstacles that EFL students encounter in crafting high-quality academic English writing consist of the compromise of grammatical structures essential for clarity, the use of incorrect or simpler vocabulary, and the forfeiture of organizational coherence (Tseng & Lin, 2024). In response to these challenges, ChatGPT can facilitate academic writing, assisting from the preliminary stages of research and planning to the finalization of work for submission (Alkamel & Alwagieh, 2024). Through the analysis of user input, ChatGPT enables the production of coherent and contextually relevant responses typically found in interpersonal communication (Cotton et al., 2023; Ray, 2023a).

In the initial phase, ChatGPT supports academic writing by fostering idea generation, assisting with the structuring of essays, delivering instant feedback, and refining language for improved clarity, which can help learners tackle problems like writer's block and difficulties in organizing their work (Fathi & Rahimi, 2024; Hosain & Younus, 2025; Tseng & Lin, 2024; Werdiningsih et al., 2024b). In the writing phase, ChatGPT is frequently used as a real-time support resource for structuring sentences, developing paragraphs, and organizing essays, while also providing assistance to writers in making complex ideas clearer and polishing their drafts (Hosain & Younus, 2025). Upon finishing the draft, ChatGPT can be utilized in the proofreading process to aid in the refinement, lessen language errors in the final writing version, and edit written material (Imran & Almusharraf, 2023; Werdiningsih et al., 2024b). Additionally, Su et al (2023) point out the prospective functions of ChatGPT in assisting students with various tasks, such as outline preparation, content revision, and proofreading. Collectively, ChatGPT can act as a helpful instrument in the pre-writing, writing, and post-writing phases of academic writing.

ChatGPT has exhibited robust performance in multiple domains, encompassing generating coherent text and essays, providing conversational responses, translating languages, responding to questions, and handling tasks related to programming (Feyijimi et al., 2025; Ray, 2023b). It serves as a helpful writing aid by responding to learners' needs through timely feedback that identifies the text's principal merits and deficiencies and suggests areas for improvement (Solovey, 2024). In a similar manner, ChatGPT's capability to deliver constructive feedback indicates that it can act as a valuable resource in supporting the writing progress of EFL learners instead of being a hindrance (Teng, 2024b). In light of these positive aspects, ChatGPT has made significant contributions to the progress of various applications and industries, showing remarkable potential in enhancing efficiency, promoting collaboration, and fostering innovation.

A multitude of academic publications have similarly raised concerns regarding the trustworthiness and ethical considerations of utilizing ChatGPT for scholarly writing. Educators show real concerns about the commitment to academic integrity standards, the possible dependence of emerging technology, and the necessity of formulating effective teaching strategies to guide their responsible incorporation (Abdelhalim, 2024; Dehauche, 2021; Dja'far & Hamidah, 2024). Student overdependence on AI as well as the need to preserve originality, underline the importance of careful integration, as the effectiveness of ChatGPT is based not only on its application but also on educators' capacity to guide students in balancing technological support with their independent academic

progress (Hosain & Younus, 2025). Additionally, it is highlighted that a significant concern regarding AI is its potential to erode the uniquely human aspects of writing, encompassing originality, personal voice, and awareness of cultural differences (Werdiningsih et al., 2024a).

There is a need for further empirical evidence to support the broader application of ChatGPT in EFL writing practices in higher education. This study extends theoretical and practical contributions by exploring students' voices on using ChatGPT to facilitate academic writing. Theoretically, incorporating ChatGPT into academic writing enriches the conceptual framework of academic literacy by positioning AI as an interactive learning collaborator. Such collaboration does not replace human intellectual authority; rather, it emphasizes the crucial role of human agency, critical analysis, and ethical responsibility in directing, assessing, and validating AI contributions in academic frameworks. As a cognitive tool, ChatGPT facilitates metacognitive regulation, support, and conversational feedback in conjunction with academic writing activities. Practically, the study demonstrates that ChatGPT is helpful for improving writing skills, grammar, and vocabulary. It also aids intricate writing tasks throughout the writing process, including generating ideas, outlining, drafting, structuring, and polishing academic texts.

Existing research has investigated the overall perceptions of ChatGPT's role in academic writing among university students (Baskara & Mukarto, 2023; Wang et al., 2024); nevertheless, there is a critical need for research tailored to the local context. This gap is particularly apparent in the current research setting, the English Literature Study Program, where no previous empirical studies have analyzed the use of ChatGPT, despite its informal and widespread adoption by students to facilitate writing activities. The absence of baseline information regarding ChatGPT's usage patterns, motivations, ethical considerations, or perceived effectiveness in this specific educational context necessitates an exploratory approach (Szügyi et al., 2024), and a pilot study is distinctly qualified to address these issues. The majority of published pilot studies originate from the medical field (e.g., with relatively limited representation in other disciplines). Additionally, the literature to date predominantly employs closed-ended Likert-type questionnaires (Dewi, 2024; Lubis et al., 2025), whereas this pilot study foregrounds open-response items to elicit students' lived experiences of using ChatGPT for academic writing that may not be accessible through closed-ended items alone. Grounded in the preceding background, the present study advances two research questions.

- 1) What is the frequency of ChatGPT use among students in academic writing class?
- 2) How are students' experiences, perceptions, and reflections when using ChatGPT to enhance academic writing performance?

## LITERATURE REVIEW

### *Artificial Intelligence (AI) in language education*

AI is anticipated to create major changes in almost every aspect of life, particularly the education sector. It receives growing recognition in the field of English language education, and various research efforts have been undertaken globally to investigate its applications in academic contexts. Meniado (2023) conducted a review of fifteen articles that explored the use of AI-powered chatbots, including ChatGPT, within English as a second language (ESL) and English as a foreign language (EFL) educational settings, focusing specifically on its impact on the teaching and learning of the English language. The results suggest that, from a teaching perspective, ChatGPT helps instructors to design lessons (Mohamed, 2024), develop instructional materials (Jeon et al., 2024), as well as assess students' written work (Mizumoto & Eguchi, 2023). In addition, from a learning perspective, ChatGPT supports students in their English language learning through a focus on meaning-oriented input, meaning-oriented output, language-centered learning, and the development of fluency (Nation, 2007). With its adaptive and responsive interactions, generative-AI tools like ChatGPT can support real-time communication, which helps students increase communicative competence as the primary objective of English language education (Al Shloul et al., 2024; Le et al., 2024).

The integration of intelligent software has great potential to improve daily human activities in the near future (Martínez-Plumed et al., 2021). AI, defined as systems equipped with intelligent

software that collaborate with humans to achieve a range of tasks, can be seamlessly integrated into online platforms to offer language input and output that support learners' development (Aldosari, 2020; Song & Song, 2023). Considering the transformations brought about by AI, the existing condition of academic instruction in higher education suggests a complete satisfaction with the achievements of technology and a strong belief in its capabilities (Aldosari, 2020). The significance of AI in improving language education is becoming more acknowledged, particularly in the context of EFL instruction, where it introduces innovative strategies to teaching, learning, and assessment (Ansari et al., 2024; Barrot, 2023; Farazouli et al., 2023; Guo et al., 2022; Li et al., 2024). AI-mediated English learning facilitates more flexible and learner-centered instruction. Students primarily gain advantages from AI-driven chatbots in three key areas: academic support, personalized learning, and skill development (Labadze et al., 2023).

Notwithstanding their pedagogical supports, systematic reviews of AI stress the importance of recognizing AI as a supportive resource that complements, rather than substitutes for, the role of human instructors and the socially embedded nature of communicative language learning (Du & Daniel, 2024; Liando et al., 2025; Wahyuni et al., 2024). AI also poses a range of challenges for its implementation in the education field. For example, since the release of ChatGPT, the researchers pointed out that educators are worried that students may come to rely on AI rather than generate original work, which could exacerbate current plagiarism problems and present new challenges to academic integrity (Cotton et al., 2023; Kostka & Toncelli, 2023). Several other researchers have also voiced concerns regarding ChatGPT, including its ethical considerations (Mhlanga, 2023), possible detrimental effects on assessment practices (Rudolph et al., 2023), and threats to scientific integrity (Cotton et al., 2023; Shiri, 2023). According to research by Sullivan et al. (2023) and Tili et al. (2023), the abundant availability of information and the ease of generating new text within the training corpus might result in the production of inaccurate or misleading outputs. This is in line with the idea that ChatGPT is prone to producing misinformation, fabricated content, and various biases (Alkaissi & McFarlane, 2023; Gupta et al., 2023; Rahman & Watanobe, 2023; Ray, 2023a). The growth of students' critical thinking and problem-solving skills may likewise be impeded (Rahman & Watanobe, 2023; Ray, 2023a) if ChatGPT is utilized without proper mindfulness.

### ***ChatGPT and academic writing***

ChatGPT is developed to perform conversation-related tasks and provide better contextual understanding, response generation, and general coherence (Ray, 2023a). Research suggests that ChatGPT, a prominent advanced language model, can enhance both language learning and instruction. Japoshvili-Ghvinashvili and Suleman (2023) concentrated on designing instructional activities that use ChatGPT to engage students in language and content assignments. In another perspective, Kostka and Toncelli (2023), in collaboration with Kohnke et al (2023), highlighted the critical role of digital literacy for students and teachers alike, pointing out the ways in which ChatGPT can aid them in language education. ChatGPT combines a sophisticated and versatile natural language processing model that enables applications across education, research, and professional communication (Macdonald et al., 2023). It can generate impressive text in seconds, raising both enthusiasm and concerns about student assessments in higher education and various other issues (Rudolph et al., 2023). Its customized functionalities facilitate the design of practice exercises that resonate with learners' preferences, particularly in fields like content organization, academic vocabulary, and academic writing, ultimately contributing to improve foreign language performance (Baskara & Mukarto, 2023; Shen, 2024).

ChatGPT is considered beneficial for EFL learners as an AI-assisted writing tool, as it supports academic writing classes that emphasize the importance of proficiency in organization, coherence, grammar, and vocabulary for language enhancement (Campbell, 2019; Song & Song, 2023). It has demonstrated significant potential as a writing assistant and educational partner by providing diverse language options, offering constructive feedback, and assisting students in feeling less anxious about their writing (Guo et al., 2022). Earlier studies also show that ChatGPT can assist in tackling writing



difficulties by giving essential guidance and helpful feedback, allowing language learners to practice writing at their own pace in a more comfortable environment while improving the quality of their writing (Guo et al., 2022; Zhang et al., 2023). Students frequently struggle with managing their time due to distractions, but ChatGPT is a useful AI tool that assists them in organizing their thoughts, structuring their essays, and getting immediate feedback, which improves the quality of their writing in a short amount of time (Tseng & Lin, 2024). Moreover, in Taecharungroj's (2023) study of early Twitter reactions, it is evident that ChatGPT is predominantly utilized for writing purposes, such as composing essays and articles.

Despite its benefits, ChatGPT reveals particular constraints. It is plausible that EFL/ESL learners may become excessively dependent on ChatGPT, thereby impairing their creativity and critical thinking skills (Darmayasa et al., 2025; Harunasari, 2023). Furthermore, some schools have forbidden the use of generative AI, including ChatGPT, due to concerns that it could negatively impact students' intelligence and problem-solving skills (Ogugua et al., 2023). Another particular concern centers on the possible rise in plagiarism among EFL students, as it is becoming more difficult to differentiate between writings created by AI and those written by humans (Harunasari, 2023). Carlson et al. (2024) also reported that the feedback produced by ChatGPT might be excessively lengthy or complex for students, which could lower their motivation and engagement.

## METHOD

### *Research design*

Research design provides a comprehensive framework for an investigation that directs data collection and analysis in order to address research questions (Flick, 2004). In the context of human science research, particularly in education, the term "pilot study" can be perceived in both a limited and an expansive way, incorporating feasibility studies and the preliminary testing of research instruments (Muresherwa & Jita, 2022). This pilot study provides researchers with the opportunity to collect preliminary data on the phenomenon under investigation before conducting a more comprehensive study. Additionally, using open-response items in questionnaires allows students who participate in research to convey their thoughts in their own words by writing in a designated area, thus collecting information about their viewpoints on specific issues or topics (Brown, 2009).

### *Specific setting and participants*

This study was conducted in the English Literature Study Program at Universitas Mulawarman, where the utilization of ChatGPT for writing activities has not been previously explored. An exploratory pilot study, characterized by its small scale, was regarded as fitting to capture student experiences in this specific research area and to evaluate the effectiveness of the research instrument for a future project. In EFL research, the selection of a pilot-study sample that is not excessively large or too small is a crucial methodological consideration (Sukserm, 2024). Johanson and Brooks (2010) suggest that a sample size of at least 30 participants is necessary for preliminary surveys or the development of scales, while Isaac and Michael (1995) view samples from 10 to 30 as practical for exploratory work despite their limits in detecting subtle effects. Bujang et al. (2018) also advise that questionnaire-based pilot studies should include 10 to 15 participants to guarantee sufficient responses for effectively testing each item. The research participants in this pilot study were second-semester students enrolled in an academic writing course, with a total of 32 students comprising 6 males and 26 females. Although the target population was 32 students, only 14 students completed the online questionnaire. This inconsistency can be attributed to various factors. Firstly, participation was completely voluntary, and no academic incentives were given, which could have impacted responses. Secondly, the requirement for open-response items demanded more time and cognitive effort than closed-ended items. Thirdly, the study was conducted during an active academic period, which may have further limited student availability.

### ***Instrument and data collection***

In order to finalize the study, an online questionnaire with an open-response format was distributed to the students of the academic writing class. The students had one week to complete the Google Form questionnaire, and a reminder was sent during the week. Their confidentiality was maintained, as they could answer privately and anonymously using the same link. No personal details were collected except for basic demographic data such as age, sex, and frequency of ChatGPT usage. The questionnaire ([Appendix 1](#)) focused on students' experiences, perceptions, and reflections on using ChatGPT to enhance their academic writing skills. Ten questions were created to explore how students typically use and integrate ChatGPT in their writing, how it enhances their writing quality and confidence, their concerns and personal beliefs on its use, and finally, the challenges they face along with their reflections on plagiarism-related issues.

### ***Data analysis***

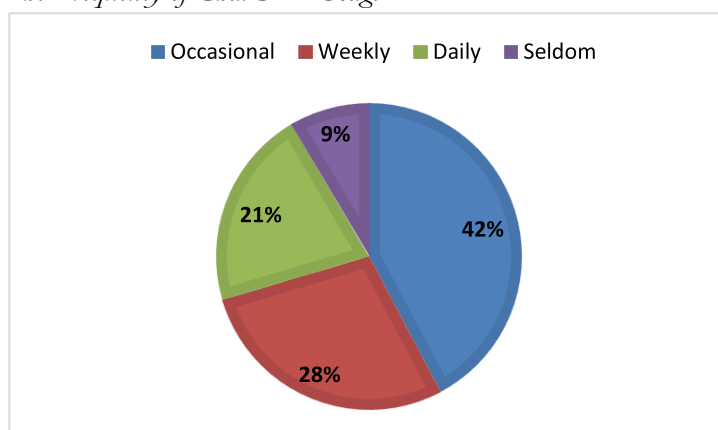
Even though the questionnaire was in English, the students were allowed to respond in either English or Indonesian to prevent confusion and misunderstandings. Subsequently, during the analysis phase, the ideas derived from the students' answers were translated into English. The thematic analysis method was applied to analyze the qualitative data which consists of six steps: familiarization with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and writing the report ([Braun & Clarke, 2006](#)). To validate the emergence of themes, the analysis focused on the iterative process of data exploration and researchers' reflexivity. From the initial data coding to the final theme construction, the analysis prioritizes the trustworthiness criteria such as credibility, transferability, dependability, and confirmability, ensuring that the themes developed are grounded in the participants' descriptions and accurately reflected their experiences ([Chakma & Li, 2025](#); [Steinke, 2004](#)). Reflexivity is integrated throughout the research process that requires researchers' critical awareness of the personal, interpersonal, methodological, and contextual elements that influence the data, along with their own theoretical positioning and potential biases ([Olmos-vega et al., 2023](#)).

## **FINDINGS**

This section presents the frequencies of ChatGPT usage among students in the academic writing courses and offers an analysis of their experiences, perceptions, and reflections regarding the use of ChatGPT to facilitate their academic writing tasks. Although the target group included thirty-two students, only fourteen returned fully completed questionnaires for analysis. Among them, there were four male students (29%) and ten female students (71%). [Figure 1](#) presents the frequency of ChatGPT usage among the third-semester students in the academic writing class.

**Figure 1**

*The Frequency of ChatGPT Usage*



Based on the responses, all participants were familiar with ChatGPT. The majority of participants were occasional users ( $n=6$  or 42%), which was the most common usage frequency. This was followed by weekly users ( $n=4$  or 28%). A smaller group of students reported daily use ( $n=3$  or 21%), and only one student (9%) used it seldom, which was the least common. In summary, the data indicated that students generally engage with ChatGPT with moderate frequency rather than at the extremes.

Drawing on the students' responses in the open-format questionnaire, the analysis proceeded by exploring students' experiences, perceptions, and reflections concerning their utilization of ChatGPT. This step facilitated the identification of patterns that influenced student engagement with the tool during their writing process. The data revealed insights into the incorporation of ChatGPT during writing process, writing support for improving linguistic accuracy and organization as well as trustworthiness and ethical use of ChatGPT. The resulting themes are presented in the subsequent table.

**Table 1**

*Students' Experiences, Perceptions, and Reflections of Using ChatGPT*

| Category of Responses                                        | Themes                             | Subthemes                                                                                                                                                                                                                                                        |
|--------------------------------------------------------------|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Incorporating ChatGPT during the writing process          | Idea development                   | Planning and generating ideas, brainstorming, providing topic suggestions, gathering preliminary information, reorganizing thoughts, outlining, drafting                                                                                                         |
|                                                              | Feedback provision                 | Making summary, clarifying difficult content and uncertainties, learning key concepts, requesting explanation of something incorrect, paraphrasing                                                                                                               |
|                                                              | Writer's autonomy                  | Crosschecking answers against ChatGPT's suggestions, verifying the accuracy of information, avoiding direct copying from ChatGPT, modifying ChatGPT's input to fit personal writing style, conducting a final quality check after considering ChatGPT's feedback |
| 2. Improving linguistic accuracy and organization in writing | Grammar                            | Checking and correcting grammar errors (e.g tense usage, subject-verb agreement, and parts of speech), giving reasons for certain incorrect grammatical structures                                                                                               |
|                                                              | Sentence                           | Restructuring unclear sentences to improve readability, combining simple sentences into more complex structures                                                                                                                                                  |
|                                                              | Paragraph and essay structuring    | Organizing ideas into a logical paragraph, assisting with idea mapping, learning how to develop a paragraph and an essay                                                                                                                                         |
|                                                              | Vocabulary expansion               | Choosing context-appropriate words, providing alternative expressions, introducing more formal and academic vocabulary, and upgrading from basic to more advanced word choices                                                                                   |
| 3. Trustworthiness and ethical use of ChatGPT                | Awareness of ChatGPT's limitations | Inaccurate and misleading information, overgeneralized suggestions, off-topic responses, template-like outputs, plagiarism risks, originality concerns, instructor                                                                                               |

| Category of Responses | Themes                         | Subthemes                                                                                                                                                                                                                                           |
|-----------------------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                       | Maintaining academic integrity | skepticism of AI-assisted writing, and limited access to certain GPT models<br>Personal understanding, reviewing external sources to verify ChatGPT's outputs, developing critical skills, and adapting ChatGPT's outputs to personal writing style |

### ***Incorporating ChatGPT during writing process***

Prior to actual writing activity, commonly referred to as prewriting, which involves the activity of choosing a topic and gathering ideas to develop and articulate it effectively (Oshima & Hogue, 2007), ChatGPT facilitates students with idea development. Their responses, for example, *"When writing a paragraph, I give my ideas to ChatGPT, and it suggests suitable topics,"* and *"I usually use ChatGPT for planning and brainstorming. I use ChatGPT as a research assistant to collect material before writing,"* confirmed that some students received assistance from ChatGPT in activities such as planning and generating ideas, brainstorming, providing topic suggestions, and gathering initial information. To produce a more structured and comprehensible paragraph and essay, particularly in outlining and drafting, the students also described the importance of ChatGPT in the following responses, *"I asked ChatGPT to help me write a draft for my paragraph, help me make an outline, and give me ideas for my writing,"* and *"I provided my draft notes and asked ChatGPT to expand them into a more detailed and structured essay."* In the other instance, students may perceive that ChatGPT helped in reorganizing thoughts in writing due to uncertainty, as written in a response, *"If I'm confused about where to start, I ask first to get an overview."*

Feedback provided by ChatGPT can take various forms, including summaries, clarifications, explanations, and paraphrases. The students responded, *"GPT helped me to summarize a PDF text, and it did the job perfectly,"* and *"I usually make sure to give the instruction not to give me a direct, single-answer solution.... so that I can choose and cross-check in a way that fits my style."* It was demonstrated that, for specific writing tasks, ChatGPT assisted students in writing summary and suggesting for explanations and clarifications. For the purpose of avoiding plagiarism, a few students did paraphrase, as shown in one student's response, *"I type instead of copy, so that I can see where I'm wrong and figure out how to paraphrase it with my own words."*

Although ChatGPT helps in many ways, it is essential to balance its suggestions with personal writing adjustments to demonstrate autonomy as a writer. In the context of second language (L2) writing, autonomous L2 writers can effectively oversee their L2 writing goals, content, and processes to achieve intended writing results (Xie & Lianjiang, 2025). Similarly, for EFL students, regarding their responsibility for their own writing, one student commented, *"I compare its suggestions with my original text and decide what changes to accept or reject so my writing still sounds like me."* This reflected that active adjustment and personalization of ChatGPT's feedback, beyond what GPT provides, is necessary. Furthermore, based on the data, students participating in this study suggested various strategies to maintain the originality of their writing. These included cross-checking answers with ChatGPT's suggestions, verifying the accuracy of information, refraining from direct copying from ChatGPT, and conducting a final quality check.

### ***Improving linguistic accuracy and organization in writing***

Linguistic accuracy is defined as the established conventions and rules governing language use within a specific context, pertaining to grammar and vocabulary (Sjöling, 2026). The benefits of using ChatGPT to improve academic writing are related to grammar, vocabulary, sentence, paragraph, and essay structuring. Most students mentioned grammar as the main reason they utilize ChatGPT. The same responses like *"It corrected mistakes in verb tense and subject-verb agreement,"* and *"ChatGPT has improved my confidence in writing. Before I often worried about grammar mistakes..."* put emphasis that grammar consistently becomes a hindrance to writing development. With ChatGPT, students felt more confident and less anxious about making mistakes in writing. Besides identifying mistakes in grammar,



ChatGPT also helped with vocabulary expansion by offering an extensive range of vocabulary and expressions. For instance, students remarked, *"For vocabulary, I often learn alternative words or phrases that sound more natural or academic,"* and *"ChatGPT helps me with grammar and vocabulary. For example, I've learned the correct use of tenses and can use more varied words."* ChatGPT as a writing support encouraged students to enrich their vocabulary through choosing context-appropriate words, using alternative expressions, and upgrading their vocabulary level.

Constructing sentences with correct grammar and appropriate word choices is considered a writing problem for students. For some reasons, ChatGPT improves clarity and coherence towards students' writing. In one response, *"Without a little help of ChatGPT, I don't think I would have been able to write a complete, though not perfect, sentence or paragraph on my own until now. I have to admit that improvement..."* explicitly indicated that ChatGPT's feedback forms clearer sentence construction and paragraph, and it shows progress for student's writing performance. The academic writing course also introduces a topic about sentence types (i.e., simple, compound, complex, and compound-complex sentences). However, not many students are able to effectively combine different sentence types, but they can instruct ChatGPT to produce text that incorporates sentence variety, as evidenced in the next response, *"ChatGPT showed me how to combine short, simple sentences into more complex ones."*

Ideas arise in an unstructured manner, making it difficult to arrange them logically in writing. In this case, ChatGPT could help manage ideas overload, as explained by one of the students, *"ChatGPT helped me the most with my coherence in paragraph. Sometimes I have too many ideas I want to put in my writing, and I get confused on how to connect every part."* Moreover, composing both a paragraph and an essay necessitates an understanding of organization. Based on the actual experience, a participant reported, *"When I was writing essays, I saw how ChatGPT structured introductions, body paragraphs, and conclusions. ChatGPT kinda improved my confidence in writing."* Through the guidance of ChatGPT, students can learn how to structure material for essay composition, which consists of three key elements: introduction, body paragraph, and conclusion.

### ***Trustworthiness and ethical use of ChatGPT***

Although ChatGPT provides valuable benefits, the integration of ChatGPT into EFL writing instruction is challenging because of trustworthiness and ethical use in its application. Students' responses revealed several limitations of using ChatGPT, particularly regarding accuracy, originality, and accessibility. As illustrated in their responses, several students are becoming increasingly aware of the potential of ChatGPT to produce inaccurate and misleading information (e.g. *"Of course, I have received incorrect or misleading suggestions from ChatGPT before."*), overgeneralized suggestions (e.g. *"I faced this kind of error from ChatGPT where it will suggest or create content or idea that has nothing to do with the prompt I wrote."*), and off-topic responses (e.g. *"At times, the answers do not align with my expectations and may be off-topic."*) In addition, plagiarism and issues with originality of work present further ethical challenges in academic environment as provided in these responses, *"AI typically depends on its internal data or external sources to generate content if you do not provide specific sources yourself,"* and *"...my teacher always warned me whenever I used GPT, so I remain thoughtfully concern about plagiarism to this day"* Students reacted with fear of skepticism from lecturers regarding their use of ChatGPT as shown in this response, *"I am concerned about how to make my writing feel original because some lecturers cannot separate themselves from the stereotype of 'this might be GPT's work.'" Apart from accuracy and originality, the participant also pointed out a problem with accessibility, "The difficulty lies primarily in the features, which are limited because I don't have the premium version."*

Academic integrity is an important part of education because it encourages a society that values learning, creating new knowledge, being honest, and acting in an ethical manner (Ogugua et al., 2023). The participants shared some practical strategies they successfully employ when using ChatGPT as a writing assistant. From the response, *"I handled this by searching for any terms that seemed incorrect and looking them up again on Google. My main concern is authenticity."* It is clearly observed that students avoid over-reliance on ChatGPT by consulting content from external sources like Google. They also maintain personal authenticity in their writing by modifying feedback and adding their own ideas, as written in their responses, *"I make changes or add my ideas. I also think about authenticity because assignments should reflect*

*my personal understanding.*”To ensure that the final writing matches the student’s voice, the student may adjust feedback to fit their personal writing style, as indicated in the response,” *My difficulty in using ChatGPT to write is that the advice sometimes doesn't fit my personal writing style, so I spend a lot of time adjusting it.*”

## DISCUSSION

This study analyzes students’ voices on ChatGPT, particularly relevant to their experiences, perceptions, and reflections, to improve academic writing. ChatGPT functions as a support resource for EFL writing, enhancing student engagement and writing proficiency (Dja’far & Hamidah, 2024; Hosain & Younus, 2025), provides feedback on users’ writing and tasks (Japoshvili-Ghvinashvili & Suleman, 2023; Solovey, 2024; Su et al., 2023; Syairofi et al., 2025), and greatly enriches the writing process (Li et al., 2024; Teng, 2024a). According to the current findings, ChatGPT was utilized for several educational purposes, encompassing idea development throughout the writing process, feedback provision, and validating information to maintain accuracy. Previous studies summarized the benefits of employing ChatGPT to support writing in specific activities such as content and idea creation (Alkamel & Alwagieh, 2024). Werdiningsih et al. (2024a) further reported that students employed ChatGPT to stimulate ideas and organize their thoughts prior to essay writing. This initial application of AI aided them in structuring their thoughts and developing an outline. Then they independently wrote the essay draft. Once the draft was finished, they reviewed and enhanced the text with the assistance of ChatGPT, making it clearer and correcting any errors. The other earlier studies also revealed that ChatGPT enhances the idea-generation process by allowing users to brainstorm and explore different viewpoints on multiple topics (Gozali et al., 2024; Marzuki et al., 2023; Werdiningsih et al., 2024b). ChatGPT proved to be beneficial for various tasks, including the preparation of outlines, content editing, proofreading, and reflecting on written work (Su et al., 2023). The findings of this study further corroborate earlier studies showing that ChatGPT effectively supports students at various stages of the writing process.

In relation to feedback provision, ChatGPT facilitated clarification and explanation for the requested information. As an illustration, Albadarin et al. (2024) described in their systematic review that students employ ChatGPT as a virtual assistant, taking advantage of its capacity to deliver immediate feedback, respond at any time, and clarify complex concepts. The feedback generated by ChatGPT is expected to be useful, particularly in the early stages of writing, as it can inspire students to undertake revision work promptly (Steiss et al., 2024). The experiences and perceptions of Japanese EFL students regarding the use of ChatGPT for writing revealed that ChatGPT fulfilled a dual function by providing authoritative insights into the students’ writing and offering feedback that students could easily understand, much like the peer review process in writing groups (Allen & Mizumoto, 2024). These results indicate that ChatGPT can offer feedback on how students engage with the task, which is advantageous for the cultivation of their learning skills.

Students often find it difficult to manage their time due to distractions; however, ChatGPT serves as a beneficial AI tool that provides them with prompt and constructive feedback (Guo et al., 2022; Tseng & Lin, 2024). It highlights the strengths and weaknesses of a text and proposes recommendations for improvement (Solovey, 2024). Moreover, because of distractions or difficulty in managing their time, students often rely on ChatGPT to clarify their ideas, plan their essays, and acquire immediate feedback, which significantly elevates the quality of their writing (Tseng & Lin, 2024). It also aids in developing a better contextual understanding, generating responses, and ensuring overall coherence (Ray, 2023a). ChatGPT addresses the emotional needs of students with high anxiety levels, enhancing their confidence throughout the writing process. This assertion aligns with the support provided by ChatGPT to students in alleviating anxiety associated with writing (Guo et al., 2022).

ChatGPT is unable to completely replace human expertise, especially in dealing with complex writing problems such as deep structure and pragmatics, as human evaluators still offer higher-quality feedback in most fields, apart from those that are strictly criteria-based (Al-Garaady & Mahyoob, 2023;

Steiss et al., 2024). This fact strengthens the notion that while ChatGPT offers linguistic and structural feedback, the autonomy of writers is maintained, as students are ultimately responsible for making adjustments and determining how to utilize the suggestions throughout the writing process (Xie & Jiang, 2025). The present results corroborate earlier research, suggesting that the participants were moderate rather than high-frequency users. They did not rely on ChatGPT entirely; rather, they generally completed the tasks based on their own knowledge, with only minimal help from the tool. Furthermore, they infrequently used ChatGPT's suggestions immediately. Instead, they checked information with trustworthy sources, avoided direct copying, paraphrased the generated material, and modified it to fit their personal writing style.

ChatGPT provides a substantially larger amount of feedback that focuses on linguistic accuracy and writing organization. It endorses academic writing courses that underscore the importance of mastery in organizing ideas, maintaining coherence, and applying accurate grammar and vocabulary (Campbell, 2019; Song & Song, 2023). The results of this study also align with Fitria's (2023) and Alkamel and Alwagieh's (2024) findings, which similarly highlighted the benefits of AI-assisted writing tools like ChatGPT in enhancing students' writing fluency, accuracy, and overall quality. These three studies indicated that ChatGPT is capable of producing well-organized and coherent essays, illustrating its strong functions in structuring content and employing language effectively. Other studies highlighted that prompts designed to detect errors in grammar, word choice, spelling, and text organization proved highly effective (Barrot, 2023; Huang, 2023). Consistent with this view, ChatGPT's collaborative features, which include suggesting improvements on grammar, syntax, and spelling, play an essential role for refining writing proficiency (Imran & Almusharraf, 2023).

Not only does ChatGPT assist in correcting grammar, improving sentences, and structuring both paragraphs and essays, but it also enriches students' vocabulary during the writing process by offering more precise, diverse, and contextually appropriate word choices. It contributes to identifying vocabulary options that better match the contextual suitability (Syafiee & Yaqin, 2025; Syairofi et al., 2025). For EFL students, mastering language proficiency requires a strong command of vocabulary, which not only boosts comprehension of spoken and written texts but also involves grasping word meanings, usage, and contextual appropriateness; consequently, ChatGPT emerges as a valuable resource in improving writing skills, especially by broadening students' vocabulary (Nguyen et al., 2024; Shahriar & Hayawi, 2023). By delivering accurate definitions, contextual examples, and translation support, ChatGPT promotes vocabulary enhancement while also providing assistance for students with vocabulary notes in both their first and the target language (Nguyen et al., 2024).

Along with its benefits, ChatGPT presents certain limitations that should not be overlooked. The limitations discovered within this study were inaccurate information, off-topic responses, and overgeneralized suggestions. A comparable issue recognized by participants from a previous study was the tendency of ChatGPT to yield responses that were irrelevant or off-topic in academic writing (Alkamel & Alwagieh, 2024), in which 39.2% of the participants reported that the tool occasionally provided suggestions that were unrelated to the task. Tsai et al. (2024) emphasized the challenges and feasibility concerns, stressing the importance of careful implementation. While previous studies indicated that from educators' perspectives, the integration of ChatGPT into instruction is a source of over-dependence, as it has the potential to weaken students' writing ability and critical thinking (Darmayasa et al., 2025; Harunasari, 2023; Japoshvili-Ghvinashvili & Suleman, 2023), the present study found that students mitigate this risk by cross-checking ChatGPT's suggestions through other platforms, such as Google, to ensure the accuracy of the information and maintain independent learning. In dealing with the feedback provided by AI, EFL students actively exercise their personal judgement and consult their instructors or peers for additional input, indicating that AI enhances rather than replaces human guidance (Werdingisih et al., 2024b).

Issues surrounding plagiarism, originality, and instructor's skepticism were central to students' experiences with ChatGPT. Despite recognizing ChatGPT as a useful tool in making writing more fluent, accurate, and high-quality, students voiced their concerns regarding academic integrity and plagiarism, reflecting a perspective that is consistent with ethical considerations from previous

research (Alkamel & Alwagieh, 2024; Dehauche, 2021). It was also documented that the concerns of academic dishonesty and plagiarism associated with ChatGPT have intensified the larger discussion about the implementation of ChatGPT as an AI-powered chatbot in academic setting, emphasizing the need for reforms in educational policies, teacher training, and assessment systems (Imran & Almusharraf, 2023). In a like manner, reports indicated that frequent use of text generated by ChatGPT might adversely affect the writing proficiency of language learners and create plagiarism problems if the text is generated without sufficient review and editing (Huang, 2023; Song & Song, 2023). Additionally, in order to prevent plagiarism, students should either directly place the borrowed ideas using quotation marks or express them through appropriate paraphrasing (Nguyen et al., 2024).

## CONCLUSION

The study adds to the research outcomes regarding the use of ChatGPT as a writing support tool in higher education, based on the students' experiences, perceptions, and reflections. AI inspires and promotes the fulfillment of writing assignments, yet the students prudently decide against fully adopting ChatGPT's suggestions. ChatGPT acts as a digital writing tool that supports students in collecting various ideas before writing. By delivering in-depth prompts, it gives substantial feedback that aids in recognizing grammatical errors, expanding vocabulary, creating more diverse sentence constructions, and structuring ideas into a logical written format. To conform to academic writing conventions, the feedback provided by ChatGPT should not entirely supplant personal understanding and individual writing style. Combining critical thinking with feedback from ChatGPT will also be useful in preserving original writing and avoiding plagiarism. Incorporating AI applications into EFL writing instruction is advised as an integral aspect of a technology-integrated language learning approach. This strategy aligns with innovative teaching practices and aims to enhance students' writing skills and confidence while ensuring authenticity. This study recognizes specific limitations, particularly in its methodology. Given that this pilot study aims to gather insights on ChatGPT's implementation to improve academic writing, the limited sample size does not yield sufficiently comprehensive results. The input from the participants demonstrated restricted variation, largely because many responses echoed a similar sense. Therefore, it is advisable to conduct interviews to achieve a more profound understanding of participants' attitudes and sentiments regarding ChatGPT. Nonetheless, these findings are still significant as a foundation for creating testing instruments and open-ended questionnaires for further studies with larger sample sizes. To strengthen the rigor and comprehensiveness of the study, it is also recommended to use a mixed-method or longitudinal design addressing the multifaceted impact of GenAI tools in EFL learning.

## REFERENCES

- Abdan, M. Z., Utamajaya, J. N., & Hadisaputro, E. L. (2025). Systematic literature review: The effectiveness of technology in education. *Buletin Poltanesa*, 26(1), 269–275. <https://doi.org/https://doi.org/10.51967/tanesa.v26i1.3226>
- Abdelhalim, S. M. (2024). Using ChatGPT to promote research competency: English as a Foreign Language undergraduates' perceptions and practices across varied metacognitive awareness levels. *Journal of Computer Assisted Learning*, 40(3), 1261–1275. <https://doi.org/https://doi.org/10.1111/jcal.12948>
- Al-Garaady, J., & Mahyoob, M. (2023). ChatGPT's capabilities in spotting and analyzing writing errors experienced by EFL learners. *Arab World English Journal*, 9, 3–17. <https://doi.org/https://dx.doi.org/10.24093/awej/call9.1>
- Al Shloul, T., Mazhar, T., Abbas, Q., Iqbal, M., Ghadi, Y. Y., Shahzad, T., Mallek, F., & Hamam, H. (2024). Role of activity-based learning and ChatGPT on students' performance in education. *Computers and Education: Artificial Intelligence*, 6, 100219. <https://doi.org/https://doi.org/10.1016/j.caeai.2024.100219>
- Albadarin, Y., Saqr, M., Pope, N., & Tukiainen, M. (2024). A systematic literature review of empirical research on ChatGPT in education. *Discover Education*, 3(60).



- <https://doi.org/https://doi.org/10.1007/s44217-024-00138-2>
- Aldosari, S. A. M. (2020). The future of higher education in the light of artificial intelligence transformations. *International Journal of Higher Education*, 9(3), 145–151. <https://doi.org/10.5430/ijhe.v9n3p145>
- Alkaissi, H., & McFarlane, S. I. (2023). Artificial hallucinations in ChatGPT: Implications in scientific writing. *Cureus*, 15(2), e35179. <https://doi.org/https://doi.org/10.7759/cureus.35179>
- Alkamel, M. A. A., & Alwagieh, N. A. S. (2024). Utilizing an adaptable artificial intelligence writing tool (ChatGPT) to enhance academic writing skills among Yemeni university EFL students. *Social Sciences & Humanities Open*, 10(August), 101095. <https://doi.org/10.1016/j.ssaho.2024.101095>
- Allen, T., & Mizumoto, A. (2024). ChatGPT over my friends: Japanese EFL learners' preferences for editing and proofreading strategies. *RELJ Journal*, 0(0). <https://doi.org/10.1177/00336882241262533>
- Ansari, A. N., Ahmad, S., & Bhutta, S. M. (2024). Mapping the global evidence around the use of ChatGPT in higher education: A systematic scoping review. *Education and Information Technologies*, 29, 11281–11321. <https://doi.org/https://doi.org/10.1007/s10639-023-12223-4>
- Aschbrenner, K. A., Kruse, G., Gallo, J. J., & Plano Clark, V. L. (2022). Applying mixed methods to pilot feasibility studies to inform intervention trials. *Pilot and Feasibility Studies*, 8(1), 217. <https://doi.org/https://doi.org/10.1186/s40814-022-01178-x>
- Barrot, J. S. (2023). Using ChatGPT for second language writing: Pitfalls and potentials. *Assessing Writing*, 57, 100745. <https://doi.org/https://doi.org/10.1016/j.asw.2023.100745>
- Baskara, R., & Mukarto. (2023). Exploring the implications of ChatGPT for language learning in higher education. *IJELTAL (Indonesian Journal of English Language Teaching and Applied Linguistics)*, 7(2), 343–358. <https://doi.org/http://dx.doi.org/10.21093/ijeltal.v7i2.1387>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/https://doi.org/10.1191/1478088706qp0630a>
- Brown, J. D. (2009). Open-response items in questionnaire. In J. Heigham & R. A. Cooker (Eds.), *Qualitative research in applied linguistics: A practical introduction* (pp. 200–219). Palgrave Macmillan.
- Bujang, M. A., Omar, E. D., & Baharum, N. A. (2018). A review on sample size determination for Cronbach's alpha test: A simple guide for researchers. *The Malaysian Journal of Medical Sciences (MJMS)*, 25(6), 85–99. <https://doi.org/https://doi.org/10.21315/mjms2018.25.6.9>
- Campbell, M. (2019). Teaching academic writing in higher education. *Education Quarterly Reviews*, 2(3), 608–614. <https://doi.org/https://doi.org/10.31014/aior.1993.02.03.92>
- Carlson, M., Pack, A., & Escalante, J. (2024). Utilizing OpenAI's GPT-4 for written feedback. *TESOL Journal*, 15(2), 1–7. <https://doi.org/https://doi.org/10.1002/tesj.759>
- Chakma, U., & Li, B. (2025). Ensuring trustworthiness using an inductive approach in qualitative educational research: An autoethnographic investigation of two early career researchers reflecting on PhD data analysis. *International Journal of Educational Methodology*, 11(2), 233–244. <https://doi.org/https://doi.org/10.12973/ijem.11.2.233>
- Cotton, D. R. E., Cotton, P. A., & Shipway, R. (2023). Chatting and cheating. Ensuring academic integrity in the era of ChatGPT. *Innovations in Education and Teaching International*, 61(2), 228–239. <https://doi.org/https://doi.org/10.35542/osf.io/mrz8h>
- Darmayasa, M. W., Kusuma, I. P. I., & Indrayani, L. (2025). Exploring EFL preservice teachers' academic integrity of using ChatGPT in educational institutions. *Journal of Psychology and Instruction*, 9(2), 165–175. <https://doi.org/https://doi.org/10.23887/jpai.v9i2.93509>
- Dehauche, N. (2021). Plagiarism in the age of massive generative pre-trained transformers (GPT-3). *Ethics in Science and Environmental Politics*, 21, 17–23. <https://doi.org/doi:10.3354/esep00195>
- Dewi, F. (2024). The inception of Ideas: How students use ChatGPT for academic writing. *Jurnal Sositologi*, 23(2), 291–304. <https://doi.org/https://doi.org/10.5614/sostek.itbj.2024.23.2.10>
- Dja'far, V. H., & Hamidah, F. N. (2024). The effectiveness of AI technology in improving academic English writing skills in higher education. *Journal of Language and Literature Studies*, 4(3), 579–593.

- <https://doi.org/https://doi.org/10.36312/jolls.v4i3.2031>
- Donald, G. (2018). A brief summary of pilot and feasibility studies: Exploring terminology, aims, and methods. *European Journal of Integrative Medicine*, 24, 65–70. <https://doi.org/https://doi.org/10.1016/j.eujim.2018.10.017>
- Du, J., & Daniel, B. K. (2024). Transforming language education: A systematic review of AI-powered chatbots for English as a foreign language speaking practice. *Computers and Education: Artificial Intelligence*, 6, 100230. <https://doi.org/https://doi.org/10.1016/j.caeai.2024.100230>
- Farazouli, A., Cerratto-Pargman, T., Bolander-Laksov, K., & McGrath, C. (2023). Hello GPT! Goodbye home examination? An exploratory study of AI chatbots impact on university teachers' assessment practices. *Assessment & Evaluation in Higher Education*, 49(3), 363–375. <https://doi.org/https://doi.org/10.1080/02602938.2023.2241676>
- Farrokhnia, M., Banihashem, S. K., Noroozi, O., & Wals, A. (2024). A SWOT analysis of ChatGPT: Implications for educational practice and research. *Innovations in Education and Teaching International*, 61(3), 460–474. <https://doi.org/https://doi.org/10.1080/14703297.2023.2195846>
- Fathi, J., & Rahimi, M. (2024). Utilising artificial intelligence-enhanced writing mediation to develop academic writing skills in EFL learners: A qualitative study. *Computer Assisted Language Learning*, 1–40. <https://doi.org/https://doi.org/10.1080/09588221.2024.2374772>
- Feyijimi, T. R., Aliu, J. O., Oke, A. E., & Aghimien, D. O. (2025). ChatGPT's expanding horizons and transformative impact across domains: A critical review of capabilities, challenges, and future directions. *Computers*, 14(9), 366. <https://doi.org/https://doi.org/10.3390/computers14090366>
- Fitria, T. N. (2023). Artificial intelligence (AI) technology in OpenAI ChatGPT application: A review of ChatGPT in writing English essay. *ELT Forum: Journal of English Language Teaching*, 12(1), 44–58. <https://doi.org/10.15294/elt.v12i1.64069>
- Flick, U. (2004). Design and process in qualitative research. In Uwe Flick, E. van Kardorff, & I. Steinke (Eds.), *A companion to qualitative research* (pp. 146–152). Sage Publications Ltd.
- Gozali, I., Wijaya, A. R. T., Lie, A., Cahyono, B. Y., & Suryati, N. (2024). ChatGPT as an automated writing evaluation (AWE) tool: feedback literacy development and AWE tools' integration framework. *The JALT CALL Journal*, 20(1), 1–22. <https://doi.org/https://doi.org/10.29140/jaltcall.v20n1.1200>
- Guo, K., Wang, J., & Chu, S. K. (2022). Using chatbots to scaffold EFL students' argumentative writing. *Assessing Writing*, 54, 100666. <https://doi.org/https://doi.org/10.1016/j.asw.2022.100666>
- Gupta, M., Akiri, C., Aryal, K., Parker, E., & Praharaj, L. (2023). From ChatGPT to threatGPT: Impact of generative AI in cybersecurity and privacy. *IEEE Access*, 11, 80218–80245. <https://doi.org/https://doi.org/10.1109/ACCESS.2023.3300381>
- Harunasari, S. (2023). Examining the effectiveness of AI-integrated approach in EFL writing: A case of ChatGPT. *International Journal of Progressive Sciences and Technologies*, 39(2), 357–368. <https://doi.org/http://dx.doi.org/10.52155/ijpsat.v39.2.5516>
- Helm, J. M., Swiergosz, A. M., Haeberle, H. S., Karnuta, J. M., Schaffer, J. L., Krebs, V. E., Spitzer, A. I., & Ramkumar, P. N. (2020). Machine learning and artificial intelligence: Definitions, applications, and future directions. *Current Reviews in Musculoskeletal Medicine*, 13(1), 69–76. <https://doi.org/https://doi.org/10.1007/s12178-020-09600-8>
- Hosain, K., & Younus, A. A. (2025). Teachers' perspectives on integrating ChatGPT into EFL writing instruction. *TESOL Communications*, 4(1), 41–60. <https://doi.org/10.58304/tc.20250103>
- Huang, J. (2023). Engineering ChatGPT prompts for EFL writing classes. *International Journal of TESOL Studies*, 5(4), 73–79. <https://doi.org/10.58304/ijts.20230405>
- Imran, M., & Almusharraf, N. (2023). Analyzing the role of ChatGPT as a writing assistant at higher education level: A systematic review of the literature. *Contemporary Educational Technology*, 15(4), ep464. <https://doi.org/https://doi.org/10.30935/cedtech/13605>
- Isaac, S., & Michael, W. B. (1995). *Handbook in research and evaluation*. Educational and Industrial Testing

Services.

- Japoshvili-Ghvinashvili, M., & Suleman, N. (2023). Assisting ELT teachers: Designing activities for the use of ChatGPT in teaching and learning. *Pakistan Journal of Multidisciplinary Innovation*, 2(1), 24–35. <https://doi.org/https://doi.org/10.59075/pjmi.v2i1.219>
- Jeon, J., Lee, S., & Choi, S. (2024). A systematic review of research on speech-recognition chatbots for language learning: Implications for future directions in the era of large language models. *Interactive Learning Environments*, 32(8), 4613–4631. <https://doi.org/https://doi.org/10.1080/10494820.2023.2204343>
- Johanson, G. A., & Brooks, G. P. (2010). Initial scale development: Sample size for pilot studies. *Educational and Psychological Measurement*, 70(3), 394–400. <https://doi.org/10.1177/0013164409355692>
- Kohnke, L., Moorhouse, B. L., & Zou, D. (2023). ChatGPT for language teaching and learning. *RELC Journal*, 54(2), 537–550. <https://doi.org/https://doi.org/10.1177/00336882231162868>
- Kostka, I., & Toncelli, R. (2023). Exploring applications of ChatGPT to English language teaching: Opportunities, challenges, and recommendations. *TESL-EL*, 27(3), 1–19. <https://doi.org/https://doi.org/10.55593/ej.27107int>
- Labadze, L., Grigolia, M., & Machaidze, L. (2023). Role of AI chatbots in education: Systematic literature review. *International Journal of Educational Technology in Higher Education*, 21(1), 56. <https://doi.org/https://doi.org/10.1186/s41239-023-00426-1>
- Le, A. N. N., Nguyen, V. N., Nguyen, M. T. X., & Bo, L. K. (2024). Exploring the use of ChatGPT as a tool for developing eportfolios in ESL classrooms. In S. Papadakis (Ed.), *IoT, AI, and ICT for educational applications* (pp. 51–76). Springer. [https://doi.org/https://doi.org/10.1007/978-3-031-50139-5\\_3](https://doi.org/https://doi.org/10.1007/978-3-031-50139-5_3)
- Li, J., Huang, J., Wu, W., & Whipple, P. B. (2024). Evaluating the role of ChatGPT in enhancing EFL writing assessments in classroom settings: A preliminary investigation. *Humanities and Social Sciences Communications*, 11(1), 1–9. <https://doi.org/10.1057/s41599-024-03755-2>
- Liando, N. V. ., Tatipang, D. P., Rorimpandey, R., Kumayas, T., Saudah, K., & Iskandar, I. (2025). AI-powered language learning: A blessing or a curse for English language education? *Studies in English Language and Education*, 12(1), 301–311. <https://doi.org/https://doi.org/10.24815/siele.v12i1.34842>
- Lubis, N. K., Azhar, F., & Daud, A. (2025). Students' perception towards ChatGPT for academic writing at English Study Program FKIP Universitas Riau. *Ideas: Journal on English Language Teaching and Learning, Linguistics and Literature*, 13(2), 4026–4038. <https://doi.org/https://doi.org/10.24256/ideas.v13i2.5887>
- Macdonald, C., Adeloje, D., Sheikh, A., & Rudan, I. (2023). Can ChatGPT draft a research article? An example of population-level vaccine effectiveness analysis. *Journal of Global Health*, 13, 01003. <https://doi.org/https://doi.org/10.7189/jogh.13.01003>
- Marr, B. (2023). *A short history of ChatGPT: How we got to where we are today*. Forbes. <https://www.forbes.com/sites/bernardmarr/2023/05/19/a-short-history-of-chatgpt-how-we-got-to-where-we-are-today/>
- Martínez-Plumed, F., Gómez, E., & Hernández-Orallo, J. (2021). Futures of artificial intelligence through technology readiness levels. *Telematics and Informatics*, 58(101525), 1–37. <https://doi.org/https://doi.org/10.1016/j.tele.2020.101525>
- Marzuki, Widiati, U., Rusdin, D., Darwin, & Indrawati, I. (2023). The impact of AI writing tools on the content and organization of students' writing: EFL teachers' perspective. *Cogent Education*, 10, 1–17. <https://doi.org/https://doi.org/10.1080/2331186X.2023.2236469>
- Meniado, J. C. (2023). The impact of ChatGPT on English language teaching, learning, and assessment: A rapid review of literature. *Arab World English Journal*, 14(4), 3–18. <https://doi.org/https://doi.org/10.24093/awej/vol14no4.1>
- Mhlanga, D. (2023). Open AI in education, the responsible and ethical use of ChatGPT towards lifelong learning. *SSRN Electronic Journal*, 19.



- <https://doi.org/https://dx.doi.org/10.2139/ssrn.4354422>
- Mizumoto, A., & Eguchi, M. (2023). Exploring the potential of using an AI language model for automated essay scoring. *Research Methods in Applied Linguistics*, 2(2), 100050. <https://doi.org/https://doi.org/10.1016/j.rmal.2023.100050>
- Mohamed, A. M. (2024). Exploring the potential of an AI-based chatbot (ChatGPT) in enhancing English as a foreign language (EFL) teaching: Perceptions of EFL faculty members. *Education and Information Technologies*, 29(3), 3195–3217. <https://doi.org/https://doi.org/10.1007/s10639-023-11917-z>
- Muresherwa, E., & Jita, L. C. (2022). The value of a pilot study in educational research learning: In search of a good theory-method fit. *Journal of Educational and Social Research*, 12(2), 220–236. <https://doi.org/https://doi.org/10.36941/jesr-2022-0047>
- Nation, P. (2007). The four strands. *Innovation in Language Learning and Teaching*, 1(1), 2–13. <https://doi.org/https://doi.org/10.2167/illt039.0>
- Nguyen, H. H. B., Ngoc, H. H. B., & Dan, T. C. (2024). EFL students' perceptions and practices of using ChatGPT for developing English argumentative essay writing skills. *European Journal of Alternative Education Studies*, 9(1), 168–216. <https://doi.org/10.46827/ejae.v9i1.5341>
- Ogugua, D., Yoon, S. N., & Lee, D. (2023). Academic integrity in a digital era: Should the use of ChatGPT be banned in schools? *Global Business and Finance Review (GBFR)*, 28(7), 1–10. <https://doi.org/https://doi.org/10.17549/gbfr.2023.28.7.1>
- Olmos-vega, F. M., Stalmeijer, R. E., Varpio, L., Kahlke, R., Stalmeijer, R. E., Varpio, L., & Kahlke, R. (2023). A practical guide to reflexivity in qualitative research : AMEE Guide No. 149. *Medical Teacher*, 45(3), 241–251. <https://doi.org/10.1080/0142159X.2022.2057287>
- Ooi, K. B., Tan, G. W. H., Al-Emran, M., Al-Sharafi, M. A., Capatina, A., Chakraborty, A., Dwivedi, Y. K., Huang, T. L., Kar, A. K., & Lee, V. H. (2023). The potential of generative Artificial Intelligence across disciplines: Perspectives and future directions. *Journal of Computer Information Systems*, 65(1), 76–107. <https://doi.org/https://doi.org/10.1080/08874417.2023.2261010>
- Oshima, A., & Hogue, A. (2007). *Introduction to academic writing (Third edition)*. Pearson Education, Inc.
- Pearson, N., Naylor, P. J., Ashe, M. C., Fernandez, M., Yoong, S. L., & Wolfenden, L. (2020). Guidance for conducting feasibility and pilot studies for implementation trials. *Pilot and Feasibility Studies*, 6(1), 167. <https://doi.org/https://doi.org/10.1186/s40814-020-00634-w>
- Pham, N. N. H. (2025). The use of ChatGPT in EFL students as a learning assistant in their writing skills: A literature review. *International Journal of AI in Language Education*, 2(1), 38–54. <https://doi.org/10.54855/ijaile.25213>
- Rahman, M. R., & Watanobe, Y. (2023). ChatGPT for education and research: Opportunities, threats, and strategies-web of science core collection. *Applied Sciences*, 13(9), 5783. <https://doi.org/https://doi.org/10.3390/app13095783>
- Ray, P. P. (2023a). ChatGPT: A comprehensive review on background, applications, key challenges, bias, ethics, limitations and future scope. *Internet of Things and Cyber-Physical Systems*, 3(April), 121–154. <https://doi.org/https://doi.org/10.1016/j.iotcps.2023.04.003>
- Ray, P. P. (2023b). Internet of things and cyber-physical systems ChatGPT : A comprehensive review on background , applications , key challenges , bias , ethics , limitations and future scope. *Internet of Things and Cyber-Physical Systems*, 3(March), 121–154. <https://doi.org/10.1016/j.iotcps.2023.04.003>
- Rudolph, J., Tan, S., & Tan, S. (2023). ChatGPT: Bullshit spewer or the end of traditional assessments in higher education? *Journal of Applied Learning and Teaching*, 6(1), 342–363. <https://doi.org/https://doi.org/10.37074/jalt.2023.6.1.9.number:1>
- Shahriar, S., & Hayawi, K. (2023). Let's have a chat! A conversation with ChatGPT: Technology, applications, and limitations. *Artificial Intelligence and Applications*, 2(1), 11–20. <https://doi.org/https://doi.org/10.47852/bonviewAIA3202939>
- Shen, Y. (2024). Investigating Chinese learners' use and perceptions of ChatGPT in EAP. *12th International Conference on Information and Education Technology (ICIET)*, 248–252.



- <https://doi.org/doi:10.1109/ICIET60671.2024.10542734>.
- Shiri, A. (2023). ChatGPT and academic integrity. *Information Matters*, 3(2). <https://doi.org/https://dx.doi.org/10.2139/ssrn.4360052>
- Sjöling, C. H. (2026). The relation between linguistic accuracy and scoring of Swedish EFL students' writing during a high-stakes exam. *Assessing Writing*, 67(December 2024), 100995. <https://doi.org/10.1016/j.asw.2025.100995>
- Solovey, O. Z. (2024). Comparing peer, ChatGPT, and teacher corrective feedback in EFL writing: Students' perceptions and references. *Technology in Language Teaching and Learning*, 6(3), 1–23. <https://doi.org/https://doi.org/10.29140/tltl.v6n3.1482>
- Song, C., & Song, Y. (2023). Enhancing academic writing skills and motivation: assessing the efficacy of ChatGPT in AI-assisted language learning for EFL students. *Frontiers in Psychology*, 14(December), 1–14. <https://doi.org/10.3389/fpsyg.2023.1260843>
- Steinke, I. (2004). Quality criteria in qualitative research. In Uwe Flick, E. von Kardorff, & I. Steinke (Eds.), *A companion to qualitative research* (pp. 184–190). Sage Publications Ltd.
- Steiss, J., Tate, T., Graham, S., Cruz, J., Hebert, M., Wang, J., Moon, Y., Waverly, T., Warschauer, M., & Olson, C. B. (2024). Comparing the quality of human and ChatGPT feedback of students' writing. *Learning and Instruction*, 91(March), 101894. <https://doi.org/10.1016/j.learninstruc.2024.101894>
- Su, Y., Lin, Y., & Lai, C. (2023). Collaborating with ChatGPT in argumentative writing classrooms. *Assessing Writing*, 57, 100752. <https://doi.org/https://doi.org/10.1016/j.asw.2023.100752>
- Sukserm, P. (2024). Determining the appropriate sample size in EFL Pilot Studies. *Journal of Research Methodology*, 37(3), 245–264. <https://doi.org/https://doi.org/10.14456/jrm.2024.13>
- Sullivan, M., Kelly, A., & McLaughlan, P. (2023). ChatGPT in higher education: Considerations for academic integrity and learning. *Journal of Applied Learning and Teaching*, 6(1), 31–40. <https://doi.org/https://doi.org/10.37074/jalt.2023.6.1.17>
- Syafiee, A. S. E. E. B. A., & Yaqin, L. N. (2025). A comparative analysis of Google Translate and ChatGPT in translating Borneo Bulletin News into standard Malay. *Journal of Research on English and Language Learning (J-REaLL)*, 6(1), 115–126. <https://doi.org/https://doi.org/10.33474/j-reall.v6i1.23252>
- Syairofi, A., Emilia, E., & Purnawarman, P. (2025). The use of ChatGPT in the Indonesian ELT context : A systematic review. *Journal of Research on English and Language Learning (J-REaLL)*, 6(2), 217–234. <https://doi.org/https://doi.org/10.33474/j-reall.v6i2.23552>
- Szügyi, J. S., Szügyi, E., & Takács, M. (2024). Evaluating the use of ChatGPT by university and high school students. *2024 IEEE 18th International Symposium on Applied Computational Intelligence and Informatics (SACI)*, 000497–000502. <https://doi.org/https://doi.org/10.1109/saci60582.2024.10619721>
- Taecharungroj, V. (2023). “What can ChatGPT do?” Analysing early reactions to the innovative AI chatbot on Twitter. *Big Data and Cognitive Computing*, 7(35), 1–10. <https://doi.org/https://doi.org/10.3390/bdcc7010035>
- Teng, M. F. (2024a). A systematic review of ChatGPT for English as a foreign language writing: Opportunities, challenges, and recommendations. *International Journal of TESOL Studies*, 6(3), 36–57. <https://doi.org/10.58304/ijts.20240304>
- Teng, M. F. (2024b). “ChatGPT is the companion, not enemies”: EFL learners' perceptions and experiences in using ChatGPT for feedback in writing. *Computers and Education: Artificial Intelligence*, 7, 100270. <https://doi.org/https://doi.org/10.1016/j.caeai.2024.100270>
- Tlili, A., Shehata, B., Adarkwah, M. A., Bozkurt, A., Hickey, D. T., Huang, R., & Agyemang, B. (2023). What is the devil is my guardian angel: ChatGPT as a case study of using chatbots in education. *Smart Learning Environments*, 10, 1–24. <https://doi.org/https://doi.org/10.1186/s40561-023-00237-x>
- Tsai, C. Y., Lin, Y. T., & Brown, I. K. (2024). Impacts of ChatGPT-assisted writing for EFL English majors: Feasibility and challenges. *Education and Information Technologies*, 29(17), 22427–22445.

- <https://doi.org/https://doi.org/10.1007/s10639-024-12722-y>
- Tseng, Y. C., & Lin, Y. H. (2024). Enhancing English as a foreign language (EFL) learners' writing with ChatGPT: A university-level course design. *Electronic Journal of E-Learning*, 22(2), 78–97. <https://doi.org/10.34190/ejel.21.5.3329>
- Vannuccini, S., & Prytkova, E. (2023). Artificial Intelligence's new clothes? A system technology perspective. *Journal of Information Technology*, 39(2), 317–338. <https://doi.org/https://doi.org/10.1177/02683962231197824>
- Wahyuni, S., Putro, N. H. P. S., & Effendi, A. (2024). Trends in artificial intelligence-infused English language learning: A comprehensive bibliometric and content review. *Advanced Education*, 12(25), 162–178. <https://doi.org/https://doi.org/10.20535/2410-8286.315035>
- Wang, C., Li, Z., & Bonk, C. (2024). Understanding self-directed learning in AI-Assisted writing: A mixed methods study of postsecondary learners. *Computers and Education: Artificial Intelligence*, 6, 100247. <https://doi.org/https://doi.org/10.1016/j.caeai.2024.100247>
- Werdiningsih, I., Marzuki, Indrawati, I., Rusdin, D., Ivone, F. M., Basthomi, Y., & Zulfahreza. (2024a). Revolutionizing EFL writing: Unveiling the strategic use of ChatGPT by Indonesian master's students. *Cogent Education*, 11(1), 1–18. <https://doi.org/https://doi.org/10.1080/2331186X.2024.2399431>
- Werdiningsih, I., Marzuki, & Rusdin, D. (2024b). Balancing AI and authenticity: EFL students' experiences with ChatGPT in academic writing. *Cogent Arts & Humanities*, 11(1), 1–15. <https://doi.org/https://doi.org/10.1080/23311983.2024.2392388>
- Xie, L., & Lianjiang, J. (2025). Promoting second language writing autonomy through digital multimodal composing. *Journal of Second Language Writing*, 69(May), 101225. <https://doi.org/10.1016/j.jslw.2025.101225>
- Zhang, R., Zou, D., & Cheng, G. (2023). Chatbot-based learning of logical fallacies in EFL writing: Perceived effectiveness in improving target knowledge and learner motivation. *Interactive Learning Environments*, 32(9), 5552–5569. <https://doi.org/https://doi.org/10.1080/10494820.2023.2220374>

## CONFLICT OF INTEREST STATEMENT:

No potential conflict of interest was reported by the authors.

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## Appendix 1

This questionnaire aims to gather information about your experience with ChatGPT as a support tool in academic writing. Please answer each question in as much detail as you can. There are no right or wrong answers. Your responses will be kept confidential and used only for research. You can use either English or Indonesian language to provide responses. Thank you for participating.

### Students' Background

Age :

Sex :

Question: How regularly do you rely on ChatGPT for completing writing tasks?

### Students' voices on ChatGPT: Experiences, perceptions, and reflections

#### A) Writing Process

- 1) Describe how you usually use ChatGPT when you write. Give specific examples.
- 2) Describe one or two writing tasks where ChatGPT helped you. Please explain what you did and what ChatGPT produced.
- 3) When you use ChatGPT, what steps do you take to incorporate its suggestions into your own writing? (Be as detailed as possible.)

#### B) Perceived Improvement and Skills

- 4) In what ways (if any) has ChatGPT helped your writing skills? Give concrete examples for vocabulary, grammar, sentence structure, coherence, organization, or other areas.
- 5) Has ChatGPT improved your confidence in writing? Explain how and give examples if possible.
- 6) Do you feel your writing has become more original or less original after using ChatGPT? Please explain with examples.

#### C) Critical Use, Trust, and Ethics

- 7) Have you ever found ChatGPT's feedback to be incorrect or misleading? If yes, describe the incident and how you handled it.
- 8) Do you have any concerns about ethics (e.g., plagiarism, authenticity) when using ChatGPT for writing? Explain.

#### D) Challenges and Reflections

- 9) What are the main difficulties you face when using ChatGPT for writing? (Technical, language, understanding suggestions, etc.)
- 10) Did you worry about plagiarism, teacher reactions, or fairness? How did you handle that?