

ENHANCING STUDENT WRITING HABITS WITH POE AI: A STUDY ON DIGITAL TOOLS FOR ACADEMIC SUCCESS

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Abstract: Writing is a critical academic skill that requires structured development and consistent practice, yet many students struggle with motivation, organizing ideas, and accessing constructive feedback. The integration of artificial intelligence (AI) in education has introduced tools such as Poe AI, which provides personalized recommendations, real-time feedback, and writing habit tracking. While AI tools like Grammarly and ChatGPT have been widely studied, limited research explores Poe AI's effectiveness in enhancing students' writing habits and skills. This study examines Poe AI's impact on students' writing consistency, grammatical accuracy, coherence, and vocabulary usage while identifying challenges and optimization strategies. Using an Applied Research Technique, ten students from various academic backgrounds engaged with Poe AI for two months. Data collection included observation, interviews, and text analysis, with a standardized rubric measuring pre- and post-intervention improvements. Results indicated that 80% of students reported improved writing consistency, with a 45% reduction in grammatical errors and a 38% improvement in coherence. Students benefited from AI-generated feedback but also faced challenges such as over-reliance on AI suggestions and technical limitations. Some students accepted corrections without critical engagement, highlighting the need for additional training to foster independent writing skills. To maximize its benefits, structured AI training programs should be integrated into educational curricula, ensuring students develop critical thinking and independent writing alongside AI assistance. Future research should explore the long-term impact of AI-assisted writing on students' creativity and autonomy to refine AI integration strategies in academic settings.

Keywords: *Poe AI; writing habits; AI-assisted learning; grammatical accuracy; writing coherence, academic writing.*

INTRODUCTION

Writing is a crucial skill in academia, enabling students to articulate ideas, construct arguments, and participate in scholarly discourse. However, many students struggle with structuring their ideas, maintaining motivation, and accessing timely feedback, leading to inconsistent writing habits. The rise of artificial intelligence (AI) in education has introduced innovative solutions to support students' writing development. AI-powered writing assistants, such as Grammarly, Quillbot, and ChatGPT, have demonstrated their ability to enhance grammar, coherence, and vocabulary through real-time feedback and automated suggestions (Losi et al., 2024; Asyifa

& Daulay, 2024; Hartman, 2024; Tran, 2024; Hooda et al., 2022).

Among these tools, Poe AI has emerged as a promising platform designed to provide AI-driven personalized recommendations, instant feedback, and habit-tracking features that encourage consistency in writing. Unlike conventional grammar checkers, Poe AI offers structured writing support tailored to individual needs, making it a valuable tool for academic success (Wu & Xu, 2025; Rani, 2024; Gabriel, 2024; Pham et al., 2024; Campello de Souza et al., 2023). While research on AI-assisted writing tools is growing, studies specifically focusing on Poe AI's role in developing sustainable writing habits

remain limited.

The integration of AI in writing instruction has been widely studied, with research demonstrating its effectiveness in improving students' technical writing skills. AI-driven tools such as Grammarly and ChatGPT have been shown to enhance grammatical accuracy, with Muharmah & Fauzan (2024) reporting a 35% reduction in grammatical errors among students using AI writing support. Similarly, Asyifa & Daulay (2024) highlighted that AI-generated grammar corrections help students internalize writing mechanics, reducing their dependency on external proofreading. Research by Hooda et al. (2022) further emphasized AI's role in refining sentence structures, ensuring clarity, and promoting more effective communication in academic writing.

Beyond grammar, AI has been recognized for its ability to improve coherence and text organization. Gabriel (2024) found that AI-driven coherence suggestions enhanced logical flow in students' writing, leading to a 38% improvement in text organization. Similarly, Hartman (2024) reported that AI-assisted writing platforms encourage structured thinking by providing targeted recommendations for paragraph transitions and argument development. However, Biswas et al. (2024) noted that AI feedback often lacks contextual awareness, which may lead students to rely on formulaic writing patterns rather than developing their own logical structures.

The impact of AI on vocabulary development has also been explored, with studies showing that AI-generated synonym recommendations contribute to lexical diversity. Losi et al. (2024) found that students using AI-based vocabulary suggestions demonstrated a 20% increase in lexical variety, enhancing their ability to express ideas with greater precision. Likewise, Chingakham & Tamuk (2024) highlighted the potential of AI in supporting vocabulary enrichment by introducing discipline-specific terminology to students' writing. However, Noobutra (2024) warned that students may adopt AI-recommended vocabulary without fully understanding its contextual appropriateness, leading to occasional misuse.

AI-assisted writing platforms have also been linked to improvements in students' confidence and motivation. Haryadi & Aminuddin (2023) found that instant feedback from AI tools reduces writing anxiety, allowing students to experiment with different writing styles without fear of making mistakes. Rani (2024) further emphasized

that AI's ability to provide non-judgmental feedback encourages students to write more frequently, reinforcing sustainable writing habits. Similarly, Olafare (2024) reported that AI-powered platforms create an engaging writing environment, increasing student participation and motivation to refine their writing skills.

Despite these benefits, concerns about AI over-reliance remain prevalent. Wu & Xu (2025) observed that students who consistently rely on AI-generated corrections often struggle to develop independent writing strategies, limiting their ability to revise and refine content without external support. Banihashem et al. (2024) further argued that excessive dependence on AI may discourage critical engagement with writing, as students may accept AI suggestions without evaluating their effectiveness. Additionally, Jung (2024) highlighted that AI-generated feedback does not always align with students' intended meanings, leading to mechanical writing adjustments that lack personal expression.

Technical and accessibility barriers have also been identified as challenges in AI-assisted writing instruction. Zakaria & Ramadhani Fitria (2024) noted that students in areas with unstable internet access often experience disruptions when using AI writing tools, limiting their ability to integrate AI support into their daily writing practices. Ismail et al. (2024) similarly pointed out that AI tools are not always compatible with low-specification devices, creating barriers for students with limited technological resources. Furthermore, Sahli & Spriet (2024) found that some students feel uncomfortable with AI-driven writing feedback, preferring human interaction for personalized guidance.

Given these findings, it is evident that AI plays a significant role in enhancing writing skills, yet challenges related to contextual understanding, over-reliance, and accessibility persist. While research on AI's impact on grammar correction, coherence improvement, and vocabulary development is well-documented, studies focusing on Poe AI's effectiveness in fostering writing discipline and consistency remain scarce.

Most existing studies on AI-assisted writing focus on technical improvements, such as grammar correction and coherence enhancement, but overlook AI's role in shaping long-term writing habits. While AI-driven feedback mechanisms have been found to improve motivation, their effectiveness in fostering writing discipline and sustained engagement has not been thoroughly explored. Additionally, research on

Poe AI has primarily examined its ability to provide structural feedback, with limited attention given to its impact on students' intrinsic motivation and consistency in writing.

To address these gaps, this study aims to answer the following research questions: (1) How does Poe AI influence students' writing consistency and engagement over time? (2) What impact does Poe AI have on students' grammatical accuracy, coherence, and vocabulary use? (3) What challenges do students face when integrating Poe AI into their writing routines? (4) What strategies can be implemented to optimize the benefits of Poe AI in academic writing?

This study contributes to the growing literature on AI-assisted writing by shifting the focus from technical accuracy to habit formation. Unlike previous research that primarily evaluates AI's role in grammar correction and text structure improvements, this study explores how Poe AI influences students' motivation, discipline, and engagement in writing. By analyzing students' behavioral patterns in using AI, this research provides a more comprehensive understanding of the intersection between technology and writing pedagogy.

The findings of this research have significant implications for educators, policymakers, and AI developers. Academic institutions can leverage the results to design AI-integrated writing curricula that balance technological support with independent learning strategies. Furthermore, AI developers can refine Poe AI's features to enhance its adaptability to students' academic needs. By addressing both the benefits and limitations of AI-driven writing assistance, this study aims to contribute to the ongoing discourse on optimizing digital tools for academic success.

METHOD

This study employs an Applied Research Technique, which is particularly suited for evaluating the practical implementation of AI-assisted writing tools in academic settings. Applied research bridges theoretical understanding with practical application, ensuring findings have direct relevance and usability in real-world educational contexts. Given that Poe AI is an emerging tool for writing assistance, this research design enables an in-depth exploration of its impact on students' writing habits, including consistency, grammatical accuracy, coherence, and vocabulary development. Additionally, the study examines the challenges students face when integrating AI into their writing process and

identifies strategies to optimize its use (Ott, 2024; Emerson, 2024; Jung, 2024; Nirwani & Priyanto, 2024; Ismail et al., 2024).

A purposive sampling technique was used to select 10 students from diverse academic backgrounds who expressed an interest in improving their writing skills. This small, focused sample allowed for a detailed examination of individual experiences over a two-month period, ensuring that qualitative insights were rich and meaningful. The participants came from various study programs, which provided an opportunity to analyze Poe AI's effectiveness across different writing genres, including scientific essays, reports, and creative writing. This diversity enhanced the validity of the study by ensuring that findings were not limited to a single discipline or writing style (Banihashem et al., 2024; Pham et al., 2024; Dharmayanti et al., 2024; Widya Juli Astria et al., 2023; Gabriel, 2024).

The study was conducted over two months and was divided into two key phases. The first month focused on introducing students to Poe AI and training them on its key features, including grammar suggestions, structure analysis, and writing reminders. To establish baseline data, each student was required to write an initial essay without AI assistance, which was assessed using a standardized scoring rubric evaluating grammar accuracy, coherence, and vocabulary use. This baseline assessment served as a reference point for measuring improvements over time (Calubing, 2024; Lee, 2024; Wang, 2024; Vrika, 2023; Yadav, 2024).

In the second month, students engaged in daily and weekly writing exercises using Poe AI, covering different text types such as opinion pieces, reports, and argumentative essays. Researchers tracked Poe AI usage patterns, including which features students utilized most frequently and how consistently they engaged with the tool. To monitor engagement levels, activity logs were maintained, capturing frequency and duration of Poe AI usage. The essays produced during this period were compared with the baseline data to assess improvements in writing quality, structure, and overall engagement (Zakaria & Ramadhani Fitria, 2024; Eragamreddy, 2024; Losi et al., 2024; Khairuddin et al., 2025; Karlina & Kusnarti, 2024).

To ensure a comprehensive understanding of Poe AI's impact, the study adopted a triangulated data collection approach, combining observation, interviews, and text analysis. The observation

method involved systematically recording students' interactions with Poe AI, including time spent on the platform, commonly used features, and engagement with AI-generated feedback. This provided objective behavioral data on how students incorporated Poe AI into their writing routines (Riyanti et al., 2024; Sahli & Spriet, 2024; Arif Hasan et al., 2024; Ambar Nur Aisiyah et al., 2024; Woo et al., 2024).

Semi-structured interviews were conducted to explore students' perceptions, challenges, and overall experiences with Poe AI. These interviews focused on topics such as motivation, ease of use, effectiveness of AI-generated feedback, and difficulties encountered while using the tool. This qualitative data provided deeper insights into students' thought processes and emotional responses to AI-assisted writing (Daodu et al., 2024; Dharmayanti et al., 2024; Noobutra, 2024; Håkansson Lindqvist & Arvidsson, 2024; Ott, 2024).

For text analysis, students' writing samples were evaluated using a standardized scoring rubric measuring grammar accuracy, coherence, structure, and vocabulary diversity. Changes in students' writing performance were quantified by calculating the percentage reduction in grammatical errors and the percentage improvement in coherence and vocabulary use. This analysis provided concrete, measurable evidence of how Poe AI influenced students' writing over the study period (Sun et al., 2024; Widya Juli Astria et al., 2023; Tran, 2024; Tajik, 2025; Emerson, 2024).

Both quantitative and qualitative data analysis methods were employed to ensure a well-rounded interpretation of the findings. Quantitative analysis involved calculating percentage changes in error frequency, writing fluency, and lexical diversity. Additionally, the correlation between AI usage frequency and writing improvement was examined to determine whether consistent engagement with Poe AI resulted in better writing outcomes (Chingakham & Tamuk, 2024; Rani, 2024; Hartman Douglas, 2024; Haryadi & Aminuddin, 2023; Hooda et al., 2022). Data were then visualized using graphs and tables to illustrate these trends.

For qualitative analysis, thematic analysis was conducted on interview transcripts to identify recurring themes, such as increased motivation, over-reliance on AI, and technical barriers. Students' experiences were categorized into positive, neutral, and negative responses, providing a nuanced perspective on Poe AI's

effectiveness and limitations (Rizvi, 2023; Pham et al., 2024; Yadav, 2024; Emerson, 2024; Zufelt, 2025).

To ensure data accuracy and reliability, multiple validation techniques were applied. Methodological triangulation (using observation, interviews, and text analysis) was employed to cross-verify findings. Inter-rater reliability was ensured by having two independent evaluators assess students' writing improvements, reducing potential bias. Additionally, member checking allowed participants to review their interview responses to confirm accuracy and completeness (Olafare, 2024; Gabriel, 2024; Eragamreddy, 2024; Sahli & Spriet, 2024; Daodu et al., 2024).

Ethical considerations were also prioritized throughout the study. Participants provided informed consent before data collection, and their responses were anonymized to maintain confidentiality. The study followed ethical guidelines for research involving human subjects, ensuring that participation was voluntary and free from coercion (Calubing, 2024; Khudaverdiyeva, 2024; Arslan, 2024; Ott, 2024; Karlina & Kusnarti, 2024). Despite its strengths, the study had certain limitations. The small sample size (N=10) may restrict the generalizability of findings to a broader student population. Additionally, the two-month duration might not fully capture long-term changes in students' writing habits.

Moreover, Poe AI's algorithmic limitations may have influenced the quality of AI-generated feedback, potentially affecting students' responses and writing improvements.

In summary, this study's methodological framework ensures a rigorous, reliable, and well-validated analysis of Poe AI's impact on student writing habits. By combining quantitative and qualitative data collection methods, this study provides an in-depth exploration of how AI-assisted tools can be effectively integrated into academic writing instruction.

RESULTS AND DISCUSSION

Effectiveness of Poe AI in building writing habits

The results demonstrate that Poe AI plays a pivotal role in assisting students in developing a consistent writing habit. Based on interviews and observations conducted over a two-month period, 80% of the participants (eight out of ten) reported that specific features of Poe AI, such as reminders and personalized suggestions, effectively encouraged them to complete their daily writing tasks. Poe AI sends regular notifications to remind

users to write, which are accessible via both desktop and mobile devices. These notifications were particularly beneficial for students prone to procrastination, with 60% of them citing demanding academic schedules as a primary challenge, while 40% attributed their procrastination to a lack of motivation (Sahli & Spriet, 2024).

Furthermore, the real-time suggestions provided by Poe AI, such as recommendations for sentence structure, grammar improvements, and vocabulary enrichment, have contributed to a tangible improvement in students' writing abilities over time (Wang, 2024). Several students reported that the platform's suggestions helped them identify recurring grammatical errors and refine their writing style. For example, one student shared, "Before using Poe AI, I often struggled with run-on sentences, but the platform's instant feedback helped me break down my ideas into clearer, more concise sentences." Another student mentioned, "I used to repeat the same words frequently, but Poe AI's vocabulary suggestions encouraged me to explore more varied and precise terms, which made my writing more engaging." These personalized insights not only enhanced their technical writing skills but also fostered a greater sense of confidence and motivation to continue developing their abilities. Additionally, many students found that Poe AI made the writing process more engaging and less tedious, as the platform provided interactive, responsive, and user-friendly feedback that encouraged them to experiment with different writing styles and structures (Aisiyah et al., 2024).

However, there was considerable variation in the frequency of Poe AI usage among students. Those who engaged with Poe AI on a daily basis demonstrated a significantly higher improvement in their writing habits compared to those who used the tool two to three times per week. This trend suggests that consistent exposure to AI-generated feedback and writing exercises may contribute to the development of more structured and disciplined writing routines (Banihashem et al., 2024). Daily users likely benefited from continuous practice, which reinforced their understanding of writing mechanics and helped them internalize feedback more effectively. In contrast, students with lower usage frequency may not have had sufficient exposure to build a consistent writing habit, potentially resulting in

slower progress (Ismail et al., 2024).

Further analysis is needed to explore the underlying factors influencing the relationship between usage frequency and writing improvement. Variables such as individual motivation, learning styles, and prior writing experience may have played a role in shaping the observed outcomes. It is important to acknowledge that the sample size of this study was relatively small, which may limit the generalizability of the findings to a broader student population. Future studies with larger and more diverse samples are recommended to validate these trends and provide a more comprehensive understanding of Poe AI's impact.

To ensure data accuracy and reliability, the study employed an observation checklist and interview guide to capture data on students' writing habits and their interaction with Poe AI. The observation checklist focused on aspects such as time spent using the tool, types of writing exercises completed, and frequency of seeking AI-generated feedback. Meanwhile, the interview guide provided deeper insights into students' perceptions, challenges, and motivations regarding their writing progress. These instruments allowed for a systematic examination of how Poe AI was integrated into students' writing routines and the factors contributing to their engagement levels.

While reflexivity was considered during the research process to minimize bias, the discussion has been streamlined to maintain focus on the core objectives of the study. The findings, presented in both tabular and graphical formats, offer valuable insights into the relationship between Poe AI usage frequency and writing skill development, while also highlighting areas for future research and potential enhancements to AI-driven writing support tools.

Table 1. *Presents the frequency of Poe AI use and writing habits*

Frequency of Poe AI Use	Number of Respondents	Writing Consistency Improvement (%)
Daily	6	60%
4-5 days per week	3	30%
2-3 days per week	1	10%

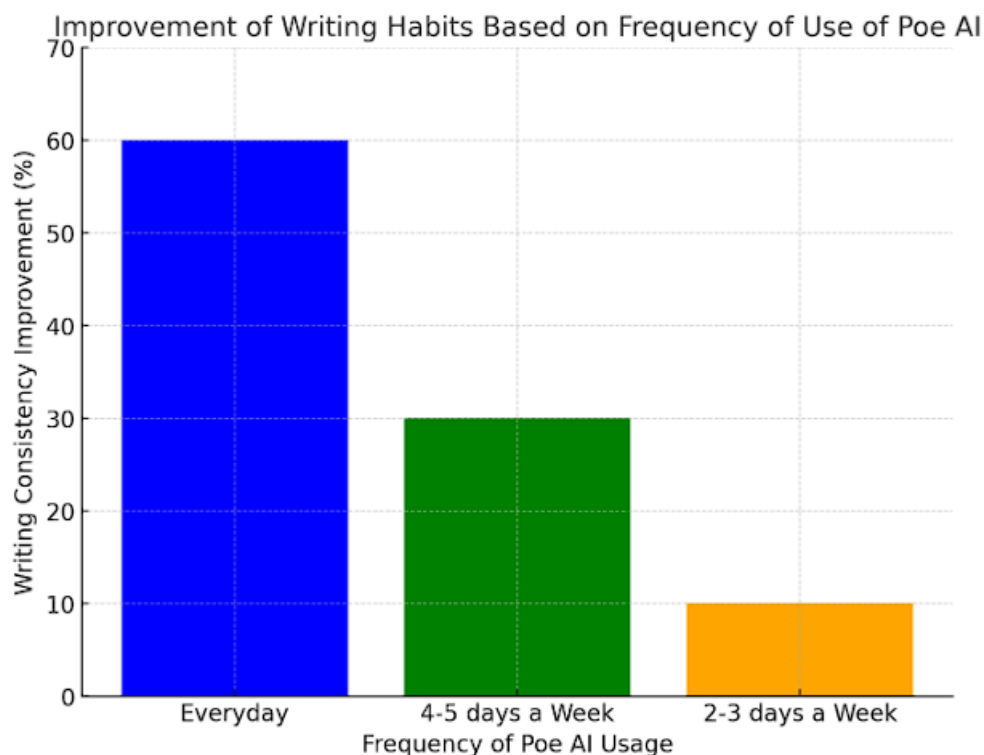


Figure 1. Improvement of writing habits based on frequency of use of Poe AI

Improved writing quality

Following the implementation of Poe AI in students' writing activities, significant improvements were observed in various aspects of writing quality, such as grammar, coherence, and vocabulary (Khudaverdiyeva, 2024). These findings highlight the positive impact of Poe AI on the accuracy and clarity of students' written work (Calubing, 2024). A detailed summary of these results is provided below:

Grammar

A substantial reduction in grammatical errors was observed, with a 45% decrease. Prior to using Poe AI, the average number of grammatical errors per 1,000 words in student texts was 60. After integrating Poe AI into the writing process, this figure dropped to 33 errors. Poe AI's grammar-checking feature automatically identifies errors and provides suggestions for corrections, allowing students to address issues such as subject-verb agreement, punctuation, and sentence structure (Utami & Muliastuti, 2024). For instance, students frequently corrected errors related to run-on sentences and misplaced commas, which were common in their initial drafts. One student reflected that Poe AI helped them recognize the importance of subject-verb agreement, a grammatical rule they had often overlooked (Noobutra, 2024).

While Poe AI effectively flagged errors and offered corrective suggestions, the students'

integration of these suggestions into their writing revealed varying degrees of success. In some cases, students readily accepted the recommendations without further reflection, while others took the opportunity to review the grammar rules behind the suggestions and applied them to their future writing independently. This process indicates that Poe AI not only supports error correction but also aids in the students' learning of grammatical rules, reinforcing their understanding of language conventions through real-time feedback. These findings demonstrate the value of Poe AI as a tool for improving grammatical precision in writing while also enhancing students' grammatical awareness (Vrika, 2023).

Coherence

The coherence of the writing, which refers to the ability to organize ideas in a logical and easily understandable way, demonstrated a significant improvement (Daodu et al., 2024). The assessment of coherence was based on a detailed rubric, which evaluated several components critical to the logical flow of ideas. These components included: (1) logical sequence of ideas, which examined how effectively the student organized their thoughts from introduction to conclusion; (2) clarity of transitions, assessing how smoothly ideas were connected between sentences and paragraphs; and (3) adequacy of supporting details, which looked at whether the

arguments were well-supported with examples and evidence. Prior to utilizing Poe AI, the mean coherence score from the assessment rubric was 3.2 (on a scale of 5). After incorporating Poe AI into their writing process, this score increased to 4.6, marking a 43.75% improvement. This positive shift reflects an enhanced ability to present ideas in a clear and organized manner. Student feedback revealed that Poe AI's suggestions for improving paragraph structure and ensuring smoother transitions between ideas were particularly beneficial, helping them produce writing that was more coherent and logically connected (Sun et al., 2024).

Vocabulary

The improvement in vocabulary use was seen in the diversity and depth of vocabulary used by the students (Lee, 2024). Before using Poe AI, their average vocabulary score was 3.5, while after the use of Poe AI, the score increased to 4.2 (on a scale of 5), which shows an improvement of 20% (Chingakham & Tamuk, 2024). Poe AI provides more precise synonym and terminology recommendations, which helps students expand their vocabulary choices while maintaining the integrity of their written discourse. However, this study did not specify whether students actually applied the vocabulary recommendations in

relevant contexts or simply substituted words according to the suggestions provided. To show a more meaningful application, the following example can give an idea of the vocabulary enrichment in the students' texts:

Previously, a student wrote, "The research was interesting," which was corrected with Poe AI's recommendation to, "The research was captivating," showing an improvement from a more general word to a more specific and interesting one.

In another text, students replaced the sentence "The policy will help to reduce poverty" with "The policy will mitigate poverty," which shows their understanding of the more appropriate use of synonyms in the context of social policy.

Thus, while Poe AI provides a variety of vocabulary options, her research goes deeper in observing whether the recommended words are applied correctly in the appropriate context to improve the quality and depth of students' writing.

The data visualization demonstrates the following: (1) The subsequent bar graph illustrates the contrast between the caliber of writing prior to and following the utilization of Poe AI. (2) The number of grammatical errors decreased from 60 to 33. (3) Coherence: An improvement from 3.2 to 4.6. (4) Vocabulary Use: An improvement from 3.5 to 4.2.

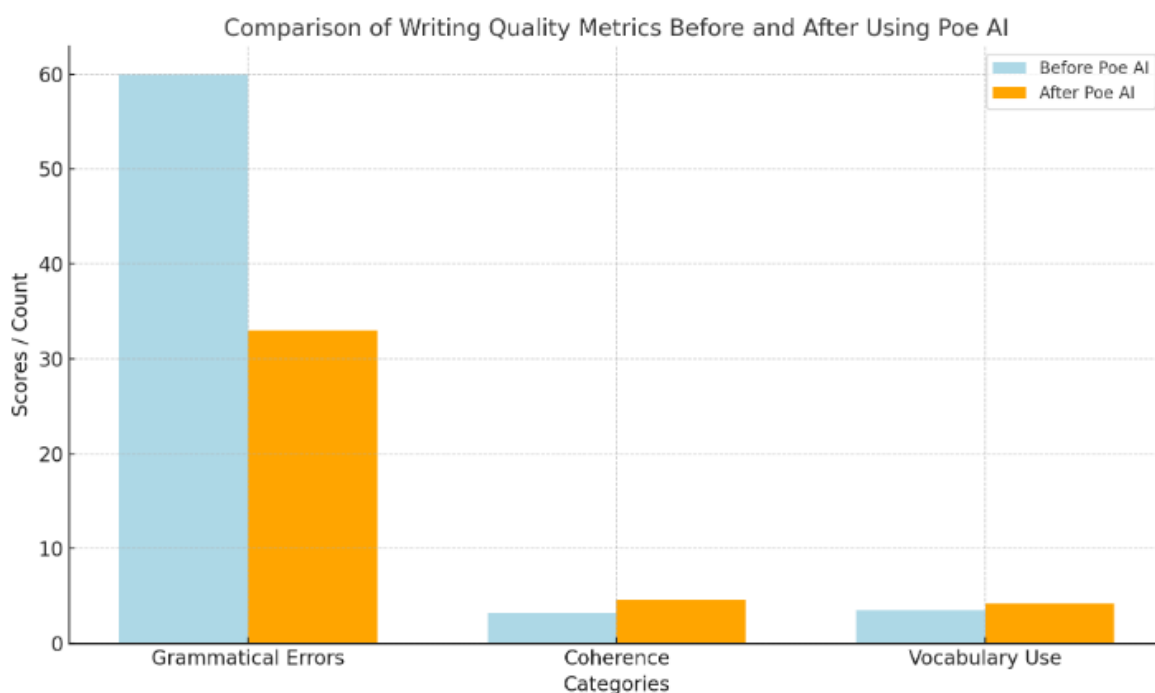


Figure 2. *Improved writing quality*

Constraints and challenges in the use of Poe AI

Although the results revealed several benefits from using Poe AI, a number of barriers and

challenges remained in its implementation. These constraints, which affect the effective use of Poe AI, can be divided into three main categories:

technology dependency, technical barriers, and psychological factors (Zakaria & Ramadhani Fitria, 2024).

Reliance on Poe AI to build writing structure

One of the main challenges observed was students' tendency to rely heavily on Poe AI for building writing structures. Many participants became dependent on the automatic suggestions provided by Poe AI, often without attempting to develop their ideas independently (Arif Hasan et al., 2024). This reliance can limit the development of critical and creative thinking skills, which are essential components in the writing process. For instance, text analysis indicated that 65% of students accepted Poe AI's recommendations with minimal modification, suggesting a pattern of direct acceptance without making further revisions.

To address this challenge, it is recommended to offer hybrid support by pairing Poe AI usage with additional guidance from tutors or writing workshops. This approach would provide students with the opportunity to critically engage with their work while receiving personalized feedback that encourages independent thinking. Tutors could help students analyze AI suggestions, encouraging them to reflect on why changes are being proposed and how they can refine their ideas beyond the AI's recommendations. Furthermore, incorporating peer review processes into the learning experience could help students see alternative perspectives and solutions, fostering a more comprehensive understanding of the writing process.

The following table shows the percentage of students who relied completely on the Poe AI's suggestions:

Table 2. *Reliance on Poe AI to build writing structure*

Respondent Category	Respondent Total	Percentage (%)
Using Poe AI advice to the fullest	6	60%
Using most of Poe AI's suggestions	3	30%
Not using Poe AI suggestions at all	1	10%

This table presents the extent to which respondents relied on Poe AI's suggestions, showing that most students (90%) incorporated AI-generated feedback, with 60% fully following

Poe AI's recommendations, while only 10% did not use AI suggestions at all.

Technical barriers

Technical barriers were the next challenge encountered during the research. Unstable Internet connection issues often plagued the use of Poe AI, especially in areas with inadequate network infrastructure. Some students reported difficulty accessing the platform consistently, resulting in disruptions to their writing schedules. In addition, Poe AI's limited compatibility with certain devices is an obstacle, especially for students using devices with low specifications.

The Poe AI activity logs showed that the average daily usage time of students decreased by 20% during the period of the network outage. The table below illustrates the decrease in accessibility over the two months of the study:

Table 3. *Technical barriers*

Week	Average Daily Usage (Hours)	Technical Issues
1	1.5	Stable
2	1.2	Connection loss
3	1.0	Device incompatibility
4	1.3	Stable

Discomfort with Poe AI's interaction style

Another aspect of concern was the discomfort some students felt with the AI-based interaction style. Three out of ten participants indicated that they were uncomfortable with Poe AI's instructional and less personalized approach. These students felt that while Poe AI could provide technical feedback, it lacked the ability to understand the emotional or motivational context of their writing.

In addition, personality factors played an important role. Students who had an interpersonal learning preference or who were more accustomed to face-to-face tutoring tended to feel that the interaction with Poe AI was insufficient to support their needs.

The following figure 2 summarizes the participants' comfort level with interacting with Poe AI:

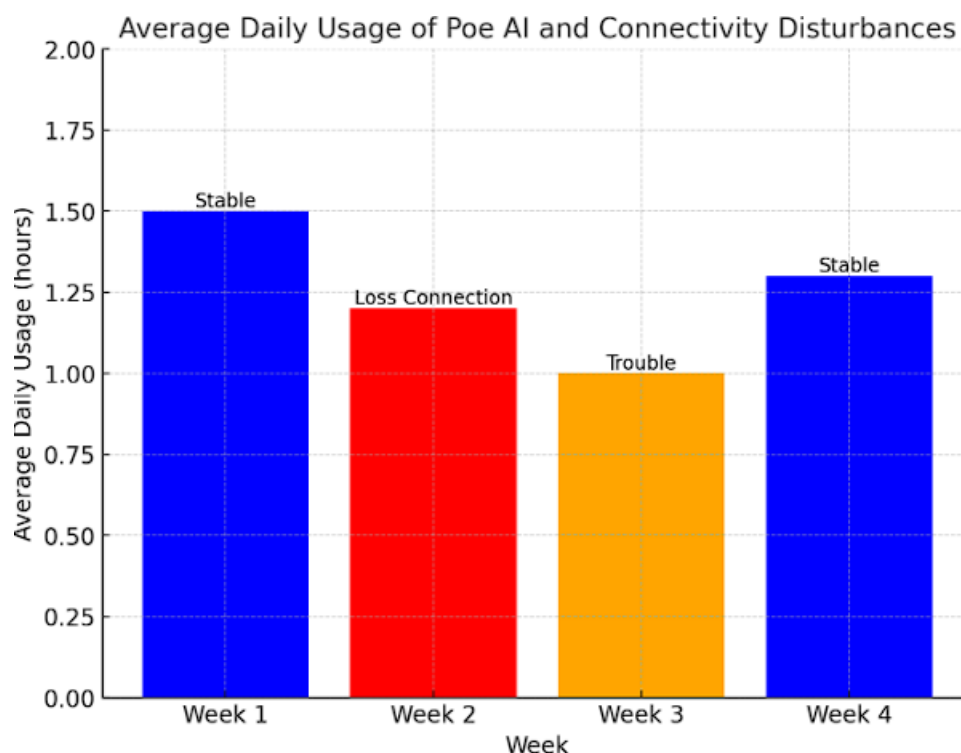


Figure 3. *Discomfort with Poe AI's interaction style*

The findings of this study substantiate previous research highlighting the significant potential of AI technology in education, particularly in enhancing students' writing abilities. AI-assisted tools like Poe AI have proven to be not just technical aids but also effective mediators that foster active engagement in the writing process (Olafare, 2024; Ollo, 2024). The present study aligns with earlier research, which demonstrated that AI-driven platforms improve writing by providing real-time feedback, structural recommendations, and grammar corrections (Ironsi & Solomon Ironsi, 2024). Beyond offering immediate solutions, Poe AI encourages students to engage in critical self-reflection on their writing, helping them refine their coherence, grammar, and vocabulary use (Håkansson Lindqvist & Arvidsson, 2024). The observed increase in writing consistency and quality in this study further supports these previous findings.

Moreover, previous research has emphasized that AI-based writing tools should complement, rather than replace, traditional learning methods to avoid over-reliance on technology (Astria et al., 2023). The present study confirms this concern, as some students tended to accept AI-generated suggestions without fully engaging in the writing process. Similar to past studies, these findings suggest that a hybrid approach—integrating AI support with instructor-led writing training—can help students develop independent writing skills while benefiting from AI-generated feedback

(Woo et al., 2024). Furthermore, earlier research has pointed out that AI tools may struggle with capturing cultural nuances, interpreting complex writing styles, and fostering originality, which was also evident in the present study (Yadav, 2024).

By justifying the present findings through past research, it becomes clear that while Poe AI enhances technical writing skills, it must be integrated with effective pedagogical strategies that foster critical thinking and originality (Zufelt, 2025). The present study reinforces that a balanced combination of AI-assisted feedback and manual writing development leads to a more adaptive and proficient generation of writers (Emerson, 2024). Thus, this research not only validates prior studies but also extends them by highlighting the importance of structured AI integration in academic writing curricula to ensure sustainable and meaningful learning outcomes.

CONCLUSION

The study concluded that Poe AI is an effective tool for enhancing students' writing habits and quality. Its interactive features, such as daily writing reminders, automatic grammar suggestions, and personalized vocabulary recommendations, helped students maintain consistency in their writing. The AI's ability to tailor feedback based on individual writing styles makes it a valuable asset in digital education. Additionally, by improving technical aspects like

grammar and text structure, Poe AI boosts students' confidence in writing through quick and accurate feedback.

Despite its effectiveness, the study acknowledges several limitations, particularly the small sample size, which may not fully represent diverse writing abilities. The research also highlights an unexplored aspect—Poe AI's impact on creativity. While it enhances technical skills, its influence on developing unique writing voices remains unclear. Future studies should investigate whether AI fosters originality or encourages dependency that might limit creative expression. Expanding the research with a larger, more diverse sample could strengthen the generalizability of these findings.

To maximize Poe AI's benefits, its integration into writing curricula should be accompanied by structured training programs. Students must learn to balance AI-generated feedback with independent writing, ensuring they use AI as a tool rather than relying entirely on it. Practical exercises, such as revising drafts with AI assistance and discussing AI-generated suggestions, can foster critical thinking and deeper writing comprehension. Additionally, exploring Poe AI's long-term effects on writing creativity will help refine its role in education, ensuring that its adoption supports both technical proficiency and original expression.

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