

Editorial



Writing with AI, not by AI: Opportunities, challenges, and the future of academic writing

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Introduction

The rapid advancement of digital technologies, particularly the emergence of artificial intelligence (AI), has transformed the writing landscape in ways that were unimaginable only a few years ago. Since the public release of ChatGPT, AI-powered writing tools have become widely accessible and are increasingly used to summarize texts, generate research ideas and outlines, draft essays and literature reviews, and even produce entire manuscripts with remarkable speed and quality (Sok & Heng, 2024). Therefore, AI has become deeply integrated into academic writing practices, supporting students, teachers, researchers, and professionals across a wide range of disciplines.

The increasing use of AI in academic writing has created both unprecedented opportunities and significant concerns. On the one hand, it is widely acknowledged that AI offers invaluable opportunities for writers by supporting them to improve productivity, enhance language quality, facilitate idea generation, and reduce barriers, particularly for multilingual scholars and novice writers (Cardon et al., 2023). On the other hand, various concerns have been raised regarding originality, critical thinking, academic integrity, authorship, and the long-term implications of AI-generated text for learning, teaching, and research (Kasneci et al., 2023; UNESCO, 2023).

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Teachers, researchers, reviewers, and editors are now faced with a fundamental question: How can we harness the benefits of AI while simultaneously maintaining the academic values that underpin scholarly writing? In this context, this editorial argues that AI should be embraced as a writing support tool rather than rejected outright. It further argues that there is a strong need for AI writing literacy and appropriate policies that can help writers engage critically and responsibly with AI-generated content. In what follows, this editorial discusses the growing presence of AI-assisted writing, the risks of AI-generated content, the importance of developing AI literacy, the need for promoting responsible AI use, and the necessity of providing AI support to ensure that students, teachers, and researchers can benefit from the rise of AI use.

The growing presence of AI-assisted writing

Recent studies have indicated that AI-assisted writing is ubiquitous across educational and research contexts (Cardon et al., 2023; Hysaj et al., 2025). AI tools are now commonly utilized to brainstorm ideas, refine arguments, improve language quality, reorganize content, and provide immediate feedback on early drafts. These capabilities can enhance writing efficiency, improve the quality of written work, and reduce the time and cognitive effort required to complete academic writing tasks (Cardon et al., 2023; Kasneci et al., 2023). For multilingual scholars, AI-assisted writing tools can be particularly beneficial (Wu et al., 2026). As academic publishing remains heavily dominated by English-language communication, researchers who write in English as an additional language often face linguistic barriers that can hinder their ability to publish in international journals (Kim et al., 2025; Zheng & Guo, 2019). AI tools can help mitigate these challenges by enhancing grammatical accuracy, clarity, coherence, and academic style, enabling researchers to communicate their ideas more effectively (Sok et al., 2025; Xiao et al., 2026). Thus, AI has the potential to promote greater equity and inclusion in global scholarly communication and increase the participation of multilingual scholars in the international research community.

AI tools can also be used to support non-native English writers in generating ideas, improving linguistic accuracy, and revising drafts (Sol & Heng, 2024; Wang & Wang, 2025; Yang et al., 2025). In this sense, AI has the potential to improve access to academic writing by providing support to individuals who

may have limited access to language resources or writing support. Moreover, AI can provide writers with personalized, contextually relevant, and timely feedback that enables them to identify areas for improvement and develop academic writing skills through step-by-step revision processes. Prior studies have highlighted that the timely feedback provided by AI enabled students to revise their work quickly, resulting in considerable improvements in writing performance ([Ding et al., 2026](#); [Tan et al., 2023](#)). This suggests that, when used appropriately, AI can serve as a collaborator or peer reviewer that enhances the writing process rather than replacing writers' own critical thinking, originality, and authorship.

Due to the remarkable capabilities of AI technologies, attempts to prohibit their use entirely are unrealistic and represent only a short-term solution. Instead of asking whether AI should be used, there is an urgent need for educational institutions to emphasize how AI can be used effectively and responsibly to ensure its alignment with the core principles of academic integrity policies. As [Amigud and Pell \(2025\)](#) argued, the challenge is not simply whether AI should be used in education, but how institutions can balance the development of AI literacy with the preservation of academic integrity and critical thinking. This requires clear policies and practical guidelines on AI use, alongside the development of students' AI literacy, including the ability to craft effective prompts, critically evaluate AI-generated outputs, and use AI transparently and responsibly. Such an approach can enable educational institutions to better prepare students to use AI as a supplementary tool that enhances learning and academic writing while preserving human judgement, creativity, critical thinking, and authorship.

The risks of AI-generated text

While AI offers a range of benefits for enhancing academic writing, its risks should not be underestimated. The increasing use of AI-generated text raises critical concerns regarding the deterioration of critical thinking, intellectual development, originality, and academic integrity ([Sok & Heng, 2024](#)). One of the key concerns relates to the nature of writing itself. Writing is not simply a process of producing text; it is also a process of learning, thinking, and knowledge construction. According to [Flower and Hayes \(1981\)](#), writing involves complex cognitive activities, including planning, translating ideas into text, and revising. Similarly, [Bereiter and Scardamalia \(1987\)](#) argued that writing contributes to knowledge transformation, enabling writers to refine

their understanding and develop more sophisticated arguments through the act of composition.

When AI assumes a substantial role in generating content, writers may have limited engagement in these cognitive processes, which may in turn determine their intellectual development and critical thinking ability. Although AI can produce fluent and well-structured texts, such activities may not reflect a full understanding and learning. With ease of AI-generated outputs, writers may simply use such content without critically evaluating the underlying ideas, evidence, or reasoning (Xiao et al., 2026). As a result, the educational value of writing as a tool for learning and intellectual development may be diminished.

Another risk concerns the reliability of AI-generated content. Large language models are developed to predict plausible language rather than verify the factual accuracy of the information they produce. Therefore, they may generate fake references, inaccurate information, or improper interpretations (Kasneci et al., 2023). These issues are common in research on AI use in academic writing (Sok et al., 2025). In fact, they can be particularly problematic, as academic writing usually emphasizes the principles of accuracy, evidence, and transparency.

The increasing use of AI also raises concerns about originality and authorship. While AI can help writers improve clarity and organization, excessive dependence on AI-generated text may blur the boundaries between human and machine contributions. Questions regarding intellectual ownership, accountability, and the authenticity of scholarly work have been widely discussed in the context of higher education and academic publishing (UNESCO, 2023; Xiao et al., 2026). Furthermore, overreliance on AI may contribute to the homogenization of academic writing. Because many AI systems generate texts based on similar linguistic patterns and conventions, extensive use of these tools may lead to increasingly standardized writing styles. The diversity of scholarly voices, perspectives, and cultural expressions that enrich academic discourse could gradually be reduced if writers rely excessively on AI-generated outputs (Xiao et al., 2026).

These risks and concerns do not suggest that AI should be avoided. However, they highlight the importance of approaching AI-generated texts critically and

responsibly ([Sok & Heng, 2024](#)). The key challenge is not the existence of AI itself but the possibility that writers may use it unreflectively, allowing convenience to replace intellectual engagement. In this respect, AI writing literacy development plays a critical role in equipping writers with the necessary competencies to use AI as a supporting tool rather than a substitute for their own thinking. This includes the ability to evaluate the accuracy and quality of AI-generated content, recognize its limitations and potential biases, integrate AI outputs ethically and transparently, and maintain responsibility for the final written work. Developing these competencies can help ensure that AI enhances learning and writing processes while preserving critical thinking, academic integrity, and authorial agency.

The need for AI writing literacy development

The increasing use of AI in academic writing highlights the need for a new set of competencies. As [Cardon et al. \(2023\)](#) argued, AI literacy is becoming an essential skill in the AI era. However, in academic contexts, a more specialized competence—AI writing literacy—is of paramount importance. This skill extends beyond the ability to operate AI tools. It includes understanding how AI systems generate content, recognizing their limitations, evaluating the quality of generated outputs, verifying information, identifying biases, and maintaining intellectual ownership of ideas. Writers who rely on AI must, therefore, learn to critically assess AI-generated suggestions rather than accept them automatically without critical engagement and reflection. Such skills are closely aligned with the notion of critical AI literacy, which emphasizes the ability to evaluate and challenge AI-generated information rather than merely consume it uncritically ([Wang & Wang, 2025](#); [Yi, 2025](#)).

The importance of AI writing literacy is particularly evident among novice authors and students. While AI can provide useful support during the writing process, it can also create an illusion of competence. A sophisticated, well-written paragraph generated by AI may appear convincing even when the user has only a limited understanding of the concepts presented. Thus, educational institutions should focus not only on teaching students how to use AI but also on helping them understand when, why, and under what circumstances AI should be used.

In this regard, AI should be viewed as a collaborator rather than a substitute for human intellectual effort. For example, it can help teachers by serving as a co-

teacher (Pang et al., 2026). Thus, effective writing in the AI era depends not only on the sophistication of the technology but also on the quality of human judgment guiding its use, particularly the role of humans in utilizing AI for a specific purpose.

From AI detection to responsible AI use

Much of the current debate surrounding AI in education focuses on detecting AI-generated content. Universities and publishers have increasingly explored the use of AI-detection tools to identify possible misuse of generative AI (Perkins et al. 2024). While concerns regarding academic integrity are legitimate, a detection-centered approach may not provide a sustainable solution. Detection tools remain imperfect and often produce false positives and false negatives (Perkins et al. 2024). More importantly, an excessive emphasis on detection risks framing AI solely as a threat rather than as a tool that can support education and research. Such an approach may encourage compliance rather than critical engagement.

A more constructive approach involves promoting transparency and responsible use. Educational institutions and academic publishers should establish clear guidelines regarding acceptable and unacceptable uses of AI. These policies should address issues related to disclosure, accountability, authorship, verification, and ethical use of AI-generated content. Rather than asking whether AI is used, policies should focus on how AI is used and whether its use contributes to or undermines scholarly integrity.

Supporting writers in the AI era

The successful integration of AI into academic writing requires more than policies; it also demands practical support mechanisms that enable writers to navigate a rapidly evolving technological environment. Therefore, particular attention should be given to researchers and students working in developing countries and multilingual contexts, where access to writing support, mentorship, and research resources may be limited. For many scholars, especially those writing in English as an additional language, academic writing presents significant challenges related to language proficiency, mentorship, research training, and opportunities for scholarly publication (Flowerdew, 2019). In response, AI technologies can reduce some of these barriers by providing support for language refinement, idea organization, and manuscript development.

Recent research has suggested that AI can support multilingual writers in generating ideas, revising drafts, and improving linguistic accuracy (Wang & Wang, 2025; Yang et al., 2025). In contexts where access to experienced supervisors, professional editors, or academic writing support services may be limited, AI can serve as an additional resource that helps novice researchers participate more effectively in scholarly communication.

However, the benefits of AI can only be fully realized when users possess the necessary knowledge and skills to critically evaluate and refine AI-generated outputs. Without such competencies, AI may inadvertently reinforce existing inequalities by benefiting those who already possess stronger research and writing skills while providing only superficial support to those who need the most assistance. Therefore, efforts to promote AI writing literacy should be accompanied by broader investments in research capacity development, mentorship, and academic writing support, particularly in under-resourced educational settings. The goal should not be to replace human expertise with AI but to leverage AI as a tool that expands opportunities for scholarly participation while preserving the intellectual rigor that underpins academic inquiry.

In this regard, it is essential that educational institutions incorporate AI literacy and AI writing literacy into research methods courses, academic writing programs, and professional development initiatives. Mentorship programs and training initiatives should be in place to provide practical guidance on prompting techniques, verification strategies, critical evaluation of outputs, and ethical use of AI-generated content. In addition, academic journals play an essential role in clearly communicating expectations concerning AI use, disclosure practices, and authorship responsibilities. Such transparent practices can help ensure consistency while supporting authors in adopting responsible writing practices.

Close attention should also be given to supporting early-career researchers and emerging scholars. These individuals often face challenges related to writing, publication expectations, and language proficiency (Wu et al., 2026). When used appropriately, AI can provide valuable support (Sol & Heng, 2024).

However, without adequate guidance, it may also encourage dependency and undermine the development of essential writing competencies.

Conclusion

The emergence of generative AI represents one of the most significant developments in the history of academic writing. Its potential benefits are substantial, including increased efficiency, improved language support, enhanced access to scholarly communication, and assistance for novice writers. At the same time, concerns about the erosion of critical thinking, originality, accuracy, authorship, and intellectual development cannot be ignored.

The challenge facing educators, researchers, educational institutions, and publishers is therefore not whether AI should be used but how it should be used. Writing remains fundamentally a human intellectual activity. Although AI can assist in generating texts, it is essential that human writers take full responsibility for generating meaning, evaluating evidence, making judgments, and constructing knowledge. In this context, the goal should be writing with AI, not writing by AI.

Therefore, the future of academic writing should not be characterized by competition between humans and machines. Rather, it should be guided by a vision of responsible human-AI collaboration. Achieving this goal requires not only technological innovation but also the development of AI writing literacy, ethical guidelines, and institutional support systems that empower writers to use AI critically, responsibly, and effectively.

For many emerging researchers, particularly those working in multilingual and resource-constrained environments, the future challenge is not whether to use AI, but how to develop the critical capacities necessary to use it responsibly while preserving the intellectual rigor and scholarly voice that define academic inquiry. In an era where generating text has become increasingly effortless, the most valuable skill may no longer be the ability to produce words but the ability to evaluate, refine, and take responsibility for them.

Overview of this issue

This issue (Volume 6, Number 1) of the Cambodian Journal of Educational Research (CJER) features six articles, including three original research articles and three review articles. The first article, written by Vitou Tes, explores

Cambodian students' perceptions of their teachers' teaching strategies, their motivation to learn English, and their English learning strategies. Drawing on survey data from 175 Cambodian students of English as a Foreign Language (EFL), the study found that students held positive perceptions of their teachers' teaching strategies and demonstrated high levels of motivation to learn English. The findings further revealed significant positive relationships between teachers' teaching strategies, students' learning motivation, and their use of language learning strategies.

The second article, contributed by Nary Tao, examines Cambodian EFL students' AI literacy and experiences of using AI through a qualitative study. The findings indicated that students employed a variety of AI tools to support their English language learning. However, they also faced several challenges, including concerns about information accuracy, data privacy and security, and limited technological competence. The study highlights the importance of developing institutional AI policies and providing AI literacy training to help university students use AI effectively and responsibly.

The third article, contributed by Sophal Kao, examines the difficulties Khmer speakers encounter when learning and using English from linguistic and cultural perspectives. Drawing primarily on the author's professional experience, the article argues that these challenges stem largely from the influence of the Khmer language and cultural norms. It concludes by offering practical recommendations for addressing pronunciation and grammatical difficulties while fostering greater intercultural awareness and communication competence.

The fourth article, written by Korngleng Sear, examines strategies for mitigating negative emotions through a review of secondary literature. The article discusses several approaches to building emotional resilience, including maintaining the belief that adversity is temporary, cultivating hope, expressing gratitude, accepting one's humanity, and openly expressing painful emotions. It argues that successfully navigating life's challenges can strengthen individuals' emotional resilience and psychological well-being.

The fifth article, contributed by Samlei Chhoun, Vitou Tes, and Siengvon Mok, investigates the levels of 21st-century skills among Cambodian university

students. Based on survey responses from 232 participants, the study found that students demonstrated high levels of collaboration and critical thinking, while their creativity and communication skills were rated as moderately high. The findings also suggest that fourth-year students generally exhibited stronger critical thinking, collaboration, and communication skills than students in earlier years of study.

The final article, a review by Sour Sokh, Bunhe Harth, and Thearom Ret, focuses on informal workplace learning (IWL). It examines the conceptual foundations, historical development, and contemporary practices of IWL and discusses its implications for policy and practice within Cambodia's sub-national administrations. The authors argue that promoting IWL can enhance administrative competence, organizational adaptability, and the overall effectiveness of public governance.

Taken together, the articles in this issue contribute valuable insights into contemporary educational research and practice, particularly in the Cambodian context. They offer evidence-based perspectives on language education, AI adoption, student development, emotional well-being, and organizational learning, while highlighting implications for educators, researchers, policymakers, and practitioners.

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Declaration of AI use

During the preparation of this manuscript, the author(s) used ChatGPT to assist with developing the manuscript outline and identifying relevant references. All

AI-assisted content was critically reviewed, verified, and edited by the author(s), who take full responsibility for the accuracy, integrity, and final content of the published article.

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