

Undergraduate Students' Perceptions of the Use of AI in an Academic Writing Class

Percepciones de estudiantes de licenciatura sobre el uso de la inteligencia artificial en una clase de redacción académica

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Abstract:

In recent years, the integration of Artificial Intelligence (AI) tools in educational contexts has sparked debate regarding their potential to support academic writing, particularly among students learning English as a foreign language (EFL). This study examines the academic writing difficulties experienced by fifth-semester students in the Applied Linguistics for English Language Teaching and Translation program at the Universidad Autónoma de Nuevo León (UANL, *by its Spanish acronym*) and explores their perceptions regarding the use of AI tools to improve their writing skills.

The main objective was to identify the specific challenges these students face in writing and to analyze their attitudes toward AI-assisted writing. A descriptive research design was used, employing a survey with Likert-scale items administered online to a group of 34 students enrolled in an academic writing course.

Findings revealed that students experience significant difficulties in the initial stages of writing, such as generating ideas, organizing information, and beginning the writing process. While most participants are familiar with AI tools, their perceptions of these tools' usefulness vary. Some view them as helpful for drafting and correcting grammar, while others express uncertainty due to a lack of formal training.

The study concludes that integrating prewriting strategies into academic writing instruction is essential. Furthermore, the responsible and informed use of AI tools requires explicit pedagogical guidance and institutional policies to support their ethical and effective application in educational settings.

Keywords:

AI in EFL, Academic Writing, Students' Perceptions

Resumen:

En los últimos años, la integración de herramientas de inteligencia artificial (IA) en contextos educativos ha generado un amplio debate sobre su potencial para apoyar la escritura académica, especialmente entre estudiantes de inglés como lengua extranjera (EFL). Este estudio analiza las dificultades que enfrentan los estudiantes de quinto semestre del programa de Lingüística Aplicada al Inglés para la Enseñanza y la Traducción de la Universidad Autónoma de Nuevo León (UANL) en sus procesos de redacción académica, así como sus percepciones sobre el uso de herramientas de IA para mejorar sus habilidades en esta área.

El objetivo principal fue identificar los desafíos específicos que enfrentan los estudiantes al escribir y explorar sus actitudes hacia el uso de herramientas de IA en este proceso. Se empleó un enfoque descriptivo mediante la aplicación en línea de una encuesta con ítems tipo Likert a un grupo de 34 estudiantes inscritos en una asignatura de Escritura Académica.

Los resultados muestran que los estudiantes experimentan dificultades significativas en las etapas iniciales del proceso de redacción, particularmente al generar ideas, organizar información y comenzar a escribir. Aunque la mayoría está familiarizada con las herramientas de IA, sus percepciones sobre su utilidad son variadas: algunos las consideran útiles para redactar y corregir gramática, mientras que otros muestran incertidumbre debido a la falta de formación formal.

Se concluye que es fundamental incorporar estrategias de preescritura en la enseñanza de la redacción académica. Asimismo, el uso responsable e informado de herramientas de IA requiere orientación pedagógica explícita y políticas institucionales que respalden su aplicación ética y eficaz en entornos educativos.

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Fecha de recepción: 03/07/2025, Fecha de aceptación: 14/10/2025, Fecha de publicación: 05/05/2025

DOI: <https://doi.org/10.29057/lc.v7i13.15441>



Palabras Clave:

IA en EFL, escritura académica, percepciones estudiantiles

Introduction

In today's global and digitally interconnected world, proficiency in written English is essential, particularly for students pursuing careers in English language teaching (ELT). This is especially relevant for Applied Linguistics students at a university in northern Mexico, who face the challenge of composing coherent and eloquent essays in a foreign language. Writing remains the most complex skill for students learning English as a foreign language (EFL), especially when mastering academic writing tasks (Al-Jarf, 2022; Ariyanti & Fitriana, 2017; Phuket & Othman, 2015). Even for native speakers, academic writing presents significant challenges (Anh, 2019; Nenotek, 2022). This activity involves arranging words and engaging with linguistic, cognitive, and psychological factors (Alisha et al., 2019).

Recent studies show that academic writing, particularly for non-native speakers, requires time and practice to refine (Phan et al., 2022). In response to these challenges, considerable research has been conducted on various aspects of EFL writing in recent years (Alisha et al., 2019). Topics include common issues found in student compositions (Ariyanti & Fitriana, 2017; Fareed et al., 2016; Phuket & Othman, 2015; Sağlamel & Kayaoğlu, 2015) and factors affecting student performance (Alagozlu, 2007; Cahyono & Rahayu, 2020; Cheng, 2004; Jawas, 2019). EFL teachers worldwide have also explored strategies to improve students' essay writing skills (Astawa et al., 2017; Han et al., 2021; Negari, 2011).

Fifth-semester students in the Bachelor of Arts in Applied Linguistics for English Language Teaching and Translation program (LAETI, by its Spanish acronym) are expected to demonstrate proficiency in academic writing, having acquired fundamental skills in English as a foreign language. However, many students still struggle with composition. As digital tools increasingly get incorporated into educational spaces, Artificial Intelligence (AI) has emerged as a novel resource for addressing these challenges. AI applications, such as grammar checkers, text summarizers, and paraphrasing assistants, provide immediate feedback, helping students quickly improve their writing (Malik et al., 2023; Kim et al., 2024). These tools hold great potential for enhancing mastery of complex academic writing conventions and are becoming a common support mechanism in the EFL classroom.

Nevertheless, the rise of AI in academic writing has also produced debates around academic integrity, particularly about the risk of over-reliance on these tools, which may unconsciously lead to plagiarism (Dergaa et al., 2023;

Rabbianty et al., 2023). Maintaining a balance between utilizing AI tools effectively while preserving students' originality and intellectual integrity remains a key concern for educators. Therefore, this article explores students' perceptions of AI use in academic writing to examine how these tools could be employed effectively without leading to academic dishonesty. By examining students' experiences and understanding the different roles of AI integration in academic tasks, this article seeks to contribute to the ongoing dialogue about the role of AI in education and provide insights into the ethical use of these tools in EFL contexts

AI in Education: An Overview

In the ever-dynamic world of education, AI is making a significant impact, offering numerous opportunities to enhance academic practices while presenting its dilemmas. In this scenario, it remains crucial to explore what AI is, its origins, its evolution, and how it is now being employed in educational contexts globally, highlighting its increasing prevalence and diverse applications in classrooms, to get a comprehensive view of how AI is transforming education, particularly in academic writing. According to Francesc et al. (2019), the origins of AI can be traced back to the 1956 Dartmouth Conference, sparking interest among scholars and industries alike. Despite existing for nearly 60 years, AI has only recently gained mainstream traction due to advancements such as big data, increased economic access to computing power, and developments in Machine Learning. As Akinwalere and Ivanov (2022) state, AI is on the verge of revolutionizing various aspects of daily life. The "human-like" intelligence concept in AI is pivotal, distinguishing it from earlier, simpler educational technologies. The Office of Educational Technology (2023) notes that contemporary AI systems possess capabilities previously thought exclusive to human intelligence, fundamentally altering our understanding of technological competency. At its core, AI is an interdisciplinary field of computer science focused on creating intelligent systems capable of performing tasks traditionally associated with human cognition. The Australian Government Department of Education (2024) defines AI as encompassing a wide array of technologies adept at processing various inputs, including text, images, and sound, to generate outputs that range from executing commands to diagnosing problems and proposing solutions. Central to AI's functionality are algorithms and computational models that enable the processing of large datasets to identify meaningful

patterns and insights. This reliance on algorithmic processing underscores AI's capacity to analyze and interpret data with remarkable speed and accuracy, facilitating its extensive application across diverse domains (Australian Government Department of Education, 2024).

AI in Education (AIEd)

The integration of AI in education is rapidly evolving and reshaping higher education (Akinwalere & Ivanov, 2022). It offers new pathways for developing captivating learning experiences and enhancing technology-driven learning tools and environments (Shofiah et al., 2023). Ouyang and Jiao (2021) categorize AI in education into three paradigms: AI-directed, AI-supported, and AI-empowered. In the AI-directed paradigm, inspired by behaviorism, AI directs cognitive learning while learners passively receive AI services. The AI-supported paradigm, rooted in cognitive and social constructivism, emphasizes collaborative learning between learners and AI. Finally, the AI-empowered paradigm, influenced by connectivism, empowers learners to take agency in their learning process, with AI serving as a tool for augmenting their intelligence through synergistic collaboration.

Digital literacy, the ability to access, manage, understand, integrate, communicate, evaluate, and create information safely and effectively using digital devices and networked technologies, is vital for incorporating AI in education (Francesc et al., 2019). However, for AI to truly enhance education, educators must receive the necessary training to effectively use these tools and interpret the data generated by algorithms (Harry, 2023). While AI holds immense potential for improving educational systems, it also underscores the need for learners to acquire skills essential for thriving in a society increasingly influenced by AI (Francesc et al., 2019). UNESCO's Information and Communication Technologies Competency Framework for Teachers (ICT-CFT) emphasizes the necessity for educators to possess digital skills and foster collaboration, problem-solving, and creativity in their students' use of digital technologies (Francesc et al., 2019).

Integrating AI in education presents unprecedented opportunities for enhancing learning experiences and fostering innovation. However, realizing AI's full potential requires concerted efforts to ensure that educators are adequately trained and that students develop the digital literacy skills necessary to thrive in an AI-driven world.

The benefits of integrating AI are becoming increasingly noticeable in the context of English as a Foreign Language (EFL) education. AI provides innovative opportunities to enhance language learning experiences and offer personalized support for EFL students (Vera, 2023). AI

tools crafted to assist teachers and learners in various aspects of language acquisition, such as grammar, vocabulary, pronunciation, and speaking skills, leverage machine learning algorithms and natural language processing techniques to create interactive and adaptable learning experiences.

Emerging evidence suggests that AI tools in the classroom benefit students and enhance outcomes for teachers (Abdalilah & AbdAlgane, 2023). Integrating AI tools enriches teachers' resource availability and students' access to authentic learning experiences. Due to AI-powered tools and technologies, the English Language Teaching (ELT) field is significantly transforming (Cantos et al., 2023). AI-driven tools revolutionize learning experiences, providing students of all levels with immersive, personalized, and feedback-rich educational opportunities.

According to Alhalangy and AbdAlgane (2023), EFL students can improve their language proficiency by enriching their lexical resources and actively engaging in EFL learning practices through AI. This suggests that vocabulary acquisition and consistent participation in learning activities are crucial for language development. Moreover, using various tools and technologies, ranging from intelligent digital devices to physical items, might facilitate and complement the learning process. By incorporating AI capabilities, learners gain immediate, tailored feedback, access to extensive linguistic resources, and customize their learning paths, fostering a collaborative environment that enhances language acquisition and writing skills development (Song & Song, 2023).

While AI presents numerous opportunities for improving language learning experiences and outcomes for students and teachers, it also introduces challenges and ethical considerations that warrant careful attention. Integrating AI into educational settings offers immense potential for revolutionizing learning experiences; however, it also introduces various challenges and ethical dilemmas that require careful consideration. These challenges encompass issues related to data quality, model limitations, and broader societal implications, such as exacerbating inequalities in access to education. Ethical considerations, like privacy concerns, fairness, and transparency, are crucial as AI becomes more prevalent in educational contexts.

Akinwalere and Ivanov (2022) highlight several challenges associated with AI use in classrooms, emphasizing concerns regarding the reliability of data utilized by AI systems, including potential discrepancies in data quality, currency, and representativeness. Furthermore, limitations in data usage and the inherent inability of AI models to explain their conclusions pose significant hurdles. González and Rebolledo Font de la Vall (2023)

elaborate on challenges specific to AI language learning tools, noting the lack of human interaction and difficulties in capturing cultural nuances integral to language acquisition.

Guo et al. (2024) draw attention to the societal implications of AI in education, highlighting how AI can exacerbate disparities in learning outcomes and opportunities. The unequal distribution of AI-enhanced technologies could widen existing educational inequalities, putting students without access to such tools at a disadvantage. Moreover, as pointed out by Dakakni and Safa (2023), an unchecked increase in AI reliance within higher education may lead to graduates who lack critical thinking skills and become overly dependent on machines. This dependency could profoundly affect professions that require nuanced decision-making and creativity.

Addressing these technical challenges is essential, but promoting ethical standards in AI implementation is equally important. González and Rebolledo Font de la Vall (2023) outline key ethical considerations, such as privacy, fairness, and accessibility, that must be addressed in the development and deployment of AI in language learning. Dakakni and Safa (2023) emphasize the risks of losing control over personal data and stress the importance of transparency and consent in AI-driven educational systems.

Holmes et al. (2021) advocate for proactive ethical guidelines governing AI educational research and development. These guidelines should focus not only on preventing harm but also on facilitating positive outcomes for all stakeholders. By establishing clear ethical standards, researchers, developers, and educators can navigate the complexities of AI implementation in education while minimizing risks and maximizing learner benefits.

AI Tools to Enhance Academic Writing in EFL

In today's fast-paced educational contexts, teachers often deal with overwhelming workloads and large class sizes, leaving little or no time for personalized feedback (Nazari et al., 2021). Moreover, traditional strategies for teaching EFL may not effectively resonate with digital-native students, who are familiar with integrating technology into their daily lives (Chang & Huang, 2021).

Fortunately, the emergence of AI is transforming teaching and learning experiences in EFL education. AI offers many opportunities in assessment, tutoring, content generation, and feedback provision for teachers and students (Nazari et al., 2021; Wale & Kassahun, 2024). Through AI-powered tools, students can now receive personalized instruction in grammar, spelling, word matching, and sentence construction, with the added benefit of immediate error detection and feedback (Fitria, 2023).

Platforms like Grammarly and ProWritingAid are leading the way in this AI revolution. These platforms employ sophisticated algorithms to offer grammar checking, spell checking, and plagiarism detection services (Chang & Huang, 2021; Fitria, 2023). These tools go beyond mere error identification, providing students with helpful suggestions for enhancing writing clarity, conciseness, vocabulary usage, delivery style, and tone.

Furthermore, AI-powered writing assistants such as ChatGPT and Writerly are revolutionizing how students approach academic writing. ChatGPT uses real-time feedback mechanisms to provide learners with continuous guidance and suggestions for improving their writing skills (Song & Song, 2023). On the other hand, Writerly utilizes AI to generate texts based on students' input, streamlining the writing process by adjusting organization, diction, content, tone, and style (Wale & Kassahun, 2024).

Integrating multiple AI writing technologies rather than one might help students gain access to diverse perspectives and recommendations, enabling them to identify and address an extensive spectrum of writing issues (Wale & Kassahun, 2024). Ultimately, these AI tools not only enhance the quality of academic writing in EFL but also empower students to become more autonomous and proficient writers in the digital age.

The integration of AI tools represents a radical shift in EFL education, offering unprecedented opportunities for students to refine their writing skills with personalized feedback and support. From grammar correction to text generation, these AI applications empower learners to navigate academic writing difficulties with confidence and proficiency. As we move forward, educators must utilize the full potential of these tools while remaining vigilant about ethical considerations, pedagogical best practices, and considering students' needs and ideas about integrating these tools.

To address this topic, the following research questions lead the present research:

1. What challenges do Applied Linguistics Students face in Academic writing?
2. What benefits do Applied Linguistics students perceive in using Generative AI tools for academic writing?

Methodology

This study employs a quantitative approach to obtain data to understand the challenges faced by fifth-semester Applied Linguistics students in academic writing and their perceptions of using AI tools to enhance their writing skills. The primary data collection instrument is a structured Likert-scale item survey.

The participants in this research are students of the Bachelor of Arts in Applied Linguistics for English

Language Teaching and Translation program currently enrolled in the Academic Writing course at the UANL. This group is particularly relevant for the study, as they are EFL students expected to demonstrate a high level of English proficiency and are currently engaged in developing their academic writing skills. A sample of 34 students responded to the questionnaire, 29 females and five males, whose ages ranged from 19 to 21.

Instrument Design and Validation

The survey instrument was adapted from one key source, Selim (2024). The instrument aims to gather quantitative data regarding students' experiences and perceptions related to academic writing and using AI tools.

Structure of the Survey:

Section 1: Academic Writing Difficulties - This section consists of 10 Likert-scale items asking participants to rate the extent to which they encounter specific challenges in academic writing, such as generating thesis statements, organizing ideas, writing coherent paragraphs, and using appropriate grammar. The items are rated on a 5-point Likert scale, with options ranging from "Strongly Disagree" (1) to "Strongly Agree" (5).

Section 2: Perceptions of the Use of AI in Academic Writing - This section contains 10 Likert-scale items focusing on participants' attitudes toward using AI writing tools, such as ChatGPT and Grammarly. The questions examine whether participants find these tools helpful for improving writing, saving time, and enhancing the quality of their academic assignments.

Validation of the Instrument

The internal consistency of the constructs was evaluated using Cronbach's alpha, a measure commonly employed to assess the reliability of a set of scale items. Two constructs, difficulties and perception, were analyzed.

Difficulties Construct: This section included 10 items. The reliability analysis yielded a Cronbach's alpha of 0.781, indicating acceptable internal consistency. The analysis showed that removing any single item from the scale would not significantly improve the alpha value, as all items contributed reasonably to the overall reliability.

Perception Construct: This section was assessed using 10 items. The Cronbach's alpha for this construct was 0.832, which falls in the range of good internal consistency. Like the "Difficulties" construct, no individual item removal would significantly enhance the reliability, as reflected in

the corrected item-total correlations and the Cronbach's alpha values if any item were deleted.

Table 1 presents the internal consistency analysis for both constructs. The analysis suggests that both constructs are internally reliable and that the items consistently measure their respective underlying factors.

Table 1

Internal Consistency Analysis

Construct	Cronbach's alpha
Difficulties	.781
Perception	.832

Note: Figure created by the author

Data Collection Process

Data was collected using an online survey platform, allowing participants to complete the questionnaire at their convenience. The survey was distributed via Microsoft Teams, the current university platform, accompanied by an informed consent form outlining the study's purpose, confidentiality measures, and the voluntary nature of participation.

Results

Academic Writing Difficulties

The survey results highlight several key challenges students face in academic writing, with varying levels of difficulty across different aspects:

Starting the writing process: Over 70% of respondents either agreed (38.2%) or strongly agreed (35.3%) that they struggled with deciding how to start their writing. This indicates that initiating a written piece is a significant challenge for most students.

Generating thoughtful ideas: While only 11.8% of respondents strongly agreed, a combined 44% (32.4% agree, 11.8% strongly agree) reported difficulty in generating thoughtful ideas, demonstrating a moderate but notable challenge in this area.

Organizing ideas: Difficulties in organizing ideas showed a similar pattern, with 32.4% agreeing and 17.6% strongly agreeing. However, a sizable portion (23.5%) remained neutral, suggesting mixed opinions on this issue.

Writing coherent paragraphs: Half of the participants (50%) maintained a neutral stance on paragraph coherence. Nonetheless, 23.5% agree and 5.9% strongly agree that this aspect presented a difficulty for them, indicating it was less challenging than others.

Summarizing ideas: More than one-fifth of respondents (26.5%) agreed, and an additional 20.6% strongly agreed, that summarizing ideas from other sources is challenging.

The high neutral response rate (26.5%) might reflect a lack of confidence or mixed feelings about their proficiency.

Paraphrasing ideas: Students experienced noticeable difficulty paraphrasing, with 26.5% agreeing and 11.8% strongly agreeing. Still, many participants expressed neutrality (32.4%), suggesting that some students may be uncertain about their skills in this area.

Documenting sources: Difficulties in source documentation were confirmed by 35.3% of participants who agreed and 14.7% who strongly agreed, implying that this was a significant area where students struggle.

Avoiding plagiarism: Avoiding plagiarism also appeared to be challenging for some students, with 20.6% agreeing and 8.8% strongly agreeing. A large proportion (41.2%) remained neutral, suggesting that students may feel unsure about their understanding of plagiarism rules.

Mechanics of writing (spelling, punctuation, and capitalization): Issues related to writing mechanics were evident, as 35.3% of respondents remained neutral, while a combined 29.5% (14.7% agreeing and strongly agreeing) acknowledged difficulties in this area.

Grammar usage (word classes, subject-verb agreement, forms of singular and plural): Challenges with grammar were reported by 29.4% of students who agree, and 14.7% who strongly agree that they experience difficulties. Like other areas, many students (26.5%) were neutral on this item.

Perception of AI Tools in Academic Writing

The second part of the survey assessed students' awareness, use, and perceptions of AI writing tools:

Awareness of AI writing tools: A significant majority (64.7%) had declared being aware of AI tools like Grammarly, GPT, and Quillbot, with 35.3% strongly agreeing and 29.4% agreeing, indicating widespread familiarity.

Use of AI tools in academic writing: The data showed that 44.1% of students agreed and 8.8% strongly agreed that they used AI tools to assist their academic writing, though 26.5% remained neutral.

Improvement in writing quality due to AI tools: Approximately 38.2% of respondents (26.5% agreeing, 11.8% strongly agreeing) perceived AI tools as having improved the quality of their writing. However, many students (41.2%) remained neutral on this matter, suggesting that the impact of AI tools on writing quality was not uniformly recognized.

Ease of use of AI tools: Like other questions, 32.4% of participants remained neutral regarding ease of use, while 32.4% agreed and 11.8% strongly agreed that AI tools were easy to use.

AI tools as a valuable resource for EFL students: Although 44.1% of students expressed a neutral stance, 38.2%

agreed that AI tools were valuable resources for EFL learners, with a minority (2.9%) strongly agreeing.

Positive influence of AI on writing skills: 47% (35.3% agreeing and 11.8% strongly agreeing) felt that AI-powered tools had positively influenced their writing skills, while 38.2% remained neutral.

Encouragement from instructors to use AI tools: Responses showed mixed views on whether university instructors encouraged AI tool use. While 20.6% agreed, 35.3% of students disagreed, suggesting variability in instructors' approaches to AI integration.

Integration of AI tools in university courses: Regarding AI tool integration, 35.3% agreed and 17.6% strongly agreed that these tools should have been part of university courses. Neutral responses (11.8%) highlighted uncertainty among some students.

Future use of AI tools: When asked about plans, 47.1% of respondents stated that they planned to continue using AI tools, with 17.6% expressing strong agreement.

Recommendation of AI tools to other EFL students: Interestingly, almost half of the students (47.1%) remained neutral when asked if they would recommend AI tools to others, while 23.5% strongly agreed, indicating some students saw a strong benefit.

In summary, the survey revealed that students faced significant challenges across multiple areas of academic writing. Most notably, 73.5% of respondents agreed or strongly agreed that they had difficulty deciding how to start writing, with similar proportions reporting challenges in organizing ideas (50%) and avoiding plagiarism (29.4%).

In contrast, students expressed more neutrality regarding challenges in summarizing (26.5% neutral) and paraphrasing ideas (32.4% neutral). Difficulties related to writing mechanics (spelling, punctuation, capitalization) were less prominent, with 29.4% agreeing or strongly agreeing.

Regarding AI tools, most students reported being aware of and utilizing AI writing tools like Grammarly and GPT for their assignments. 64.7% of students reported using AI tools, with 38.2% agreeing that these tools had improved the quality of their academic work. Despite the general positive outlook, 47.1% of respondents remained neutral regarding recommending AI tools to others, signaling mixed perceptions of their overall effectiveness in academic contexts.

Discussion

The survey results revealed that students struggle with multiple aspects of academic writing, particularly with idea generation, organization, and starting the writing process. 73.5 % of respondents reported difficulty deciding how to start their writing. This supports the notion that EFL

students often struggle with composition's initial planning and ideation phases (Coffin et al., 2005). Additionally, 50% of respondents indicated difficulty in organizing their ideas, aligning with studies that show that EFL learners often face challenges in structuring complex arguments in a foreign language (Hyland, 2016).

Interestingly, plagiarism and paraphrasing difficulties were notable, with 29.4% of students admitting to challenges in avoiding plagiarism. This may reflect a lack of understanding of proper citation techniques or difficulty adapting source material into their own words, as suggested by previous studies (Pecorari, 2008).

The results also show a mixed perception of AI writing tools. While 64.7% of students use AI tools for academic writing, only 38.2% agree that these tools have positively influenced the quality of their writing. This discrepancy may indicate that while students recognize the potential value of AI tools, they may not fully understand how to use them effectively or rely too heavily on them for superficial corrections rather than meaningful writing improvement (Xu et al., 2020). Furthermore, 47.1% of respondents who remain neutral regarding recommending AI tools to others suggest that students are cautious about their broader applicability in academic settings.

These findings align with prior research on the challenges faced by EFL students in academic writing. For example, Coffin (2003) highlights that starting the writing process is particularly difficult for learners who may lack confidence in their linguistic abilities. This factor resonates with the high percentage of students struggling with idea generation and organization. Similarly, the difficulties in paraphrasing and avoiding plagiarism echo studies by Pecorari (2008), who points out that students unfamiliar with academic conventions often struggle to reword source material without unintentional plagiarism.

However, the mixed attitudes toward AI writing tools present an interesting contrast to some of the more optimistic literature, which suggests that AI tools can significantly aid writing development when appropriately used (Li et al., 2021). While students in this study are generally aware of and use these tools, their limited perception of AI's positive impact may indicate a gap in AI literacy, that is, understanding how to integrate these tools into their writing process in a way that supports deeper learning rather than just surface-level corrections.

These findings have important implications for EFL writing instruction. First, instructors should emphasize prewriting strategies, such as brainstorming and outlining, to help students overcome their difficulties when starting their writing. Additionally, teaching students how to organize ideas logically and coherently will be crucial for improving the overall quality of their writing.

Regarding AI tool integration, while many students are aware of AI technologies, their hesitancy to fully embrace

them suggests that explicit instruction in how to use AI writing tools effectively should be incorporated into academic writing courses. Instructors could guide students on using these tools for more than just spelling and grammar checks, encouraging them to leverage AI for higher-order writing processes, such as idea generation and structural feedback.

Conclusion

This study aimed to investigate the academic writing difficulties faced by EFL Applied Linguistics students and explore their perceptions of AI writing tools as potential aids in overcoming these challenges. The findings highlight several key difficulties in academic writing and provide insights into the mixed perceptions regarding using AI tools in the academic setting.

Moreover, while most students know and use AI tools, their perceptions of their impact on academic writing are mixed. This suggests that while AI tools are becoming increasingly prevalent, students may not fully understand how to use them to enhance their writing skills beyond basic corrections.

The practical implications of this research are twofold. First, educators should focus on teaching strategies that help students at the ideation and organization stages of writing. By doing so, students may gain the confidence to approach academic writing more clearly and structured. Second, there is a clear need for more comprehensive instruction on how to use AI writing tools effectively. Rather than solely relying on AI for grammar and spelling corrections, students should be encouraged to leverage these tools for more complex tasks, such as improving coherence and developing ideas.

Considering these findings, it is recommended that universities consider integrating AI tool training into academic writing courses. This would assist students in improving the quality of their writing and raising their awareness of proper academic conventions, such as citation and paraphrasing. Furthermore, educators should focus on creating an environment where students can explore these technologies constructively and be guided. Some limitations of the study that were related to the sample population were identified. First, the sample was relatively small, limiting the findings' generalizability. Additionally, the data is self-reported, which could introduce bias in how students perceive their writing difficulties or use of AI tools. Future research could involve a larger and more diverse sample to better understand the range of difficulties and AI perceptions among different student populations.

Additionally, further studies should explore how students can be trained to use AI tools more effectively in their writing processes. It could also investigate whether

specific subgroups of students benefit more from AI tools based on their proficiency levels or writing experience. Finally, longitudinal studies could assess how the ongoing use of AI tools impacts students' writing development over time.

In conclusion, the challenges LAETI students face in academic writing are multifaceted, and while AI tools offer promise, they are not a standalone solution. This study highlights the importance of balancing traditional academic writing instruction with the benefits of AI technology, ensuring that students receive holistic support in their academic writing development, along with institutional policies and guidelines that encourage and support such efforts.

References

- [1] Akinwalere, S., & Ivanov, V. (2022). Artificial intelligence in higher education: Challenges and opportunities. *Border Crossing*, 1-15. <https://doi.org/10.33182/bc.v12i1.2015>
- [2] Al-Jarf, R. (2022). Role of instructor qualifications, assessment and pedagogical practices in EFL students' grammar and writing proficiency. *Journal of World Englishes and Educational Practices*, 4(2), 06-17. <https://doi.org/10.32996/jweep.2022.4.2.2>
- [3] Alagozlu, N. (2007). Critical thinking and voice in EFL writing. *Asian EFL journal*, 9(3), 118-136.
- [4] Alhalangy, A., & AbdAlgane, M. (2023). Exploring the impact of AI on the EFL context: A case study of Saudi universities. *Journal of Intercultural Communication*, 23(2), 41-49. <https://doi.org/10.36923/jicc.v23i2.125>
- [5] Alisha, F., Safitri, N., Santoso, I., & Siliwangi, I. (2019). Students' difficulties in writing EFL. *Professional Journal of English Education*, 2(1), 20-25. <https://doi.org/10.33508/mgs.v5i1.4823>
- [6] Anh, D. T. N. (2019). EFL student's writing skills: Challenges and remedies. *IOSR Journal of Research & Method in Education*, 9(6), 74-84. DOI: 10.9790/7388-0906017484
- [7] Ariyanti, A., & Fitriana, R. (2017). EFL students' difficulties and needs in essay writing. *Proceedings of the International Conference on Teacher Training and Education 2017*, 32-42. <https://doi.org/10.2991/ictte-17.2017.4>
- [8] Astawa, N. L. P. N. S. P., Artini, L. P., & Nitiasih, P. K. (2017). Project-based Learning activities and EFL students' productive skills in English. *Journal of Language Teaching and Research*, 8(6), 1147. <http://dx.doi.org/10.17507/jltr.0806.16>
- [9] Australian Government Department of Education. (2024, may 03). Building an understanding of AI in education. Retrieved from Organisation for Economic Co-operation and Development: https://www.oecd.org/pisa/aboutpisa/EHF_AI%20Issues%20Paper_Australia.pdf
- [10] Cahyono, B. Y., & Rahayu, T. (2020). EFL students' motivation in writing, writing proficiency, and gender. *TEFLIN Journal - A publication on the teaching and learning of English*, 31(2), 162. <https://doi.org/10.15639/teflinjournal.v31i2/162-180>
- [11] Cantos, K., Varas, R. & Magayanes, I. (2023). Artificial Intelligence In Language Teaching and Learning. *Ciencia Latina Revista Científica Multidisciplinar*. 7. https://doi.org/10.37811/cl_rm.v7i4.7368
- [12] Chang, T.-S., & Huang, H.-W. (2021). Exploring EFL Students' Writing Performance and their Acceptance of AI-based Automated Writing Feedback. *Proceedings of the 2021 2nd International Conference on Education Development and Studies*, 31-35. <https://doi.org/10.1145/3459043.3459065>
- [13] Coffin, C., Curry, M. J., Goodman, S., Hewings, A., Lillis, T., & Swann, J. (2005). *Teaching academic writing: A toolkit for higher education*. Routledge.
- [14] Dakakni, D., & Safa, N. (2023). Artificial intelligence in the L2 classroom: Implications and challenges on ethics and equity in higher education: A 21st century Pandora's box. *Computers and Education: Artificial Intelligence*, 1-10. <https://doi.org/10.1016/j.caeai.2023.100179>
- [15] Dergaa, I., Chamari, K., Żmijewski, P., & Saad, B. (2023). From human writing to artificial intelligence generated text: examining the prospects and potential threats of ChatGPT in academic writing. *Biology of sport*, 40 2, 615-622. <https://doi.org/10.5114/biolsport.2023.125623>
- [16] Fareed, M., Ashraf, A., & Bilal, M. (2016). ESL learners' writing skills: Problems, factors and suggestions. *Journal of Education & Social Sciences*, 4(2), 83-94.
- [17] Fitria, T. (2023). ProWritingAid as AI-Powered Writing Tools: The Performance in Checking Grammar and Spelling of Students' Writing. *Polingua (Scientific Journal of Linguistics, Literature and Language Education)*, 65-75. DOI: 10.30630/polingua.v12i2.276
- [18] Francesc, P., Subosa, M., Rivas, A., & Valverde, P. (2019). Artificial Intelligence in Education: Challenges and Opportunities. *Francia: UNESCO*. <https://unesdoc.unesco.org/ark:/48223/pf0000366994>
- [19] González, F., & Rebolledo Font de la Vall, R. (2023). Exploring the Benefits and Challenges of AI-Language Learning Tools. *International Journal of Social Sciences and Humanities Invention*, 69-76. DOI:10.18535/ijsshi/v10i01.02
- [20] Guo, S., Zheng, Y., & Zhai, X. (2024). Artificial intelligence in education research during 2013–2023: A review based on bibliometric analysis. *Education and Information Technologies*, 29, 16387–16409.
- [21] Han, Y., Zhao, S., & Ng, L. L. (2021). How technology tools impact writing performance, lexical complexity, and perceived self-regulated learning strategies in EFL academic writing: A comparative study. *Frontiers in psychology*, 12, 752793. <https://doi.org/10.3389/fpsyg.2021.752793>
- [22] Harry, A. (2023). Role of AI in Education. *Injury: Interdisciplinary Journal and Humanity*, 260-268. <https://doi.org/10.58631/injury.v2i3.52>
- [23] Holmes, W., Porayska-Pomsta, K., Holstein, K., Sutherland, E., Baker, T., Buckingham Shum, S., Koedinger, K. (2021). Ethics of AI in Education: Towards a Community-Wide Framework. *International Journal of Artificial Intelligence in Education*, 504-526. DOI:10.1007/s40593-021-00239-1
- [24] Hyland, K. (2019). *Second Language Writing*. Cambridge: Cambridge University Press. <https://archive.org/details/secondlanguagewr0000hyla>
- [25] Jawas, U. (2019). Writing anxiety among Indonesian EFL students: Factors and strategies. *International Journal of Instruction*, 12(4), 733–746. <https://doi.org/10.29333/IJI.2019.12447A>
- [26] Kim, J., Yu, S., Detrick, R., & Li, N. (2024). Exploring students' perspectives on Generative AI-assisted academic writing. *Educ. Inf.*

- Technol., 30, 1265-1300. <https://doi.org/10.1007/s10639-024-12878-7>.
- [27] Malik, A., Pratiwi, Y., Andajani, K., Numertayasa, I., Suharti, S., Darwis, A., & M. (2023). Exploring Artificial Intelligence in Academic Essay: Higher Education Students' Perspective. *International Journal of Educational Research Open*. <https://doi.org/10.1016/j.ijedro.2023.100296>.
- [28] Nazari, N., Shabbir, M., & Setiawan, R. (2021). Application of Artificial Intelligence powered digital writing assistant in higher education: randomized controlled trial. *Heliyon*, 1-9. <https://doi.org/10.1016/j.heliyon.2021.e07014>
- [29] Negari, G. M. (2011). A study on strategy instruction and EFL learners' writing skill. *International Journal of English Linguistics*, 1(2), 299. <https://doi.org/10.5539/ijel.v1n2p299>
- [30] Nenotek, M. (2022). Academic writing difficulties among non-native and native speakers: A comparative study. *Linguistics and Education*, 40(3), 201-215. DOI:10.35445/alishlah.v14i1.1352
- [31] Office of Educational Technology. (2023, Mayo). Artificial Intelligence and Future of Teaching and Learning: Insights and Recommendations. Retrieved from U.S. Department of Education: <https://www2.ed.gov/documents/ai-report/ai-report.pdf>
- [32] Pecorari, D. (2010). Academic writing and plagiarism: A linguistic analysis. *Journal of English for Academic Purposes*, 7(2), 123-135. DOI: <https://doi.org/10.2104/aral1023>
- [33] Phan, T. M. U., Nguyen, T. T. H., & Le, T. T. (2022). A Survey on the Difficulties in Writing Essays of English Majored Sophomores at Tay Do University, Vietnam. *European Journal of English Language Teaching*, 7(2). <http://dx.doi.org/10.46827/ejel.v6i2.3518>
- [34] Phuket, P. R. N., & Othman, N. B. (2015). Understanding EFL students' errors in writing. *Journal of Education and Practice*, 6(32), 99-106. <https://files.eric.ed.gov/fulltext/EJ1083531.pdf>
- [35] Rabbianty, E., Azizah, S., & Virdyna, N. (2023). AI in academic writing: Assessing current usage and future implications. *INSANIA: Jurnal Pemikiran Alternatif Kependidikan*. <https://doi.org/10.24090/insania.v28i1a.9278>.
- [36] Sağlamel, H., & Kayaoğlu, M. N. (2015). English major students' perceptions of academic writing: A struggle between writing to learn and learning to write. *Journal of History Culture and Art Research*, 4(3), 37. https://www.academia.edu/61332364/b_English_Major_Students_Peceptions_of_Academic_Writing_A_Struggle_between_Writing_to_Learn_and_Learning_to_Write_b_
- [37] Selim, A. (2024). The Transformative Impact of AI-Powered Tools on Academic Writing: Perspectives of EFL University Students. *International Journal of English Linguistics*, 14-29. DOI:10.5539/ijel.v14n1p14
- [38] Shofiah, N., Putera, Z., & Solichah, N. (2023). Challenges and opportunities in the use of artificial intelligence in education for academic writing: A scoping review. *Conference Psychology and Flourishing Humanity*, 174-193. 10.2991/978-2-38476-188-3_20
- [39] 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*, 1-14. <https://doi.org/10.3389/fpsyg.2023.1260843>
- [40] Vera, F. (2023). Integrating Artificial Intelligence (AI) in the EFL Classroom: Benefits and Challenges. *Revista Electrónica Transformar*, 66-77. <https://dialnet.unirioja.es/servlet/articulo?codigo=9639595>
- [41] Wale, B., & Kassahun, Y. (2024). The Transformative Power of AI Writing Technologies: Enhancing EFL Writing Instruction through the Integrative Use of Writerly and Google Docs. *Human Behavior and Emerging Technologies*, 1-15. <https://doi.org/10.1155/2024/9221377>
- [42] Xu, J., Zhang, Y., & Li, Q. (2020). Understanding the use of AI tools in academic writing: Student perceptions and challenges. *Journal of Educational Technology & Development*, 43(5), 102-115. <https://doi.org/10.1016/j.eng.2020.07.017>