

EFL University Students' Perceptions of ChatGPT's Impact on English Writing Content

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Abstract

This study investigates EFL students' perceptions of ChatGPT's impact on academic writing at the University of Economics, Da Nang, Vietnam, focusing on idea development, idea expansion, logical organisation, and the use of discourse markers. A mixed-methods design was used to examine both general trends and detailed learner perspectives. Quantitative data were collected through a Likert-scale questionnaire administered to 134 B1-level students, while semi-structured interviews were conducted with 10 participants selected from the survey sample. The findings indicate moderately positive to positive perceptions of ChatGPT's contribution to writing content, particularly in idea generation, idea expansion, and textual organisation. Interview participants expressed greater confidence in its benefits than survey respondents. However, both data sources raised concerns about over-reliance on AI, weakened writing autonomy, and possible declines in idea quality. Among these concerns, the threat to students' writing independence was considered the most significant. Overall, ChatGPT was perceived as a valuable tool for supporting academic writing, but unregulated use may hinder the development of independent writing skills. The study therefore highlights the need for pedagogically informed AI integration that maintains established writing standards, encourages critical evaluation of AI-generated content, and promotes learner autonomy in EFL writing instruction.

Keywords ChatGPT, writing content, idea development, logical organization

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INTRODUCTION

Writing is a critical skill in EFL (English as a Foreign Language) learning, as it not only reflects learners' command of grammar and vocabulary but also demonstrates their ability to organise and communicate complex ideas effectively (Fareed et al., 2016). Research highlights that strong EFL writing requires a combination of subskills, including vocabulary range, grammatical accuracy, cohesion and coherence, task understanding, and awareness of audience and tone (Harmer, 2001). For this reason, writing is often the most cognitively demanding skill, since it demands the simultaneous application of linguistic, organisational, and critical thinking skills (Dar & Khan, 2015; Nunan, 1989). Common limitations in writing include poor grammar control, lack of ideas, weak organisation, a shortage of topic-specific vocabulary, and limited exposure to formal writing genres (Hawanti & Zubayduloevna, 2023). Moreover, anxiety, limited feedback, and over-reliance on translation from the first language can hinder their progress (Hyland, 2003). Studies also show that many learners struggle to develop an academic voice and often imitate sentence structures without fully understanding them (Al Badi, 2015). Writing therefore poses major hurdles for EFL learners.

In light of such issues, the integration of Artificial Intelligence (AI) into EFL (English as a Foreign Language) learning has become increasingly widespread, particularly in writing instruction and practice (Alharbi, 2023). AI refers to computer systems capable of performing tasks that typically require human intelligence, such as language generation, feedback, and correction (Praphan & Praphan, 2023). In recent years, tools like ChatGPT, Grammarly, and Quillbot have gained popularity among EFL learners due to their ability to assist with grammar checking, paraphrasing, vocabulary enhancement, and even idea generation. Research indicates that the frequency of AI use in EFL writing has grown significantly, especially among university students, who rely on these tools for academic writing tasks. This trend is driven by several factors, including immediate and detailed feedback after writing, quick generation of vocabulary and grammar structures tailored to students' needs, and the need for sample texts for approaching unfamiliar writing genres and developing ideas (Lee, 2024; Syahnaz & Fithriani, 2023). However, studies also point out concerns, such as over-reliance on AI, lack of critical engagement with corrections, and potential ethical issues when AI-generated content is used without proper understanding or attribution (Huang et al., 2023; O'Neill & Russell, 2019). Despite these concerns, AI is becoming an important supplement to EFL instruction. When used thoughtfully, it can support learner autonomy and enhance writing quality, particularly when combined with guided teacher feedback and active learning strategies (Allen & Mizumoto, 2024; Bibi & Atta, 2024; Deep et al., 2025).

More specifically, ChatGPT, developed by OpenAI, is an AI language model increasingly used by EFL (English as a Foreign Language) learners to support writing tasks. Its primary functions include generating text, rephrasing sentences, correcting grammar, suggesting vocabulary, and offering structural guidance for various genres such as essays, emails, and reports. Many EFL students find ChatGPT valuable for overcoming writing challenges, such as limited vocabulary, grammatical uncertainty, or difficulty organising ideas (Abdenmour & Smail, 2024). One of the major positive impacts of ChatGPT is its ability to provide instant feedback and language models that learners can study and imitate, which can support improvements in fluency, coherence, and task completion (Guo & Wang, 2024; Rudolph et al., 2023). It also promotes learner autonomy by allowing students to practice writing outside the classroom and gain exposure to natural language use (Chan & Hu, 2023). However, concerns have been raised about over-reliance on the tool. When students depend too heavily on AI-generated content, they may bypass the cognitive processes necessary for developing writing skills, such as planning, revising, and self-correction (Gayed et al., 2022). Furthermore, some learners may use ChatGPT to complete entire writing tasks without understanding the language produced, which limits long-term language acquisition (Chan & Hu, 2023; Guo & Wang, 2024). There is also the risk of generating inappropriate or culturally inaccurate content if the prompts are unclear (Abdenmour & Smail, 2024; Gayed et al., 2022).

Although many studies investigating students' perceptions of the impact of AI, specifically ChatGPT, on writing performance have identified a variety of general advantages and disadvantages in areas such as vocabulary, grammar, idea development, and organisation, insights into these aspects in the Vietnamese EFL context, particularly in Da Nang, remain limited. Since AI is increasingly used in EFL writing tasks in Vietnamese universities, with rising concerns about its likely implications for EFL writing development (Duong & Chen, 2025; Nguyen et al., 2024), this research aims to shed more light on how EFL university students in Da Nang perceive AI's impact on idea development and organisation, including brainstorming, idea expansion, logical progression, and cohesive devices, which remain essential elements in high-quality writing (Hyland, 2003). By doing so, the study seeks to use

these insights to better inform writing practices and learning methods for EFL students in a world increasingly shaped by AI.

The study addresses the following research questions.

1. How do students perceive the use of AI in relation to their idea generation and idea expansion processes?
2. How do students perceive the use of AI in relation to the logical progression and the discourse marker use of their writing?

LITERATURE REVIEW

The Importance of Content in EFL Writing

Writing quality in EFL contexts has commonly been viewed as a multidimensional construct involving not only linguistic but also cognitive components. Beyond grammatical accuracy or proper vocabulary use, effective and high-quality writing also necessitates the production of relevant ideas for tasks, their coherent and logical organisation, and the use of appropriate discourse markers to guide readers (Shaw & Weir, 2007). These aspects are consistently reflected in construct-based writing assessment frameworks and have been widely examined in EFL writing research. In fact, various reliable English-testing organisations, such as IELTS, TOEFL, or Cambridge, have always included idea development as one of their most core criteria to assess learners' writing performance. In recent years, the emergence of generative AI tools such as ChatGPT has prompted renewed interest in how technology may support or influence these idea-related dimensions of writing (Xiao, 2024; Vera, 2023).

Idea generation refers to a writer's ability to brainstorm relevant and sufficient ideas in response to a writing task (Flower & Hayes, 1981). These ideas form the basis for writing, providing a basis for learners to use grammar and vocabulary resources to express their ideas fluently in written communication. However, in EFL contexts, learners often experience obstacles during the pre-writing stage due to limited background knowledge, especially when addressing abstract topics, lexical constraints, or lack of confidence, which can result in underdeveloped content (Hyland, 2003). Previous studies have highlighted that challenges in idea generation may negatively affect overall writing quality, even when learners possess adequate grammatical or lexical knowledge. Consequently, supporting learners in generating ideas has been considered a crucial pedagogical focus in EFL writing instruction.

While idea generation is essential, effective idea expansion is also necessary for high-quality writing (Hyland, 2004). Idea expansion includes elaborating initial ideas through explanations, examples, and supporting details to enhance clarity and persuasiveness, while demonstrating language ability. Nevertheless, this is an area requiring significant cognitive demands, critical thinking, and language resources (Hawanti & Zubaydullovna, 2023). For this reason, EFL learners often struggle to move beyond brief or surface-level ideas, resulting in repetitive or insufficiently developed paragraphs. Research on EFL writing has shown that explicit support in developing ideas can significantly improve content quality and reader comprehension.

Logical organisation refers to the coherent sequencing and structuring of ideas within a text so that arguments flow in a clear and meaningful manner (Halliday & Hasan, 1976). Effective logical organisation results in a writer's clear line of reasoning without confusion, manifesting

in paragraph organisation, clear connections between ideas, and unity (Biber et al., 2021; Connor, 1996). In EFL writing, learners frequently encounter challenges in organising ideas logically, particularly in argumentative or opinion-based tasks, where ideas show little or no relevance to one another and fail to support the main points (Hyland, 2003). For this reason, logical organisation is also central to content development.

Discourse markers, including connectors and transitional expressions, play a key role in establishing cohesion by highlighting relationships between ideas (Fraser, 1999). These connections and expressions can play a vital role in expressing reasons, effects, examples, contrast, sequence, comparison, or the relative importance of ideas (Ferris & Hedgcock, 2023). Appropriate use of discourse markers helps guide readers through a text and enhances its readability (Hyland, 2005; Field & Yip, 1992). Nevertheless, EFL learners often misuse, underuse, or overuse discourse markers, which can disrupt rather than improve coherence (Hyland, 2003). Research has emphasised the importance of teaching discourse markers in relation to meaning and logical relationships rather than as isolated linguistic forms.

Impact on Content (Logic, Coherence, Idea Development)

AI tools are widely acknowledged for their positive impact on the content dimension of EFL writing, particularly in supporting idea generation, idea development, organisation, and coherence. First, AI enhances idea generation and helps overcome writer's block. Several studies emphasise that AI tools such as ChatGPT effectively stimulate initial ideas and support conceptualisation (Feng, 2024). For example, Xiao (2024) and Marzuki et al. (2023) reported improvements in overall content quality when students used AI. Similarly, Winarti et al. (2025) found that approximately 80% of participants believed AI generated better ideas and reduced writing anxiety. Nguyen et al. (2024) further identified idea generation as the writing aspect with the highest score when using ChatGPT, highlighting AI's particular strength at the pre-writing stage. Second, AI supports idea expansion and logical development. Beyond generating initial ideas, AI assists learners in elaborating arguments and maintaining logical flow. Khan and Ghani (2024), in line with earlier findings by Lee et al. (2024), noted that AI facilitates idea expansion and coherence in argumentation. Hawanti and Zubaydullovna (2023) also observed that AI contributes to textual coherence through suggestions that improve transitions and the integration of ideas. Third, AI improves organisation and structural clarity. Research consistently shows that AI use leads to essays with clearer structure. Hidayat and Sujarwati (2024) and Fitria (2021) reported that around 70% of learners perceived ChatGPT as enhancing writing organisation and clarity. Likewise, Xiao (2024) and Marzuki et al. (2023) highlighted improvements in structural integrity, suggesting that AI supports learners in arranging ideas into coherent and logically sequenced texts. Allen and Mizumoto (2024) and Song and Song (2023) also shared the same view, noting the boost in coherence and cohesion in writing. Finally, AI provides scaffolding and interactive feedback that strengthen overall writing efficacy. AI tools are particularly beneficial for lower-level learners who require structured guidance (Aljuaid, 2024) and Sumakul et al. (2022) found that AI applications supported students throughout the writing process by clarifying theoretical concepts and offering practical assistance. More broadly, Yang and Li (2024) categorised ChatGPT's functions as both content generation and feedback provision, while Jeon et al. (2023) and Vera (2023) emphasised its personalised, interactive affordances that enhance learner engagement and language proficiency.

Despite these well-documented benefits, the literature also highlights substantial concerns regarding over-reliance on AI and its potential negative impact on critical thinking and originality. First, the tool can result in overdependence and reduced critical engagement. A number of studies caution that excessive AI use may encourage passive learning habits. Khairani Zakaria et al. (2025), Winarti et al. (2025), Abdenmour and Smail (2024), Aisyi (2024), Etaat (2024), and Mokhebi and Miloudi (2023) collectively warn that students may accept AI-generated outputs uncritically. This is in line with Ranalli (2021), whose research points out the concerning impacts of just relying on ChatGPT for proofreading with no cognitive actions. Aisyi (2024) and Barrot (2023), in particular, identified issues such as laziness, dependency, uncreative content production, and plagiarism. Similarly, Winarti et al. (2025) reported that 70% of students believed AI could potentially replace deeper analytical processes, raising concerns about diminished cognitive engagement. Second, there are also threats to originality and academic voice. Several scholars argue that heavy reliance on AI may weaken students' ability to develop an independent academic voice. Abdenmour and Smail (2024) stressed that AI tools cannot substitute human creativity and self-reliant writing. This position aligns with Alkaissi and McFarlane (2023), Shibani et al. (2024), and Al Zaidy (2024), who emphasise the need for constant, critical interaction with AI so that learners remain the primary authors of their work. The consensus suggests that AI should function as a supportive tool rather than dominate the writing process. Third, various papers also note reliability and quality concerns in AI-generated content. Beyond cognitive issues, researchers also question the accuracy and contextual appropriateness of AI outputs. Deep et al. (2025) highlighted problems such as grammatical inaccuracies, inappropriate vocabulary suggestions, and culturally insensitive language, while Alharbi (2023) noted AI's inability to generate helpful suggestions for coherence, organisation, and argumentation because of its difficulty in capturing the complexity of human language. Such limitations may result in writing that lacks nuance or fails to meet disciplinary and contextual expectations, particularly if students rely on AI suggestions without verification. Fourth, AI can lead to differential impact based on learner proficiency. Importantly, the influence of AI appears to vary according to students' language proficiency and critical awareness. Lee et al. (2024) found that 47.50% of students acknowledged overdependence, while 40.00% encountered unnatural grammar or expressions in AI-generated text. Notably, higher-proficiency learners tended to evaluate AI suggestions critically, whereas lower-level learners were more likely to accept them unquestioningly. This tiered effect suggests that AI may pose greater risks to learners who lack sufficient linguistic and analytical competence to assess its outputs independently.

In conclusion, the reviewed literature presents a balanced yet qualified picture of AI use in EFL writing. On the one hand, AI demonstrates substantial pedagogical value in enhancing idea generation, content expansion, organisation, coherence, and learner confidence, particularly by scaffolding the writing process and reducing anxiety. On the other hand, concerns about overdependence, diminished critical thinking, weakened originality, and the unreliability of certain AI-generated outputs highlight the potential risks of uncritical adoption. Importantly, the impact of AI appears to be mediated by learner proficiency and the extent to which students engage with it reflectively.

METHODOLOGY

Research Design

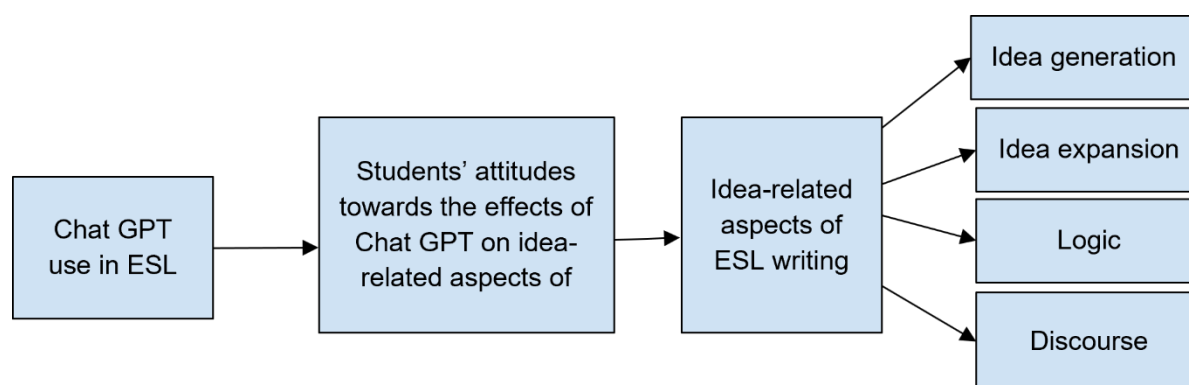
This study adopts a mixed-methods approach using an explanatory sequential design (Creswell & Plano Clark, 2018). The research begins with a survey-based quantitative phase, followed by detailed qualitative interviews, to investigate EFL learners' perceptions of ChatGPT use in relation to idea-related aspects of writing, including idea generation, idea expansion, logical organisation, and the use of discourse markers.

The quantitative phase was conducted first to obtain a broad overview of students' perceptions across the cohort and to identify common and recurring patterns in their reported use of ChatGPT during both pre-writing and stages after writing. Specifically, the survey examined how learners use ChatGPT to generate and expand ideas, review AI-generated model texts for logical organisation and discourse markers, and request feedback on idea quality and coherence after drafting (Ivankova et al., 2006). By administering the survey to a larger group of participants, the study was able to capture general trends and dominant viewpoints.

The subsequent qualitative phase was designed to elaborate on and explain the quantitative findings. Semi-structured interviews were conducted to gain deeper insights into students' experiences, focusing on the underlying rationales behind their perceptions, the contextual factors shaping their views, and any subtle or contrasting perspectives that could not be fully captured through closed-ended survey items (Fetters et al., 2013).

The integration of quantitative breadth and qualitative depth strengthens the overall interpretive validity of the study, as the interview data help clarify and contextualize the statistical patterns identified in the survey results (Creswell & Plano Clark, 2018; Fetters et al., 2013; Ivankova et al., 2006).

Figure 3.1. *Conceptual Framework of the Study on EFL Learners' Perceptions Towards the Perceived Effects of ChatGPT Use on Idea-related Aspects of Writing.*



Note. All arrows indicate perceived relationships, not causal effects.

Participants

For the quantitative phase, a total of 134 second-year university students from the University of Economics, Da Nang participated in the study. These students had all completed a course on Intermediate Writing (B1 writing), where they have been familiarised with opinion-based paragraph and essay writing. Participants were selected through convenience sampling, as they belonged to B1 writing classes run by the researchers. The sample size is considered adequate for statistical analysis and aligns with Dörnyei's (2007) recommendation that samples

exceeding 100 participants are generally sufficient for survey-based studies in applied linguistics.

For the qualitative phase, 10 participants were randomly selected from among those who completed the survey to take part in follow-up interviews. These students included three males and seven females, all aged 20, and they had been using AI frequently in English learning for around one year before the interviews took place. As data from surveys alone might not clearly explain survey perceptions, these participants were chosen to provide more detailed perspectives on the survey findings and to explore individual experiences with ChatGPT use in writing tasks.

Research Instruments

Survey Questionnaire

Data were collected using a structured questionnaire consisting of 25 items, organised into four sections corresponding to key aspects of idea development and organisation in writing, namely idea generation (IG), idea expansion (IE), logical organisation (LO), and the use of discourse markers to enhance rhetorical cohesion (RC). The questionnaire was developed with reference to the B1-level writing assessment criteria published by Cambridge Assessment English, particularly descriptors related to content and organisation. These criteria provided a theoretical foundation to ensure alignment with internationally recognised standards of writing performance.

To strengthen content validity, the items were systematically mapped onto the four predefined constructs (IG, IE, LO, and RC), ensuring balanced representation of each dimension. A pilot test was conducted with 20 B1-level students with comparable proficiency to the main sample, and minor revisions were made to improve wording and clarity based on their feedback.

Quantitative data were analysed using SPSS, with descriptive statistics employed to identify patterns and trends in learners' perceptions towards the use of ChatGPT in supporting writing development.

Interviews

To complement the survey data, semi-structured interviews were conducted with 10 selected participants. The interviews focused on the same four aspects examined in the questionnaire and used corresponding prepared guiding questions, along with follow-up questions and further probing that asked for reasons, personal reflections, and actual experiences (Creswell & Plano Clark, 2018), allowing for a deeper exploration of students' perceptions, experiences, and concerns regarding the use of ChatGPT for idea development in writing. These questions are separated into five main areas, namely idea generation (5 questions), idea expansion (3 questions), logic (2 questions), discourse markers (2 questions), and future reflections and overall impact (2 questions). A clear list of questions can be seen in Appendix 2. Each interview lasted approximately 20 to 30 minutes and was audio-recorded with participants' consent. The interviews were later transcribed for qualitative analysis, which involved thematic coding that grouped codes under the four main themes (IG, IE, LO, and RC).

Data Collection Procedures

The study followed a sequential data collection process. First, the survey questionnaire was administered to participants, after which 10 of the 134 participants were selected randomly to participate in interviews. This design enabled the interview phase to elaborate on and contextualise the quantitative findings.

Ethical Considerations

The study adhered to strict ethical guidelines. Informed consent was obtained from all participants prior to data collection, and measures were taken to ensure anonymity and confidentiality throughout the research process (Gass & Mackey, 2016). Participation was voluntary, and participants were informed of their right to withdraw from the study at any time without penalty.

FINDINGS OF SURVEY

Idea Creation

Table 4.1. *Descriptive Statistics for the Idea Generation Scale (N = 134)*

Item	Minimum	Maximum	Mean (M)	SD
Idea generation 1	1.00	5.00	3.88	0.93
Idea generation 2	1.00	5.00	3.78	0.83
Idea generation 3	1.00	5.00	3.75	0.93
Idea generation 4	1.00	5.00	2.99	1.09
Idea generation 5	1.00	5.00	3.01	1.08
Idea generation 6	1.00	5.00	3.78	0.86

Note. Items were measured on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree). The internal consistency of the scale was acceptable (Cronbach's $\alpha = 0.75$).

The first aspect examined is idea creation, which assesses students' perceptions of the extent to which ChatGPT supports rapid idea generation and brainstorming during the pre-writing stage. The descriptive statistics indicate that the mean scores for the six items ranged from 2.99 to 3.88, with an overall mean of 3.54. These results suggest that students tended to express moderately positive perceptions of ChatGPT's role in facilitating idea generation. While several items received relatively high mean scores, others showed lower values close to 3.0, reflecting some variability in responses. The standard deviations further indicate a moderate spread of opinions among participants.

Idea Expansion

Table 4.2. *Descriptive Statistics for the Idea Expansion Scale (N = 134)*

Item	Minimum	Maximum	Mean (M)	SD
Idea expansion 1	1.00	5.00	3.78	0.87
Idea expansion 2	2.00	5.00	3.84	0.85
Idea expansion 3	2.00	5.00	3.69	0.82
Idea expansion 4	1.00	5.00	3.07	0.99
Idea expansion 5	2.00	5.00	3.91	0.82

Idea expansion 6	1.00	5.00	3.25	0.99
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Note. Items were measured on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree). The reliability of the idea expansion scale was acceptable (Cronbach's $\alpha = 0.77$).

The second aspect considered is idea expansion, which explores students' perceptions of the extent to which ChatGPT helps them elaborate on their initial ideas by adding supporting details such as examples, reasons, and potential effects. The descriptive statistics show that mean scores range from 3.07 to 3.91, with an overall average close to 3.58, slightly above the neutral midpoint. These results suggest a somewhat positive perception towards ChatGPT's impact on idea expansion, indicating that many students view ChatGPT as somewhat helpful in extending and deepening their ideas during writing.

Logic

Table 4.3. *Descriptive Statistics for the Logical Organisation (Logic) Scale (N = 134)*

Item	Minimum	Maximum	Mean (M)	SD
Logic 1	2.00	5.00	3.82	0.84
Logic 2	1.00	5.00	3.79	0.83
Logic 3	2.00	5.00	3.80	0.79
Logic 4	1.00	5.00	3.10	0.90
Logic 5	1.00	5.00	3.15	0.94
Logic 6	1.00	5.00	3.72	0.90

Note. Items were measured on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree). The logical organisation scale demonstrated good internal consistency (Cronbach's $\alpha = 0.81$).

The next aspect investigated is writing logic, which assesses students' perceptions towards how ChatGPT influences their capacity to structure ideas in a rational sequence, ensure consistency between claims and evidence, and build a persuasive line of reasoning. The descriptive statistics show mean scores ranging from 3.10 to 3.82, with an overall average of 3.40, suggesting a moderate level of agreement among the students. These results indicate that students generally perceive ChatGPT as a helpful tool for developing the logical flow of their writing, though this perception is not overwhelmingly strong. The less enthusiastic scores for items like Logic 4 and Logic 5 (means of 3.10 and 3.15 respectively) may reflect reservations about the tool's ability to foster deeper critical thinking or support complex, original logical arguments, rather than simply organising existing ideas.

Discourse Markers

Table 4.4. *Descriptive Statistics for the Discourse Markers Scale (N = 134)*

Discourse	Minimum	Maximum	Mean	Std. Deviation
Discourse 1	2.00	5.00	3.75	0.85
Discourse 2	2.00	5.00	3.03	0.92
Discourse 3	1.00	5.00	2.93	0.88
Discourse 4	2.00	5.00	3.93	0.88
Discourse 5	1.00	5.00	3.21	0.85
Discourse 6	1.00	5.00	3.70	0.90

Note. Items were measured on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree). The discourse marker scale demonstrated good internal consistency (Cronbach's $\alpha = 0.824$).

The final aspect to be analysed is discourse markers, which are words or phrases that connect, organise, and manage the flow of ideas in writing (e.g., *however, therefore, in addition*). The descriptive statistics show mean scores ranging from 2.93 to 3.80, with an overall average of 3.51, suggesting a moderate level of agreement among the respondents. These findings suggest that students generally find ChatGPT to be a moderately useful tool for improving their use of discourse markers. The higher mean scores for Discourse 1, 4, and 6 (ranging from 3.70 to 3.80) indicate a strong positive perception of the AI's ability to help with the basic function of connecting ideas and ensuring overall text coherence. However, the lower means for Discourse 2 and 3 (3.03 and 2.93, respectively) suggest that students hold reservations about the tool's effectiveness for more nuanced tasks, such as choosing appropriate markers for complex rhetorical situations or ensuring the markers align with their unique writing style. This indicates a perceived gap between the AI's ability to provide a general list of connectors and its capacity to help students develop a sophisticated, sensitive to context command of discourse markers.

FINDINGS OF INTERVIEWS

Idea Generation

For this aspect, interviews with participants revealed a strong perceived connection between ChatGPT use and improvements in idea creation. All participants (10 out of 10) claimed that ideas generated by this AI tool helped them brainstorm much more quickly and effectively. Considering the context of participants' learning, which revolves around paragraphs stating opinions or advantages/disadvantages, the use of ChatGPT has been useful in helping them brainstorm a wide range of vocabulary items and ideas to combat the lack of academic vocabulary in abstract topics. This resulted in more fluent writing that has clearer and more logical ideas. This ability extends even to situations without AI access such as test conditions. One participant noted, "When I write paragraphs about learning online, which is a fairly academic topic, I can easily think of words or phrases about disadvantages and advantages of this, which is something I could not do easily in the past, when I had to struggle for ideas and expressions." Another participant also pointed to ChatGPT's important role in "reshaping her thought processes" from a jumble of writing blocks and incoherent arguments to more linear and organised ways of thinking and organizing.

However, certain participants also noted the decline in their ability to generate ideas on their own when AI support is unavailable. One participant highlighted that dependence on ChatGPT reduces their autonomy in idea generation, even reducing idea depth. In addition, noting the detrimental impact on autonomy, another interviewee reported, "Teachers' insights into writing still matter much more than AI input, as these create a clear structure and guidance for learners, while AI only presents a general finding of things from different sources."

Idea Expansion

Similar to idea generation, this area also generated many views that highlighted the benefits ChatGPT has in helping learners in expanding their ideas and arguments with logical supporting ideas, even in difficult and abstract topics. The majority of participants claimed that

they were able to think of appropriate and relevant examples, reasons, or effects to expand their ideas and make them more convincing. AI use also appeared to encourage the exploration of more diverse viewpoints and aspects. One participant said, “During my exam, for the topic of online learning, I was able to brainstorm a detailed and specific example about COVID-19 to support my points about the advantages of learning online.” Another student further corroborated this with an observation about her improvement in seeking more appropriate supporting ideas, which had been more difficult in the past.

Despite these reported advantages, a number of participants expressed concerns regarding their ability to sustain idea expansion without AI support. Some reported difficulty elaborating on ideas independently, particularly when confronted with unfamiliar or challenging topics that had not previously been explored using ChatGPT. One participant noted a noticeable lack of specific examples in such situations, which they perceived as leading to a decline in writing quality when compared to AI-supported tasks. In response to this issue, one interviewee suggested the development of disciplined self-study practices, such as maintaining idea notebooks or constructing mind maps, as strategies to strengthen autonomous idea development and reduce reliance on AI tools.

In addition to concerns about dependence, participants also raised issues related to the quality of ideas generated by ChatGPT. Seven out of ten described AI-produced content as overly general and not always suited to their specific writing purposes. Although such ideas were often perceived as plausible at a surface level, participants reported that they could be inaccurate and required careful evaluation and fact-checking. Descriptors such as “*mechanical*” and “*unoriginal*” were frequently used, with several participants expressing concern that excessive reliance on ChatGPT negatively affected their creativity and ability to produce personalised writing. One participant claimed, “I always had a fear that AI makes my writing less attractive and interesting, because it’s so robotic.” Overall, these responses highlight an underlying tension between the perceived usefulness of ChatGPT in idea expansion and participants’ concerns about originality, creativity, and long-term writing development.

Students therefore held ambivalent perceptions of idea generation and expansion. AI was seen as an efficient scaffolding tool for brainstorming and elaboration, but concerns remained about over-reliance and diminished cognitive engagement.

Logic

For logic, most participants agreed that their organisational ability in writing has improved with ChatGPT. After consultations with this AI, they have transformed their writing from illogical and incoherent sentences to paragraphs with greater coherence, where connections between ideas were more easily recognised through more appropriate links between ideas and argument support. One participant noticed, “I used to write in a messy way with no distinction between ideas and support, since supporting sentences may not match main ideas, or the main ideas are not explained and expanded logically enough, but after using ChatGPT for some time, I’ve been much more confident to write in a more coherent way. I can easily use a common logical pattern in essay writing - Problem, Cause, and Effect!”. Another participant pointed out a greater fluency in developing ideas coherently into paragraphs when writing longer essays, and there was less risk of vagueness and disorderly writing.

However, several students noted the importance of teacher instruction before AI use regarding more logical organisation. One participant said, “I feel that ChatGPT can produce a logical thought process in just an instant, but this means nothing for learning if we don’t get the tips from teachers about how to write coherently in the first place! It’s this instruction that helps us uncover the framework for writing logically, and only then can ChatGPT give us more materials to develop it.”

Discourse Markers

In terms of discourse markers, the majority of participants observed a more fluent and diverse use of discourse markers to link their ideas when writing. They reported using a higher number of different markers to show reason, effect, or examples, repeating them less often than before and less frequently leaving sentences without necessary markers. One participant said, “While writing, I was able to replace repetitive words for reasons like ‘because’ with ‘since’, ‘as’, or ‘this is because’, or contrasting connectors such as ‘but’ are swapped more with ‘however’, or ‘although.’ This makes my grades go up and I feel like my writing is less boring and mechanical.” Another participant said, “In opinion paragraphs, I can use more advanced connectors like ‘Moreover’, ‘Additionally’ to replace ‘and’ or ‘also’, while there are also some more like ‘As a result’ and ‘Therefore’, both of which I have never used before, so that’s really helpful.”

Overall, in relation to logical progression and discourse marker use, AI is largely perceived as enhancing textual coherence and organisation, although students stress the necessity of maintaining independent structural competence.

DISCUSSION

Idea Generation

The findings of the current study regarding students’ perceptions of AI’s influence on writing content largely align with and further nuance the existing literature. In terms of idea generation, both survey statistics and interview insights suggest that students generally perceive ChatGPT as somewhat beneficial for quickly generating and brainstorming ideas, helping to overcome initial writing blocks. Specifically, most interviewees noted the beneficial effect of ChatGPT on offering ideas for writing, especially in abstract topics. This resonates strongly with the literature, where Marzuki et al. (2023), Nguyen et al. (2024), Winarti et al. (2025), and Xiao (2024) highlight AI’s role in improving content and structure, noting its ability to generate ideas and reduce writing anxiety. However, as evidenced by the hesitation in survey respondents to positively rate idea generation, and some interviewees suggested that AI could reduce the depth and originality of their ideas while decreasing writing autonomy, the study shares findings with Aisiyi (2024), Deep et al. (2025), the emphasis by Lee et al. (2024) and Ranalli (2021) on a possible decline in critical thinking and independence if learners rely on ChatGPT excessively. Participants’ observations suggest that easy access to AI ideas may reduce critical engagement, echoing concerns in various studies that highlight ChatGPT’s potentially detrimental impact on idea generation because it is a readily available source of knowledge.

Idea Expansion

Results from both the survey and interview findings underline the usefulness of ChatGPT in allowing learners to write longer and more expansive ideas in a more logical way, and this is especially evident in interview participants, who stressed the important role of ChatGPT in developing their ideas in difficult and abstract topics. Participants note how they not only wrote more, but also used clearer logic and made supporting ideas align more closely with main ideas. This is also consistent with Khan and Ghani (2024) and Lee et al. (2024), both of whom highlight ChatGPT's positive impact on lengthening ideas and therefore boosting writing quality. ChatGPT's ability to brainstorm ideas and provide prompt-based support can play a major role in instructing students to become better writers.

However, considering the hesitant perceptions seen in both statistics and interview answers, there are still concerns regarding the actual effectiveness of ChatGPT in building idea-expanding skills. While survey takers generally showed a moderately positive attitude, interviewees expressed major worry about the possible lack of independence in generating supporting ideas, especially in situations disallowing AI use. In accordance with studies by Abdenmour and Smail (2024), Aisyi (2024), Khairani Zakaria et al. (2025), Winarti et al. (2025) who note the risk of AI reliance and declining originality, participants reveal that ChatGPT had, in many ways, eroded their autonomy in developing supporting ideas, leaving them less able to elaborate logically without suggestions. This also agrees with Shibani et al. (2024)'s finding that the majority of learners who use ChatGPT while writing show little critical interaction with ChatGPT and the critical thinking needed to develop their own ideas, which can result in passive writing and later declines in writing skills. Another concern lies in the quality of information and arguments offered by ChatGPT, as learners noted the possibility of inaccuracies, excessive generalisations, and mechanical styles, which can decrease the plausibility of arguments, especially in opinion writing. Alharbi (2023), Deep et al. (2025), Lee et al. (2024), and Winarti et al. (2025) share this concern, noting the somewhat questionable quality of certain ChatGPT suggestions in writing.

Students therefore held ambivalent perceptions of idea generation and expansion. AI was seen as an efficient scaffolding tool for brainstorming and elaboration, but concerns remained about over-reliance and diminished cognitive engagement.

Logical Organization

Regarding logical organization, students found ChatGPT useful for structuring ideas rationally and ensuring consistency, while several participants in the interview pointed out how ChatGPT contributes to their increased ability to write logically with appropriate organisation of main and supporting ideas, and remembered common logical patterns to independently arrange ideas effectively. This perception is consistent with Hidayat and Sujarwati (2024), who found that 70% of participants believed ChatGPT made their writing more organized and easier to understand. The literature consistently points to AI's ability to improve the overall flow and coherence of written texts (Allen & Mizumoto, 2024; Marzuki et al., 2023; Song & Song, 2023; Xiao, 2024). Even though survey results and interview respondents share similar views regarding the effectiveness of ChatGPT in enhancing logic in writing, one concern among participants, similar to those raised in idea generation and idea expansion, emphasises learners' responsibility for retaining the logical structures in writing taught by teachers or textbooks, as these are the foundation for sound argumentative writing. This is also in line with various studies highlighting the need for critical thinking, active learning, and appropriate acquisition

of language functions without constantly depending on ChatGPT for information (Aisyi, 2024; Shibani et al., 2024; Marzuki et al., 2023).

Discourse Markers

For discourse markers, survey results and participants' insights show strong support for wider use of discourse markers in writing to build higher-quality writing. While perceptions revealed by surveys still remain moderately positive, almost all interviewees expressed support for ChatGPT's role in diversifying their range of discourse markers used to enhance logic and organisation in their writing. This supports Khan and Ghani (2024) and Hawanti and Zubayduloevna (2023), which observed increased in text coherence and logical writing in students who acquire knowledge from ChatGPT while writing. The greater variety of discourse markers for different purposes in writing, such as giving reasons, results, or examples observed by interview participants also coincided with findings from Marzuki et al. (2023) and Xiao (2024), whose research highlights the wide variety of connectors used in students' writing and their perceptions of better use of discourse markers in their writing.

Overall, in relation to logical progression and discourse marker use, AI is largely perceived as enhancing textual coherence and organisation, although students stress the necessity of maintaining independent structural competence.

CONCLUSION AND IMPLICATIONS

This study investigated EFL learners' attitudes toward the impact of ChatGPT on academic writing, with particular attention to idea-related aspects of writing, including idea generation, idea expansion, logical organisation, and the use of discourse markers. Using a mixed-methods approach that combined questionnaire data and semi-structured interviews with B1-level university students in Vietnam, the study aimed to capture both general trends and deeper learner perceptions regarding AI-assisted writing.

Taken together, the findings of this study indicate that EFL students generally hold moderately positive perceptions of ChatGPT's impact across the four examined content-related areas, namely idea development, idea expansion, logical organisation, and the use of discourse markers. While the survey results suggest cautious optimism accompanied by certain doubts, the interview data provide richer insights and more reflective evaluations. Interview participants reported that ChatGPT contributed positively to overall content quality, with particularly noticeable improvements in generating and expanding ideas, achieving clearer logical flow, and employing a wider range of discourse markers. However, alongside these benefits, learners also expressed persistent concerns regarding writing autonomy, the depth and originality of ideas, and their mastery of writing techniques. Among these concerns, the perceived loss of writing independence emerged as the most critical issue, as some students reported feeling less confident and less capable when writing without AI support.

The findings therefore suggest several pedagogical implications for the integration of AI tools in EFL writing instruction. First, ChatGPT should be positioned as a supplementary learning aid rather than a replacement for students' own thinking and writing processes. Traditional writing instruction remains essential in developing foundational skills such as brainstorming, outlining, idea expansion techniques, and mastery of core linguistic resources including vocabulary, sentence construction, and cohesive devices (Hyland, 2003). In addition, instructional practices that promote writing autonomy, including peer feedback, self-

assessment, and guided reflection, should be actively incorporated into writing courses, as these practices have been shown to deepen learning and foster greater independence in writing development (Andrade & Du, 2007; Liu & Hansen, 2002; Min, 2006; Nicol & Macfarlane-Dick, 2006). To support responsible AI use, students should also be encouraged to complete their initial drafts independently before using ChatGPT for feedback or revision. Another important implication concerns the development of students' AI literacy. Since some learners reported that AI-generated suggestions could be overly general, vague, or excessively formal, explicit instruction is needed to help students critically evaluate AI outputs and determine their appropriateness in terms of context, accuracy, and formality. Training students to engage critically with AI-generated content can help ensure that AI tools support rather than undermine the development of writing competence (Day, 2023).

Despite its contributions, this study has several limitations. First, the findings rely primarily on self-reported data, which may not fully reflect students' actual writing practices when using ChatGPT. Participants may have had limited time to reflect on their experiences while completing the questionnaire, potentially affecting the accuracy of their responses. Second, the study was conducted with participants from a single university, which limits the generalisability of the findings to other ESL contexts, educational settings, or learner populations. Third, the research focused on learners' attitudes toward ChatGPT rather than examining objective measures of writing performance, largely due to time and resource constraints.

Future research could address these limitations by adopting experimental or quasi-experimental designs that compare AI-assisted and non-AI writing classrooms to more clearly examine the causal impact of AI tools on writing development. Further studies could also investigate how AI influences other dimensions of writing, such as vocabulary range, grammatical accuracy, and sentence complexity, to develop a fuller understanding of AI-supported writing. Additionally, research exploring effective instructional strategies for developing writing autonomy in environments supported by AI, including scaffolded AI use, guided feedback practices, and structured reflection, would be valuable for informing sustainable pedagogical approaches.

In conclusion, while ChatGPT demonstrates considerable potential to support idea development and content organisation in EFL writing, its pedagogical value depends on how it is integrated into the learning process. When used responsibly as a supplementary tool within a carefully structured instructional framework, AI can enhance writing development without undermining learners' autonomy. Ensuring a balanced integration of AI tools alongside traditional writing instruction will therefore be essential for promoting meaningful and sustainable progress in EFL writing education.

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APPENDICES

APPENDIX 1. Questionnaire on the Effects of ChatGPT on Idea Development in EFL Writing

Instructions to participants

Please read each statement carefully and indicate the extent to which you agree or disagree based on your experience using ChatGPT for writing.

Use the following scale:

- 1 = Strongly disagree
- 2 = Disagree
- 3 = Neutral
- 4 = Agree
- 5 = Strongly agree

Section A: Idea Generation

No.	Statement	1	2	3	4	5
IG1	I can think of ideas more quickly when writing after using ChatGPT.	☐	☐	☐	☐	☐
IG2	I feel more confident when I start thinking of ideas for my writing after using ChatGPT.	☐	☐	☐	☐	☐
IG3	I have more writing ideas than before after using ChatGPT.	☐	☐	☐	☐	☐
IG4	It still takes me a long time to think of ideas, even after using ChatGPT. (reverse-coded)	☐	☐	☐	☐	☐
IG5	I still struggle to generate ideas when writing, even after using ChatGPT. (reverse-coded)	☐	☐	☐	☐	☐

IG6 I find it easier to come up with a variety of ideas after using ChatGPT. ☐ ☐ ☐ ☐ ☐

Section B: Idea Expansion

No.	Statement	1	2	3	4	5
IE1	I can add more reasons, examples, or effects to support my ideas after using ChatGPT.	☐	☐	☐	☐	☐
IE2	My ideas are more developed after using ChatGPT.	☐	☐	☐	☐	☐
IE3	I am better at expanding my ideas with relevant details after using ChatGPT.	☐	☐	☐	☐	☐
IE4	I still have trouble expanding my ideas, even after using ChatGPT. <i>(reverse-coded)</i>	☐	☐	☐	☐	☐
IE5	I find it easier to elaborate on my ideas when writing after using ChatGPT.	☐	☐	☐	☐	☐
IE6	I often struggle to add supporting details to my ideas, even after using ChatGPT. <i>(reverse-coded)</i>	☐	☐	☐	☐	☐

Section C: Logical Organization of Ideas

No.	Statement	1	2	3	4	5
LO1	I organize my ideas more clearly when I write after using ChatGPT.	☐	☐	☐	☐	☐
LO2	My ideas are more logically connected after using ChatGPT.	☐	☐	☐	☐	☐
LO3	I can present my ideas in a more structured and coherent way after using ChatGPT.	☐	☐	☐	☐	☐
LO4	I still have problems with the logic of my ideas, even after using ChatGPT. <i>(reverse-coded)</i>	☐	☐	☐	☐	☐
LO5	I still struggle to connect my ideas logically, even after using ChatGPT. <i>(reverse-coded)</i>	☐	☐	☐	☐	☐
LO6	I find it easier to create a logical flow of ideas when writing after using ChatGPT.	☐	☐	☐	☐	☐

Section D: Range of connectors (Discourse markers)

No.	Statement	1	2	3	4	5
RC1	I use a wider range of connectors (e.g., <i>if, when, because, for example, due to, despite</i>) after using ChatGPT.	☐	☐	☐	☐	☐
RC2	I often repeat the same connectors in my writing, even after using ChatGPT. <i>(reverse-coded)</i>	☐	☐	☐	☐	☐
RC3	I use a variety of connectors to link ideas in my writing after using ChatGPT.	☐	☐	☐	☐	☐

RC4	I still repeat the same connectors in my writing, even after using ChatGPT. (<i>reverse-coded</i>)	☐	☐	☐	☐	☐
RC5	I feel more confident using a variety of connectors when writing after using ChatGPT.	☐	☐	☐	☐	☐
RC6	I use more diverse linking words to connect my ideas after using ChatGPT.	☐	☐	☐	☐	☐

APPENDIX 2. Interview Questions - AI Impacts on Content of Writing

1. Idea generation:

- Do you easily overcome writing blocks? Think of new ideas for topics easily?
- Can you give an example of a writing task and how can you easily think better compared to before?
- Do you always trust AI's idea quality when writing?
- Do you ever feel your originality decreases because ideas come too easily from ChatGPT?
- Does your mind go blank without ChatGPT use? And give an example of that time?

2. Idea expansion

- Can you expand your main ideas with reasons, effects, or other information easily?
- Give a specific example of a task where you can
- Do you think more or less deeply when writing after AI use?

3. Logic

- Can you organize ideas in essays or paragraphs better? Can you give an example of that?

4. Discourse markers

- Do you notice that you've used a wider range of discourse markers (connectors like because / which / as a result) in a more appropriate way?
- For example, when you write opinion paragraphs, have you used more connectors in your exam or self-written papers without AI support?

5. Future reflections and overall impact

- How do you balance your own ideas with those suggested by ChatGPT?
- Overall, do you think AI has a positive or negative impact on your content (generation, expansion, logic, discourse markers)