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Value and Cost of Using Ai-powered Writing Assistants in Academic Writing: Basis for Crafting a Policy Brief

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ABSTRACT

The introduction of Artificial Intelligence (AI)-powered writing assistants has significantly altered the writing landscape. Tools such as ChatGPT, Grammarly, MetaAI, and Perplexity have become increasingly popular among students for completing academic writing assignments. This qualitative study explored the perceived value and cost of using AI-powered writing assistants in academic writing among Grade 12 HUMSS students of Leuteboro National High School, to inform the development of a policy brief. Employing a phenomenological approach, data were collected through semi-structured interviews and focus group discussions to capture students' lived experiences with AI tools in completing written academic tasks. The study's findings revealed five key themes reflecting the perceived value of AI tools: overcoming writer's block, widening vocabulary, enhancing idea development, improving coherence, and increasing writing productivity. In contrast, the perceived cost was associated with cognitive and creative dependence and ethical concerns, including cheating and plagiarism. The study underscored the dual impact of AI-powered writing tools—offering substantial benefits in supporting students' writing processes while simultaneously posing risks to academic integrity and independent critical thinking. The research recommends further investigation through a mixed-methods design, particularly incorporating language teachers' perspectives, to develop a more comprehensive understanding of AI's role in academic writing and inform balanced policy-making.

INTRODUCTION

Writing is a crucial determinant of academic success and serves as the primary channel for effective communication. Among the macro skills, it is often regarded as the most challenging to master. Writing enables students to articulate their understanding and express complex ideas, making it an essential component of the educational experience. Traditionally, students have developed their writing skills through drafting, revising, and editing, often seeking guidance from teachers and peers to enhance their work.

However, the introduction of Artificial Intelligence (AI)-powered writing assistants has significantly altered the writing landscape. Tools such as ChatGPT, Grammarly, MetaAI, and Perplexity have become increasingly popular among students for completing academic writing assignments. These AI tools provide real-time feedback and suggestions, streamlining the writing process and enabling greater efficiency. As a consequence, there is a growing concern regarding students' dependency on these technologies, raising questions about their impact on the development of writing skills. It is imperative to critically evaluate whether these AI tools are ultimately beneficial or detrimental to students' growth as proficient writers.

Globally, the United Nations Educational, Scientific, and Cultural Organization (UNESCO) has shown its support for the integration of AI in education. It stresses the significance of responsible and ethical implementation of AI in academic settings. To support this, they have developed competency frameworks for both students and teachers. This initiative highlights the need for schools to not only embrace the benefits of AI but also remain vigilant about the potential harm it may cause if used unethically or irresponsibly (UNESCO, 2024).

At the national level, the Philippines has demonstrated a positive stance toward integrating AI into the educational system. Recently, Education Secretary Sonny Angara endorsed the use of AI in schools through the launch of the Education Center for AI Research (E-CAIR) (PhilStar, Oct 2024). This center aims to provide AI-driven tools to enhance both teaching and learning, in alignment with Republic Act No. 11899, or the EDCOM II Law, which mandates the modernization of education by addressing outdated curricula and infrastructure (EDCOM II, 2025). While such developments signal progress, concrete policies specifically guiding the use of AI in writing instruction have yet to be put in place.

The Department of Education (DepEd) continues to prioritize the enhancement of writing skills through programs such as the Every Child a Reader Program (ECARP) and the Early Language, Literacy, and Numeracy Program (ELLN), which focus on developing foundational skills in reading and writing (DepEd, 2016). Moreover, under the K-12 Enhanced Basic Education Curriculum (Republic Act No. 10533), senior high school (SHS) students are required to take writing-intensive subjects and research courses that demand a high level of writing proficiency.

Despite these efforts, the use of AI-powered writing

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assistants has become increasingly prevalent among SHS students. At Leuteboro National High School, for instance, English and Humanities teachers have reported a noticeable rise in students' reliance on tools like Grammarly, QuillBot, and ChatGPT to complete their written academic tasks. During Learning Action Cell (LAC) sessions, the teachers shared that using AI tools in academic writing is becoming a trend. Students are submitting AI-generated outputs and are becoming independent, sometimes boldly asking subject teachers to allow them to use AI. In addition, a pre-survey conducted by the school's official publication, The Junction, revealed that a sum of 85% from junior and senior high school students are already using AI in their studies. In the survey, students identified convenience, corrections and suggestions, and language difficulties as reasons for using it.

Consequently, the viewpoints on whether these AI tools are beneficial or detrimental to the development of essential writing skills are divided. For instance, studies conducted in Indonesia and Saudi Arabia have shown how AI writing tools can support students' understanding of writing processes and enhance language performance (Utami, *et al.*, 2023; Liu *et al.*, 2021). Conversely, other studies caution against the risks of uniformity in writing style, reduced creativity, and increased likelihood of plagiarism (Yu, 2024).

In a wider context, national assessments have revealed persistent challenges in writing proficiency among Filipino students. The Southeast Asia Primary Learning Metrics (SEA-PLM) 2019 found that nearly half of Grade 5 learners in the Philippines are in the lowest proficiency band for writing literacy. These struggles continue into senior high school. A study by Pablo and Lasaten (2018) in Laoag City documented issues among Grade 11 students in areas such as organization, vocabulary, sentence structure, and academic tone, reflecting a broader national concern.

Given these realities, there is a pressing need to investigate the true value and cost of using AI-powered writing assistants in academic settings. Although many studies emphasize the overall effectiveness of these tools, few focus specifically on their cognitive and pedagogical implications—especially in the Philippine senior high school context. There is a notable gap in localized research that examines how these tools influence key writing processes and student learning outcomes.

Thus, this study sought to explore the perspectives of Grade 12 Humanities and Social Sciences (HUMSS) students on the benefits and drawbacks of using AI-powered writing assistants. Ultimately, the findings would inform the development of a policy brief proposing a structured user guide aimed at helping students use these tools ethically, effectively, and responsibly in support of their academic writing development.

LITERATURE REVIEW

Academic Writing Challenges

Academic writing is a formal style of communication that requires the appropriate use of vocabulary, grammar, and sentence structure (Morley-Warner, 2019). It also involves the logical organization of ideas, including effective paragraph development, the use of cohesive devices, and smooth transitions to ensure clarity and coherence in written texts (Roxas, 2020).

Zhang and Zhang (2021) emphasized that students must possess essential academic writing skills, as these are closely linked to the development of critical thinking. Academic writing enhances higher-order cognitive skills such as organizing, analyzing, and synthesizing information, as well as problem-solving and decision-making. Moreover, it strengthens communication, research, and professional competencies while fostering personal and intellectual growth through reflection, idea exploration, and the articulation of complex concepts (Conijn *et al.*, 2023).

In the Philippines, the Enhanced Basic Education Curriculum (K–12) mandates that senior high school students develop academic writing competencies through subjects such as English for Academic and Professional Purposes, Practical Research 1 (Qualitative), Practical Research 2 (Quantitative), and Inquiries, Investigations, and Immersion. These subjects require learners to engage in various academic writing tasks, including narrative reports, position papers, concept papers, and research projects. In response to these demands, teachers employ diverse instructional strategies to support and enhance students' academic writing skills (Dorji, 2021).

Despite these curricular initiatives, many students continue to struggle with academic writing. Findings from the 2019 Southeast Asia Primary Learning Metrics (SEA-PLM) revealed that Filipino Grade 5 students performed below their counterparts in several Southeast Asian countries. Nearly half (46%) of the participants were classified in the lowest proficiency band in writing literacy, indicating difficulties in expressing ideas clearly and producing coherent and substantive written texts. These challenges persist as students advance to higher grade levels.

Magsambol (2020) further reported that some senior high school students remain unable to construct basic English sentences. In Metro Manila, students encounter various academic writing difficulties, including limited content knowledge, unfamiliarity with proper citation practices, grammatical inaccuracies, restricted vocabulary, and ineffective use of writing structures (Urbano *et al.*, 2021). Early literacy skills, particularly writing, serve as the foundation for future academic success (Sugumlu, 2020). When writing skills are insufficiently developed during the early years of education, students are more likely to experience persistent difficulties in higher grade levels. Similarly, Chakma *et al.* (2021) noted that graduating students struggle with the techniques and mechanics of academic writing due to its inherent complexity. Langum and Sullivan (2020) also observed that the demanding nature of academic writing poses significant challenges for many writers.

In the Philippine context, these challenges include, but are not limited to, language proficiency issues, limited access to resources and academic support services, and unequal access to technological tools. Recent studies suggest that AI-powered writing tools can assist Filipino students in improving grammar and sentence structure (Malik *et al.*, 2023; Lipalam *et al.*, 2023). However, further research is necessary to fully understand the long-term effects of these tools on students' learning. Concerns regarding overreliance on AI and potential issues of plagiarism also warrant careful consideration (Estrellado & Miranda, 2023; Herminigildo *et al.*, 2024; Obenza *et al.*, 2024).

Artificial Intelligence (AI)-powered Writing Assistants

AI-powered writing assistants have significantly transformed the way students approach writing (Moore *et al.*, 2016; Peters & Cadieux, 2019). As learners become more familiar with these digital tools, their perceptions of writing gradually shift, often becoming more positive and confident (Geitgey, 2018; Brown *et al.*, 2020; Heaven, 2020).

Sison *et al.* (2023) posited that AI-powered writing assistants function as companions throughout the various stages of the writing process, including brainstorming, drafting, and revising. Beyond the convenience they provide, students value these tools for their practical support in idea generation and grammatical improvement (Cheng, 2020).

In academic contexts, ChatGPT, QuillBot, and Grammarly are among the most widely used AI-powered writing assistants. ChatGPT is trained on vast datasets that enable it to recognize linguistic patterns, grammar, semantics, and contextual nuances of human language. Through reinforcement learning from human feedback, the model refines its responses, making them more contextually appropriate and useful for academic purposes (Cao *et al.*, 2023).

One of the most common challenges in academic writing is the effective generation and organization of ideas. In this regard, ChatGPT provides prompt responses that support brainstorming and idea expansion. Students and researchers can interact with the model by presenting preliminary ideas and receiving contextually relevant suggestions, thereby helping them overcome writer's block and stimulate creativity during the initial stages of writing (Bhatia, 2023; Huang, 2022).

QuillBot also offers valuable support through its instant feedback features. The tool analyzes written text and provides real-time suggestions for grammatical corrections, sentence structure refinement, and vocabulary enhancement. This immediate assistance allows users to identify and correct errors during the writing process, resulting in clearer and more polished academic outputs (Raheem, 2023).

Similarly, Grammarly is designed to improve writing quality through real-time feedback on grammar, punctuation, and writing style. Available as a browser extension, desktop application, and mobile application, Grammarly provides suggestions related to clarity, engagement, and tone (Grammarly, 2023). Its real-time grammar and spelling checks enable students to detect errors such as subject–verb agreement, verb tense, and punctuation issues, thereby promoting clearer and more coherent writing (Chen, 2021).

While these features have made AI-powered writing assistants increasingly essential in academic and professional contexts, it remains necessary to exercise caution regarding their limitations and ethical implications. As these tools continue to reshape academic writing practices, responsible and critical use is imperative to ensure academic integrity and the development of independent writing skills.

Benefits and Disadvantages of AI-powered Writing Assistants

AI-powered writing assistants present both advantages and limitations in academic writing. Recent international studies have recognized their potential to enhance students' language proficiency and writing efficiency. Utami *et al.* (2023) found that AI writing assistants support students in restructuring ideas and sustaining writing momentum. Similarly, Huang (2022) explained that AI-generated suggestions, content scaffolding, and organizational support help writers overcome mental barriers, thereby fostering creativity and sustaining writing flow. AI tools have also been shown to inspire diverse perspectives and originality by encouraging writers to explore alternative ideas and directions (Taylor & Smith, 2023). Teng (2024) further emphasized the collaborative nature of AI-powered writing assistants, wherein students interact iteratively with the tools to refine their written outputs.

Beyond creativity, AI-powered writing assistants contribute significantly to idea development and organization. Kumar and Sharma (2021) reported that these tools assist writers in structuring arguments with greater clarity and depth. This organizational support is reinforced by real-time feedback, which enhances writers' confidence. Rejeki (2023) observed that pre-submission error detection reduces students' anxiety and self-doubt, particularly under high academic pressure, while Firat (2023) highlighted the benefits of AI tools for self-directed learners who require guided support throughout the writing process. Consequently, these tools promote deeper engagement with writing tasks, increased motivation, and improved writing confidence.

The widespread adoption of AI-powered writing assistants has drawn considerable attention from academic institutions worldwide. Developed countries such as the United States, the United Kingdom, and Canada have integrated these tools to support students and researchers in reducing grammatical errors and producing well-structured academic texts (Cardon *et al.*, 2023; Morrison, 2023; Zhao, 2023). In the United States, universities have reevaluated writing instruction approaches in response

to AI advancements, updating institutional policies to address concerns related to academic integrity (Inside Higher Ed, 2023). Similarly, a qualitative study conducted in Canada revealed that university educators view AI tools as instrumental in improving content organization and clarity, while also expressing concerns about students' overreliance, which may hinder the development of critical thinking and creativity (Tandfonline, 2023).

In Asia, countries such as China have capitalized on adaptive learning technologies to enhance educational outcomes, despite ongoing concerns related to privacy, equity, and the emphasis on standardized testing (Lake, 2023). Likewise, several Asian nations are investing in educational technologies to address persistent gaps in educational quality (Concepcion *et al.*, 2019; Ibrahim, 2023; Magulod *et al.*, 2020; Torneo, 2023). Universities across the region have begun integrating AI-powered writing assistants to improve language proficiency, particularly among non-native English speakers.

In the Philippine context, selected universities—including Silliman University, the University of the Philippines Open University, Mapúa University, Mindanao State University–Iligan Institute of Technology, and Lyceum of the Philippines University–Cavite—have introduced institutional guidelines for AI use in teaching and learning. These guidelines encourage educators to utilize AI tools for instructional design while requiring students to properly acknowledge AI-generated content to prevent plagiarism (UPOU, 2024). These initiatives align with Republic Act No. 11899, or the EDCOM II Act, which mandates the modernization of education through curriculum reform and technological integration.

Empirical studies further illustrate the nuanced effects of AI-powered writing assistants on learners. Vidhaya *et al.* (2024), in a survey of 309 health science graduates in South India, found that while most participants were familiar with AI tools for improving vocabulary and grammar, many primarily relied on these tools for generative writing rather than revision. The findings indicated that excessive dependence on AI for content generation may negatively affect independent writing skills, underscoring the need for teacher-guided and ethical use of AI tools. Similarly, Aisyi (2024) identified positive impacts of AI on grammar, sentence construction, vocabulary, and time efficiency, while also noting challenges such as dependency, reduced creativity, and plagiarism.

From a linguistic perspective, AI-generated word suggestions have been shown to enhance clarity and precision in academic writing (Malik *et al.*, 2023). Marzuki *et al.* (2023) further noted that real-time feedback and vocabulary suggestions reduce redundancy and improve textual coherence. However, Haleem *et al.* (2022) cautioned that AI tools may fail to capture nuanced tone and contextual subtleties, resulting in inappropriate suggestions. Regular exposure to vocabulary through AI tools has also been linked to improved word retention and contextual understanding (Ngo, 2024; Webb, 2020), aligning with Schmitt's framework of vocabulary knowledge as cited by Qbeita (2024).

AI-powered writing assistants have also been found to reduce cognitive barriers among non-native English learners by supporting idea translation and grammatical accuracy (Gayed *et al.*, 2022). Tools that incorporate Socratic questioning, such as Scraft, promote deeper engagement and critical thinking by encouraging students to explore multiple perspectives (Kim & Tan, 2023; Zhao, 2022). Furthermore, studies indicate that AI tools support collaborative writing experiences, enhance confidence, and improve writing quality by simplifying complex ideas and improving comprehension (Hidayat, 2024; Puxon *et al.*, 2023; Utami & Ariati, 2024).

Despite these benefits, concerns regarding overreliance and ethical implications remain prominent. The 2023 AI Index Report highlighted a significant increase in AI misuse, raising concerns related to academic integrity and broader societal implications. Researchers have emphasized that AI-powered writing assistants possess limitations in contextual understanding, which may result in oversimplified or inaccurate academic content (Adams, 2023; Marzuki *et al.*, 2023; Parker & Zhao, 2024). Overdependence on AI tools has also been linked to diminished critical thinking, originality, and depth of analysis (Johnson, 2023; Smith, 2024).

Ethical concerns such as plagiarism, academic dishonesty, and authenticity of student work have been widely documented. Dempere *et al.* (2023) argued that unregulated AI use may encourage passive learning and reliance on automatically generated content, while Yu (2024) identified plagiarism and cheating as growing concerns among educators. These findings reinforce the need for balanced, guided, and ethical integration of AI tools in academic writing instruction.

In conclusion, AI-powered writing assistants offer substantial opportunities to enhance academic writing while simultaneously posing challenges related to dependency, ethics, and critical thinking. A clear understanding of their strengths and limitations enables educators and students to make informed decisions regarding their use. Institutions must promote responsible integration by positioning AI as a supportive tool rather than a substitute for authentic learning, ensuring that the development of essential writing skills and academic integrity remains central to educational practice (Abdullayeva, 2023).

Policy Brief on Using Assistive AI Tools in Academic Writing

The Universal Declaration of Human Rights defined the purpose of education as promoting the 'full development of the human personality', strengthening 'respect for fundamental freedoms', and promoting 'understanding, tolerance and friendship'. This idea needs to move with the times. An expanded definition of the right to education suggests that it should encompass not just access to education but also the effective use of technology to support all learners in reaching their full

potential. This means that educational systems should leverage technological tools and resources to ensure that every student, regardless of their background, environment, or personal challenges, can benefit from high-quality learning opportunities. When technology is responsibly integrated, education becomes more inclusive and adaptable. It can help address barriers that hinder students from succeeding (Global Education Monitoring Report, 2023).

Despite numerous claims on how the tools enhance students' quality of writing, the risks of overreliance, plagiarism, and the decline in critical and independent writing skills remain. In relation, a report from Enago stressed the need for unified guidelines. They encouraged institutions to establish clear policies regarding AI use. This is to prevent ethical issues like plagiarism and misrepresentation of authorship and to ensure quality and transparency of use (Enago, 2024).

In the same vein, Padua (2024) underscored how crucial guidelines are in ensuring effective use of the tools in academic settings while addressing the potential drawbacks. He further accentuated that the guidelines should involve best practices in tool utilization, ethical considerations, and strategies for fostering critical thinking.

Moreover, Almaraz-López *et al.*, (2023) discovered that despite having little training and vague understanding of the subject, students are willing to continue their studies in AI. This connotes that AI in education should be enhanced and expanded by highlighting practical applications and its limitations for students to use it responsibly. Also, survey said that students had favorable opinions about the usage of AI technology in writing classes (Sumakul, Hamied & Sukyadi, 2022). They said that the AI they were using could guide them through the writing process, help them comprehend the theoretical ideas, and teach them the language and syntax they would need for their work, indicating that students have benefited from AI technology, given these favorable perceptions.

Because of the swift rise in its application, educators and students must possess a fundamental grasp of AI and the data it uses in order to interact with it constructively, critically, and to the fullest extent possible (Sheeba, 2022). According to a study, educators and learners alike require a deeper comprehension of the ways in which the use of AI might enhance their individual capacities for instruction and learning (Sangapu, 2018). It also found that making the best use of this technology could result in improved outcomes.

Furthermore, whether AI-powered writing assistants can constitute plagiarism is unclear (Miao *et al.*, 2023). Currently, there is no consensus on where to draw the line between original human work and the reuse of ideas from training materials (Vasquez, 2024). There are two conflicting positions on the use of AI in research writing. On one hand, drafts generated by an AI system are seen as plagiarizing from the source texts used to train that AI system (Anson, 2022; Lukac & Lazareva, 2023). However, others argue that AI systems produce novel combinations of knowledge not present in any single source, making accusations of plagiarism illogical (Cameron, 2020; Grimm *et al.*, 2021; McJohn & McJohn, 2020; Novobilská, 2023). With no standardized assistance could unintentionally lead to claims of plagiarism down the line, depending on varying editorial interpretations (Vasquez, 2024).

The study by Zhang (2024) suggested that AI-powered writing assistants should be used with caution and guidance and that there is a necessity for developing students' AI literacy and providing clear guidelines on the appropriate use of AI in academic writing. As one interviewed teacher noted, "AI can be a useful tool, but it's not a magic solution. Students still need to learn the fundamental skills of writing and use AI critically and ethically."

In the Philippines, the Department of Education has acknowledged the potential of AI to benefit both teachers and students. For teachers, it streamlines administrative tasks, while for students, it promotes independent and self-paced learning. However, clear guidelines on its implementation have yet to be released.

The growing use of AI in academic settings and the limited localized guidance mean that it is high time to provide clear, evidence-based policy recommendations. As such, this study aims to bridge this gap by crafting a policy brief that would inform educational stakeholders on the balanced integration of AI tools in academic writing, which maximizes the benefits and safeguards the academic integrity and the development of essential writing skills.

As Gates said, "The world needs to establish the rules of the road so that any downsides of artificial intelligence are far outweighed by its benefits, and so that everyone can enjoy those benefits no matter where they live or how much money they have." This suggests the establishment of regulations for artificial intelligence to mitigate its risks while ensuring that its advantages are accessible and beneficial to everyone, regardless of their location or financial means.

MATERIALS AND METHODS

This study employed a qualitative research design utilizing a phenomenological approach to explore the experiences of Grade 12 HUMSS students at Leuteboro National High School regarding the perceived value and costs associated with AI-powered writing assistants in academic writing for A.Y. 2024–2025.

Through purposive sampling, 14 participants were selected based on specific criteria, including current enrollment, experience with AI-powered writing tools in terms of duration, frequency, and variety of use, and willingness to participate.

To gather data, the researcher conducted face-to-face interviews and focus group discussions using a validated interview guide. The guide was initially reviewed by her

research adviser and validated by two Master Teachers in English—one from the selected school and another from a different public school in the division—as well as a qualitative research expert from the Schools Division of Oriental Mindoro. This validation ensured alignment with the study's objectives and improved the tool's reliability.

A pilot test was subsequently conducted with a small group of HUMSS students to refine the interview protocol and enhance the effectiveness of data collection. Based on the insights gathered, the interview questions and process were revised accordingly. Afterward, actual data collection proceeded using semi-structured interviews and focus group discussions, strictly following the approved protocols.

To enhance the credibility and trustworthiness of the findings, the study employed methodological triangulation by incorporating semi-structured interviews, focus group discussions, and document analysis. This combination of data sources enabled the researcher to cross-verify information and gain a more nuanced understanding of participants' experiences. The inclusion of document analysis, such as evaluating students' essays, provided contextual evidence that complemented the verbal data and strengthened the overall analysis.

When the data were collected, all responses were transcribed verbatim for analysis. The researcher used Colaizzi's (1978) seven-step method for phenomenological data analysis. This systematic approach allowed for the extraction of significant statements, formulation of meanings, and clustering into themes, ensuring a rigorous and in-depth exploration of the participants' lived experiences. Colaizzi's method emphasized maintaining the participants' original intent and perspectives, thus ensuring that their voices remained central to the findings.

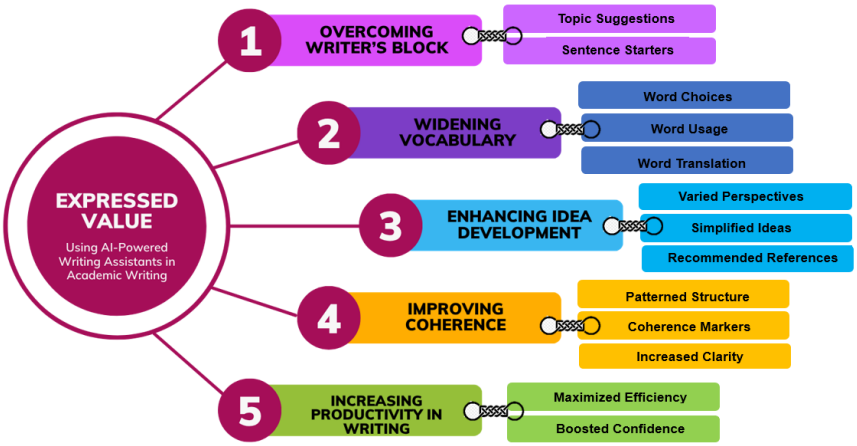
RESULTS AND DISCUSSION

Expressed Value of Using AI-Powered Writing Assistants in Academic Writing

The dominant values of using AI-powered writing assistants in academic writing highlight the following themes and subthemes: overcoming writer's block (sentence starters, topic suggestions), widening vocabulary (word choices, word usage, word complexity and word translation), enhancing idea development (varied perspectives, simplified ideas, linked academic sources), improving coherence (patterned structure, coherence markers and increased clarity), and increasing productivity and confidence in writing (maximized efficiency and boosted confidence), as shown in the linear diagram below.

Overcoming Writer's Block

AI-powered writing assistants have proven instrumental in helping students, particularly Grade 12 HUMSS students at Leuteboro National High School, overcome the challenge of writer's block. This support is most evident during the initial stages of writing, where students often face uncertainty and lack of direction. Two features that stood out in the students' experiences are topic suggestions and sentence starters.



Many students shared that selecting a topic was often where they got stuck. AI tools like ChatGPT helped narrow broad themes into more focused ideas aligned with their interests. P7 shared, "When my idea is still too broad, ChatGPT gives me sub-topics that allow me to share my thoughts more clearly." Similarly, P14 stated, "Once I have a clear topic, it becomes easier for me to continue writing because I know exactly what to focus on. AI helped me narrow down my ideas, so I no longer feel lost in the process."

P1 reflected on the struggle, "…can't immediately decide on a topic that we can study for research, and that's where we often get stuck." P6 and P12 echoed this, with P6 saying, "Since AI provides a lot of topics and information, I just choose what interests me or what I can handle, and then I can start writing," and P12 adding, "We get to choose what we want to study, especially in research, so we can focus on topics we care about. It makes the whole process more interesting and fun." These accounts demonstrate how AI tools serve as scaffolds to reduce anxiety and promote motivation.

Apart from choosing a topic, students also struggle with how to begin their writing. AI-provided sentence starters gave them a useful jumpstart. P13 admitted, "Starting is really a struggle for me even though I have a lot of ideas,

but when I use AI, it no longer becomes a problem." P5 noted a practical benefit: "When there's AI, I use less scratch paper. I don't keep repeating my introduction—it's like I already have a basis to start with." P8 added, "It's really just the first part that feels heavy especially when I really don't know anything about the topic. But once I have an AI prompt, I can quickly build a paragraph."

Others emphasized how a lack of ideas blocked their writing. P4 stated, "When I have no ideas, I struggle to think of a good topic for writing." P11 reflected on the improvement AI brought: "Before, it took me a long time to conceptualize ideas. My mind would get blocked for a while before I could start writing. So, normally, I would just try to quickly blurt out whatever comes to mind. But now, when I try to write, I can at least think of a concept or outline much faster than before because I can get prior information or suggestions from AI."

These insights show that AI-powered writing assistants help reduce stress, avoid redundancy, provide structure, and build confidence at the start of writing. This aligns with Vygotsky's (1978) Sociocultural Theory on scaffolding, and is supported by studies such as those by Gayed *et al.* (2022), Sun (2024), and Wu (2024). Despite some limitations like relevance mismatch in specific contexts (Song & Song, 2023), the benefits in promoting creativity, reducing writing anxiety, and facilitating smoother writing starts are evident.

Widening Vocabulary

AI-powered writing assistants significantly support students in expanding their vocabulary, especially in academic writing. This includes refining word choices, understanding word usage, and utilizing word translations. Students used AI tools to select more appropriate and varied words, which helped them express their thoughts more clearly and avoid redundancy. P1 shared, "AI is useful because it helps me find fitting words for what I am writing." Similarly, P4 said, "There are many suggestions like synonyms for words, which help me avoid repeating the same terms in my writing." P11 added, "With AI, it allows me to present my ideas while keeping my target audience in mind. It even shows whether the tone should be academic or casual, so I get exposed to those as well." However, several students admitted feeling limited in vocabulary. P2 stated, "Honestly, my vocabulary isn't that big, so I really have a hard time picking the right words to express it." P5 added, "I'm also not sure if my words still sound formal, which makes me feel uncertain about the quality of my work." P14 confessed, "I also often can't help but write as if I'm just having a casual conversation... I find it difficult to write using academic terms." Despite these struggles, the exposure to AI-generated suggestions helped students develop more confidence and precision in selecting appropriate academic words.

Students also used AI to translate their thoughts from Filipino to English. This helped them better understand new words, express themselves more clearly, and improve their writing quality. P3 shared, "When I don't know certain words in English, once they're translated to Tagalog, I remember them and can use them in my writing." P10 said, "When I write an essay, I first write it in Tagalog and then translate it into English." P13 added, "When I write, I first draft in Tagalog, then translate it into English using an app. To make it clearer and more impactful, I input it into ChatGPT for refinement." Moreso, they expressed a preference for ChatGPT over Google Translate.

Evidently, Work Immersion essays submitted by participants showed improved vocabulary: limited repetition, better clarity, and more academic tone. For example, P1 used terms like "behave professionally," "reflect a positive attitude," and "prepare themselves for future work opportunities" replacing vague or redundant expressions. P4 used the word "trait" for a more precise meaning and "trust" to fit a professional context.

AI-powered writing tools effectively support vocabulary development through

offering a variety of word choices and avoiding repetition, reinforcing word usage through context-based examples, and aiding word translation, which helps students bridge their thoughts into clearer English writing. These tools serve as scaffolding aligned with Vygotsky's Sociocultural Theory and Piaget's Cognitive Learning Theory, enabling students to operate within their zone of proximal development and internalize new vocabulary through repeated exposure. While limitations exist—such as potential misalignment with emotional or contextual nuance (Haleem *et al.*, 2022)—the overall impact on vocabulary expansion and academic writing skills is substantial.

Enhancing Idea Development

AI writing assistants helped students view topics from different angles, leading to improved understanding and stronger argument construction. P11 shared: "I think that with AI, I can share better perspectives on a certain matter since it provides me with different examples of various views, unlike without it, where I can only share very limited ones."P6 emphasized: "Because ChatGPT provides a lot, I get more ideas, and I can expand my thoughts better." P3 added: "When I have AI, my ideas are no longer as shallow." These perspectives fostered greater writing confidence, as echoed in:"It feels good knowing that what you wrote has substance… and you're actually saying something meaningful." (P3) "Knowing my argument is well-structured makes me confident in submitting my work…" (P6) Similarly, Zhao (2022) and Utami & Ariati (2024) found that AI tools not only enhanced content quality but also boosted confidence and expanded perspectives.

Furthermore, AI tools were seen as helpful in breaking down abstract or unfamiliar topics into digestible explanations. P5 noted: "I really turn to AI whenever I don't understand the concept being taught to us." P1 stated: "It's better at generating specific responses, so I'm able to understand it." P13 added: "I just type 'explain this'

and it quickly gives an answer that's easy to understand." This aligns with Sweller's (1988) Cognitive Load Theory, which posits that minimizing extraneous cognitive load aids in learning. AI helps students retain and articulate information by clarifying difficult concepts.In addition, Marzuki *et al.* (2023) emphasized AI's role in overcoming writer's block, while Puxon *et al.* (2023) noted the value of AI in summarizing, outlining, and explaining ideas clearly. AI tools also assisted in finding literature and developing the Review of Related Literature (RRL)—though with cautionary notes. P1 stated: "It gave me legit links to websites I could read through…" P5 shared: "I really use AI when I'm looking for related literature (RRL) for our research…" However, concerns were raised about reliability:"Sometimes the sources it gives don't really exist…" (P8)"…the publication year is often wrong." (P1) "The titles and authors sometimes look legit, but when I search for them, I can't find anything." (P11)

Despite positive feedback, some written outputs remained vague, repetitive, and lacked coherence. For example: "They do their jobs with heart and not complain, like always… respect is there and no shouting happens…" (P3) "…managements like you more and the company grows up better…" (P7) These suggest a disconnect between perceived understanding and actual writing competence. While AI provided support, the lack of critical reflection resulted in mechanical or shallow writing.

AI writing tools positively impacted students by enhancing idea development however, students must critically engage with these tools to avoid over-reliance and misinformation. When used thoughtfully, AI can serve as a scaffold within the Zone of Proximal Development (Vygotsky, 1978), promoting better learning outcomes.

Improving Coherence

Participants reported that AI tools helped them structure their thoughts more clearly, organize their essays better, and use coherence markers more effectively. AI-generated structures helped students organize their writing. By modeling outlines, paragraph structures, and sentence formats, AI allowed students to identify and replicate coherent patterns in their own work. This reduced cognitive load and made essay writing more manageable. P6 shared, "When I see how the AI connects the ideas smoothly, I get a better sense of how to organize my own thoughts, so my writing makes more sense, too." P5 said, "It's easier to write when there's something to follow, so I ask AI for examples and then I imitate how they were done." P12 emphasized: "I give the topic and then ask for an outline so I can structure my essay properly and make it easy to read." These results echoed on the studies by Jaiswal *et al.* (2022) and Storey (2023), who found that AI tools improve students' ability to structure content. Song *et al.* (2023) further stressed how personalized feedback enhances essay coherence.

Students also became more adept at using coherence markers, which link sentences and paragraphs smoothly. Exposure to diverse transitions in AI-generated texts enabled them to move beyond basic terms like first, second, third to more advanced markers like however, similarly, and furthermore. P6 noted, "Before, I only knew simple transitional devices... but now, I'm also able to use words like however and similarly." P3 shared, "Before... the ideas were all over the place—going in different directions." P13 explained, "I feel like my ideas are more connected and clearer when I use AI." These improvements are supported by Gültekin *et al.* (2023) and Al-Khazraji (2019), who emphasized the importance of transition markers in academic writing. However, Farrokhnia *et al.* (2023) cautioned that while AI enhances foundational skills, teacher support is necessary for refining deeper-level coherence.

Beyond structural coherence, students also reported that AI tools improved the clarity of their writing. Tools helped them express complex ideas more simply and offered alternative phrasings that improved comprehension. P3 shared, "I really struggle with organizing my ideas... which is why ChatGPT is a big help for me." P9 noted, "When I started using AI, things became much clearer." P8 added, "Once the reader reads my work, they understand it better or they're able to grasp what I'm thinking." This aligns with Song & Song (2023), who found that AI helps students revise for better sentence structure, clarity, and cohesion. Zheldibayeva *et al.* (2025) also observed that AI-generated feedback significantly supported 11th-grade students in producing clear, coherent texts. Despite these perceived benefits, the students' submitted essays often showed mismatches between expectations and actual writing quality. Some writings still displayed vague or illogical flow and overly complex or unclear sentences. P3's essay showed "vague connections between ideas" despite claiming improved clarity. P9's writing included "overly complex sentences that hindered clarity." P8's work lacked clear argumentation despite self-reported improvements.

Increasing Productivity in Writing

The study revealed a key theme: AI tools significantly enhance students' writing productivity by improving efficiency and boosting confidence. AI tools contributed to more efficient writing by offering grammar corrections, generating ideas, and reducing cognitive load. Participants emphasized that these supports made the writing process faster and more manageable. For example, P2 shared, "My tasks become easier because I can quickly identify and correct my mistakes. I admit that I'm weak in grammar, so this is a big help for me to come up with better and more polished answers." P9 echoed this, stating, "As a student, there are so many tasks assigned, my mind gets overloaded, and sometimes I experience having no ideas at all. With the help of AI, it helps me come up with ideas so I can complete the task effectively." P11 added, "When I ask AI for ideas, writing becomes easier because I already have suggested ideas. I'm also able to come up with a concept or outline, so it becomes much easier to write the ideas for my papers."

These responses align with Lookadoo *et al.* (2025) and Agustina *et al.* (2024) found that tools like Grammarly improve technical accuracy and writing awareness. However, Fitria (2021) cautioned against overreliance, warning it may hinder long-term grammar mastery.

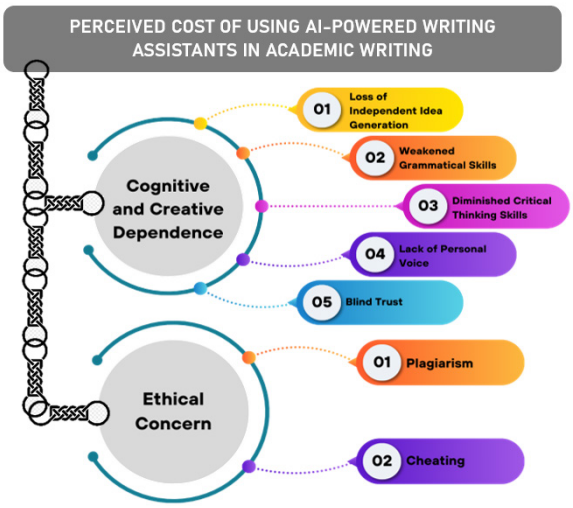
AI tools not only improved technical skills but also positively affected students' emotional engagement with writing. They reported feeling more confident and motivated as the tools helped them overcome anxiety and fear of mistakes. As P4 shared, "I feel that the quality of my writing improves when I use AI, unlike before." P2 similarly stated, "I'm really weak in grammar, so when I use AI, I'm more confident that the verb tenses in my essay are correct." These reflections indicate that as students gained assurance in their writing ability, their productivity also improved. Research by Utami and Ariati (2024) confirmed this, noting that tools like Canva Magic Write and Quillbot foster collaborative writing, idea development, and self-confidence.

Perceived Cost of Using AI-Powered Writing Assistants in Academic Writing

The main concerns of using AI-powered writing assistants in academic writing are encapsulated on the following themes and subthemes: Cognitive and Creative Dependence (loss of independent idea generation, weakened grammatical skills, diminished critical thinking skills, lack of personal voice, blind trust) and ethical concerns (plagiarism and academic dishonesty) as outlined in diagram below.

Cognitive and Creative Dependence

A dominant concern that emerged from the participants' narratives is the overreliance on AI tools, which impairs students' cognitive and creative capacities. While AI offers convenience and speed, its excessive use can hinder essential academic skills.



Students expressed difficulty in generating their own ideas due to habitual dependence on AI-generated content. Instead of brainstorming, many default to selecting from AI suggestions, which undermines creativity and independent thinking. P10 confessed, "I've noticed that I rely too much on AI, so I'm having a hard time starting a writing task on my own." P3 admitted, "Before, I was able to come up with my own ideas, but now it seems harder without the help of AI." The overuse of AI tools reduces students' capacity for creative problem-solving and independent decision-making (Zhai *et al.*, 2024; Lin *et al.*, 2024).

Moreso, participants noted a decline in grammatical knowledge, as they relied on AI for corrections rather than learning grammar rules. This detachment from the learning process has led to gaps in understanding and errors when AI is unavailable. P5 shared, "Since AI automatically handles grammar, I don't really pay much attention to it anymore." P14 reflected, "I used to really study grammar… but now that there's AI, I don't anymore." These insights align with García and Pérez (2022) and Capinding *et al.* (2024), who observed that AI dependency weakens active recall and grammar retention, contradicting the constructivist approach to meaningful learning through engagement.

In addition, AI's provision of instant solutions has led to a decline in students' analytical thinking and problem-solving efforts. Instead of grappling with content, students tend to accept AI answers passively. P10 noted, "AI makes my tasks easier, and often I feel like I'm not learning because I'm no longer being forced to think." P3 shared, "Now I struggle even just to come up with ideas." Research (Iskender *et al.*, 2023; Buçinca *et al.*, 2021) affirms that this overreliance results in shallow decision-making and limited academic inquiry, contrary to Cognitive Load Theory and Constructivist Learning Theory.

Anent to this regard, students reported that their writing sounded mechanical and lacked authenticity when AI tools were heavily used. This led to a disconnect from their work and a diminished sense of ownership. P1 commented, "AI's answers are very repetitive and very robotic… when I use AI, my work feels dull." P3 noted, "When I use AI, it feels like I'm suddenly good at English, even though I'm really not." This reflects the findings of Amirjalili *et al.* (2024) and Black *et al.* (2025), who observed that AI-generated texts lack the depth and individuality found in human writing, risking loss of intellectual authenticity.

Lastly, the troubling trend of students' uncritical acceptance of AI outputs. They believe them to be error-free and superior. This passive attitude discourages revision and undermines learning through self-assessment. P5 admitted, "I became dependent on AI, so sometimes I no longer check if there are still errors in my answers." P2 said, "Since it was made by AI, it must already be perfect." P12 stated, "AI is more capable than me, so I accept all the suggestions—it's not like I would've thought of those myself." This confirms Microsoft's (2025) findings that overconfidence in AI weakens students' editing skills and critical thinking, promoting cognitive shortcuts and reducing meaningful engagement with their work (Zhai

et al., 2024).

While AI tools offer efficiency and support, overreliance can erode essential academic competencies. From grammar and idea generation to critical thinking and personal voice, students risk becoming passive learners. The findings call for a balanced use of AI, ensuring that technology enhances—not replaces—cognitive and creative engagement in the writing process.

Proposed Intervention: Policy Brief on Using Assistive AI in Academic Writing

Context and Rationale

With the rapid rise of AI-powered writing assistants like ChatGPT, senior high school students—especially those in writing-heavy tracks such as HUMSS—are turning to these tools to support their academic writing. Many students have shared that AI helps them generate ideas, choose better words, and overcome writer's block. However, alongside these benefits, there are growing concerns about misuse, such as copying without understanding, weak grammar development, and reduced critical thinking. Teachers also face challenges in guiding students to use these tools appropriately, as there are no clear school-based protocols or training resources available. Without proper direction, the potential of these tools as learning aids can be lost.

To address this, a policy brief on using assistive AI tools in academic writing can be crafted. This policy outlines ethical guidelines and tips for using AI during different stages of writing, reflection prompts, and suggestions for teacher-facilitated discussions. The policy brief aims to encourage responsible, thoughtful, and creative use of AI tools. It permits students to take advantage of technology while still actively learning and thinking for themselves. With the support of teachers as facilitators, this intervention may help cultivate a culture of integrity and critical engagement in writing.

Component Parts

The policy brief is composed of seven sections: Introduction, Legal and Policy Framework, Overview of Commonly Used Assistive AI Tools in Academic Writing, Dos and Don'ts of AI Tools, Helpful AI-Supported Prompts, Reflection and Monitoring Tools, and References.

The Introduction sets the stage by outlining the brief's purpose, scope, and intended users. It highlights how the policy can assist schools, teachers, and students in using AI tools effectively and responsibly. It also frames AI as a supportive aid that enhances learning—not a shortcut—and provides strategies for teachers to promote ethical and meaningful student engagement with these tools. Then, the Legal and Policy Framework presents relevant laws, institutional policies, and ethical standards that guide responsible AI use in education. This section ensures that the policy is grounded in existing regulatory and moral contexts.

Following this, the Overview of Commonly Used Assistive AI Tools introduces tools such as ChatGPT, Grammarly, and QuillBot. It describes their key features and explains how they can support both students and teachers at different stages of the writing process.

To clarify appropriate usage, the Dos and Don'ts of AI Tools in Academic Writing section outlines practical and ethical boundaries. It encourages students to use AI for tasks like brainstorming and revision, while discouraging overreliance or academic dishonesty. Concrete examples are included to help distinguish acceptable from unacceptable practices.

Complementing this, the Helpful AI-Supported Prompts section offers sample questions and inputs students can use when engaging with AI tools across the writing process—from generating ideas to editing drafts. These prompts are designed to foster reflection, interaction, and deeper understanding, rather than passive use. To support intentional and reflective AI use, the Reflection and Monitoring Tools section provides resources like self-assessment questions, usage logs, and checklists. These tools help students evaluate how, why, and to what extent they are using AI in their academic work. Finally, the References section compiles all sources cited throughout the brief, ensuring transparency and scholarly integrity.

If thoughtfully implemented, this policy has the potential to modernize academic writing support, promote equity among learners, and address writing challenges across diverse groups. However, to fully realize these benefits, the policy must also confront key ethical, cognitive, and pedagogical considerations. Ethical guidelines must prevent plagiarism and overuse; cognitively, students must be encouraged to think critically and independently; and pedagogically, teachers need training and support to effectively integrate AI into instruction. With a balanced and comprehensive approach, the policy can transform writing instruction while preserving the development of essential academic skills and values.

CONCLUSION

Based on the study's findings, it can be concluded that AI-powered writing assistants play a significant role in enhancing the writing capabilities of Grade 12 HUMSS students. These tools support students by helping them overcome common writing challenges such as writer's block and limited vocabulary. Additionally, AI aids in generating and organizing ideas, improving the overall coherence of written outputs, and increasing productivity. The integration of such technology in writing tasks shows strong potential to elevate the quality of student compositions, offering real-time feedback and suggestions that foster continuous improvement in writing performance.

However, the study also underscores the importance of using AI tools in a responsible and guided manner. While these tools can be beneficial, there is growing concern about students becoming overly reliant. This may hinder the development of independent thinking and essential writing skills. Furthermore, ethical issues such

as plagiarism and misuse of generated content present risks to academic integrity. To address these concerns, the creation and implementation of a Policy Brief on the use of assistive AI in academic writing is recommended. Such a policy would serve to educate students on the appropriate and ethical use of AI tools, ensuring that these technologies support rather than replace critical learning processes.

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