# THE ROLE OF AI IN SUPPORTING INDEPENDENT WRITING: A QUALITATIVE CASE STUDY

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| Article Info | Abstract |
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| | *This qualitative descriptive case study investigates the role of Artificial Intelligence (AI) in supporting independent English writing learning at the University of Muhammadiyah Mataram. Sixteen students using AI-based tools, like Grammarly and ChatGPT, were selected via purposive sampling to provide detailed insights. Data were collected through open-ended and closed-ended questionnaires, supplemented by interviews. The findings indicate that AI tools significantly assist in grammar correction, sentence structuring, and idea generation, enhancing learners' autonomy and confidence in writing. However, challenges such as overreliance, reduced creativity, and diminished originality underscore the importance of integrating AI thoughfully, highlighting the need for balanced integration of AI into learning processes. The study emphasizes developing pedagogical strategies that promote AI as a supplementary resource rather than a primary tool, ensuring students maintain critical thinking and creative expression. Additionally, ethical considerations were discussed, including data privacy and the potential cognitive effects of AI usage. Implications for curriculum design suggest incorporating guided AI usage and reflective writing activities to balance technological support with skill development. Future research should explore adaptive AI systems for personalized feedback and strategies to enhance writing skills without fostering dependency.* |

## INTRODUCTION

In the era of intelligent machines, advancements in Artificial Intelligence (AI), machine learning, and deep learning have made it possible for chatbot software that uses natural language processing—to mimic human behavior (Fitria, 2024). AI has become a transformative tool across various fields, including education, offering new ways to improve learning experiences. Writing, as a complex cognitive process, plays a crucial role in language development (Rebolledo et al., 2023). It encourages deeper interaction with language and is vital in academic contexts as it demonstrates a student's language ability and is essential for academic success (Nguyen Minh, 2024). Despite its importance, writing is often seen as one of the most complex skills to teach and learn, requiring significant student effort. In line with that, (Ilham et al., 2025; Ilham, 2022, 2023, 2024) said that writing English can be challenging for students learning English as a foreign language (EFL). In addition, (Fitria, 2021) Writing is one of the two productive skills, alongside speaking, that learners are expected to master to achieve communicative competence. The complexity is amplified in independent learning settings, where the absence of immediate feedback can hinder progress. To address these difficulties, language educators must encourage to adopt up-to-date pedagogical strategies and incorporate practical, engaging tools to address these learning challenges (Tran, 2024).

In addition, (Karim et al., 2024) stated that writing activities are more challenging than other language activities, as they require significant time investment and consistent practice to produce quality work. Therefore, AI writing tools have emerged as valuable support for independent writing development. These tools evaluate and provide feedback on different aspects of writing, such as grammar, vocabulary, syntax, and content, helping students improve their language skills (Marzuki et al., 2023). AI has been recognized for its ability to simulate human decision-making processes, enhancing the language learning experience. ChatGPT, for instance, is an advanced language tool powered by GPT technology. It is a chatbot that predicts the next word or sentence in a conversation and provides automatic, natural language responses (Nur & Fitria, 2023). With its ability to give immediate feedback and writing suggestions, ChatGPT and other AI tools have become essential resources for students and teachers (Pratama & Hastuti, 2024).

These AI tools also offer personalized learning experiences, which are crucial for promoting learner independence and engagement. The benefits of AI tools include real-time feedback, adaptability to learner needs, increased learner autonomy, and enhanced motivation. This personalized approach allows students to take greater control of their writing development, fostering self-directed learning habits vital for success in independent learning environments (Correa & Liu, 2023). Furthermore, these tools encourage students to experiment with language, boosting creativity and confidence in expressing complex ideas in writing (Sari et al., 2023). This adaptive feedback mechanism enhances the learning process and ensures that students receive targeted support, minimizing the risk of repeated errors in their writing. In this regard, (Irwandi et al., 2021) assert that writing is a critical skill that needs to be acquired, even though it remains one of the most challenging to master. Therefore, integrating AI tools into writing instruction becomes a powerful means to address these challenges, enabling students to develop the skills necessary to succeed academically and professionally.

Motivation is a key factor in the success of AI tools. Research shows that AI not only acts as an external motivator but also builds intrinsic motivation by making learning more enjoyable (Rebolledo et al., 2023). Tools like Grammarly, which feature user-friendly designs and efficient functionalities, can enhance student engagement by reducing frustration and increasing cognitive focus (Armanda et al., 2022). The effectiveness of AI in improving learning outcomes depends on how actively students engage with the task. Meaningful learning requires cognitive effort and the application of strategies aimed at mastery (Nazari et al., 2021). Moreover, students are more likely to benefit from AI if they find the writing process enjoyable and feel it meets their psychological needs, as self-determination theory describes.

In addition to motivation, AI tools help develop critical 21st-century skills, such as critical thinking, creativity, and digital literacy. These skills are essential for students to succeed in a globalized, technology-driven world (Muthmainnah et al., 2022)(Mizumoto & Eguchi, 2023). By providing dynamic and adaptive feedback, AI tools encourage students to refine their arguments, consider alternative perspectives, and organize their essays more effectively. This process improves academic performance and prepares students to become strong communicators and problem-solvers in their future careers (Asian et al., 2024). Thus, AI promotes a comprehensive approach to writing development, bridging the gap between leveraging AI for writing development and maintaining student autonomy. However, potential drawbacks must also be considered. Excessive reliance on AI tools may inhibit students' critical thinking and editing skills, leading to over-dependence, though these areas are also often underexplored in existing research.

From a teaching perspective, AI is a tutor that monitors students' progress, assesses their performance, and reduces teachers' workloads by automating repetitive tasks (Kholis et al., 2024). Writing requires careful attention to details like spelling, sentence structure, and punctuation, often making it difficult for students to express their ideas clearly. AI tools address

these issues by providing real-time corrections and constructive suggestions, enabling students to improve their writing with less reliance on teachers. As a result, AI serves as both a support system for students and a valuable resource for educators, enhancing the overall teaching and learning experience (Islam & Chang, 2021).

Furthermore, this study contributes by focusing not merely on the benefits of AI in writing instruction, but on the critical balance between leveraging AI support and fostering learner autonomy. Unlike previous studies that primarily emphasize AI's technical capabilities, this research explores how AI tools can be integrated pedagogically to preserve critical thinking, creativity, and personal voice in student writing. This study fills a gap in the literature by shifting the discussion from AI's functional efficiency to its pedagogical implications in promoting sustainable writing instruction. It seeks to provide insights into the development of instructional frameworks where AI acts as a supportive tool rather than a central resource (Ploug & Holm, 2020), aligning with the broader goal of cultivating student-centered learning and long-term autonomy in academic writing. This study is guided by the following research question: 1) How do AI-based tools support students' independent?.

## RESEARCH METHOD
### Research Design
This study employs a qualitative descriptive case study design to analyze the role of Artificial Intelligence (AI)  in supporting independent English writing learning. According to (Han et al., 2023), the qualitative descriptive method focuses on processing data as it reflects actual conditions in the field, providing an understanding of the subject's situation and context without manipulation. Therefore, this method was chosen to describe experiences and the impact of AI technology in the context of self-direct learning. The aim of using a case study design in this research is to focus on students of AI-based writing applications. Ilham et al. (2020) said that a case study is a research approach that explores a specific phenomenon, situation, or event within its real-world context, often focusing on a limited scope and a single case to gain a detailed understanding of the subject matter. A case study was selected to explore how AI is utilized and its perceived benefits in enhancing English writing skills independently.

The qualitative descriptive case study approach is well-aligned with the exploratory nature of this research, as it captures the nuanced experiences of students. Interview questions were developed based on a preliminary review of relevant literature and piloted with a small group of students to ensure clarity, relevance, and validity. Feedback from the pilot study was used to refine the interview guide before the full data collection process.

### Research Participants or Population and Sample
The population of this study was selected from the English Education Department at the University of Muhammadiyah Mataram who are actively using AI-based writing applications, such as Grammarly, ChatGPT, or others, with 16 student participants. The participants ranged in age from 20 to 23 years and were in their third or fourth year of study. Most participants had intermediate-level writing proficiency, as indicated by their prior coursework and academic performance in writing-related subjects. The participants were selected using a purposive sampling technique. Through purposive sampling, the study sought to obtain in-depth qualitative insights from a specifically selected group of students. Although this approach does not aim for statistical representativeness of the broader population, it offers valuable insights that capture the nuanced experiences of students using AI as a tool for learning English writing (Laili et al., 2024).

### Instruments
The data for this study were collected using questionnaires and semi-structured interviews. A questionnaire is a method of gathering data by presenting respondents with written questions. In this study, the questionnaire was designed using Google Forms and

distributed to students to gather feedback on using Artificial Intelligence (AI) to support independent English writing. The questionnaire consisted of 15 items, including 10 closed-ended questions and 5 open-ended questions, The closed-ended questions allowed students to express their views on learning English writing through predefined options, while the open-ended questions enabled students to provide detailed responses based on their experiences.

Before data collection, the questionnaire was pre-tested with a small group of students to ensure clarity and relevance. The feedback gathered during the pilot phase helped identify areas of ambiguity in the wording of some questions, leading to minor revisions in the questionnaire to improve clarity and focus. In addition, semi-structured interviews were conducted to gain deeper insights into students' perceptions and experiences. This approach allowed for more flexible discussions, enabling the researcher to further explore participants' responses and clarify any unclear points from the questionnaire. The combination of these methods provided a comprehensive understanding of the use of AI in learning English writing.

**Data Collection**

In this study, 16 respondents were selected using a purposive sampling technique. This sampling method is appropriate for descriptive qualitative case studies where the aim is to gain detailed insights into specific phenomena rather than achieve statistical generalization. The criteria for respondents were that they actively use AI-based writing applications and are learning English, mainly focusing on independent writing improvement. Purposive sampling ensures that the selected participants possess relevant experiences and insights, aligning with the research objective to explore the role of AI in supporting independent English writing learning. The researchers collected data using questionnaires and semi-structured interviews to explore the role of Artificial Intelligence (AI) in supporting English writing learning. The questionnaires included both closed-ended and open-ended questions. The closed-ended questions allowed respondents to select the available options aligned with their experiences. Meanwhile, the open-ended questions allowed participants to share their views on using AI tools in their independent writing practice, including their experiences and benefits.

The researchers also conducted semi-structured interviews as the second data collection method to explore the role of Artificial Intelligence (AI) in supporting English writing learning. Semi-structured interviews allowed for guided discussions with participants, providing the opportunity to delve deeper into their experiences and perspectives. The interviews included questions that encouraged respondents to share their views on using AI tools in their independent writing practice, including the benefits and challenges they encountered. This method complemented the questionnaire by offering richer, qualitative insights into the students' interactions with AI in English writing. Data collection was conducted over a period of two months, from November to December 2024. Prior to participation, students were informed about the objectives of the study and provided written consent. Anonymity was ensured by assigning identification codes to participants instead of using their real names. All data collected were treated confidentially and were used exclusively for research purposes. These ethical procedures were implemented to uphold participants' privacy and maintain the integrity of the research process.

**Data Analysis**

The researchers employed questionnaires and interviews to collect data exploring the role of Artificial Intelligence (AI) in supporting English writing learning. The questionnaires included both open-ended questions and closed-ended questions. The open-ended questions allowed participants to share their views on using AI tools in their independent writing practice. In addition, interviews provided a deeper exploration of participants' experiences. In this study, semi-structured interviews were conducted with selected participants to gain further insights

into their questionnaire responses, allowing a richer understanding of how AI tools supported their independent English writing learning.

Data analysis commenced with the organization and coding of responses from both the questionnaires and interviews. The study of questionnaire data focused on identifying key responses relevant to the role of Artificial Intelligence (AI) in supporting independent English writing learning. Quantitative data from the closed-ended questions were analyzed using descriptive statistical methods, such as frequencies and percentages, to reveal general patterns and trends in participants' interaction with AI tools. For example, an excerpt such as "Using Grammarly helped me notice my grammar mistakes faster and made me more confident when writing essays independently" was initially coded as "grammar awareness improvement" and "increased writing confidence." These codes were later grouped into the category of "Skill Development through AI Tools," which contributed to the broader theme of "AI Tools Foster Autonomy and Confidence in Independent Writing."

The interview data were analyzed using a qualitative approach. The researchers first identified meaningful text segments that reflected participants' thoughts, emotions, or experiences related to AI use. Initial codes were refined by combining, expanding, or narrowing them into more specific categories. These categories were then used to develop key themes that captured the essence of participants' experiences with AI tools. Further analysis explored patterns and relationships across the identified themes, focusing particularly on participants' perceptions, experiences, and challenges using AI for independent English writing learning. This process resulted in the construction of a comprehensive narrative that summarized participants' insights, experiences, and recommendations for future AI use in learning contexts.. By separately analyzing data from questionnaires and interviews, the study provided a nuanced and integrated understanding of how AI tools contribute to and influence independent English writing learning, while also acknowledging the complexity of learner interactions with such technologies.

## RESEARCH FINDINGS AND DISCUSSION
### Research Findings

Before delving into this study's findings, it is essential to understand the significance of exploring how Artificial Intelligence (AI) supports independent English writing learning. This section comprehensively analyzes the participants' experiences, perceptions, and challenges using AI-based tools. By highlighting the nuanced insights gathered, this study seeks to provide valuable contributions to understanding the role of AI in fostering autonomy and skill development in English writing.
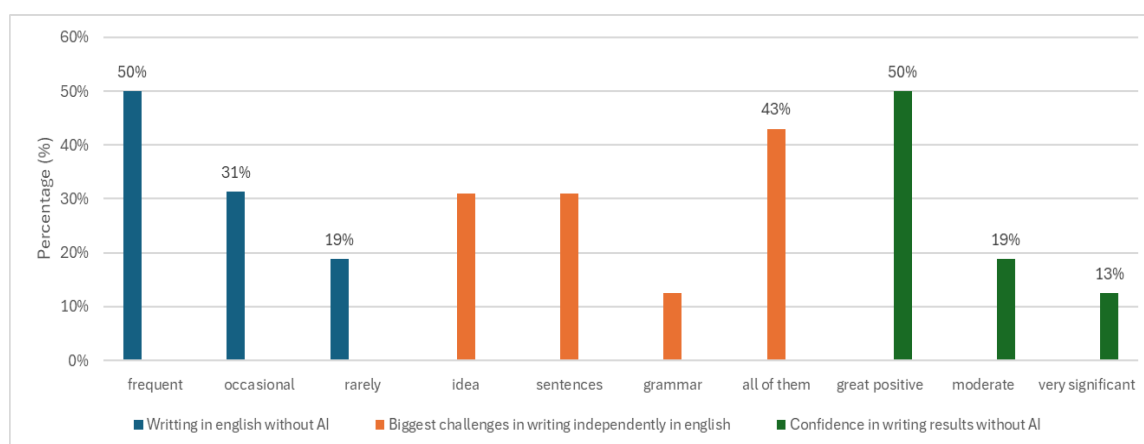


Figure 1. Students' Frequency and Purpose in Using AI for Independent English Writing.

As shown in Figure 1, AI tools are predominantly used by students to support grammar improvement, sentence construction, and idea generation, reflecting their integral role in the writing process. The findings indicate that AI has become an essential tool in English writing, with 50% of respondents frequently using it, 31% occasionally, and 19% rarely. Its versatility is evident, as 43% of respondents find AI helpful for improving grammar, crafting better sentences, and generating ideas. Specifically, 31% use AI primarily for idea generation, another 31% for sentence construction, and 13% for grammar correction highlighting its focus on conceptual and structural support rather than solely technical accuracy. Additionally, AI significantly enhances writing confidence, with 50% of respondents reporting a highly positive impact, 19% noting a moderate influence, and 13% experiencing a significant improvement. Overall, the data underscores AI's dual role in providing technical assistance and boosting confidence, solidifying its position as a valuable and widely utilized tool in writing.

Aligned with the questionnaire findings, the interviews further revealed that students recognized AI's dual function: offering technical assistance and fostering confidence. This underscores its significance as a valuable and widely adopted tool in the writing process. The students 'comments regarding input are shown below :

*I frequently use AI for writing, especially when I need ideas or better sentence structures. AI helps me organize my writing more effectively and ensures grammatical accuracy, which makes me feel more confident in my writing process (S1).*
*For me, AI's primary function is to assist in generating ideas and structuring sentences. It is particularly helpful in improving grammar and organizing paragraphs, which has significantly increased my confidence in the quality of my writing (S3).*
*I use AI almost every time I write. It is incredibly helpful in improving grammar and providing suggestions for better sentences. AI makes the writing process faster and the results more professional (S5).*

These findings are consistent with previous research by Aljuaid (2024), demonstrating that integrating supportive tools or technologies in learning contexts significantly enhances students' outcomes and writing performance. This highlights the role of AI as an effective tool in not only streamlining the writing process but also improving the quality and confidence of learners in writing.
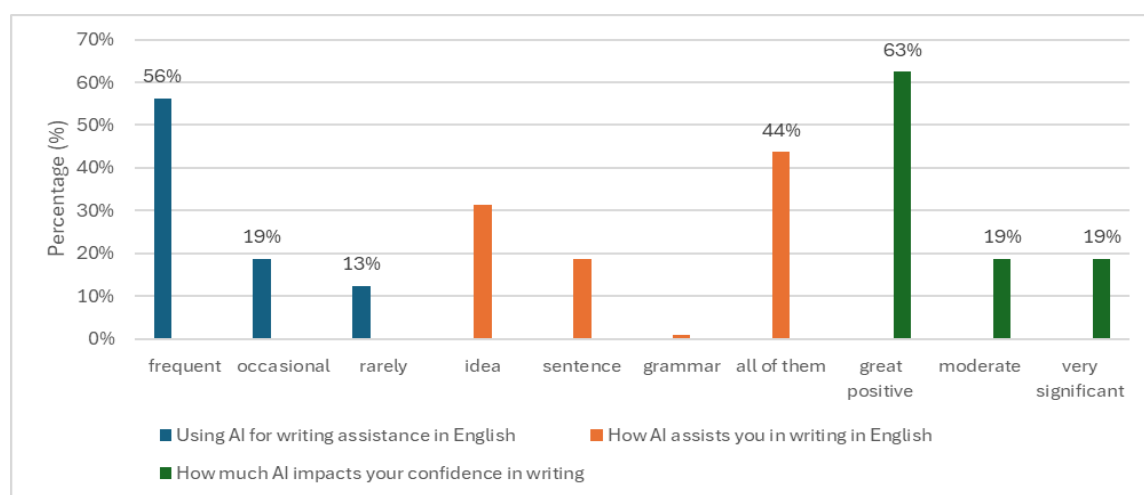


Figure 2. Students' Perceptions of AI's Role in Structuring and Enhancing Writing Quality.

Figure 2 shows that AI tools serve multiple purposes in students' writing activities, notably in generating ideas, refining sentence structures, and boosting writing confidence, reflecting AI's multifunctional support in the learning process. The findings reveal that AI plays

a significant role in assisting with English writing, with 56% of respondents frequently using it, 19% occasionally, and 13% either rarely or consistently relying on it. Most respondents (44%) find AI helpful in three key areas: improving grammar, structuring better sentences, and generating ideas. Specifically, 31% primarily use AI for idea generation, 19% for crafting better sentences, and 1% for grammar correction, highlighting its multifunctionality with a focus on idea development and sentence structure. Additionally, 63% of respondents reported that AI dramatically boosts their confidence in writing, while 19% noted a moderate impact, and another 19% experienced a very significant positive influence. This study provides evidence from interviews indicating that AI provides technical support and enhances users' confidence, making it a widely adopted and effective tool in the writing process. This is evident from the excerpt presented below:

*I frequently use AI when writing to organize initial ideas and improve sentence structure. AI is extremely helpful in ensuring that my writing is well-organized and free of grammatical*
*errors. It has also boosted my confidence when submitting my work (*S2*).*
*For me, AI is highly flexible. I use it to develop ideas and refine sentences to make them more transparent. AI also helps boost my confidence because I know my writing will be more structured and accurate (S4).*
*I use AI primarily to generate ideas and craft better sentences. Although I do not use it all the time when I do, the quality of my writing is significantly improved, which also boosts my confidence in writing (S6).*

From the excerpts, it can be inferred that participants highly valued AI in their writing process, particularly for organizing initial ideas, improving sentence structure, and refining grammar. They emphasized that AI helped make their writing more organized and precise, which led to a considerable increase in their confidence when submitting their work. One participant also pointed out that AI played a key role in refining sentences for better clarity, further boosting their confidence. These findings align with previous studies by Al-Busaidi & Al-Seyab (2021), which suggested that using tools like AI in writing practices significantly improves students' writing quality and enhances their confidence.
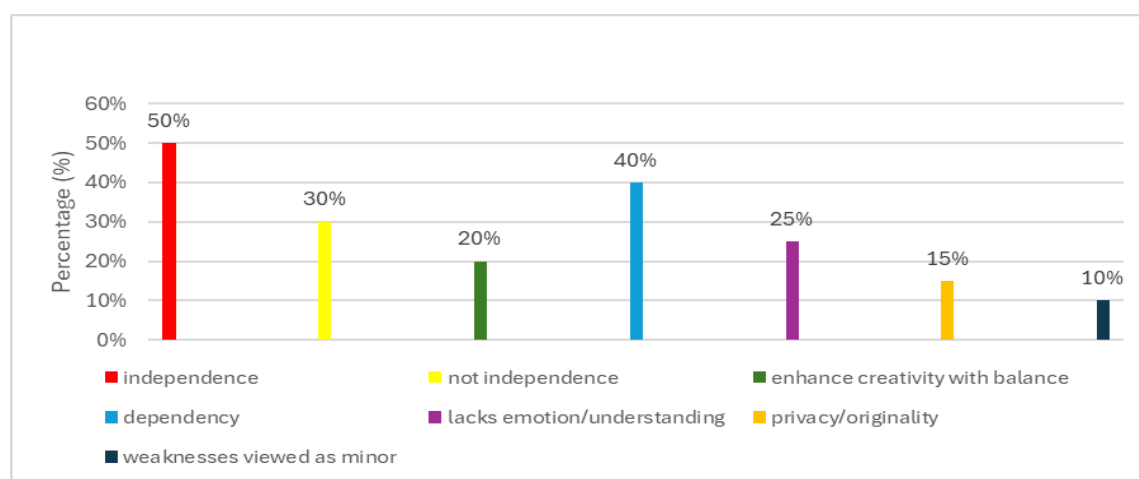


Figure 3. Comparison of Student Experiences With and Without Assistance

Figure 3 highlights the mixed perceptions of students regarding AI's impact: while many acknowledge AI's role in fostering writing independence and creativity, concerns remain about dependency risks and loss of originality. Based on the findings, 50% of respondents stated that AI helps them become more independent in writing by assisting with idea development, fostering innovation, and correcting errors. However, 30% expressed concerns that AI does not

promote independence, as it fosters reliance on the tool. Additionally, 20% acknowledged AI's usefulness in enhancing creativity and refining work but emphasized the need for a balanced approach to its usage. Despite its advantages, 40% identified dependency as a key drawback, citing potential reductions in critical thinking, creativity, and confidence. Furthermore, 25% highlighted AI's inability to fully grasp emotions and language nuances, leading to rigid or inaccurate outputs.

In comparison, 15% raised concerns about data privacy, reduced originality, and overly formal or complex language. Nevertheless, 10% of respondents viewed these weaknesses as minor when AI is employed as a supportive tool rather than a replacement for human effort. Additionally, the findings align with the interview responses, suggesting that AI holds considerable promise for enhancing writing. However, users must take a balanced approach to maximize its advantages without weakening independent learning and creative autonomy, as seen in the excerpt below..

*AI helps me become more independent in writing, providing new ideas and correcting mistakes. However, I am also aware that my creativity may diminish if I become too reliant on AI. Therefore, we must try to use it wisely (S1).*
*AI enhances my creativity, especially in organizing ideas and improving sentences. However, I need to be more cautious, as AI does not always grasp the emotional nuances or specific context in my writing (S3).*
*Although AI helps me refine my work, sometimes I worry that relying too much on it will diminish my critical thinking skills. I strive to use AI only to improve certain technical aspects while maintaining focus on my creative process (S5).*
*AI improves my writing, but I realize I could lose my originality if I rely too heavily on it. I prefer to use AI to assist rather than replace my writing effort (S6).*

The excerpts above show that all participants recognize the value of AI in the writing process, especially in generating ideas, improving sentence structure, and correcting grammar. However, they also acknowledge the need for cautious use of AI, as relying too much on it could reduce creativity and originality. Participants stress the importance of using AI as a supportive tool rather than a substitute for their creative contributions. This perspective is consistent with (Zhai et al., 2024), which suggests that overdependence on AI may negatively impact one's critical and creative thinking skills.

Further analysis of participants' responses reveals a distinction between high AI users and low AI users. High AI users, who frequently relied on AI tools for various aspects of writing, reported substantial improvements in writing fluency and confidence. However, they also acknowledged the potential risks of overreliance, such as diminished creativity and critical thinking. On the other hand, low AI users employed AI more selectively, seeing it as a supplementary aid to enhance their writing process without undermining their originality or intellectual autonomy. These findings underscore the importance of balancing AI use to optimize its benefits while maintaining creative independence. These findings underscore the importance of adopting a balanced and strategic approach to AI use, ensuring that its benefits are optimized without compromising students' creative independence and cognitive engagement.

## Discussion

This study examines how AI-based tools support students' independent English writing development from students' perspectives, thereby directly addressing the research questions concerning students' experiences, perceptions, and challenges with AI use in writing. The data on the frequency of AI use, its utility in various aspects of writing, and its influence on students' confidence offer a clear understanding of how AI tools, such as Grammarly and ChatGPT, shape learners' writing experiences.

Frequency of Independent Without AI indicates that half of the respondents frequently engage in independent writing, consistent with the argument presented by Marzuki et al. (2023), who noted that students often balance AI-assisted and independent writing to maintain their foundational writing skills. Similarly, Nguyen Minh (2024) emphasized the importance of fostering independent writing skills, even in an AI-supported environment, to enhance critical thinking and autonomy in learners. The challenges identified in this study, such as sentence structuring and idea generation, align with the findings of Nazari et al. (2021), who reported that sentence organization and brainstorming are significant obstacles for EFL students. Moreover, Armanda et al. (2022) highlighted that digital tools like Grammarly frequently address these challenges, suggesting that students may become overly reliant on AI for these technical aspects. To mitigate this, educators should implement classroom practices such as explicit instruction on brainstorming and organization strategies without technological assistance, thus strengthening students' core writing abilities. The moderate confidence levels observed in this study echo the findings of (Tran, 2024), who argued that while AI tools can substantially support refining writing, they do not inherently build students' confidence in their independent capabilities.

On the other hand, Pratama & Hastuti (2024) found that when AI tools are used carefully, they can complement traditional teaching methods, leading to a gradual increase in students' writing confidence. Educators should implement this tool into the curriculum using a well-designed pedagogical strategy, such as inspiring students to engage AI in the revision phase of their writing to encourage initial drafts without AI, using AI only later to polish and revise, preserving the students' ownership of ideas while enhancing technical accuracy. This approach allows students to maintain focus on developing their creative skills during the early stages of the writing process.

Furthermore, the frequency of AI use in English writing revealed that most respondents (56%) use AI tools frequently, with an additional 13% using them consistently. This high usage rate aligns with findings from Armanda et al. (2022), where students widely adopted AI tools like Grammarly as essential writing assistants. Similarly, (Pratama & Hastuti, 2024) report that EFL students increasingly rely on AI-based platforms to support their writing tasks, indicating a shift toward technology-driven writing practices. The frequency of use in this study further emphasizes AI's growing role in everyday academic writing, suggesting a trend in the broader educational landscape where AI tools are not merely supplementary but central to students' writing workflows. Respondents identified three primary ways AI assists them: improving grammar, constructing sentences, and generating writing ideas. Importantly, idea generation was the most common response (44%), followed by sentence construction (19%) and grammar correction (1%). This finding is consistent with research by Fitria (2024), who found that students using AI tools like ChatGPT find them particularly helpful in brainstorming and generating ideas, a crucial step in the writing process. In addition, Shofiah (2024) also highlights that AI tools are more commonly used for enhancing the overall structure of writing rather than just focusing on grammar corrections.

The multifunctionality of AI tools, as observed in this study, supports the idea that these tools serve diverse functions beyond basic proofreading, providing a comprehensive approach to writing improvement. The study found that 63% of respondents felt that AI significantly impacted their confidence in writing. This mirrors the findings of Johnson & Ph, n.d. (2019), who noted that AI tools boost students' writing confidence by providing immediate feedback and helping them feel more secure about their language proficiency. Moreover, Kholis et al. (2024) emphasize that AI's role extends beyond technical support; it enhances students' self-efficacy and reduces anxiety related to writing tasks. This has direct pedagogical implications: teachers might incorporate reflective activities where students critically analyze how AI feedback influenced their revisions and confidence growth, thereby promoting self-regulated

learning. The positive effect on confidence is significant for EFL students, as it encourages active participation in writing tasks and fosters a growth mindset, allowing learners to view challenges as opportunities for improvement rather than obstacles.

AI's impact on writing independence presents a complex interplay of benefits and challenges. Half of the respondents indicated that AI helps them become more independent in writing, primarily through idea development, innovation, and error correction. This aligns with Lingard & Craft (2023), who observed that AI tools empower students by providing instant feedback and helping them overcome common writing challenges, such as generating ideas or refining content. Uri (2023) found that AI tools like ChatGPT encourage independent thinking by offering suggestions that inspire creativity while leaving the final decisions up to the user. However, the concern raised by three respondents, who felt that AI fosters dependency rather than independence, resonates with the findings (Dawson et al., 2024). They argue that an overreliance on AI tools can lead to decreased critical thinking and creativity, as students might rely on AI-generated ideas and suggestions instead of developing their own. These mixed perspectives highlight the need for a balanced approach when integrating AI into the writing process, ensuring it serves as a support rather than dependence.

Several identified dependency as the main drawback of using AI, with concerns that it might reduce critical thinking, creativity, and confidence. This mirrors the findings of Wirawan et al. (2024), who highlighted that while AI tools can enhance technical aspects of writing, they can also diminish students' engagement with the writing process if overused. These findings suggest the importance of balanced AI integration. Classroom assessment strategies could include tasks that require students to submit both AI-assisted and independently written drafts, encouraging reflection on differences and promoting critical awareness of AI's role in writing. Additionally, while AI can be a helpful brainstorming tool, there are potential adverse effects on students' creative thinking skills and self-confidence, as reliance on AI-generated ideas may hold back the development of original thought Henriksen et al. (2024).

Furthermore, respondents raised valid concerns about AI's inability to fully understand emotions and language nuances, resulting in rigid or inaccurate outputs. This aligns with the criticisms discussed by Park (2019), who noted that AI-based grammar checkers can sometimes miss subtleties in tone or meaning, which are crucial elements of effective communication in writing. Concerns about data privacy and reduced originality, and respondents also noted the overly formal or complex language produced by AI. These concerns echo the findings of Kholis et al. (2024), who noted that while AI tools are widely adopted, users remain wary of the implications of sharing personal data and relying on tools that may compromise the originality of their work. The concern about AI-generated content sounding overly formal or rigid has also been highlighted in previous studies, such as Tran (2024), which emphasized the need for students to maintain a balance between using AI and preserving their uniqueness in writing.

Despite these drawbacks, some respondents believe that the weaknesses of AI are not significant when the tool is used as a supplementary aid rather than a replacement for human thought processes. This viewpoint is supported by Ilham et al. (2020), who argue that AI tools can be most effective when integrated into the learning process to augment rather than replace students' efforts. Rebolledo et al. (2023) further emphasized that AI should be viewed as a facilitator of the writing process, providing support in areas such as structure and idea generation while leaving the critical elements of creativity and originality to the student.

## CONCLUSION

The dual impact of AI tools on English writing highlights both benefits and challenges. On the one hand, AI tools significantly enhance students' writing processes by aiding in grammar correction, sentence structuring, and idea generation. This aligns with previous research indicating that AI fosters independence, improves confidence, and serves as a valuable support system in academic writing. On the other hand, the study also identifies critical

drawbacks, such as potential overreliance on AI, reduced critical thinking and creativity, and the risk of diminishing originality. These concerns echo the broader discourse on the importance of balancing leveraging AI as a tool and preserving fundamental writing skills, creativity, and individual expression.

Educators need to design strategies that promote the integration of AI tools without fostering dependency. Practical recommendations include encouraging students to use AI during the revision phase rather than during idea generation or drafting, implementing writing tasks that require both AI-assisted and independent work, and fostering critical reflection on AI's role in the writing process. Policymakers should also support teacher training programs that equip educators with the skills to guide AI-integrated learning while maintaining academic integrity and student creativity. Developing pedagogical frameworks that encourage students to view AI as a supplementary resource rather than a primary writing mechanism is critical.

Additionally, concerns about AI's limitations—such as its inability to capture emotional nuances and its tendency to produce overly formal or rigid language—point to the necessity of further research into refining AI technologies for nuanced communication. Future studies should explore how AI tools can be effectively integrated into language education to enhance writing autonomy while minimizing dependency. Moreover, research is needed to address ethical concerns, including data privacy and the implications of AI's influence on originality. Exploring the potential of adaptive AI systems that personalize feedback while preserving the user's unique voice could also provide innovative solutions. These research efforts will be crucial in ensuring that AI supports, rather than supplants, the essential human elements of writing and learning.

## REFERENCES

Al-Busaidi, S., & Al-Seyabi, F. (2021). Project-based Learning as a Tool for Student-Teachers' Professional Development: A Study in an Omani EFL Teacher Education Program. *International Journal of Learning, Teaching and Educational Research*, *20*(4), 116–136. https://doi.org/10.26803/ijlter.20.4.7

Aljuaid, H. (2024). The Impact of Artificial Intelligence Tools on Academic Writing Instruction in Higher Education: A Systematic Review. *Arab World English Journal*, *1*(1), 26–55. https://doi.org/10.24093/awej/chatgpt.2

Armanda, M. L., Nugraheni, A. F., Wulansari, A., & Imron, A. (2022). "Grammarly" as English Writing Assistant from EFL Students' Perspective. *English Education:Journal of English Teaching and Research*, *7*(2), 128–137. https://doi.org/10.29407/jetar.v7i2.17988

Asian, C., Of, J., Studies, M., & Info, A. (2024). Using AI Technologies in English Teaching. *Central Asian Journal of Multidisciplinary Research and Management Studies*, *1*(18), 40–43. https://doi.org/https://doi.org/10.5281/zenodo.14515131

Correa, Z. M., & Liu, T. Y. A. (2023). Revolutionizing Education: Harnessing the Power of Artificial Intelligence for Personalized Learning. *Journal of Education, Language Teaching and Science*, *5*(2), 241–244. https://doi.org/10.1007/978-3-031-08250-4_25

Dawson, P., Bearman, M., Dollinger, M., Boud, D., Dawson, P., Bearman, M., Dollinger, M., & Boud, D. (2024). Validity Matters More Than Cheating. *Assessment & Evaluation in Higher Education*, *49*(7), 1005–1016. https://doi.org/10.1080/02602938.2024.2386662

Fitria, T. N. (2021). Grammarly as AI-powered English Writing Assistant: Students' Alternative for Writing English. *Metathesis: Journal of English Language, Literature, and Teaching*, *5*(1), 65. https://doi.org/10.31002/metathesis.v5i1.3519

Fitria, T. N. (2024). Using ChatBot-Based Artificial Intelligence (AI) for Writing an English Essay: The Ability of ChatGPT, Perplexity AI, and ChatSonic. *Journal of Language Intelligence and Culture*, *6*(2), 103–128. https://doi.org/10.35719/jlic.v6i2.139

Han, H., Islam, M. H., & Ferdiyanto, F. (2023). An Analysis of Student's Difficulties in English

Speaking, a Descriptive Study. *EDUTEC : Journal of Education And Technology*, *6*(4), 497–503. https://doi.org/10.29062/edu.v6i4.579

Henriksen, D., Mishra, P., & Stern, R. (2024). Creative Learning for Sustainability in a World of AI : Action ,. *Multidisciplinary Digital Publishing Institute*, 1–20. https://doi.org/https://doi.org/10.3390/ su16114451 Academic

Ilham, I. (2022). Implementing Project-Based Learning for Efl Students' Writing Achievement At Tertiary Level. *English Review: Journal of English Education*, *10*(3), 1003–1012. https://doi.org/10.25134/erjee.v10i3.6470

Ilham, I. (2023). Need Analysis for Developing Paragraph Writing Materials Based on Problem-Based Learning Model for Indonesian Efl Learners. *English Review: Journal of English Education*, *11*(3), 833–842. https://doi.org/10.25134/erjee.v11i3.8326

Ilham, I. (2024). Needs Analysis of Project-Based Learning Model in Writing Paragraphs from EFL Students' Perspectives. *Journal of Languages and Language Teaching*, *12*(1), 282. https://doi.org/10.33394/jollt.v12i1.9215

Ilham, I., Musthafa, B., & Yusuf, F. N. (2020). University Students' Needs of Writing Course Materials: a Case of Indonesia. *English Review: Journal of English Education*, *8*(2), 31. https://doi.org/10.25134/erjee.v8i2.2988

Ilham, Irwandi, Zakiyah, Q. A., & Saniyatil, W. (2025). Project-Based Learning Model with Blended Learning in Academic Writing : A Need Analysis. *JOLLT Journal of Languages and Language Teaching*, *13*(1), 306–317. https://doi.org/https://doi.org/10.33394/jollt.v13i1.12552

Irwandi, Isnaini, Y., & Hudri, M. (2021). Improving Students' Writing Skills through Computer-Based Concept Mapping. *Linguistics and ELT Journal*, *9*(2), 2339–2940. https://doi.org/https://doi.org/10.31764/leltj.v9i2.7759

Islam, A., & Chang, K. (2021). Real-time AI-based informational decision-making support system utilizing dynamic text sources. *Applied Sciences (Switzerland)*, *11*(13). https://doi.org/10.3390/app11136237

Johnson, L., & Ph, D. (n.d.). *Using AI Simulation to Build Fluency and Self-Confidence*. https://doi.org/https://www.alelo.com/wp-content/uploads/dlm_uploads/2019/07/Using-AI-Simulations-to-Build-Fluency-and-Self-Confidence.pdf

Karim, S. A., Matas, G., & Ismail, H. (2024). Elevating Students' Narrative Writing Ability through Local Legendary Picture Series. *JOLLT Journal of Languages and Language Teaching*, *12*(4), 1871–1884. https://doi.org/https://doi.org/10.33394/jollt.v12i4.12446

Kholis, A., Lisan, K. H., & Azmi, U. (2024). Empowering Students through AI : Integrating Artificial Intelligence ( AI ) Tools in Academic Writing Classes. *Journal of English Tteaching and Applied Linguistic*, 96–102. https://doi.org/https://d1wqtxts1xzle7.cloudfront.net/118573981

Laili, R. N., Nashir, M., & Kifi, A. (2024). Student's Perspective on The Use of Sevima Edlink as an English Learning Medium. *Jo-ELT (Journal of English Language Teaching) Fakultas Pendidikan Bahasa & Seni Prodi Pendidikan Bahasa Inggris IKIP*, *11*(1), 1. https://doi.org/10.33394/jo-elt.v11i1.11004

Lingard, L., & Craft, T. H. E. W. S. (2023). Writing with ChatGPT : An Illustration of its Capacity , Limitations & Implications for Academic Writers. *Journal of the Netherlands Association of Medical Education*, *12*(1), 261–270. https://doi.org/10.5334/pme.1072

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

Mizumoto, A., & Eguchi, M. (2023). Exploring the potential of using an AI language model for automated essay scoring. *Research Methods in Applied Linguistics*, *2*(2), 100050. https://doi.org/10.1016/j.rmal.2023.100050

Muthmainnah, Ibna Seraj, P. M., & Oteir, I. (2022). Playing with AI to Investigate Human-Computer Interaction Technology and Improving Critical Thinking Skills to Pursue 21stCentury Age. *Education Research International*, *2022*. https://doi.org/10.1155/2022/6468995

Nazari, N., Shabbir, M. S., & Setiawan, R. (2021). Application of Artificial Intelligence powered digital writing assistant in higher education: randomized controlled trial. *Heliyon*, *7*(5), e07014. https://doi.org/10.1016/j.heliyon.2021.e07014

Nguyen Minh, A. (2024). Leveraging ChatGPT for Enhancing English Writing Skills and Critical Thinking in University Freshmen. *Journal of Knowledge Learning and Science Technology ISSN: 2959-6386 (Online)*, *3*(2), 51–62. https://doi.org/10.60087/jklst.vol3.n2.p62

Nur, T., & Fitria. (2023). ELT FORUM 12(1) (2023) Journal of English Language Teaching Artificial intelligence (AI) technology in OpenAI ChatGPT application: A review of ChatGPT in writing English essay. *Journal of English Language Teaching*, *12*(1), 44–58. http://journal.unnes.ac.id/sju/index.php/elt

Park, J. (2019). An AI-based English Grammar Checker vs. Human Raters in Evaluating EFL Learners' Writing. *Multimedia-Assisted Language Learning*, *22*(1), 112–131. http://journal.kamall.or.kr/wp-content/uploads/2019/3/Park_22_1_04.pdfhttp://www.kamall.or.kr

Ploug, T., & Holm, S. (2020). The Four Dimensions of Contestable AI Diagnostics- A Patient-Centric Approach to Explainable AI. *Artificial Intelligence in Medicine*, *107*(April), 101901. https://doi.org/10.1016/j.artmed.2020.101901

Pratama, R. M. D., & Hastuti, D. P. (2024). The use of artificial intelligence to improve EFL students' writing skill. *English Learning Innovation*, *5*(1), 13–25. https://doi.org/10.22219/englie.v5i1.30212

Rebolledo Font de la Vall, R., & González Araya, F. (2023). Exploring the Benefits and Challenges of AI-Language Learning Tools. *International Journal of Social Sciences and Humanities Invention*, *10*(01), 7569–7576. https://doi.org/10.18535/ijsshi/v10i01.02

Sari, W., Ilham, I., & Ismail, H. (2023). Meta-Analysis of Mind Mapping in Vocabulary Learning of the Past Decade. *English Review: Journal of English Education*, *11*(2), 347–356. https://doi.org/10.25134/erjee.v11i2.7610

Shofiah, N. (2024). Examining the User Experience of Artificial Intelligence Tools in Academic Writing : The Perceptions Lecturers Practices. *Research Square*, 1–24. https://doi.org/https://doi.org/10.21203/rs.3.rs-3871916/v1

Tran, T. T. H. (2024). AI Tools in Teaching and Learning English Academic Writing Skills. *Proceedings of the AsiaCALL International Conference*, *4*, 170–187. https://doi.org/10.54855/paic.23413

Uri, D. (2023). *College of Business Faculty Publications ChatGPT for Higher Education and Professional Development : A Guide to Conversational AI ChatGPT for Higher Education and Professional Development : A Guide to Terms of Use.* https://digitalcommons.uri.edu/cba_facpubs/548

Wirawan, A. K., Saputri, V. A., Lamongan, U. B., & Lamongan, U. B. (2024). Paradox Artificial Intelligence : Encourage Innovation or Kill Thoughts ? *International Conference on Education*, *02*(October). https://doi.org/https://jurnalfaktarbiyah.iainkediri.ac.id/index.php/proceedings/article/view/3882

Zhai, C., Wibowo, S., & Li, L. D. (2024). The effects of over-reliance on AI dialogue systems on students' cognitive abilities: a systematic review. *Smart Learning Environments*, *11*(1). https://doi.org/10.1186/s40561-024-00316-7