



AI-Assisted Writing in Discussion Texts: What changes in Theme and Thematic Progression?

Angel Jarbowah¹, Alan Jaelani², Indah Sri Redjeki³, Novita Sari Hidayat⁴

^{1,2,3,4} English Department, Universitas Ibn Khaldun Bogor

Article Info	Abstract
Received: 2026 - 06- 01	<i>This study investigates the influence of AI assistance on Theme choices and Thematic Progression (TP) patterns in Indonesian EFL students' discussion texts. A qualitative comparative discourse analysis was employed using a paired-text design in which the same 20 participants produced one text independently (pre-AI) and another with ChatGPT assistance (post-AI) by direct within-subject comparison of thematic change. A total of 558 clauses were analyzed (265 pre-AI; 293 post-AI) at the clause and discourse levels using Systemic Functional Linguistics frameworks. Results indicate that AI assistance produced a notable increase in the use of unmarked topical themes +6.7%, and a corresponding decrease in the Marked Topical Themes -7.1%, while Textual Themes showed only a slight increase +0.4% and the Interpersonal Themes remained mostly stable -0.7%. Regarding TP patterns, Derived/Split Progression showed the most significant change +2.8%, while Constant/Parallel Progression decreased -3.4% and Linear/Zigzag remained stable -0.2%. The findings suggests that AI supports structural organization and coherence in EFL writing through standardization of clause structure and modest thematic elaboration, while having limited impact on interpersonal or evaluative expression. This study provides pedagogical implications for combining AI tool with explicit writing instruction in order to enhance discourse organization, thematic development, and coherence.</i>
Revised: 2026 06-18	
Accepted: 2026 06-30	
Keywords: AI-assisted writing, EFL Discussion Texts, Theme choices, Thematic Progression, ChatGPT	
DOI: 10.24256/ideasv14i1.11122	
Corresponding Author: Angel Jarbowah angelmohni07@gmail.com English Department, Universitas Ibn Khaldun Bogor	

1. Introduction

Writing in English as a Foreign Language (EFL) remains a central concern in language education as it requires learners to manage grammar, vocabulary, argumentation, coherence, stance, and audience awareness within a single act of meaning-making. In academic and argumentative genres, the difficulty becomes

more demanding because students are expected to present claims, organize evidence, anticipate opposing views, and guide readers through a logical sequence of ideas (Pham, 2024; Sun et al., 2024). Discussion text is one of the genres that makes these demands visible. It requires writers to examine an issue from more than one perspective, arrange arguments and counterarguments, and produce a reasoned position.

For EFL students, this genre is mostly challenging because successful discussion writing depends on linguistic accuracy and textual control - ideas must be introduced, maintained, developed, contrasted, and concluded in ways that readers can follow (Fitriati et al., 2021; Sun et al., 2024). Discussion text is specifically suitable for Theme and Thematic Progression analysis because its communicative objectives demand writers to manage argument conflicting topical threads, signal shifts between perspectives, and keep argument continuance throughout the full text where all functions observed through thematic choices to the clause-level.

Recent developments in generative artificial intelligence have added a new layer to this issue. AI writing tools are increasingly used by EFL learners to generate ideas, revise sentences, organize paragraphs, and improve linguistic accuracy (Barrot, 2023; Lee et al., 2025). Song and Song (2023) have reported that ChatGPT-assisted learning can enhance EFL students' academic writing skills and writing motivation throughout immediate feedback and revision support. Teng (2024) also highlighted that EFL learners perceive ChatGPT as a partner because it can provide feedback, suggest alternatives, and reduce the burden of composing in a foreign language.

The growing use of AI in EFL writing has encouraged researchers to examine its pedagogical value, ethical implications, and effects on learner performance (Barrot, 2023; Ibrahim & Kirkpatrick, 2024; Jaelani & Dewanti, 2025; Lo et al., 2024). Zhang (2025) shows that generative AI feedback and hybrid feedback can influence L2 academic writing development when AI input is combined with human guidance. Ibrahim and Kirkpatrick (2024) also report that ChatGPT can support L2 writing instruction through motivation, automated instructional assistance, and personalized feedback. Lo et al. (2024) indicate that the field is moving from general enthusiasm toward more specific questions about how AI affects learning processes, language performance, and classroom practice. These studies suggest that AI-assisted writing should not be evaluated only through final scores or general perceptions, yet it also through the linguistic organization of the texts that students produce.

One productive way to examine textual organization is Systemic Functional Linguistics (SFL). From an SFL perspective, writing is viewed as a social semiotic act in which linguistic choices realize meanings in context (Halliday & Matthiessen, 2014; Thompson, 2014). Among the key resources in SFL, the system of Theme and Rheme is relevant to written coherence. Theme functions as the point of departure

of a clause, while Rheme develops the message (Halliday & Matthiessen, 2014). In written discourse, the selection and sequencing of Themes affect how information unfolds across clauses and paragraphs (Eggins, 2004; Thompson, 2014). Textual Themes help connect clauses through conjunctions, continuatives, and cohesive signals; Interpersonal Themes position the writer's stance, evaluation, or interaction with the reader; Topical Themes introduce the main experiential content of the clause (Halliday & Matthiessen, 2014).

In discussion texts, these three types of Themes are central because writers must connect arguments, signal contrast, express judgment, and maintain topic development across competing viewpoints. The connection between AI assistance and SFL is consequently noteworthy: if AI reshapes the language that students produce, it crucially reshapes the thematic choices through which their own texts establish meaning, arrange information, and signal stance.

Thematic Progression (TP) extends this analysis by tracing how Themes and Rhemes move from one clause to another. It explains how a text maintains a topic, develops new information, or shifts focus (Eggins, 2004; Thompson, 2014). (Fitriati et al., 2021) showed that TP contributes to cohesion and coherence in EFL learners' writing and identified common problems such as brand-new themes, empty themes, overuse of Constant Theme patterns, and excessive dependence on Textual Themes. Sun et al. (2024) also confirmed that TP has been widely applied to various writing types, including academic, argumentative, expository, descriptive, and narrative writing. These findings show that TP is a valuable analytical lens for diagnosing how EFL students organize meaning beyond sentence-level correctness.

Recent studies on Theme and TP in EFL contexts have noted that students' writing quality is closely related to their ability to manage information flow (Fitriati et al., 2021; Pham, 2024; Sun et al., 2024). Latifa and Kurniawan (2023) analyzed Theme and TP in pre-service teachers' recount texts and found that thematic choices helped reveal how writers maintained textual continuity.

Mustofa & Kurniawan (2023) similarly examined Theme and TP in an advanced learner's recount text, showing that SFL-based analysis can uncover the relationship between clause-level structure and broader textual organization. Herman et al. (2023) also argued that metafunctional analysis can help improve EFL learners' writing ability because it allows teachers and learners to see how meaning is built through language choices. Although these studies do not focus specifically on AI-assisted writing, they reveal that SFL provides a robust framework for examining how learners construct coherence.

Despite the growth of studies on AI-assisted EFL writing, the internal textual effects of AI assistance remain insufficiently explored. Many studies have measured students' writing improvement through scores, rubrics, surveys, interviews, or perceptions of usefulness (Ibrahim & Kirkpatrick, 2024; Lo et al., 2024; Teng, 2024). These approaches are valuable, yet they do not fully explain how AI assistance reshapes the linguistic architecture of student texts. A student's essay may receive a higher

score after using AI, but the improvement may come from grammatical polishing, clearer transitions, standardized paragraphing, or more systematic argument sequencing. Without a detailed analysis of theme choices and TP patterns, it is difficult to determine whether AI assistance strengthens students' own control of textual organization or produces a more polished but externally shaped discourse.

Prior research has not adequately addressed the comparison between human-written and AI-assisted discussion texts through the combined lens of theme choices and TP. Yang et al. (2024) provide the closest precedent by comparing human-written and AI-generated texts through thematic choices and TP patterns, finding that SFL can reveal differences in how human and AI texts organize clauses and construct coherence.

However, their study compared human-written and AI-generated texts as separate products – texts produce by different agents under different conditions. While the present study examines texts written by the same students under two conditions: without AI assistance and with AI assistance. This design allows the study to investigate the textual shift that occurs when student writing receives AI support. This paired-text design is the key methodological advance of the present study over (Yang et al., 2024) and allows attribution of thematic change directly to the effect of AI assistance rather than to individual variation between different writers.

This separation creates a conceptual gap. It remains unclear whether AI assistance changes the distribution of Textual, Interpersonal, and Topical Themes in student writing. It also remains unclear whether AI-assisted texts display different TP patterns – such as more Constant Theme progression, more Linear progression, fewer thematic ruptures, or more formulaic shifts between arguments. These questions matter because the organization of Theme and TP can indicate whether students are developing arguments through their own meaning-making resources or relying on AI-generated patterns of coherence (Fitriati et al., 2021; Yang et al., 2024).

ChatGPT is among the most widely adopted generative AI tools in EFL educational contexts globally and in Indonesia specifically (Lo et al., 2024; Teng, 2024). Its conversational interface and free accessibility make it practically available to the student population studied. Prior research has specifically examined ChatGPT's effects on L2 writing across a range of dimensions – including feedback quality, motivation, and text organization – providing a body of prior literature against which this study's SFL-based findings can be positioned (Ibrahim & Kirkpatrick, 2024; Song & Song, 2023). These characteristics make ChatGPT the most contextually appropriate and empirically documented AI tool for this study's purposes.

The present study aims to investigate how AI assistance affects the thematic organization of EFL students' discussion texts. The conceptual framework of the study positions AI assistance as a potential mediating variable between students'

independent thematic choices and their AI-supported thematic choices, with SFL – specifically Theme-Rheme theory and Thematic Progression theory – providing the analytical lens through which this mediation is examined at the clause and discourse levels. The study analyzes differences in Textual, Interpersonal, and Topical Theme choices, and examines differences in TP patterns, interpreting what these differences indicate about argument organization, textual coherence, and authorial voice.

Accordingly, this study is guided by the following research questions: (1) How do students' discussion texts written without AI assistance and with AI assistance differ in their choices of Textual, Interpersonal, and Topical Themes? (2) How do students' discussion texts written without AI assistance and with AI assistance differ in their TP Patterns, and what do these differences indicate about the organization of arguments and textual coherence?

The contribution of this study lies in its focus on textual meaning. Rather than evaluating AI-assisted writing through scores, fluency, grammar, or student perceptions, the study examines clause-level and text-level organization of meaning. Such findings can help teachers distinguish between genuine improvement in textual control and surface-level polishing generated through AI support, and can inform the design of AI-integrated EFL writing instruction that preserves learner agency and rhetorical individuality.

2. Method

This study utilized a qualitative comparative discourse analysis design grounded in Systemic Functional Linguistics (SFL). The design was selected to investigate how AI assistance affects Theme choices and Thematic Progression (TP) patterns in EFL learners' discussion texts at both clause and discourse levels. A paired-text design was implemented, where each participant produced one discussion text independently (pre-AI) and another using AI assistance (post-AI).

This design allows for within-subject comparison, minimizing individual differences and focusing on textual changes induced by AI support. Such an approach aligns with established SFL-based studies that analyze clause-level Theme and TP to reveal how learners organize meaning and maintain textual coherence (Daneš, 1974; Halliday & Matthiessen, 2014; Thompson, 2014).

The participants were 20 sixth-semester Indonesian EFL university students, aged 20–22 years, comprising 17 females and 3 males. All participants had an intermediate to upper-intermediate level of English proficiency as assessed by their prior coursework and standardized English test scores. A sample of 20 participants was deemed sufficient for this qualitative comparative discourse analysis because the paired-text design allows detailed within-subject comparisons, providing rich insight into AI-mediated changes without requiring a large sample for statistical generalization. Each participant wrote two texts on the same topic: Online Learning vs. Face-to-Face Learning. The first text was written

independently without AI support (pre-AI), and the second with ChatGPT assistance (post-AI). Students were chosen using purposive sampling to ensure sufficient English proficiency and prior exposure to discussion text writing.

In the post-AI condition, students wrote with ChatGPT assistance. They were provided with standardized prompts instructing ChatGPT to generate ideas, suggest sentence revisions, and organize paragraphs. Participants could adopt AI-generated sentences fully or partially, but final texts required their own revisions to maintain personal writing style. Example of a standardized prompt: "Write a discussion text comparing Online Learning and Face-to-Face Learning.

Provide supporting arguments for both sides and suggest a recommendation. Maintain logical organization and use cohesive devices." Prior to writing, participants received explicit instruction on the discussion text genre, including its structure, social purpose, and linguistic features. Texts were collected electronically and anonymized to prevent researcher bias.

Ethical procedures were strictly followed. Participants provided informed consent prior to the study. All texts were anonymized to ensure participant confidentiality, and the research protocol received approval from the institutional ethics committee of Universitas Ibn Khaldun Bogor.

The clause-level analytical framework was adapted from Halliday & Matthiessen's (2014) theme-rheme and Daneš' (1974) thematic progression model. This framework allowed identification of Theme types, including textual themes, interpersonal themes, unmarked topical themes, and marked topical themes, and TP patterns, including constant/parallel, linear/zigzag, and derived/split progressions.

A structured coding sheet was employed to systematically record occurrences and frequencies of each theme type and TP pattern, following procedures used in prior EFL discourse analysis research (Fitriati et al., 2021; Sun et al., 2024). Sample coding examples: a clause starting with "In this modern era..." was coded as a Marked Topical Theme; a clause beginning "Online learning is beneficial..." was coded as an Unmarked Topical Theme. Derived/Split TP was identified when a clause introduced multiple subthemes from a main Theme, e.g., "Both online and face-to-face learning have advantages; online learning offers flexibility, face-to-face enhances interaction."

Data analysis involved several steps. First, all texts were segmented into individual clauses (pre-AI: 265 clauses; post-AI: 293 clauses). Second, each clause was coded for Theme type and TP pattern. Third, frequency counts and percentages for all Theme types and TP patterns were calculated for each condition. Fourth, comparative analysis was conducted to evaluate differences between pre-AI and post-AI texts, providing insight into how AI support influenced clause-level and discourse-level organization.

This procedure aligns with previous SFL research, which emphasizes clause-level coding to examine textual coherence and thematic structure (Fitriati et al.,

2021; Yang et al., 2024).

Content validity was ensured by adapting the analytical framework from well-established SFL literature and having the instrument reviewed by linguistic experts to confirm it captured clause-level and discourse-level phenomena accurately. Construct validity was maintained by defining Theme types and TP patterns according to prior theoretical models, ensuring alignment between conceptual definitions and operationalization.

Additionally, sample texts were piloted and examined for clarity and interpretability. Inter-coder reliability was assessed by having two independent coders analyze a subset of texts. Agreement was calculated using Cohen’s Kappa, resulting in a coefficient of 0.85, indicating high coding consistency. Coding procedures were applied systematically across all texts to ensure reproducibility and accuracy in identifying Theme types and TP patterns. Any discrepancies were resolved through discussion and consensus, following best practices in qualitative discourse research (Sun et al., 2024). To minimize researcher bias, coders maintained reflective memos documenting potential subjective interpretations, and all decisions were double-checked through consensus discussions.

3. Result

A total of 40 discussion texts produced by 20 Indonesian EFL university students were analyzed across two conditions: pre-AI (independently written) and post-AI (written with ChatGPT assistance). The texts comprised a total of 558 clauses, with 265 clauses in the pre-AI condition and 293 clauses in the post-AI condition. This paired-text design enabled direct comparison of clause-level and text-level changes in thematic organization and progression. The analysis focused on two main variables i.e., Theme types: interpersonal themes, unmarked topical themes, and marked topical themes and TP patterns: Constant/Parallel, Linear/Zigzag, and Derived/Split Progressions.

Table 1. Distribution of Theme Types (pre-AI vs post-AI)

Theme Type	Pre-AI Frequency	Pre-AI (%)	Post-AI Frequency	Post-AI (%)
Textual	83	31.3%	93	31.7%
Interpersonal	10	3.8%	9	3.1%
Topical (Unmarked)	118	44.5%	150	51.2%
Topical (Marked)	56	21.1%	41	14.0%
Total	265	100%	293	100%

Theme Types in students’ Pre-AI Assistance Texts

The pre-AI discussion texts highlight a clear pattern of thematic traditionalism. Unmarked Topical Themes serve as the dominant Theme type, by accounting for nearly half of all clause openings (44.5%). This finding indicates that

students writing independently highly depended on the default subject-first clause structure, which is by placing the grammatical subject in Theme position without intend thematic foregrounding.

Textual Themes took place secondly (31.3%), by noting that students did integrate connective devices such as conjunctions and conjunctive adjuncts. Despite that, a closer investigation of the data presents that the majority of these Textual Themes were restricted into a low stock of connectors, mostly *but*, *and*, *so*, and *because* which are additive and normal conjunctions that serves as the most basic level of logical signaling. More sophisticated connectors which reflects contrast, concession, or reformulation such as in *however*, *in contrast*, *on the other hand*, *furthermore*, or *therefore* have appeared yet notably lower frequency and concentrated in only some students' texts, mainly in S.04, S.07, and S.13, who produced longer and more structurally developed pre-AI texts.

Marked Topical Themes have been shown in 21.1% of clauses, which underlines that some students did focus on circumstantial or contextual elements before presenting the main clause subject. These were specifically realized through sequential or locative adjuncts such as *in this modern era*, *Nowadays*, *In digital era*, and *during the pandemic*. In which this reflects some thematic range, the marked Themes in the pre-AI texts were highly formulaic scene-setters has been concentrated in the departure sentences, by functioning as generic discourse openers more than as strategically utilized thematic choices that arrange the argumentative content.

Interpersonal Themes were significantly rare at only 3.8%, only 10 models throughout all of the 265 clauses produced by 20 students. This extremely low frequency leads that students writing independently almost never foregrounded their own evaluative opinion, modality, or attitudinal manner before the experiential content of the clause. The few models that been appeared were limited to expressions – such as *in my opinion* and *I think* – and these were conducted in the concluding paragraphs of texts, by suggesting that students reserved stance marking for their personal conclusion rather than distributing evaluative voice through the noted argument. Examples of each Theme Type that can be observed in the following clauses.

Unmarked Topical Theme – S.05:

"Online learning is useful because students can study from anywhere."

"Students can ask questions directly to the teacher and get faster answers."

These examples reflect the default subject-first pattern. The Theme in each clause is the grammatical subject, in which is carrying the expected topical information without any prior textual or interpersonal framing.

Textual Theme – S.03:

"And some people think online more effective but some people again think face to

face better."

"Because not all from us have same facilities."

The Textual Themes here are mainly conjunctions which offers minimal logical guidance. The use of *And* and *Because* as clause-initial elements reflects limited command of the formal connective discourse.

Marked Topical Theme – S.09:

"In this modern era where the technology developed significantly, there are a lot of activity from traditional method become modern method."

This marked Theme foregrounds a temporal-contextual frame before presenting the topical content, demonstrating a degree of thematic style, yet its function remains largely introductory rather than being argumentative.

Interpersonal Theme – S.07:

"In my opinion, both online learning and face-to-face learning have their own strengths and weaknesses depending on the students' needs and learning situations."

One of only ten Interpersonal Themes across all pre-AI texts, this example shows the writer grounding personal stance before the propositional content, in which it remains a rare occurrence in independently written texts.

Theme Types in students' Post-AI Assistance Texts

The post-AI discussion texts demonstrate a notable change in the thematic distribution compared to the pre-AI condition. The most specific change is the increase in the Unmarked Topical Themes decreased slightly from 44.5% to 51.2% – in an increase of 6.7 percentage points – in which it remains the dominant Theme type but with a modest reduction in their share. This indicates that while AI assistance encouraged more connective framing, students remain predominantly relied on the subject-first clause structure as their default thematic choice. The reduction in unmarked Topical Themes was not startling, which is confirming that AI assistance does not fundamentally transform students' underlying on clause-level habits, yet rather supplements them with additional connective scaffolding.

Textual Themes showed only a marginal increase from 31.3% to 31.7%. Given the very small difference, this result should not be interpreted as evidence of a substantial change in students' use of textual Themes. Rather, the finding suggests that AI assistance had a limited effect on the overall frequency of textual Theme use, although qualitative differences were observed in the variety and formality of connectors employed.

The Textual Themes in post-AI texts were qualitatively different from those in the pre-AI texts: they featured a wider and more formal list of connectors – including *however*, *in addition*, *on the other hand*, *furthermore*, *therefore*, *meanwhile*, *besides that*, *despite these benefits*, *in contrast*, and *overall*. These are highlights been

associated with academic and formal argumentation, by suggesting that ChatGPT served students with connective vocabulary that expanded their independent command of formal academic discourse.

Marked Topical Themes highly decreased from 21.1% to 14.0% – in a decrease of 7.1 percentage points. This is a notable shift finding in the thematic distribution and shows that AI assistance did not promote for a greater variety in clause-initial positioning as it might have been expected. Yet, the decreasing leads that students relied less on the marked thematic structures to ground circumstantial elements – such as *time*, *place*, *manner*, or *condition*.

A possible explanation can be given is that AI-generated enhance tend to arrange discourse through an explicit textual connectors and cohesive devices more than across the strategic placement of the contextual information in the position of Theme. Due to that, students may have preferred more conventional subject-first construction and connector-driven organization, by decreasing their usage of Marke Topical Themes as a definition of structuring information and leading readers through the text. This noted shift reflects a movement toward more predictable thematic patterns in the post-AI discussion texts.

Interpersonal Themes decreased slightly from 3.8% to 3.1%. However, the difference is minimal and should be interpreted cautiously. The findings suggest that AI assistance did not noticeably affect students' use of evaluative or interpersonal resources, as both conditions exhibited similarly low frequencies of interpersonal Themes. This finding suggests that AI assistance did not meaningfully influence students' usage of evaluative language, personal instance, or even writer-reader interaction.

Meanwhile AI appeared to enhance the organizational parts of writing throughout changes in the thematic structure, its own impact on the Interpersonal dimension of the discourse was minimal. From the perspective of pedagogy, this result is crucial due to its ability to indicate that AI tools are able to support textual organization and coherence, yet not specifically encouraging students to improve into a stringer authorial voice or engage more actively in showing attitude, judgements, and personal positionings throughout the arguments. Examples of each Theme Type that can be observed in the following clauses.

Textual Theme – S.07:

"Despite these benefits, face-to-face learning continues to play an important role in education."

"Furthermore, in-person learning promotes social engagement, collaboration, and teamwork."

These Textual Themes reflect a qualitative upgrade in the connective complexity compared to pre-AI texts. *Despite these benefits* signals concession and forward contrast simultaneously, while *furthermore* added into an existing argumentative chain, which both functions are characteristic of formal academic discussion text.

Textual Theme – S.04:

"However, despite those advantages, online learning also has several weaknesses that cannot be ignored."

"Therefore, combining both online and face-to-face learning may become a suitable recommendation."

The post-AI text of S.04 notes how more systematic use of logical connectors at key argumentative transitions – which is moving from advantage to disadvantage (*However*) and from analysis into recommendation (*Therefore*) – as a result, it creates a more explicitly organized argument structure.

Unmarked Topical Theme – S.02:

"Online learning offers many advantages."

"Learning materials are easy to access through videos, websites, and online platforms."

Even in post-AI texts, unmarked Topical Themes still remain the dominant in body paragraphs, by confirming that the subject-first pattern stays as the default clause structure regardless of the appearance of AI assistance.

Interpersonal Theme – S.10:

"In my opinion, online learning is useful for independent students because it helps them manage their own study schedule."

Interpersonal Themes in post-AI texts shown in same positions and with similar frequency to the pre-AI texts – largely confined to personal opinion statements rather than distributed throughout the argument as evaluative framing.

Thematic Progression Patterns

The analysis of **Thematic Progression (TP) patterns** aimed to examine how students organized information across clauses in pre-AI and post-AI discussion texts. Table 2 presents the frequency and percentage of each TP pattern for the two conditions.

Table 2. Distribution of Thematic Progression Patterns in Pre-AI Texts

TP Pattern	Pre-AI Frequency	Pre-AI (%)	Post-AI Frequency	Post-AI (%)
Constant/Parallel	180	67.9%	189	64.5%
Linear/Zigzag	61	23.0%	67	22.9%
Derived/Split	26	9.8%	37	12.6%
Total	265	100%	293	100%

Thematic Progression Patterns in Students' Pre-AI Assistance Texts

The pre-AI discussion texts reveal a strong dominance of the

Constant/Parallel Progression pattern, accounting for 67.9% of all thematic progressions identified in the corpus. This finding indicates that students writing independently tended to maintain the same Theme across successive clauses, repeatedly returning to the same topical focus rather than developing information through more complex thematic relationships. Such a pattern creates textual stability and cohesion, yet it may also limit the depth of idea development because new information is not consistently transformed into new thematic starting points.

The predominance of Constant/Parallel Progression suggests that students preferred a relatively straightforward method of organizing their arguments. Rather than constructing chains of logically connected information, they frequently maintained a single participant or concept as the Theme across several clauses. This tendency is particularly visible in texts discussing online learning, where the Themes online learning, students, or face-to-face learning repeatedly appeared in consecutive clauses. While this approach contributes to textual clarity, it also reflects a limited range of discourse development strategies.

Linear/Zigzag Progression appeared in 23.0% of the corpus. Although considerably less frequent than Constant Progression, this pattern demonstrates that some students were capable of creating information flow by transforming Rhemes into subsequent Themes. Through this mechanism, new information introduced at the end of one clause became the point of departure for the next clause. However, the relatively modest frequency suggests that students only occasionally expanded their arguments through cumulative thematic development.

Derived/Split Progression was the least common pattern, representing only 9.8% of all thematic progressions. This low frequency indicates that students rarely developed multiple subtopics from a single overarching Theme or hyper-theme. As a result, most texts lacked extensive hierarchical organization and instead progressed through simpler thematic repetition. Examples of each progression pattern can be observed in the following extracts.

Constant/Parallel Progression – S.05

"Online learning is useful because students can study from anywhere."



"It also saves time and money because students do not need to go to school."

The Theme still focusing on online learning across successive clauses, by illustrating the maintenance of a single topical focus.

Linear/Zigzag Progression – S.05

"They only need a phone or laptop and an internet connection."



"It also saves time and money because students do not need to go to school."

The information introduced in the Rheme of the first clause becomes the Theme of the following clause, creating a sequential flow of information.

Derived/Split Progression – S.07

"Both online learning and face-to-face learning have their own strengths and weaknesses."

"Online learning has several advantages."

"Face-to-face learning also gives many benefits."

The Themes *online learning* and *face-to-face learning* are derived from the broader hyper-theme that been introduced in the first clause, by demonstrating a derived thematic relationship. The pre-AI texts were characterized by thematic stability rather than the thematic expansion. Students mainly depended on repetition of the same Theme to keep coherence; meanwhile more complex progression patterns been appeared less frequently.

Thematic Progression Patterns in Students' Post-AI Assistance Texts

The post-AI discussion texts maintained Constant/Parallel Progression as the dominant organizational pattern. However, it decreased slightly from 67.9% to 64.5%. Even if the reduction was relatively small, yet it suggests that AI assistance enhanced students to diversify their thematic development into a limited extent rather than depending exclusively on repetitive thematic structures.

Linear/Zigzag Progression remained remarkably stable, changing only marginally from 23.0% to 22.9%. This stability indicates that AI assistance had little influence on students' tendency to transform Rhemes into subsequent Themes. The ability to construct linear information chains appears to have remained largely dependent on students' existing discourse competence rather than on AI-generated support.

Among the TP patterns, Derived/Split Progression showed the largest proportional increase from 9.8% to 12.6%. Nevertheless, the increase remains relatively modest and should be interpreted as a tendency rather than conclusive evidence of a major shift in discourse organization. This increase reflects a slightly more hierarchical organization of information and a broader thematic exploration of discussion topics. Examples of the progression patterns can be observed in the following extracts.

Constant/Parallel Progression – S.06

"Online learning is considered more practical and flexible."

"Online learning also has some disadvantages."

The same Theme is maintained across clauses, preserving a consistent topical focus.

Linear/Zigzag Progression – S.03

"Students can easily access learning materials and use various online resources."

"These resources can help students improve their understanding."

The Rheme of the first clause becomes the Theme of the following clause, creating a linear chain of information.

Derived/Split Progression – S.04

"Both online learning and face-to-face learning have their own merits and demerits."

"Online learning can become an effective alternative in certain conditions."

"Face-to-face learning is still considered more effective in building interaction and communication."

The Themes online learning and face-to-face learning are derived from the broader concept introduced in the first clause. These examples reveal that AI-assisted texts retained the overall thematic organization observed in the pre-AI condition while showing a slightly greater tendency toward thematic expansion and elaboration.

4. Discussion

The results show that AI assistance was associated with changes in thematic organization between the pre-AI and Post-AI conditions. However, these changes should be interpreted cautiously because some percentage differences were relatively small. Rather than indicating a complete transformation of students' discourse competence, the findings suggest that AI assistance mainly supported more conventional and explicit forms of textual organization. The analysis revealed an increase in Unmarked Topical Themes and a decrease in Marked Topical Themes when students wrote with AI assistance.

From an SFL perspective, this shift is important because Theme functions as the point of departure of the clause and helps determine how information is made prominent for the reader. The greater use of Unmarked Topical Themes suggests that AI-assisted texts tended to foreground familiar grammatical subjects, such as "online learning," "students," or "face-to-face learning," rather than circumstantial or context-setting elements. This pattern aligns with recent research comparing human-written and AI-generated texts, which found that AI tends to produce more unmarked and repetitive thematic structures while reducing complexity in Theme foregrounding (Yang et al., 2024).

Theoretically, the increase in Unmarked Topical Themes may reflect AI's tendency to prioritize clarity, grammatical regularity, and processing ease. In discussion texts, subject-first clause structures can help maintain a stable topical focus and make arguments easier to follow. However, this stability may also reduce

thematic variation. Marked Topical Themes, such as temporal, conditional, or contrastive clause openings, allow writers to foreground context, perspective, or argumentative contrast. Therefore, the decrease in Marked Topical Themes may indicate that AI-supported writing became more standardized and less rhetorically flexible. Textual and Interpersonal Themes did not change substantially, indicating that clause-linking devices and authorial stance remained relatively stable across both conditions. The minimal increase in Textual Themes should not be overstated.

Although post-AI texts may have used more formal connectors, the overall frequency difference was small. This suggests that AI assistance may improve the quality or variety of connectors without substantially changing the frequency of textual Theme use. This finding supports studies reporting that AI tools can improve surface organization and connectivity but do not automatically transform deeper rhetorical control (Anshar et al., 2025; Deng & Jamaludin, 2026; Wijaya & Rachmawati, 2026).

The limited use of Interpersonal Themes is important as in SFL, interpersonal resources allow writers to express stance, judgment, probability, obligation, and engagement with readers. The low frequency of these Themes in both pre-AI and post-AI texts suggests that AI assistance did not meaningfully strengthen students' authorial voice. This finding raises a critical issue i.e., AI may help students produce more coherent and formally organized texts, but it may not necessarily help them become more rhetorically present as writers.

The dominance of Constant/Parallel pattern in both conditions indicates that students relied heavily on repeated topical focus to maintain coherence. This pattern is common in EFL writing because repetition of the same Theme helps writers keep the text cohesive even when their ability to develop complex information flow is still limited. In SFL terms, Constant Progression supports continuity, but excessive reliance on it may restrict the movement of ideas from given information to new information.

The increase in Derived/Split pattern in post-AI texts suggests that AI assistance may have helped students expand a central issue into related subtopics. This pattern resonates with research showing that AI feedback and scaffolding can assist learners in producing more elaborated academic structures (Zainab & Parveen, 2026). In discussion texts, Derived/Split Progression is especially relevant because students need to develop multiple arguments and counterarguments from a broader issue.

The modest increase in this pattern suggests that AI may support hierarchical organization by helping students divide a general topic into more manageable argumentative points. However, the increase should not be interpreted as strong evidence of independent discourse development. It remains unclear whether students internalized the principle of thematic progression or simply adopted AI-generated organizational patterns. This distinction is central to learner agency. If

students only accept ready-made AI structures, the resulting text may appear more coherent without reflecting genuine growth in discourse competence.

The relative stability of Linear/Zigzag pattern indicates that sequential information development remained largely unchanged across conditions. This is theoretically significant because Linear Progression requires writers to transform information from the Rheme of one clause into the Theme of the next. Such movement reflects stronger control of information flow and cumulative reasoning. The limited change in this pattern suggests that AI assistance did not substantially improve students' ability to build step-by-step argumentative development.

The findings also suggest a relationship between Theme choices and TP patterns. The increase in Unmarked Topical Themes may have contributed to the continued dominance of Constant Progression because repeated subject-first Themes make it easier to maintain the same topical focus across clauses. At the same time, the modest increase in Derived/Split Progression may be linked to AI-supported paragraph organization, where a broad issue is divided into advantages, disadvantages, and recommendations.

This interaction shows that AI influences coherence not only through individual sentence improvement but also through the organization of information across clauses. Nevertheless, the pattern also indicates a possible risk of formulaic discourse. AI-assisted texts may become clearer and more predictable, but they may also rely on standardized argumentative templates. Therefore, improved coherence should be interpreted as both a pedagogical opportunity and a potential limitation.

Critical Perspective on AI-Assisted Thematic Organization

The reduction of Marked Topical Themes and the limited use of Interpersonal Themes suggest possible over-standardization. Students may produce texts that are grammatically smoother and more logically connected, yet less distinctive in voice, stance, and argumentative positioning. This finding is consistent with current concerns in AI-assisted writing research regarding learner agency, authorship, and over-reliance. AI may function as a useful scaffold when it helps students notice organizational patterns, but it may become problematic when students depend on it to make discourse-level decisions. In this sense, AI does not automatically improve discourse competence; its value depends on whether learners actively reflect on, revise, and appropriate the structures suggested by the tool.

Pedagogical Implications

The findings have practical implications for EFL writing instruction in contexts where AI tools are increasingly accessible. AI can be used as a scaffold to support structural aspects of writing, including topic maintenance, paragraph organization, and subtopic elaboration. However, teachers should not treat AI-generated

coherence as equivalent to students' independent writing development. Instead, AI should be integrated into instruction through guided comparison, reflection, and revision.

Teachers can ask students to compare their pre-AI and post-AI texts by identifying Theme choices, tracing TP patterns, and explaining why certain clauses create clearer information flow. Such activities can help students move from passive use of AI suggestions to active metalinguistic awareness. Teachers should explicitly teach the rhetorical functions of Marked Topical Themes and Interpersonal Themes so that students do not rely only on safe subject-first structures.

A balanced pedagogy should therefore combine AI assistance with SFL-informed writing instruction. Students need to learn either how to make a text coherent or how to control thematic prominence, manage information flow, and express authorial stance. AI can support drafting and revision, but teacher guidance remains necessary to develop critical awareness, independent discourse competence, and rhetorical agency.

5. Conclusion

This study investigated the influence of AI assistance on Theme choices and Thematic Progression (TP) patterns in discussion texts written by Indonesian EFL students. A paired-text design comparing pre-AI (independent) and post-AI (ChatGPT-assisted) texts allowed analysis of clause-level and discourse-level features. The findings indicate that AI assistance increased the use of Unmarked Topical Themes and slightly reduced Marked Topical Themes, suggesting a shift toward more conventional subject-first clause structures.

Textual Themes showed minor growth, reflecting AI-supported enhancement in the use of connective devices, while Interpersonal Themes remained limited, highlighting minimal influence on authorial stance. Regarding TP patterns, Constant/Parallel Progression remained dominant, Linear/Zigzag Progression was stable, and Derived/Split Progression increased modestly, indicating slight expansion of sub-theme elaboration under AI support. AI assistance appears to enhance structural organization and coherence at both clause and discourse levels by scaffolding theme selection and thematic elaboration.

However, it has limited effect on interpersonal or evaluative features, suggesting that teacher guidance remains essential to develop students' rhetorical stance and evaluative voice. These results provide empirical insight into the role of AI as a supportive tool in EFL writing pedagogy and highlight the need for balanced integration of AI with explicit instruction in discourse and genre-based writing strategies.

6. References

Anshar, M., Jaelani, A., Shabir, M., kunci, K., EFL, P., Buatan, K., & Bahasa, P. (2025).

- Can ChatGPT Help EFL Learners Improve Writing Coherence? Benefits and Limitations. *Bogor English Student and Teacher (BEST) Conference*, 6, 266–269. <https://pkm.uika-bogor.ac.id/index.php/best/article/view/3001>
- Barrot, J. S. (2023). Using ChatGPT for second language writing: Pitfalls and Potentials. *Assessing Writing*, 57, 100745. <https://doi.org/10.1016/J.ASW.2023.100745>
- Daneš, F. (1974). Functional Sentence Perspective and the Organization of the Text. *Papers on Functional Sentence Perspective*, 106–128. <https://doi.org/10.1515/9783111676524.106>
- Deng, L., & Jamaludin, K. A. (2026). Roles of Generative Artificial Intelligence (GenAI) in English as a Foreign Language (EFL) Instruction: A Systematic Literature Review. *SAGE Open*, 16(1). <https://doi.org/10.1177/21582440261418315;PAGE=STRING:ARTICLE/CHAPTER>
- Eggs, Suzanne. (2004). *An introduction to systemic functional linguistics*. New York: Continuum International Publishing Group.
- Fitriati, S. W., Nurjannah, & Gayatri, M. (2021). Thematic Progression in EFL Learners Writing: A Literature Review. *Lingua Cultura*, 15(2), 257–262. <https://doi.org/10.21512/LC.V15I2.7645>
- Halliday, M. A. K., & Matthiessen, C. M. I. M. (2014). *An Introduction to Functional Grammar* (4th ed.). Routledge.
- Herman, H., Rafiek, M., Agustina, T., Saddhono, K., Malabar, S., Saputra, N., & Purba, R. (2023). Exploring the Metafunctions to Improve EFL Learners' Writing Ability in the Perspective of Systemic Functional Linguistics. *Research Journal in Advanced Humanities*, 4(2), 87–100. <https://doi.org/10.58256/RJAH.V4I2.1195>
- Ibrahim, K., & Kirkpatrick, R. (2024). Potentials and Implications of ChatGPT for ESL Writing Instruction. *The International Review of Research in Open and Distributed Learning*, 25(3), 394–409. <https://doi.org/10.19173/IRRODL.V25I3.7820>
- Ismayanti, D., Said, Y. R., Usman, N., & Nur, M. I. (2024). The Students Ability in Translating Newspaper Headlines into English A Case Study. *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature*, 12(1), 108-131.
- Jaelani, A., & Dewanti, R. (2025). When Humor is Preserved or Lost: Evaluating ChatGPT and Gemini on CultureSpecific Humor Translation Strategies. *Jurnal Sosioteknologi*, 24(3). <https://doi.org/10.5614/SOSTEK.ITBJ.2025.24.3.4>
- Latifa, S. H., & Kurniawan, E. (2023). Theme and Thematic Progression Analysis of Pre-Service Teachers' Recount Text. *Indonesian Journal of EFL and Linguistics*, 99–111. <https://doi.org/10.21462/ijefl.v8i1.588>
- Lee, Y. J., Davis, R. O., & Choi, J. I. (2025). Integrating generative AI into EFL writing: University Students' Strategies and Perceptions. *Online Journal of*

- Communication and Media Technologies*, 15(4).
<https://doi.org/10.30935/OJCMT/17545>
- Lo, C. K., Yu, P. L. H., Xu, S., Ng, D. T. K., & Jong, M. S. yung. (2024). Exploring the Application of ChatGPT in ESL/EFL Education and Related Research Issues: a systematic review of empirical studies. *Smart Learning Environments*, 11(1).
<https://doi.org/10.1186/S40561-024-00342-5>
- Masruddin, M., & Nasriandi, N. (2022). Lexical and Syntactical Errors Performed by Junior High School Student in Writing Descriptive Text. *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature*, 10(1), 1094-1100.
- Mustofa, M. I., & Kurniawan, E. (2023). Theme and Thematic Progression in a Recount Text by an Advanced Student. *IJELTAL (Indonesian Journal of English Language Teaching and Applied Linguistics)*, 7(2), 481-494.
<https://doi.org/10.21093/IJELTAL.V7I2.1382>
- Pham, P. T. (2024). The Realization of Thematic Progression in Argumentative Essays by Third-year English-majored Students at a Public University in Vietnam. *Proceedings of the AsiaCALL International Conference*, 6, 204-216.
<https://doi.org/10.54855/PAIC.24615>
- Saleha Zainab, & Dr. Shahida Parveen. (2026). Scaffolding Academic Writing for EFL Learners Through AI Tools: A Mixed Method Study. *Journal of Applied Linguistics and TESOL (JALT)*, 9(1), 1578-1595.
<https://doi.org/10.63878/JALT2038>
- Song, C., & Song, Y. (2023). Enhancing Academic Writing Skills and Motivation: Assessing the Efficacy of ChatGPT in AI-assisted Language Learning for EFL students. *Frontiers in Psychology*, 14.
<https://doi.org/10.3389/fpsyg.2023.1260843>
- Sun, G., Ahmad, N. K., & Che Nawi, N. R. (2024). Investigating the Application of Thematic Progression in EFL Writing: A Systematic Review. In *International Journal of Learning, Teaching and Educational Research* (Vol. 23, Number 2, pp. 294-312). Society for Research and Knowledge Management.
<https://doi.org/10.26803/ijlter.23.2.14>
- Teng, M. F. (2024). "ChatGPT is the Companion, Not Enemies": EFL Learners' Perceptions and Experiences in Using ChatGPT for Feedback in Writing. *Computers and Education: Artificial Intelligence*, 7, 100270.
<https://doi.org/10.1016/J.CAEAI.2024.100270>
- Thompson, G. (2014). Introducing Functional Grammar. *Introducing Functional Grammar*. <https://doi.org/10.4324/9780203785270>
- Wijaya, Moh. T., & Rachmawati, D. L. (2026). AI-Supported EFL Writing Instruction: A Study on the Use of ChatGPT. *English Review: Journal of English Education*, 14(2), 455-464. <https://doi.org/10.25134/ENGLISHREVIEW.V14I2.215>
- Yang, S., Chen, S., Zhu, H., Lin, J., & Wang, X. (2024). A Comparative Study of Thematic Choices and Thematic Progression Patterns in Human-written and AI-

- generated Texts. *System* (Linköping), 126.
<https://doi.org/10.1016/J.SYSTEM.2024.103494>
- Mi Rong, & Yao Yuan. (2026). From Assistance to Advancement: A Systematic Review of How GenAI Supports L2 Writing Learning from the Lens of Activity Theory. *ECNU Review of Education*, 9(2).
<https://doi.org/10.1177/20965311261437802>