



Prompting ChatGPT: A Syntactic Analysis of English Education Students' Queries at the University Level

Rayhan Izzati Basith¹, Tathahira²

¹Universitas Syiah Kuala, Aceh, Indonesia

²Institut Agama Islam Negeri Takengon, Aceh, Indonesia

ARTICEL INFO

Keywords:

ChatGPT
Syntactic Analysis
Queries
Prompt engineering

History:

Received (22 April 2025)
Revised (30 July 2025)
Accepted (27 August 2025)

ABSTRACT

This study investigates the syntactic features of prompts formulated by English Education students at Syiah Kuala University when interacting with ChatGPT for academic purposes. Specifically, it examines sentence length, sentence form (imperative or interrogative), and grammatical accuracy in prompts related to the Morphology and Syntax course. Using a qualitative descriptive approach, data were collected from three students in semester six or above, each submitting five naturally composed prompts. The findings reveal a dominance of imperative sentences, with varying degrees of sentence length and grammatical correctness. While most prompts were structurally sound, occasional errors—particularly in complex constructions—highlighted syntactic challenges. The study provides insight into students' linguistic competence in AI-assisted learning environments and emphasizes the need for further syntactic awareness in prompt engineering. These results contribute to growing discussions on digital literacy and the pedagogical implications of using generative AI in higher education.

INTRODUCTION

The rapid advancement of artificial intelligence (AI) over the past few years has brought substantial changes to many aspects of life, including education. Among the AI tools that have gained prominence, ChatGPT, developed by OpenAI, has emerged as one of the most widely adopted AI-based platforms for natural language interaction (Tiwari, 2024; Irawan, 2025; Hidayati, 2024).. Its user-friendly design and ability to generate human-like responses to text prompts have made it a favorite tool among university students, especially in language learning contexts (Khoirul Anam, 2025).

English Education students, in particular, have been observed using ChatGPT to support various learning tasks such as drafting essays, generating teaching materials, solving grammar exercises, and even seeking feedback on their written or spoken output. Recent studies support this: English-as-a-Foreign-

Language learners have employed ChatGPT for essay drafting, revising, and improving academic writing (Mahapatra, 2024); preservice teachers have used it to generate lesson plans and design teaching materials (Gurl et al., 2024); and comparative studies of feedback quality show that ChatGPT provides responses on students' writing that are in many cases comparable to or even more balanced than human instructors (Hidayat, 2025; Steiss et al., 2024). Together, these findings highlight the diverse applications of ChatGPT in supporting language learners' academic tasks, from writing development to materials design and feedback provision.

According to Cao et al. (2025), the functionality of ChatGPT is driven primarily by how users formulate their prompts or queries. Prompts serve as input commands that guide the model's output, and therefore, the clarity, specificity, and structure of these prompts greatly influence the quality of the responses produced. Given this, prompting becomes not merely a technological interaction but also a linguistic activity involving strategic language use. For students in English Education programs, who are training to become future English teachers, their prompt construction can be a valuable lens through which to understand their command of English, their cognitive engagement with language, and their digital literacy (Ng et al., 2024; Zhang, 2025; Muawanah, Marini & Sarifah, 2024).

Despite the growing use of ChatGPT among university students globally, empirical research focusing on how students actually write their prompts—especially from a linguistic standpoint—remains limited. Most existing studies tend to focus on the effectiveness of AI tools in enhancing language learning outcomes (Michel-Villarreal et al., 2023; Kristiawan, Bashar & Pradana, 2024; Zhao, 2025), the ethical implications of AI in academia (Cotton et al., 2023), or students' perceptions of AI usage (Aydin, 2023). Only a handful have turned their attention to the linguistic characteristics of the prompts themselves, and even fewer have analyzed them through a syntactic lens. This leaves a notable gap in the literature concerning how students linguistically formulate their prompts when interacting with AI language models like ChatGPT.

In particular, there is a lack of studies that investigate the syntactic features of prompts generated by students who are non-native English speakers but are pursuing a degree in English education. These students represent a unique group: they are expected to have intermediate to advanced English proficiency, and they engage with AI tools not only as learners but also as future educators. Their interactions with AI are likely to be shaped by both their linguistic competence and pedagogical intentions. Understanding the syntactic patterns in their prompt formulations can shed light on how they utilize their linguistic knowledge when engaging with AI systems.

To address this gap, the present study investigates the syntactic features of prompts written by English Education students at Syiah Kuala University in Indonesia. The focus is on students in their sixth semester or higher, assuming that by this stage in their academic journey, they have acquired sufficient experience with both English language use and academic technologies. By analyzing a selection of prompts submitted

by three students, this study aims to identify specific syntactic features—namely sentence length, sentence forms (imperative or interrogative), and grammatical accuracy. These features are considered central to syntactic analysis because they reflect the structural complexity and communicative intent behind the students' queries.

From a linguistic perspective, syntax refers to the arrangement of words and phrases to create well-formed sentences in a language (Radford, 2009). In written prompts, syntactic choices can indicate levels of fluency, cognitive planning, and pragmatic awareness. For example, the use of imperative forms (e.g., “Explain the difference between...” or “List five examples of...”) may suggest a confident, goal-oriented approach to prompting, whereas interrogative forms (e.g., “What is the meaning of...?” or “Can you help me understand...?”) might reflect exploratory or inquisitive thinking. Similarly, sentence length may serve as a proxy for syntactic complexity, with longer sentences often indicating higher language proficiency or deeper elaboration. Grammatical accuracy, meanwhile, can offer insights into students' linguistic control and attention to form.

In line with the aforementioned, this study is guided by the following research questions:

1. What is the average sentence length of prompts written by English Education students at university level when using ChatGPT?
2. What sentence forms (imperative or interrogative) do students most frequently use in their prompts?
3. To what extent do students maintain grammatical accuracy in their prompts?

This research contributes to the growing body of literature on AI-assisted learning by offering a unique focus on the linguistic—rather than technological or pedagogical—dimension of ChatGPT usage. More specifically, it highlights how English Education students employ syntax in interacting with AI, an area that remains underexplored in both applied linguistics and educational technology research. The findings from this study may inform language educators, curriculum designers, and teacher trainers about students' syntactic abilities in authentic, self-directed writing tasks. Furthermore, understanding these syntactic tendencies may help develop more effective instructional strategies for improving AI literacy and academic writing skills among future English teachers.

The novelty of this research lies in its micro-level examination of language used in real-world AI interactions by a linguistically specific student population. While other studies have discussed “prompt engineering” as a technique used by AI developers or researchers, this study brings the focus back to students—non-native English speakers—who may not have technical training but actively use AI tools as part of their learning process. By examining their natural prompts, this study seeks to explore their implicit linguistic knowledge and strategy use when crafting effective queries. Moreover, by narrowing the study to

syntactic features, it allows for a focused and detailed linguistic analysis, which can complement broader research efforts on AI in education.

Therefore, this introduction has outlined the rationale for studying the syntactic features of prompts made by English Education students using ChatGPT. It has also established the relevance and novelty of this focus, particularly in the context of university students in Indonesia. The following sections of this paper will describe the methodology, present the findings, discuss the implications, and conclude with recommendations for future research and pedagogical practice.

LITERATURE REVIEW

The Rise of ChatGPT and AI-Assisted Learning in Higher Education

Recent years have witnessed the rapid integration of Artificial Intelligence (AI) tools in education, with ChatGPT, developed by OpenAI, becoming one of the most widely adopted platforms for student learning, especially in higher education (Michel-Villarreal et al., 2023). Students use it for generating summaries, revising texts, exploring ideas, and even crafting academic papers. While AI technologies provide efficiency and convenience, concerns about language dependency, critical thinking, and academic integrity remain at the center of scholarly debates (Yankouskaya, Liebherr & Ali; 2025; Melisa et al., 2025).

Some studies have explored how students interact with AI tools like ChatGPT (Baidoo-Anu & Ansah, 2023; Adiguzel, Kaya, & Cansu, 2023; Güner & Er, 2025), yet few have focused on how students frame their prompts linguistically, particularly from a syntactic perspective.

Prompting Behavior and Language Use in AI Interaction

Prompt engineering is the practice of crafting inputs to elicit desired responses from large language models (LLMs). Geroimenko (2025) argue that the way a user formulates a prompt determines the clarity, coherence, and quality of the model's response. However, while research on prompt engineering from a computer science angle is extensive, linguistic studies on how students phrase prompts—especially in educational settings—remain scarce. Further, prompt clarity and linguistic appropriateness were found to influence the relevance and quality of responses, yet there has been no deeper syntactic breakdown of student prompts in academic usage contexts (Lee, 2025). This points to a gap in understanding the linguistic dimensions of student–AI interaction, especially in non-native English contexts.

Syntactic Features in Student Academic Writing

Syntax, as a branch of linguistics, focuses on sentence structures and grammatical arrangements. In applied linguistics, syntactic analysis is used to evaluate sentence length, grammatical complexity, and sentence forms (imperatives, interrogatives, declaratives) in learner output (Ningsih & Rahman, 2023; Budi,

Halimah & Indarto, 2024). In the field of Second Language Acquisition (SLA) and English for Academic Purposes (EAP), syntactic competence is seen as a marker of both proficiency and task performance.

Several studies have looked into students' syntactic features in writing tasks (Lu, 2010), but none have focused on students' syntactic output when prompting AI tools like ChatGPT. This is significant because interacting with AI requires clear, concise, and goal-oriented language use—often with unique linguistic features that differ from traditional academic writing.

Sentence Length and Cognitive Load in Task Design

Sentence length has been a central measure in readability and syntactic complexity studies, thus, it suggests that longer sentences can indicate more sophisticated grammatical structures, but may also reflect a higher cognitive load or verbosity. Conversely, very short sentences may point to simplicity or limited proficiency.

In AI prompting, a balance is often required—too short, and the model may not understand the task; too long, and the prompt may become vague or convoluted. This balance is rarely studied in academic research, especially among L2 users.

Sentence Form: Imperatives vs. Interrogatives

Another important syntactic dimension is sentence form. In ChatGPT usage, prompts tend to take two main shapes, namely imperative forms (e.g., “Summarize this paragraph.”) and interrogative forms (e.g., “Can you explain this?”).

Imperative prompts tend to be more direct and task-oriented, while interrogative prompts often reflect a more conversational or cautious stance. Research in pragmatics (Rahman et al., 2023) has explored how these forms relate to politeness and clarity in requests. However, studies analyzing these forms in AI-student interactions—particularly in an EFL (English as a Foreign Language) context—are almost nonexistent.

Grammatical Accuracy in Second Language Writing

Grammatical accuracy is one of the pillars of language assessment and is widely studied in learner corpora (Ellis & Barkhuizen, 2025). In the context of L2 users interacting with AI tools, grammatical errors may impact the tool's interpretation of the prompt. A grammatically inaccurate prompt might still elicit an appropriate response due to ChatGPT's robustness, but it raises questions about language quality in mediated academic tasks.

While there are studies that evaluate students' grammar in essays, emails, or presentations, none have focused on prompt writing as a genre. This genre is unique because it often involves short, task-based utterances that must be functional and precise. Studying grammatical accuracy in this domain can provide valuable insights into the linguistic competence of EFL students in the digital era.

Research Gap and Justification

While the use of ChatGPT in higher education has received growing attention in recent research, very limited work has examined the linguistic nature of the prompts generated by students, especially within an EFL context. No study, to the best of the researcher's knowledge, has conducted a syntactic analysis of prompts created by university-level English Education students, particularly in Indonesia.

Moreover, prompts are typically treated as a technical or functional input, rather than a linguistic product that reflects the user's language proficiency and stylistic tendencies. This research, therefore, aims to fill this gap by focusing on syntactic features—sentence length, sentence form, and grammatical accuracy—in student-generated prompts submitted to ChatGPT.

METHODS

This study employs a qualitative descriptive research design. The aim is to describe the syntactic features of prompts written by English Education students at Syiah Kuala University when using ChatGPT. This study received approval in the form of research permit letter issued by the Head of Study Program of English Education. The researcher also distributed an informal informed consent to do the research beforehand. A qualitative descriptive approach is suitable for exploring language use in real-life contexts, particularly to describe how students construct prompts syntactically (Tisdell et al., 2025).

The participants in this study are three students of the English Education Study Program at Syiah Kuala University. All participants are in semester six or higher. Students at this academic level are considered to have sufficient language proficiency and experience in using digital tools like ChatGPT for learning. The limited number of participants is intentional to allow a deeper analysis of each prompt and the specific syntactic features used. This approach aligns with qualitative research methodology norms, where small and focused samples are considered appropriate to capture rich, detailed, and contextually grounded insights (Creswell, 2018; Dörnyei, 2007). As Patton (2014) notes, the emphasis in qualitative inquiry is on information-rich cases rather than sample size, making three participants sufficient for the depth of syntactic analysis intended in this study.

Data were collected through a prompt collection task. Each participant was asked to submit 10–15 prompts they have used or would naturally use when interacting with ChatGPT for academic purposes. In addition, a short follow-up interview was conducted to gain insight into their experience and context of using ChatGPT.

First, the researcher contacted the participants and explained the study's purpose. Once they agreed to participate, they were asked to provide a collection of prompts they had written when using ChatGPT. Prompts were submitted in written form using a template provided by the researcher. After all prompts were

collected, the researcher conducted short interviews to clarify any unclear data and ensure the authenticity of the prompts. The data were then prepared for analysis by identifying sentence length, sentence form (imperative or interrogative), and grammatical accuracy.

The data in this study consisted of prompts written by participants when interacting with ChatGPT to complete tasks related to the Morphology and Syntax course. These prompts were analyzed to identify specific syntactic features, namely sentence length, sentence form (imperative or interrogative), and grammatical accuracy. The analysis was conducted manually by closely examining each prompt.

First, the sentence length was calculated by counting the number of words in each prompt. This helped to determine whether students tended to use short, medium, or long prompts when engaging with ChatGPT. Second, each prompt was analyzed based on its sentence form, identifying whether it was constructed as an imperative (a command or instruction) or an interrogative (a question). Lastly, the grammatical accuracy of each prompt was assessed by evaluating the structure of the sentence based on standard English grammar rules. Prompts were noted as either grammatically correct or incorrect, with explanations provided for any significant errors found.

The results of this analysis were then summarized to highlight trends and patterns in how English Education students at Syiah Kuala University construct prompts when using ChatGPT for learning. This analysis aimed to provide insight into students' syntactic awareness and their ability to formulate clear and effective prompts in English.

RESULTS

This study aimed to explore the syntactic features present in student-generated prompts when interacting with ChatGPT for academic learning, specifically within the subject area of *Morphology and Syntax*. The analysis focused on three key features: sentence length, sentence form (imperative or interrogative), and grammatical accuracy. A total of 18 prompts were collected from three English Education students at Syiah Kuala University, each contributing six prompts they had used or would naturally use during their engagement with ChatGPT. These prompts were analyzed manually and recorded based on the predetermined syntactic criteria.

1. Sentence Length

The length of the prompts varied across students but generally ranged between 4 to 15 words, with the average word count per prompt being 10.5 words. Most prompts were concise, with a few extending into more complex academic structures. This trend suggests that students typically preferred short, direct prompts that get to the point, likely influenced by their intent to receive fast and efficient responses from ChatGPT.

The prompts containing more technical content (e.g., involving concepts such as X-bar theory or morphemic structure) tended to be slightly longer to ensure clarity.

2. Sentence Form: Interrogative vs. Imperative

The second feature examined was the syntactic form of the prompt—whether it was phrased as an *imperative* (a command or instruction) or *interrogative* (a question). The distribution showed that 10 of the 18 prompts (56%) were interrogative, whereas 8 (44%) were imperative. This relatively balanced distribution reflects the dual function of ChatGPT as both an explainer and a task performer. Students tended to use *interrogatives* when seeking clarification (e.g., “What is the difference between derivational and inflectional morphemes?”), while *imperatives* were more common when requesting examples or analysis (e.g., “Give three examples of compound words”). This finding is consistent with the observation that interrogative forms are often employed in information-seeking behavior, whereas imperative forms are more goal-directed and procedural.

3. Grammatical Accuracy

The grammatical correctness of prompts was also assessed. Out of the 18 prompts, the distribution showed that 14 prompts (78%) were grammatically accurate, whereas 4 (22%) had minor grammatical errors. The errors observed were mostly minor, including article omissions (e.g., “Give some example...” instead of “Give some examples”) or misused question structures (e.g., “How to differentiate...” instead of “How do you differentiate...”). These are common learner issues and did not significantly obscure the intended meaning.

4. Sample Prompts and Its Syntactic Features

Below is a simplified version of the prompt analysis table, showing six representative prompts.

Table 1. Sample Prompts and Its Syntactic Features

Prompt #	Prompt Text	Word Count	Sentence Form	Grammatical Accuracy	Notes
1	Explain derivational morphemes.	4	Imperative	✓	Simple, clear, and grammatically correct.
2	What is the difference between prefix and suffix?	10	Interrogative	✓	Academic and accurately structured.
3	Give some example of affixation.	6	Imperative	✗	Article error: should be “examples.”
4	What is inflection and give example of it?	10	Interrogative	✗	Compound question with missing article.
5	Identify the affixes in the word “unfriendly.”	8	Imperative	✓	Grammatically correct task-based instruction.
6	How to differentiate between derivation and compounding?	8	Interrogative	✗	Ungrammatical question formation.

These examples demonstrate the common structures students use when interacting with AI. Most prompts were straightforward and reflective of either a request for explanation or a command to perform a task.

5. Participant-Based Analysis

The following section discusses the specific syntactic characteristics observed in prompts from each participant. Although all students operated within the same course focus—*Morphology and Syntax*—each exhibited distinct preferences in how they formulated their prompts to ChatGPT.

Participant A: The Direct Imperative User

Participant A tended to use imperative sentences consistently across their prompts. Five out of six prompts submitted by this student were imperative, such as:

“Explain the types of affixes.”

“Give three examples of inflectional morphemes.”

These prompts were generally short (average of 6–8 words) and to the point. The student seemed to treat ChatGPT as a task performer rather than an interlocutor. This functional style suggests a tendency toward efficiency and direct instruction rather than inquiry. Moreover, all of Participant A’s prompts were grammatically correct, indicating relatively strong syntactic control despite the lack of variation in sentence form. Key traits: dominant use of imperative forms; high grammatical accuracy; clear, concise prompts with little elaboration.

Participant B: The Inquisitive Interrogator

In contrast, Participant B favored interrogative forms, using them in five out of six prompts. Examples include:

“What is the morphological structure of the word ‘unbelievable’?”

“How do derivational and inflectional morphemes differ in function?”

This participant’s prompts tended to be longer (10–15 words) and more formal, often resembling complete academic questions. While this form reflects a higher level of grammatical and structural awareness, it also included two prompts with minor grammatical errors, particularly in article use and word order. Key Traits: strong preference for interrogatives; prompts are more elaborated and formal; some minor grammatical inaccuracies despite complex structure.

Participant C: The Balanced User

Participant C showed a balanced mix of both sentence forms, using three imperative and three interrogative prompts. This flexibility in syntactic choice reflected a more adaptive and varied approach to prompting.

An example of an imperative from this student is:

“List three words with prefix and explain their meaning.”

While an interrogative prompt looked like:

“What is the difference between compound and complex words?”

In terms of grammatical accuracy, only one prompt had an issue, which involved an awkward construction (“How to explain the meaning of free morphemes?” instead of “How do you explain...”). Sentence lengths ranged from 7 to 12 words, placing this participant in the moderate range. Key Traits: balanced use of imperative and interrogative forms; minor grammatical lapses; demonstrates syntactic versatility.

Table 2. Summary of Participant Patterns

Feature	Participant A	Participant B	Participant C
Dominant Sentence Form	Imperative	Interrogative	Mixed (3 each)
Avg. Word Count	6–8 words	10–15 words	7–12 words
Grammar Accuracy	100% accurate	67% accurate (2 errors)	83% accurate (1 error)
Notable Trait	Task-based prompts	Academic inquiry style	Syntactic flexibility

This participant-level insight reveals subtle but important differences in how students formulate language when interacting with AI. Their choices reflect not just linguistic ability, but also their approach to technology as a learning tool—some treating it as a knowledge database, others as an assistant, and others still as a conversational partner.

DISCUSSIONS

Syntactic Simplicity and Efficiency in Prompting Behaviour

One of the key findings from this study is the prevalence of simple sentence structures in student prompts, especially those written in imperative form. Participants showed a tendency to write short, efficient commands such as “List five examples of free morphemes” or “Explain the concept of inflectional morphemes.” This aligns with what experts refer to as users prioritize brevity and clarity to elicit more accurate responses (Lee, 2025; Geroimenko, 2025).

This syntactic simplicity, especially among students like Participant A, reflects an **instrumentalist approach** to ChatGPT—viewing the tool primarily as a task-performer rather than a dialogic partner. While this method supports efficient information retrieval, it may limit opportunities for more critical or reflective thinking, which often requires more elaborative questioning.



Grammatical Accuracy: A Reflection of Proficiency or Familiarity with ChatGPT?

Grammatical accuracy among prompts was generally high, with only a few minor errors. Participant B, who favored interrogative forms, showed slight difficulty with article usage and word order—issues typical in intermediate to upper-intermediate L2 learners (Anisah, Dewanti & Rasyid, 2025). These findings suggest that grammatical competence remains stable in familiar academic contexts, but may fluctuate when learners are faced with more syntactically complex constructions.

Interestingly, the errors were not egregious and did not seem to inhibit ChatGPT's response generation. This points to a low-risk environment for experimentation, in which minor inaccuracies are tolerated by the AI system. This echoes work by Kostka & Toncelli (2023), who emphasize the potential of ChatGPT to support language development through nonjudgmental feedback, especially in writing-related tasks.

Sentence Form: Imperative vs. Interrogative Choices

Participants demonstrated noticeable preferences for either imperative or interrogative forms, with only one showing a balanced use. Imperative prompts often functioned as direct instructions (“Give three examples...”), while interrogatives posed questions seeking deeper understanding (“What is the function of an inflectional suffix?”).

This variation may stem from students' mental models of how ChatGPT functions. Those using imperative forms may perceive the AI as a search engine or personal assistant. Meanwhile, students who write interrogatives may subconsciously treat it more like a human interlocutor. This mirrors the findings in Wang et al. (2021), where university students exhibited diverse linguistic strategies based on their assumed interaction style with AI systems.

Moreover, from a pedagogical standpoint, encouraging students to use interrogative forms may foster higher-order thinking skills, as these structures often prompt explanation, analysis, or comparison—key cognitive domains in Bloom's taxonomy.

Prompting Behavior as a Window into Academic Literacy

The linguistic features analyzed in this study offer insight not only into students' language proficiency but also into their academic literacy behaviors. Prompts such as “How do derivational and inflectional morphemes differ?” reflect an awareness of contrastive academic thinking, while shorter prompts like “List three examples” point to surface-level information retrieval. Thus, syntactic choices in prompts could reflect cognitive engagement levels. As Mahapatra (2024) note, prompting AI tools may become a skill that parallels academic writing—requiring learners to formulate clear, precise, and cognitively rich input in order to yield valuable output. If taught intentionally, this could become a pedagogical asset in higher education, particularly in linguistics-related fields.



Pedagogical Implications for English Language Education

The findings from this study suggest several implications for English education programs. First, explicit instruction on prompt formulation—emphasizing clarity, form, and purpose—could enhance students’ interaction with AI tools like ChatGPT. This is especially relevant in writing, syntax, and morphology courses, where linguistic precision matters.

Second, instructors might consider integrating prompt-based learning tasks as a formative assessment method. By analyzing the syntactic quality of student prompts, educators can assess not just content knowledge but also linguistic accuracy and metacognitive engagement.

Finally, given the variation in prompt form and accuracy, educators should view prompting not merely as a digital literacy skill, but also as a linguistic and academic practice that reflects students’ underlying command of the English language.

CONCLUSION

This study explored the syntactic features of prompts written by English Education students at Syiah Kuala University when using ChatGPT for learning purposes, particularly in the context of the Morphology and Syntax course. Focusing on three specific linguistic aspects—sentence length, sentence form (imperative or interrogative), and grammatical accuracy—the findings offer a glimpse into how students formulate academic queries when interacting with AI tools.

The analysis of prompts from three upper-semester students revealed that most prompts were brief, typically ranging from six to ten words. The brevity reflects a practical and focused use of language, aiming to elicit direct responses from ChatGPT. The majority of the prompts were imperative in form, such as “List the types of morphemes” or “Give examples of derivational affixes,” showing that students tend to issue clear, direct commands rather than pose questions. Nonetheless, some variation was present, with a few prompts taking an interrogative form, indicating that students have diverse perceptions of their interaction with AI—some treating it more like a search engine, others like a conversational partner. In terms of grammatical accuracy, most of the prompts were syntactically sound, with only occasional errors in word choice or word order. These minor mistakes did not seem to affect the overall clarity of the prompt or the effectiveness of the interaction with ChatGPT. The findings suggest that students, even when not given specific training in prompt writing, are capable of using English effectively to access AI-generated academic support. However, their prompts still reflect a tendency toward surface-level inquiries, with few instances of complex sentence structures or nuanced critical thinking embedded in their requests.

The implications of this study are twofold. Pedagogically, the act of prompt writing can serve as a valuable linguistic task that integrates digital literacy, syntactic awareness, and academic inquiry. Educators



can incorporate prompt formulation exercises into writing or linguistics courses to help students develop clearer, more targeted communication skills while also enhancing their engagement with digital tools like ChatGPT. Additionally, prompting could function as a formative assessment to gauge student understanding of a topic based on how they articulate their academic needs.

Theoretically, this study contributes to the growing discourse on human-AI interaction in education, specifically within EFL learning contexts. It positions prompts not merely as input commands, but as meaningful linguistic artifacts that reflect learner identity, intent, and language competence. While limited in scope due to its small sample size, the study lays groundwork for future research to explore more diverse syntactic patterns, broader linguistic features, or comparative studies across institutions and disciplines. Overall, the results demonstrate that ChatGPT can serve as both a learning aid and a linguistic mirror, giving insight into students' syntactic choices while supporting their academic development.

REFERENCES

- Adiguzel, T., Kaya, M. H., & Cansu, F. K. (2023). Revolutionizing education with AI: Exploring the transformative potential of ChatGPT. *Contemporary educational technology*, 15(3). <https://doi.org/10.30935/cedtech/13152>
- Anisah, L., Dewanti, R., & Rasyid, Y. (2025, July). Accuracy of Word Order in Phrases and Sentences Resulting From Machine Translation. In *International Seminar on Humanity, Education, and Language* (pp. 629-639). <https://doi.org/10.21009/ishel.v1i1.57696>
- Baidoo-Anu, D., & Ansah, L. O. (2023). Education in the era of generative artificial intelligence (AI): Understanding the potential benefits of ChatGPT in promoting teaching and learning. *Journal of AI*, 7(1), 52-62. <http://dx.doi.org/10.2139/ssrn.4337484>
- Budi, W., Halimah, N., & Indarto, H. (2024). Language Acquisition of Declarative and Imperative Sentences in five-year-old Children. *Journal Corner of Education, Linguistics, and Literature*, 3(3), 309-321. <https://doi.org/10.54012/jcell.v3i3.275>
- Cao, J., Li, M., Wen, M., & Cheung, S. C. (2025). A study on prompt design, advantages and limitations of chatgpt for deep learning program repair. *Automated Software Engineering*, 32(1), 1-29. <https://doi.org/10.1007/s10515-025-00492-x>
- Creswell, J. W. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.
- Dörnyei, Z. (2007). *Research methods in applied linguistics*. Oxford: Oxford University Press.
- Dwivedi, Y. K., Hughes, D. L., Coombs, C., Constantiou, I., Duan, Y., Edwards, J. S., ... & Wamba, S. F. (2023). Artificial intelligence (AI): Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy. *International Journal of Information Management*, 71, 102545. <https://doi.org/10.1016/j.ijinfomgt.2019.08.002>
- Ellis, R., & Barkhuizen, G. (2025). *Analysing learner language*. Oxford university press.
- Geroimenko, V. (2025). Key Principles of Good Prompt Design. In *The Essential Guide to Prompt Engineering: Key Principles, Techniques, Challenges, and Security Risks* (pp. 17-36). Cham: Springer Nature Switzerland.
- Güner, H., & Er, E. (2025). AI in the classroom: Exploring students' interaction with ChatGPT in programming learning. *Education and Information Technologies*, 1-27. <https://doi.org/10.1007/s10639-025-13337-7>
- Gurl, T.J., Markinson, M.P. & Artzt, A.F. Using ChatGPT as a Lesson Planning Assistant with Preservice Secondary Mathematics Teachers. *Digit Exp Math Educ* 11, 114–139 (2025). <https://doi.org/10.1007/s40751-024-00162-9>



- Hidayat, N., (2025). An Explanatory Study: Exploring EFL Students' Attitudes Toward the Use of AI Tools in Academic Writing. *English Language, Literature, and Teaching*, 10(1), 59-70. <https://doi.org/10.32528/ellite.v10i1.3389>
- Hidayati, N. N. (2024). Research Article Trends Globally on Translation: A Bibliometric Analysis with ScienceDirect Database. *JETLEE: Journal of English Language Teaching, Linguistics, and Literature*, 4(2), 169-189. <https://doi.org/10.47766/jetlee.v4i2.2868>
- Irawan, I. N. (2025). A Comparative Analysis of Cognitive and AI Approaches in English-Indonesian Translation: Manual vs. Automated Methods. *JETLEE: Journal of English Language Teaching, Linguistics, and Literature*, 5(1), 35-46. <https://doi.org/10.47766/jetlee.v5i1.4557>
- Khoirul Anam, R. (2025). Prompt Engineering and the Effectiveness of Large Language Models in Enhancing Human Productivity. arXiv e-prints, arXiv-2507. <https://doi.org/10.48550/arXiv.2507.18638>
- Kostka, I., & Toncelli, R. (2023). Exploring applications of ChatGPT to English language teaching: Opportunities, challenges, and recommendations. *Tesl-Ej*, 27(3), n3. <https://doi.org/10.55593/ej.27107int>
- Kristiawan, D., Bashar, K., & Pradana, D. A. (2024). Artificial intelligence in English language learning: A systematic review of AI tools, applications, and pedagogical outcomes. *The Art of Teaching English as a Foreign Language (TATEFL)*, 5(2), 207-218. <https://doi.org/10.36663/tatefl.v5i2.912>
- Lee, H. (2025). The Accuracy, Linguistic Appropriateness, and Prompting as Properties of Use in ChatGPT Relevant to Korean EFL Learners. *언어학 연구*, (75), 109-141. <https://doi.org/10.17002/sil.75.202504.109>
- Lu, X. (2010). Automatic analysis of syntactic complexity in second language writing. *International Journal of Corpus Linguistics*, 15(4), 474-496. <https://doi.org/10.1075/ijcl.15.4.02lu>
- Mahapatra, S. (2024). The impact of ChatGPT on ESL students' academic writing skills: A mixed-methods intervention study. *Smart Learning Environments*, 11, 9. <https://doi.org/10.1186/s40561-024-00295-9>
- Melisa, R., Ashadi, A., Triastuti, A., Hidayati, S., Salido, A., Ero, P. E. L., ... & Al Fuad, Z. (2025). Critical Thinking in the Age of AI: A Systematic Review of AI's Effects on Higher Education. *Educational Process: International Journal*, 14, e2025031. <https://doi.org/10.22521/edupij.2025.14.31>
- Michel-Villarreal, R., Vilalta-Perdomo, E., Salinas-Navarro, D. E., Thierry-Aguilera, R., & Gerardou, F. S. (2023). Challenges and opportunities of generative AI for higher education as explained by ChatGPT. *Education sciences*, 13(9), 856. <https://doi.org/10.3390/educsci13090856>
- Muawanah, U., Marini, A., & Sarifah, I. (2024). The interconnection between digital literacy, artificial intelligence, and the use of E-learning applications in enhancing the sustainability of Regional Languages: Evidence from Indonesia. *Social Sciences & Humanities Open*, 10, 101169. <https://doi.org/10.1016/j.ssaho.2024.101169>



- Ng, D. T. K., Xinyu, C., Leung, J. K. L., & Chu, S. K. W. (2024). Fostering students' AI literacy development through educational games: AI knowledge, affective and cognitive engagement. *Journal of computer assisted learning*, 40(5), 2049-2064. <https://doi.org/10.1111/jcal.13009>
- Ningsih, N. S., & Rahman, F. (2023). Exploring the unique morphological and syntactic features of Singlish (Singapore English). *Journal of English in Academic and Professional Communication*, 9(2), 72-80. <https://doi.org/10.25047/jeapco.v9i2.3933>
- Patton, M. Q. (2014). *Qualitative research and evaluation methods* (4th ed.). SAGE Publications.
- Radford, A. (2009). *Analysing English sentences: A minimalist approach*. Cambridge University Press.
- Rahman, F., Yuzar, E., & Zhou, W. (2023). Developing an Online Test Battery for Testing EFL Pragmatic Competence: What Can It Tell Us?. *Scope: Journal of English Language Teaching*, 8(1), 72-83. <https://doi.org/10.30998/scope.v8i1.17418>
- Steiss, J., Tate, T., Graham, S., Cruz, J., Hebert, M., Wang, J., Moon, Y., Tseng, W., Warschauer, M., & Olson, C. B. (2024). Comparing the quality of human and ChatGPT feedback of students' writing. *Learning and Instruction*, 91, 101894. <https://doi.org/10.1016/j.learninstruc.2024.101894>
- Taguchi, N. (2011). Teaching pragmatics: Trends and issues. *Annual Review of Applied Linguistics*, 31, 289–310. <https://doi.org/10.1017/S0267190511000018>
- Tisdell, E. J., Merriam, S. B., & Stuckey-Peyrot, H. L. (2025). *Qualitative research: A guide to design and implementation*. John Wiley & Sons.
- Tiwari, H. P. (2024). Artificial intelligence in the classroom: Revolutionizing English language teaching. *Journal of English Teaching and Linguistics Studies (JET Li)*, 6(1), 42-59. <https://doi.org/10.55215/jetli.v6i1.9757>
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Wang, Q., Saha, K., Gregori, E., Joyner, D., & Goel, A. (2021, May). Towards mutual theory of mind in human-ai interaction: How language reflects what students perceive about a virtual teaching assistant. In *Proceedings of the 2021 CHI conference on human factors in computing systems* (pp. 1-14).
- Yankouskaya, A., Liebherr, M., & Ali, R. (2025). Can ChatGPT be addictive? A call to examine the shift from support to dependence in AI conversational large language models. *Human-Centric Intelligent Systems*, 1-13. <https://doi.org/10.1007/s44230-025-00090-w>
- Zhang, Z. V. (2025). Digital literacy in the age of artificial intelligence: exploring student engagement with automated writing evaluation (awe) feedback. *Práxis Educacional*, 21(52), e17102-e17102.
- Zhao, J. (2025). Advancing english language education: A mixed-methods analysis of AI-driven tools' impact on engagement, personalization, and learning outcomes. *Education and Information Technologies*, 1-41. <https://doi.org/10.1007/s10639-025-13560-2>

