International Journal of Language Pedagogy
Vol. 5, No. 2, pp 43-56, November 2025
E-ISSN 2777-1229, P-ISSN 2797-1783
DOI: https://doi.org/10.24036/ijolp.v5i2.104

Using Generative AI in Thesis Writing: Perspectives from EFL Students and Lecturers

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Received: August, 20, 2025 Revised: October, 12, 2025 Accepted: November, 2, 2025

Abstract

Generative AI is transforming how students plan, write, and revise academic work, raising new questions about critical thinking, ethics, originality, and authorship. This mix-methods study investigated how EFL students use generative AI in thesis writing and included lecturers' perspectives. Data were collected from 200 undergraduate students through surveys measuring their perceptions, experiences, and practices. In addition, semi-structured interviews were conducted with 20 students and 8 lecturers across four Indonesian universities. Quantitative data were analyzed descriptively, while qualitative data underwent thematic analysis. Findings show that generative AI helps students in idea generation, linguistic refinement, and text organization, reducing cognitive load and enhancing writing confidence. Students mostly used AI for revision and editing. Institutions should establish clear frameworks for responsible AI use, provide formal training, and set expectations to ensure AI supports learning without undermining skill development or academic integrity. Overall, this research offers a deeper understanding of generative AI's role in EFL thesis writing and emphasizes the importance of teaching strategies, curriculum integration, and institutional policies for ethical and effective use. Future research should examine AI's long-term impact on independent writing skills and higher-order thinking across diverse educational contexts.

Keywords: Generative AI, Thesis writing, Academic integrity, EFL, Higher education

Introduction

Generative AI is changing how EFL students plan, write, and revise their theses. Many students rely on AI to overcome common challenges such as limited vocabulary, weak grammar, and difficulty organizing complex ideas (Mahapatra, 2024; Setyani et al., 2023). Lecturers have also noticed shifts in how students draft, structure, and revise their work. Although generative AI can make thesis writing more manageable, it also raises concerns about overreliance, the authenticity of student work, and the changing role of supervisors in guiding writing process (Bastola, 2023; Fhonna, 2020; Gurung & Thapa, 2023).

From a theoretical perspective, this study draws on cognitive load theory, which suggests that generative AI can reduce the mental effort needed to write by supporting language and organization. It also considers sociocultural theory, viewing AI as a mediating tool that interacts with students' learning and collaboration. Additionally, self-regulated learning theory highlights how students manage their own writing process, planning, monitoring, and evaluating their work, which can be influenced by AI use. Finally, TPACK (Technological Pedagogical Content Knowledge) emphasizes that the integration of technology into teaching requires careful alignment with pedagogy and content

knowledge, relevant when supervising thesis writing (Mishra & Koehler, 2006; Sweller, 2019; Vygotsky, 1978; Zimmerman, 2002).

In response to these developments, the Indonesian Ministry of Education has issued guidelines for the use of generative AI in higher education. The Guidelines for the Use of Generative Artificial Intelligence (Gen AI) in Higher Education Learning stress ethical use, critical digital literacy, and the need for clear institutional policies and training for both students and educators (Directorate of Learning and Student Affairs, 2024). Despite the emergence of policies, research on how students and lecturers experience these tools in thesis writing is still limited (Alordiah, 2023; Rahayu et al., 2024; Samantaray & Azeez,2023). Most studies focus on short-term writing outcomes and pay little attention to the wider pedagogical and ethical implications of AI use in EFL thesis writing (Luo & Qiu, 2024; Mudawy, 2024; Praphan & Praphan, 2023).

Recent studies in Indonesia and Southeast Asia have begun to examine how generative AI influences academic writing practices in EFL contexts. Putri et al, (2025) found that Indonesian EFL students used generative AI for revising and editing thesis drafts, showing limited critical engagement and awareness of ethical issues. Similarly, Gandhi & Gani, (2024) reported that Indonesian lecturers acknowledged AI's potential to enhance writing efficiency but expressed concern over plagiarism and declining student autonomy. In another study, Batubara et al, (2025) observed that EFL students frequently relied on Grammarly and ChatGPT for linguistic accuracy and idea generation, though few demonstrated the ability to critically evaluate AI-generated outputs. These findings indicate that although AI can enhance language performance, its pedagogical and ethical implications remain underexamined. Therefore, institutions need clear guidelines and teaching models that help students use AI in academic writing ethically, thoughtfully, and effectively.

This study aimed to explore the perceptions, practices, and concerns of EFL students and lecturers regarding the use of generative AI writing tools in undergraduate thesis writing. It also examined areas of agreement and disagreement between students and lecturers to inform future teaching strategies, curriculum design, and institutional policies in academic writing programs (Fredericks & Louw, 2024) (Lekamge & Jenan, 2024). This inquiry is timely, given the growing need for ethical, responsive, and inclusive support for academic writing in multilingual contexts (Gartner & Krašna, 2023; Rahim et al., 2023; Sullivan et al, 2023).

The study was guided by the following research questions:

1. How did undergraduate EFL students perceive the use of AI writing tools during the thesis writing process?
2. What kinds of benefits and challenges did students encounter when using these tools?
3. How did EFL lecturers view the role of AI writing tools in their students' thesis writing?
4. What concerns did lecturers express regarding the integration of these tools into academic writing?
5. In what ways could institutions better support the ethical and effective use of AI writing tools in EFL thesis writing?

By examining student and lecturer perspectives, this study provided deeper insights into the practical effects of generative AI tools in EFL academic writing. It contributes to emerging research by showing how institutional expectations align with classroom practices. The novelty of this study lies in its focus on pedagogical and ethical issues, connecting technology use with academic responsibility in multilingual higher education. This study adds to the global discussion on AI in academic writing by providing evidence from an under-researched EFL context. It broadens understanding of how AI is integrated into diverse linguistic and educational settings.

Methods

Research Design

This study used a convergent parallel mixed-methods design, which involves collecting quantitative and qualitative data at the same time, analyzing them separately, and then integrating the results during interpretation (Creswell & Clark, 2018). This approach was selected to gain a comprehensive understanding of EFL students' and lecturers' experiences, perceptions, and concerns regarding the use of generative AI in undergraduate thesis writing. By combining numerical data with

detailed narrative accounts, the study aimed to capture the complexity of academic writing practices in multilingual contexts.

This design is particularly suited to educational research that examines both overall patterns and individual experiences (Ivankova et al, 2006). It allowed the researchers to examine how survey findings aligned with or diverged from interview data, providing greater insight into student and lecturer practices. Triangulation was used during the interpretation phase to enhance the credibility of the results and to compare quantitative trends with qualitative themes (Fetters et al, 2013).

Participants

The study involved a total of 200 undergraduate EFL students and 8 EFL lecturers from four public and private universities in Bengkulu, Indonesia. Student participants for the survey were selected through purposive sampling, focusing on those who were actively engaged in the thesis writing process. From this group, 20 students (five from each university) were invited to participate in semi-structured interviews based on their willingness to provide more detailed accounts of their experiences. Lecturer participants were chosen based on their supervisory roles in thesis writing and had a minimum of five years of experience in academic writing instruction. Table 1 summarizes the demographic characteristics of the participants, including the selection criteria, university sources, and specific notes regarding their involvement in the study.

Table 1 Demographic Characteristics of Study Participants

Participant Group	N	Selection Criteria	University Source	Notes
Undergraduate EFL Students (Survey)	200	Actively engaged in thesis writing; purposive sampling	Four public and private universities in Bengkulu	General survey respondents
Undergraduate EFL Students (Interviews)	20	Willing to share detailed experiences; 5 from each university	Same four universities	Subset of survey participants
EFL Lecturers	8	Supervisory role in thesis writing; ≥5 years teaching experience	Same four universities	Provided qualitative insights
Undergraduate EFL Students (Survey)	200	Actively engaged in thesis writing; purposive sampling	Four public and private universities in Bengkulu	General survey respondents

Instruments

Two structured questionnaires were developed for students and lecturers, each containing ten thematic aspects: perceived usefulness, writing quality, organization, challenges, academic integrity, writing skills, satisfaction, writing process, general perceptions, and future expectations. Each area included 10 items rated on a 4-point Likert scale.

Before full-scale administration, both survey instruments underwent rigorous validation and reliability checks. Content and face validity were assessed three senior EFL writing instructors with expertise in academic writing and assessment. Their feedback led to revisions for clarity and contextual relevance. A pilot test was then conducted with 20 undergraduate students from outside the study sample to evaluate item clarity, scale consistency, and completion time. Minor adjustments were made based on pilot results. The internal consistency reliability of the student questionnaire was confirmed using Cronbach's Alpha, yielding a coefficient of 0.91, which exceeds the commonly accepted threshold of 0.70 for social science research (Tavakol & Dennick, 2011).

For qualitative data, two semi-structured interview protocols were designed. Student interviews explored personal experiences, challenges, decision-making processes, and ethical considerations in using generative AI in thesis writing. Lecturer interview questions focused on pedagogical perspectives, observed student behavior, concerns about academic integrity, and recommendations for instructional policy.

Data Collection Procedures

Quantitative data were collected using Google Forms, which was distributed to student and lecturer participants via a shared Google link. Participation in the survey was voluntary. All responses were anonymized and securely stored to ensure the protection of participant privacy and data integrity.

Qualitative data were gathered through semi-structured interviews, conducted face-to-face at each participating university. Each session lasted between 25 and 30 minutes. Interviewers adhered to a standardized protocol to ensure consistency across sessions, but also allowed for flexibility in participant responses to encourage the emergence of rich, detailed narratives. All interviews were audio-recorded with informed consent and subsequently transcribed for thematic analysis.

Data Analysis

Quantitative Analysis

Survey data were analyzed using SPSS. Descriptive statistics including means, standard deviations, and response frequencies were used to summarize participant responses. The Shapiro-Wilk test was used to assess data normality. Since some variables were not normally distributed, non-parametric tests such as the Kruskal-Wallis H test and Mann-Whitney U test were applied to examine differences in perceptions among student groups. For lecturer responses, descriptive statistics were used due to the smaller sample size.

Qualitative Analysis

The qualitative data from interviews with 20 EFL students and 8 lecturers were analyzed using Braun & Clarke (2006) six-steps thematic analysis method, which allows for a systematic exploration of patterns in the data.

Integration and Triangulation

Data from the quantitative and qualitative strands were integrated during the interpretation stage. Triangulation was employed to compare findings across data sources, revealing areas of convergence. This integration contributed to a more nuanced understanding of the research problem and reinforced the reliability of the interpretations(Creswell & Plano Clark, 2018).

Ethical Considerations

This research received ethical clearance from the institutional research ethics committee of the lead university. All participants were informed of the study's purpose, their rights, and confidentiality measures prior to data collection. Data were anonymized, securely stored, and used solely for academic purposes.

Result and Discussion

Usefulness of Generative AI for Thesis Writing

Generative AI helped EFL students in writing their theses, particularly by improving grammar, vocabulary, and sentence organization. As shown in Table 2, grammar checking was perceived as the most beneficial feature (60% very helpful), followed by sentence structuring (55%) and vocabulary improvement (50%).

Table 2 Usefulness of Tools for Thesis Writing

Aspect	Very Helpful (%)	Helpful (%)	Not Helpful (%)
Grammar Checking	60%	25%	15%
Vocabulary Improvement	50%	30%	20%
Sentence Structure	55%	30%	15%

Qualitative data supported these results. One student remarked, "*The grammar checker helps me fix mistakes I would otherwise miss, and the vocabulary suggestions help me express my ideas more precisely. The sentence structure hints also guide me to organize paragraphs logically*" (Ss 7).

Another student noted, "*I often combine all three features: grammar for correctness, vocabulary for clarity, and sentence structuring for flow. It really makes my thesis more readable*" (Ss 12).

Lecturers shared similar observations but voiced caution. One lecturer stated, "*Students clearly write more accurately and organize ideas better, but many rely heavily on AI and neglect their independent writing skills*" (Lt 2). This concern shows a tension between using technology and maintaining student independence.

Lecturers observed similar patterns but also raised caution. One lecturer commented, "*Students are clearly improving their grammar and sentence organization, and their word choice is more precise. However, I worry that they may rely too much on AI and miss the chance to develop independent writing skills*" (Lt 2).

These findings suggest that generative AI tools effectively support thesis writing by enhancing clarity, vocabulary precision, and sentence flow. From a cognitive load perspective, AI reduces extraneous effort, allowing students to concentrate on higher-order thinking and argument development (Sweller, 2019). Similarly, Vygotsky's sociocultural theory highlights the lecturer's role in guiding students so that AI supports learning instead of replacing critical thinking (Vygotsky, 1978). These insights extend previous studies (Marzuki et al., 2023; Setyani et al., 2023), which emphasized writing outcomes but overlooked the cognitive and metacognitive processes behind AI-supported drafting (Marzuki et al., 2023; Setyani et al., 2023).

The results show that generative AI improves the linguistic and structural quality of EFL thesis writing. However, its educational value depends on proper guidance, reflective use, and institutional support to ensure students develop independent academic skills.

Generative AI and Thesis Structure

Findings indicate that generative AI played a substantial role in helping students organize their theses, particularly in managing chapter structure and integrating ideas across sections (Table 3). Specifically, 70% of students rated AI support for overall thesis organization as very helpful, with an additional 20% finding it helpful and only 10% considering it not helpful. Similarly, 65% of students found AI very helpful for integrating ideas across sections, while 20% found it helpful and 15% reported limited usefulness. Chapter structuring received slightly lower ratings; with 60% of students indicating it was very helpful, 25% helpful and 15% not helpful.

Table 3. Generative AI and Thesis Structure

Aspect	Very Helpful (%)	Helpful (%)	Not Helpful (%)
Thesis Organization	70%	20%	10%
Chapter Structuring	60%	25%	15%
Idea Integration	65%	20%	15%

Qualitative insights aligned with these findings. One student stated, "*Using AI suggestions really help me see how my chapters should flow. It shows me where to put each section so the thesis makes sense*" (Ss 5). Another student added, "*I rely on the tool to connect ideas across chapters; it helps me keep my argument clear and consistent*" (Ss 11).

Lecturers observed improvements in students' structural coherence. As one lecturer commented, "*Students are better at organizing their chapters and linking ideas across sections, but I worry that some may rely too heavily on AI instead of developing their own structuring skills*" (Lt 3).

Students also reported improvements in vocabulary and coherence. These outcomes align with previous research showing linguistic gains through AI-supported writing (Simamora & Tenrisanna; Alharbi, 2023; Marzuki et al., 2023; Fhonna, 2020). However, the study shows that students still struggle with higher-level writing skills, such as developing logical arguments, organizing ideas, and maintaining cohesion throughout their thesis.

From a cognitive load perspective (Sweller, 2019), generative AI help reduces cognitive effort needed for grammar and vocabulary correction, enabling students to focus more on content development. Yet, Vygotsky's sociocultural theory (Vygotsky, 1978) suggests that students still need guidance from lecturers to develop critical reasoning and analytical writing skills.

Lecturers noted that although students' writing became more fluent, their ability to build strong

arguments and think critically showed little progress. This indicates that AI helps improve basic writing skills but cannot replace lecturer guidance in developing higher-level reasoning. Therefore, students need guided and reflective use of AI to ensure that technology supports, rather than replaces, meaningful learning.

These findings suggest that generative AI can enhance thesis organization and coherence, yet careful guidance from lecturers is necessary to ensure students build independent academic writing abilities.

Perceived Effectiveness of Generative AI

The survey results show that students perceived generative AI as highly effective in supporting key aspects of thesis writing, particularly grammar accuracy, writing clarity, and cohesion (Table 4). Grammar support received the strongest endorsement, with 65% of students rating it as very helpful and another 25% as helpful, leaving only 10% who considered it not helpful. Writing clarity was also positively viewed, with 60% of students finding it very helpful and 30% helpful, indicating that AI suggestions contributed meaningfully to making sentences clearer and more precise. Cohesion and coherence were slightly less strongly rated, though still valued: 55% of students reported AI as very helpful, 35% helpful and 10% not helpful.

Table 4. Perceived Effectiveness of Generative AI

Aspect	Very Helpful (%)	Helpful (%)	Not Helpful (%)
Grammar Accuracy	65%	25%	10%
Writing Clarity	60%	30%	10%
Cohesion and Coherence	55%	35%	10%

Interview findings deepened these insights. Students emphasized that AI improved the readability and flow of their writing. One student said, "*The grammar checker helps me fix mistakes I often miss, and my sentences sound clearer*" (Ss 7). Another explained, "*AI helps connect my ideas, but I still need to make sure my arguments are logical*" (Ss 12). Others added that AI made organizing chapters easier and improved word choice, but it could not help them reason critically.

Lecturers agreed that AI enhances grammar, structure, and fluency but noted its limits in developing argumentation and analytical skills. One lecturer explained, "*AI makes the text more polished, but it cannot build logical reasoning or deep analysis, which students must learn through supervision*" (Lt 2). Another commented, "*Students' grammar is much better, yet they still struggle to integrate ideas and develop arguments*" (Lt 5).

These findings align with previous research indicating that AI improves surface-level writing but has minimal impact on higher-order thinking (Sullivan & McLaughlan, 2023). From a cognitive perspective, AI eases mechanical work so students can focus on meaning, but it cannot replace critical thinking (Sweller et al, 2019). Sociocultural theory further suggests that lecturer mediation remains essential to transform AI use into genuine learning (Vygotsky, 1978)

Students and lecturers were concerned about academic honesty, especially in paraphrasing, citing sources, and maintaining originality. Many students were unsure about the ethical limits of using AI, supporting previous findings that unclear policies can increase plagiarism and reliance on AI (Ibrahim, 2023; Jarrah et al., 2023).

Therefore, universities should develop clear policies and pedagogical frameworks that guide responsible AI use. These should include explicit rules, ethics training, and opportunities for reflective practice. Integrating AI into thesis supervision can be valuable when paired with ethical awareness and lecturer guidance.

Challenges in Using Generative AI

The survey shows that students faced challenges using generative AI for grammar, clarity, and cohesion (Table 5). Most found AI very helpful, 65 percent for grammar, 60 percent for clarity, and 55 percent for cohesion, while smaller proportions rated it helpful or not helpful. These results indicate that AI supports writing but requires students to evaluate suggestions carefully and manage technical or contextual issues to ensure quality and integrity.

Table 5. Challenges in Using Generative AI

Aspect	Very Helpful (%)	Helpful (%)	Not Helpful (%)
Grammar Accuracy	65%	25%	10%
Writing Clarity	60%	30%	10%
Cohesion and Coherence	55%	35%	10%

Overreliance on AI emerged as another significant challange. Some students admitted to accepting suggestions automatically, without critically evaluating them, which could hinder the development of independent writing skills. One student explained, "*Sometimes generative AI changes what I meant, so I have to check carefully or ignore its suggestions*" (Ss 9). Another added, "*It helps polish my sentences, but I don't feel I'm learning much if I follow it blindly*" (Ss 14).

Lecturers confirmed these observations, noting that frequent dependence on AI might restrict students' growth in higher-order writing skills such as style, tone, and logical flow. As one lecturer remarked, "*Generative AI is useful for surface corrections, but students still need to practice organizing ideas and writing with their own voice*" (Lt 3). Another lecturer noted, "*Heavy reliance can slow down the development of critical thinking and problem-solving in writing*" (Lt 6).

Students and lecturers highlighted ethical challenges, particularly in paraphrasing, citation integration, and maintaining originality. Many students were unsure about ethical boundaries when using AI tools, reflecting gaps in institutional guidance. Previous research has often overlooked these issues (Balta, 2024; Idroes et al., 2023). Lecturers expressed concern that unclear policies could threaten academic honesty, as students may not know what constitutes acceptable use of AI in academic writing. This underscores the importance of institutional frameworks that provide clear guidance on responsible AI use, ethical practices, and expectations for independent writing (Kostick-Quenet & Gerke, 2022; Leung et al., 2023).

Impact of Generative AI on Writing Skills

The findings indicate that generative AI influenced EFL students' foundational writing skills. Survey results (Table 6) show that 58 percent of students strongly agreed and 30 percent agreed that AI improved their grammar, with only 12 percent disagreeing, highlighting that most students experienced noticeable gains in grammatical accuracy. For vocabulary expansion, half of the students strongly agreed and 35 percent agreed that AI helped broaden their word choices, while 15 percent disagreed, suggesting substantial support in lexical development. Regarding organization, 55 percent strongly agreed and 32 percent agreed that AI enhanced the structure of their theses, indicating that most students found it valuable for arranging content logically, although 13 percent did not perceive improvement. In terms of idea development, 45 percent strongly agreed and 38 percent agreed that AI assisted in linking and generating ideas, while 17 percent disagreed, showing that AI's contribution to higher-order cognitive skills was less pronounced but still meaningful for a significant portion of students.

Table 6. Perceived Impact of Generative AI on Writing Skills

Aspect	Strongly Agree (%)	Agree (%)	Disagree (%)
Improved Grammar	58%	30%	12%
Expanded Vocabulary	50%	35%	15%
Enhanced Organization	55%	32%	13%
Better Idea Development	45%	38%	17%

Grammar checking was widely appreciated for making writing more polished and accurate, consistent with prior research demonstrating AI's ability to reduce surface-level errors and cognitive load in writing (Alharbi, 2023; Simamora & Tenrisanna, 2023). Students also noted that AI helped them use a wider range of vocabulary, making their writing clearer and more expressive. Tools for organizing chapters and maintaining logical flow were especially useful for connecting ideas, which aligns with previous research on AI-supported writing (Buriak et al., 2023; Sullivan et al, 2023).

The effect of AI on higher-order skills like idea generation, argument development, and critical thinking was limited. Some students found it helpful for connecting ideas, but many still struggled to clearly present arguments or integrate evidence. One student said, "*My grammar is much better now, but I still need to work on making my arguments stronger*" (Ss 4), showing that AI mainly improves surface-level skills. Lecturers agreed, noting that AI can refine text but cannot replace active thinking. One lecturer stated, "*Students must think deeply about their ideas to produce meaningful, well-structured theses*" (Lt 1). This supports cognitive load theory, which suggests AI reduces basic writing effort but does not build critical reasoning (Sweller et al, 2019) and Vygotsky's view that AI works best as a support alongside guided learning (Vygotsky, 1978).

Unlike previous studies that focus mainly on surface-level outcomes or tool functionality (Marzuki et al., 2023; Mahniza et al, 2024; Putri et al, 2025), this study offers empirical evidence on how students and lecturers engage with AI-supported writing, revealing gaps between technical utility and higher-order skill development. The findings underscore the need for thoughtful AI integration in pedagogy, pairing digital tools with instructional guidance to foster both foundational writing skills and advanced academic competencies.

Generative AI and Academic Integrity

The findings reveal that academic integrity is a key concern in the use of generative AI for EFL thesis writing (table 7). For encouraging originality, 42 percent of students strongly agreed and 40 percent agreed that AI supports originality, while 18 percent disagreed, showing that most students see potential benefits but some remain cautious. Regarding plagiarism risk, half of the students strongly agreed and 30 percent agreed that AI could increase plagiarism, with 20 percent disagreeing, highlighting widespread awareness of ethical challenges. For promoting ethical writing habits, 38 percent strongly agreed and 35 percent agreed that AI can support responsible practices, while 27 percent disagreed, indicating that although students recognize ethical benefits, more guidance is needed.

Table 7. Generative AI and Academic Integrity

Aspect	Strongly Agree (%)	Agree (%)	Disagree (%)
Encourage Originality	42%	40%	18%
Risk of Plagiarism	50%	30%	20%
Promote Ethical Writing Habits	38%	35%	27%

Many students found AI helpful for improving language and ideas, some admitted to following suggestions without critically checking them, raising questions about authorship. One student said, "*Sometimes I just followed the suggestions without really thinking. I wasn't sure if that was still considered my own writing*" (Ss 9).

Lecturers noticed similar issues. They acknowledged improvements in grammar and clarity but warned that overreliance on AI could reduce originality and critical thinking. One lecturer explained, "*Some students submitted sections that sounded very similar to external sources*" (Lt 4), emphasizing that AI should be a tool, not a shortcut. These observations support previous research showing that unclear policies and lack of guidance raise the risk of plagiarism (Ibrahim, 2023; Jarrah et al., 2023; Kostick-Quenet & Gerke, 2022).

Pedagogically, this highlights the need for clear guidelines and ethical training. Structured guidance helps students evaluate AI outputs critically, use suggestions responsibly, and maintain authorship integrity (Balta, 2024; Roe et al., 2023). These results contribute to the wider discussion on AI in academic writing by showing how ethical, cognitive, and technical issues intersect in EFL thesis work.

Satisfaction with Generative AI

The findings indicate that students were largely satisfied with generative AI in supporting their thesis writing (table 8). For ease of use, 65 percent of students reported being very satisfied and 25 percent satisfied, while 10 percent were not satisfied, showing that most found the tools user-friendly. Regarding helpfulness, 60 percent were very satisfied and 30 percent satisfied, with 10 percent not satisfied, suggesting that students valued AI assistance for improving writing. For overall worth, 70

percent considered AI very useful and 20 percent useful, with 10 percent not satisfied, indicating that most students perceived substantial benefits from integrating AI into their thesis writing process.

Table 8. Overall Satisfaction with Generative AI

Aspect	Very Satisfied (%)	Satisfied (%)	Not Satisfied (%)
Ease of Use	65%	25%	10%
Helpfulness	60%	30%	10%
Worth Using	70%	20%	10%

Many students found generative AI user-friendly and effective for supporting their thesis writing. One student noted, "*They're easy to use, and most of the time the suggestions are useful. I would definitely keep using them*" (Ss 5). Another commented, "*Even if I don't use them all the time, they help me notice mistakes I might miss on my own*" (Ss 14). These findings indicate that students value AI not only for improving text quality but also for enhancing their confidence and autonomy during thesis writing.

These perceptions align with prior research suggesting that positive user experience and perceived usefulness are critical factors in technology adoption in educational contexts (Granić, 2022; (Raghuram & Jain, 2024). Satisfaction with AI tools not only enhances writing efficiency but also increases learner confidence and a sense of autonomy, which are essential for self-regulated learning (Apriani et al, 2024). Moreover, consistent with cognitive load theory (Sweller et al, 2019), the ease of use and helpfulness of AI reduce extraneous cognitive effort, allowing students to concentrate on content development and idea articulation rather than mechanical correction.

Generative AI and Thesis Writing Process

The findings demonstrate that students primarily used generative AI during the later stages of thesis writing (table 9). For planning and outlining, 52 percent of students used AI frequently, 34 percent sometimes, and 14 percent rarely, indicating moderate engagement in early-stage structuring. During drafting, 60 percent used AI frequently, 28 percent sometimes, and 12 percent rarely, showing increased reliance for composing content. The highest usage occurred in revising and editing, with 68 percent using AI frequently, 22 percent sometimes, and 10 percent rarely, suggesting that students mainly perceive AI as a tool for correcting grammar, improving clarity, and refining sentences rather than for generating ideas and planning structure.

Table 9. Use of Generative AI across Thesis Writing Stages

Writing Stage	Frequently (%)	Sometimes (%)	Rarely (%)
Planning & Outlining	52%	34%	14%
Drafting	60%	28%	12%
Revising & Editing	68%	22%	10%

Qualitative findings supported this trend. One student explained, "*I mostly use AI when revising to fix mistakes or improve sentences, not when I first plan my chapters*" (Ss 5). Lecturers also reported noticing that students rarely applied AI tools in the early stages, which may limit the tools' potential to support higher-order writing skills, such as organizing arguments and developing ideas. One lecturer stated, "*Students often check grammar and clarity at the end, but they don't use AI to help plan or structure their work, which could make their writing stronger*" (Lt 3).

These findings show that AI helps improve basic writing skills but is less used for higher-level tasks like idea development and argument organization. Using AI during the planning stage could reduce effort on mechanical tasks, letting students focus on content and structure (Sweller, 2019). Sociocultural theory also suggests that early guidance is essential for developing critical thinking and clear arguments, so AI should support, not replace, instructor input throughout the writing process (Vygotsky, 1978).

Perception of Generative AI in Thesis Writing

The findings illustrate that most students view generative AI positively as part of academic support systems, especially for promoting independent learning and enhancing thesis writing practices (table 10). For formal integration into support systems, 62% strongly agreed and 25% agreed, showing broad endorsement, while 13% disagreed. Regarding support for independent learning, 58% strongly agreed and 30% agreed, indicating that AI helps students work autonomously, though 12% were unconvinced. For encouraging better thesis writing practices, 48% strongly agreed and 32% agreed, suggesting moderate confidence in AI's role, with 20% expressing skepticism.

Table 10. General Perceptions of Tools in Thesis Writing

Statement	Strongly Agree (%)	Agree (%)	Disagree (%)
Should be part of academic support	62%	25%	13%
Useful for independent learning	58%	30%	12%
Encourage better thesis writing practices	48%	32%	20%

A majority of students agreed that AI tools function like personal tutors, providing immediate feedback while still requiring active engagement with their writing. One student remarked, "*It feels like having a personal tutor; the tool guides me but still lets me think for myself*" (Ss 8). Another added, "*I can check my writing and learn from the suggestions without asking someone every time*" (Ss 13). Lecturers also acknowledged the benefits of these tools for supporting self-directed learning. One lecturer explained, "*Students are improving faster when they use AI responsibly; it encourages them to revise their work and reflect on their choices*" (Lt 3).

From a cognitive perspective, instant feedback reduces extraneous load and allows students to focus on higher-order writing tasks (Sweller, 2019). Vygotsky's sociocultural theory further supports this view, suggesting that scaffolding through instructor guidance combined with AI-mediated support fosters critical thinking, coherent argumentation, and deeper engagement with content (Vygotsky, 1978).

These results suggest that generative AI helps students learn independently and build a positive writing culture. By giving instant feedback and guidance, it let students track their progress, improve confidence, and take more control of their thesis. Lecturers noted that AI works better when paired with supervision and teaching support, helping students develop critical thinking and writing skills.

The Future of Generative in Thesis Writing

The survey results highlight that students strongly support formally integrating generative AI into academic programs (table 11). Specifically, 65% of students strongly agreed and 28% agreed that AI tools should be taught formally, with only 7% disagreeing, reflecting broad consensus on the need for structured instruction. Regarding inclusion in writing courses, 60% strongly agreed and 30% agreed, showing strong approval, while 10% were unconvinced. Instruction on ethical use received the highest endorsement, with 70% strongly agreeing and 20% agreeing that formal guidance on responsible AI use is necessary and only 10% dissenting.

Table 11. Future Role of Generative AI in Thesis Writing

Opinion	Strongly Agree (%)	Agree (%)	Disagree (%)
Should be taught formally	65%	28%	7%
Should be part of writing courses	60%	30%	10%
Should come with ethical use training	70%	20%	10%

Interview data supported these findings. One student stated, *"I think AI should be part of our writing courses so we learn how to use it properly and not just copy everything*" (Ss 3). Another student added, "*If we are taught the rules and limits, I can use it to improve my writing without breaking academic rules*" (Ss 16). Lecturers also highlighted the dual benefit of formal instruction, noting that AI tools can support skill development but need structured guidance: "*Students improve*

grammar and clarity, but without proper supervision, they may not learn to develop arguments or ensure originality" (Lt 5).

These findings show that generative AI can greatly support thesis writing in EFL contexts, but its benefits depend on careful integration into courses. Teaching AI use formally, including ethical guidance, can help students improve writing skills, think critically, and maintain academic honesty. With proper supervision, AI can enhance learning without replacing students' independent effort and development (Balta, 2024;Roe et al., 2023).

Contribution and Implications

This study differs from prior research by combining student and lecturer perspectives through a mixed-methods approach. The use of semi-structured interviews provides deeper insights into how generative AI are used and reveals gaps in institutional support that previous studies often overlook.

The findings indicate that generative AI should not be treated as shortcuts, but as resources that require structured orientation, ethical guidance, and careful integration into academic writing instruction (Alharbi, 2023). Students' reliance on AI primarily during later stages highlights the need for guidance throughout the writing process to increase critical thinking, argument development, and responsible authorship.

From a policy perspective, these results suggest that institutions should establish clear frameworks for AI use, including formal training programs, ethical guidelines, and curricular integration. Policies that outline appropriate and responsible use of AI can help ensure that these tools support learning outcomes instead of hindering skill development.

For lecturers, the study highlights the need to guide students in using AI in writing courses and thesis supervision. By giving clear instructions, showing ethical use, and including AI in structured activities, lecturers can help students think critically and use AI responsibly. Combined with institutional policies, this approach treats AI as a learning support, not a replacement for independent work.

Conclusion

This study examined how EFL students use generative AI in thesis writing included their lecturers' perspectives. Students generally found AI helpful, especially for revising and editing their work. However, they also raised concerns about overreliance, ethical issues, and limited institutional support. Lecturers acknowledged the benefits of AI but cautioned that using it without guidance could weaken critical thinking, argument development, and academic integrity. The findings support the cognitive process model of writing and socio-constructivist theory confirming the importance of planning, reflection, and guided interaction. Using AI mainly in later stages without structured guidance limits students' opportunities to plan ideas, develop arguments, and think critically. From a curriculum perspective, generative AI should be intentionally integrated into writing courses and thesis supervision, with clear instructions on ethical use, critical evaluation, and iterative drafting. This approach can strengthen digital literacy, higher-order thinking, and alignment with program learning outcomes. At the policy level, institutions need frameworks that define responsible AI use, provide ethical guidelines, and offer formal training. Providing clear guidance and expectations helps AI support learning without harming skill development and academic integrity. Overall, this study offers a deeper understanding of the role of generative AI in EFL thesis writing. Unlike earlier research that focused mostly on AI features or short-term outcomes, it emphasizes the need for effective teaching strategies, curriculum integration, and institutional policies to support ethical and thoughtful use. Future research should examine how AI affects students' independent writing skills and higher-order thinking over the long term in different educational contexts.

References

Affairs, D. of L. and S. (2024). *Guidelines for the use of Generative Artificial Intelligence (GenAI) in higher education learning* (and T. Directorate General of Higher Education, Research, and Technology, Ministry of Education, Culture, Research (ed.); 1st ed).

Alharbi, W. (2023). AI in the Foreign Language Classroom: A Pedagogical Overview of Automated Writing Assistance Tools. *Education Research International*, *2023*. https://doi.org/10.1155/2023/4253331

Alordiah, C. O. (2023). Appreciating the ai revolution: empowering educational researchers through ai tools for writing research articles. *Zamfara International Journal of Humanities*, *2*(1), 178–195. https://doi.org/https://doi.org/10.36349/zamijoh.2023.v02i01.013

Apriani, E., Cardoso, L., Obaid, A., , M., Wijayanti, E., Esmianti, F., & Supardan, D. (2024). Impact of AI-Powered ChatBots on EFL Students' Writing Skills, Self-Efficacy, and Self-Regulation: A Mixed-Methods Study. *Global Educational Research Review*, *1*(2), 57–72. https://doi.org/https://doi.org/10.71380/gerr-08-2024-8.

Balta, N. (2024). Ethical Considerations in Using AI in Educational Research. *Journal of Research in Didactical Sciences*, *2*(1), 14205. https://doi.org/10.51853/jorids/14205

Bastola, M. N. (2023). An Activity Theoretical Perspective on Writing and Supervising a Master's Thesis. *English Language Teaching Perspectives*, *8*(1–2), 31–44. https://doi.org/10.3126/eltp.v8i1-2.57855

Batubara, I., Wariyati, W., & Prawiyata, Y. (2025). Exploring University Students' Perceptions of AI: Insights from Indonesia. *Edu Cendikia: Jurnal Ilmiah Kependidikan.*, *4*(3), 1687–1701. https://doi.org/10.47709/educendikia.v4i03.5465

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/https://doi.org/10.1191/1478088706qp063oa

Buriak, J. M., Akinwande, D., Artzi, N., Brinker, C. J., Burrows, C., Chan, W. C. W., Chen, C., Chen, X., Chhowalla, M., Chi, L., Chueh, W., Crudden, C. M., Di Carlo, D., Glotzer, S. C., Hersam, M. C., Ho, D., Hu, T. Y., Huang, J., Javey, A., … Ye, J. (2023). Best Practices for Using AI When Writing Scientific Manuscripts. *ACS Nano*, *17*(5), 4091–4093. https://doi.org/10.1021/acsnano.3c01544

Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and Conducting Mixed Methods Research* ((3rd ed.)). Thousand Oaks, CA: SAGE.

Fetters MD, Curry LA, C. J. (2013). Achieving integration in mixed methods designs-principles and practices. *Health Serv Res*. https://doi.org/doi: 10.1111/1475-6773.12117

Fhonna, R. (2020). *THE LECTURERS' EXPERIENCES ON STU DENTS' THESIS SUPERVISION Rahmi Fhonna*. *7*(1), 113–122.

Fredericks, B., & Louw, T. (2024). Exploring student and lecturer perspectives on academic writing: a case study at the central university of technology, south africa. *Language Literacy*, *8*(8), 548–563. https://doi.org/https://doi.org/10.30743/ll.v8i2.10165

Gandhi, A., & Gani, P. (2024). Would Lecturers Use AI-Based Software to Write Scientific Article? A Quantitative Approach in Indonesia. *Ingénierie Des Systèmes d Information*, *29*(3), 941–950. https://doi.org/https://doi.org/10.18280/isi.290314.

Gartner, S., & Krašna, M. (2023). Ethics of Artificial Intelligence in Education. *Journal of Elementary Education*, *16*(2), 221–237. https://doi.org/10.18690/rei.16.2.2846

Granić, A. (2022). Educational Technology Adoption: A systematic review. *Education and Information Technologies*, *27*(7), 9725–9744.

Gurung, R. K., & Thapa, H. (2023). Current Trends in Writing Thesis at Master's Level in English of Humanities and Social Sciences. *Khwopa Journal*, *5*(2), 55–63. https://doi.org/10.3126/kjour.v5i2.60427

Ibrahim, K. (2023). Using AI-based detectors to control AI-assisted plagiarism in ESL writing: "The Terminator Versus the Machines." *Language Testing in Asia*, *13*(1). https://doi.org/10.1186/s40468-023-00260-2

Idroes, G. M., Noviandy, T. R., Maulana, A., Irvanizam, I., Jalil, Z., Lensoni, L., Lala, A., Abas, A. H., Tallei, T. E., & Idroes, R. (2023). Student Perspectives on the Role of Artificial Intelligence in Education: A Survey-Based Analysis. *Journal of Educational Management and Learning*, *1*(1), 8–15. https://doi.org/10.60084/jeml.v1i1.58

Ivankova, N. V., Creswell, J. W., & Stick, S. L. (2006). Using Mixed-Methods Sequential Explanatory Design: From Theory to Practice. *Field Methods*, *18*(1), 3–20. https://doi.org/https://doi.org/10.1177/1525822X05282260

Jarrah, A. M., Wardat, Y., & Fidalgo, P. (2023). Using ChatGPT in academic writing is (not) a form of plagiarism: What does the literature say? *Online Journal of Communication and Media Technologies*, *13*(4). https://doi.org/10.30935/ojcmt/13572

Kostick-Quenet, K. M., & Gerke, S. (2022). AI in the hands of imperfect users. *Npj Digital Medicine*,

5(1), 1–6. https://doi.org/10.1038/s41746-022-00737-z

Lekamge, W. L. R. C., & Jenan, R. (2024). Enhancing Academic Writing Proficiency among English as a Second Language Users at the Undergraduate Level: A Comparative Analysis of Student-Lecturer Perspectives and Strategies. *Research and Education*, *10*, 37–76. https://doi.org/https://doi.org/10.56177/red.10.2024.art.4

Leung, T. I., de Azevedo Cardoso, T., Mavragani, A., & Eysenbach, G. (2023). Best Practices for Using AI Tools as an Author, Peer Reviewer, or Editor. *Journal of Medical Internet Research*, *25*, 1–8. https://doi.org/10.2196/51584

Luo, J., & Qiu, L. (2024). *Review of Artificial Intelligence-Based Tools in EFL Classroom*. https://doi.org/https://doi.org/10.61173/s266nr95

Mahapatra, S. (2024). Impact of ChatGPT on ESL students' academic writing skills: a mixed methods intervention study. *Smart Learning Environments*, *11*(1). https://doi.org/10.1186/s40561-024-00295-9

Mahniza, M., Sari, R., Suci, P., Saputra, I., & Putri, E. (2024). AI-Driven Learning: Mediating and Moderating Dynamics in Self-Regulated Learning. *Ournal of Educational Science and Technology (EST)*, *10*(3), 229–241. https://doi.org/https://doi.org/10.26858/est.v10i3.68254.

Marzuki, Widiati, U., Rusdin, D., Darwin, & Indrawati, I. (2023). The impact of AI writing tools on the content and organization of students' writing: EFL teachers' perspective. *Cogent Education*, *10*(2). https://doi.org/10.1080/2331186X.2023.2236469

Mishra, P., & Koehler, M. J. (2006). Technological Pedagogical Content Knowledge: A Framework for Teacher Knowledge. *Teachers College Record*, *108*, 1017–1054. https://doi.org/http://dx.doi.org/10.1111/j.1467-9620.2006.00684.x

Mohammed Ahmed Mudawy, A. (2024). Investigating EFL Faculty Members' Perceptions of Integrating Artificial Intelligence Applications to Improve the Research Writing Process: A Case Study at Majmaah University. *Arab World English Journal*, *1*(1), 169–183. https://doi.org/10.24093/awej/chatgpt.11

Praphan, P. W., & Praphan, K. (2023). AI technologies in the ESL/EFL writing classroom: The villain or the champion? *Journal of Second Language Writing*. https://doi.org/https://doi.org/10.1016/j.jslw.2023.101072

Putri, B. G., Suryati, N., Ivone, F. M., & Hayati, N. (2025). The role of AI in academic writing: Unveiling strategies among EFL students. *Celtic : A Journal of Culture, English Language Teaching, Literature and Linguistics*, *12*(2), 774–792. https://doi.org/https://doi.org/10.22219/celtic.v12i2.42039

Raghuram, J., & Jain, K. (2024). Gen-AI integration in higher education: Predicting intentions using SEM-ANN approach. *Educ. Inf. Technol*, *29*, 17169–17209. https://doi.org/https://doi.org/10.1007/s10639-024-12506-4.

Rahayu, Weda, S., Muliati, & De Vega, N. (2024). Artificial Intelligence in writing instruction: A self-determination theory perspective. *XLinguae*, *17*(1), 234–244. https://doi.org/10.18355/XL.2024.17.01.16

Rahim, N. A., Hanum, A. Z. A., Bhakti, M. A. C., & Wandy, W. (2023). Artificial Intelligence Tools in Higher Education Students Usage Analysis – Case Study: Sampoerna University. *Jurnal Teknologi*, *16*(2), 137–145. https://doi.org/10.34151/jurtek.v16i2.4544

Roe, J., Renandya, W. A., & Jacobs, G. M. (2023). A Review of AI-Powered Writing Tools and Their Implications for Academic Integrity in the Language Classroom. *Journal of English and Applied Linguistics*, *2*(1). https://doi.org/10.59588/2961-3094.1035

Samantaray, R. R., & Azeez, A. (n.d.). AI Tools for Efficient Writing and Editing. *IGI Global*, *2024*, 33–56. https://doi.org/https://doi.org/10.4018/979-8-3693-1798-3.ch004

Setyani, E. D., Bunau, E., & Rezeki, Y. S. (2023). The Influence of Grammarly towards Indonesian EFL Students' First-Degree Thesis Writing Confidence. *Elsya : Journal of English Language Studies*, *5*(1), 54–67. https://doi.org/10.31849/elsya.v5i1.6773

Simamora, B., & Tenrisanna, R. (2023). Technology in Training Delivery of Education Management: AI in ELT Approach. *International Journal of Current Science Research and Review*, *06*(08), 5970–5977. https://doi.org/10.47191/ijcsrr/v6-i8-64

Sullivan, M., Kelly, A. & McLaughlan, P. (2023). ChatGPT in Higher Education: Considerations for Academic Integrity and Student Learning. *Journal of Applied Learning and Teaching*, *6*, 31–40.

https://doi.org/https://doi.org/10.37074/jalt.2023.6.1.17

Sweller, J., van Merriënboer, J. J., & Paas, F. (2019). Cognitive architecture and instructional design. *Educational Psychology Review*, *31*(2), 261–292. https://doi.org/https://doi.org/10.1007/s10648-019-09465-5

Sweller, J. (2019). Cognitive load theory and educational technology. *Educational Technology Research and Development*, *68*(1), 1–16. https://doi.org/https://doi.org/10.1007/s11423-019-09701-3.

Tavakol, M., & Dennick, R. (2013). Making Sense of Cronbach's Alpha. *International Journal of Medical Education*, *2*, 53–55. https://doi.org/http://dx.doi.org/10.5116/ijme.4dfb.8dfd

Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Harvard University Press.

Zimmerman, B. J. (2002). *Becoming a Self-Regulated Learner: An Overview. Theory into Practice*. *41*, 64–70. https://doi.org/http://dx.doi.org/10.1207/s15430421tip4102_2