

Artificial Intelligence Integration in the Acquisition of English Academic Writing

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Abstract. The rapid proliferation of Generative Artificial Intelligence (AI) has introduced a paradigm shift in higher education, particularly in the acquisition of English academic writing skills. This paper examines the transformative role of AI tools, analysing their pedagogical benefits against the significant challenges and ethical dilemmas they present. Through a comprehensive review of current literature and empirical studies, this analysis synthesises the dual nature of AI as both a powerful assistant and a potential impediment to developing core academic competencies. Key findings indicate that while AI offers substantial advantages in improving writing fluency, providing instant feedback, and enhancing learner engagement, it also poses risks related to academic integrity, over-reliance, and the potential erosion of critical thinking skills. The discussion is contextualised with a focus on the educational landscape in the Baltic region, highlighting local research and initiatives at institutions like the University of Tartu. The paper concludes that a successful integration of AI into academic writing pedagogy necessitates the development of critical AI literacy among students and educators, alongside the implementation of clear institutional guidelines to ensure that these technologies augment, rather than undermine, the fundamental goals of academic learning.

Key words: *artificial intelligence, academic writing, English for Academic Purposes (EAP), higher education, AI literacy, pedagogy, educational technology*

INTRODUCTION

With the public release of sophisticated generative AI models like ChatGPT¹, educational establishments are facing a new reality that demands careful consideration of how such tools can be integrated without harming the educational process or impeding learning outcomes (Dwivedi et al., 2023: 102642). The integration of AI in language acquisition has become a source of constant debate, presenting a dichotomy where these technologies are viewed as either a ‘villain or the champion’ in the classroom (Praphan and Praphan, 2023: 101072). On one hand, AI-powered tools offer innovative methodologies to augment language teaching and learning, with the potential to significantly enhance students' writing skills by providing automated assistance, corrections, and suggestions (Artiana and Fakhurriana, 2024: 112). On the other hand, their use raises profound concerns regarding academic

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integrity, the potential for over-reliance, and the deskilling of students in critical thinking and authentic writing (Kasneci et al., 2023: 3; Sahli et al., 2024: 286).

This paper aims to investigate the multifaceted impact of AI integration on the acquisition of English academic writing. It synthesises findings from recent empirical studies to explore the benefits and challenges as perceived and experienced by students and educators. The goal is to provide a balanced perspective on how these powerful tools are being used and to consider the pedagogical adjustments required to harness their potential responsibly. This topic is of particular relevance to the Baltic region, where educational institutions are actively navigating this new technological landscape. A recent study involving upper-secondary and university students in Latvia, for example, revealed a high awareness of AI tools but concluded that their use in academic writing remains ‘irregular, cautious and/or secretive’ (Farneste et al., 2025: 31). This indicates a pressing need for structured pedagogical approaches and clear institutional frameworks. By examining global trends and grounding them in local contexts, such as the research initiatives at the University of Tartu, this paper seeks to contribute to the ongoing discourse on creating an effective and ethical AI-integrated learning environment.

THEORETICAL BACKGROUND

The integration of AI into education is not merely a technological update but a pedagogical shift that intersects with established theories of learning and competence. To understand its impact on academic writing, it is essential to first define the core competencies involved in this complex skill and then to survey the landscape of AI tools designed to assist in its acquisition.

1 COMPETENCES IN ACADEMIC WRITING

Academic writing is a multifaceted competence that extends beyond mere linguistic proficiency. The European Commission’s framework on key competences defines literacy as ‘the ability to identify, understand, express, create, and interpret concepts, feelings, facts and opinions in both oral and written forms, using visual, sound/audio and digital materials across disciplines and contexts’ (European Commission, 2018: 5). In an academic context, this involves a sophisticated set of skills, including critical thinking, the ability to construct a coherent argument, the logical structuring of ideas, and the ethical use of sources through proper citation (Nesi and Gardner, 2012: 45). It requires writers to engage in a process of inquiry, analysis, and synthesis, rather than simply reporting information. The development of these skills is a primary objective of higher education, as they are foundational to knowledge creation and scholarly communication. The introduction of AI tools challenges educators to ensure that technology serves as a scaffold for these core competencies rather than a substitute for the intellectual labour they require.

2 AI-POWERED TOOLS FOR ACADEMIC WRITING

The ecosystem of AI tools available to students is vast and varied, catering to different stages of the writing process. These tools can be broadly categorised based on their primary function. For research and idea generation, platforms like Consensus, SciSpace, and ResearchRabbit use semantic search and citation network analysis to help students find relevant literature, summarise complex papers, and visualise connections between sources (Blainy, 2024; SciSpace, 2024). For drafting and content

creation, generative AI models such as ChatGPT, Gemini, and Claude can produce outlines, draft paragraphs, and help overcome writer's block by offering different angles on a topic (Oklahoma State University Library, 2024). In the revision and editing phase, tools like Grammarly, QuillBot, and Paperpal provide advanced grammar checking, stylistic suggestions, and paraphrasing capabilities to improve clarity and fluency (Goyibova et al., 2024: 3; Yomu AI, 2024). Finally, citation management software like Zotero and Mendeley automates the tedious process of formatting references, helping to ensure academic integrity (Tran et al., 2024: 12). The availability of these specialised tools means that students can receive AI assistance at nearly every step, transforming the traditional workflow of academic writing.

AI IN ACADEMIC WRITING: A DUAL PERSPECTIVE

The integration of AI in the acquisition of academic writing skills presents a dual-edged sword. On one side, it offers a host of pedagogical benefits that can enhance learning and efficiency. On the other, it introduces significant challenges and ethical concerns that require careful navigation by both students and educators.

1 PEDAGOGICAL BENEFITS

Empirical studies have begun to highlight the positive impacts of AI on student writing. A primary benefit is the provision of personalised and instantaneous feedback. AI tools can offer real-time suggestions on grammar, syntax, and style, allowing learners to make immediate corrections and internalise linguistic rules more effectively (Alhalangy and Abdalgane, 2023: 15; Haristiani, 2019: 3). This is particularly valuable in large classes where individualised teacher feedback is limited. According to a study by Su et al. (2023: 8), AI-powered platforms can enhance student engagement and performance by providing customised learning pathways. Furthermore, AI serves as a powerful tool for brainstorming and overcoming writer's block, helping students generate ideas and structure their arguments (University of Kansas, 2024). For English as a Foreign Language (EFL) learners, these tools can build confidence by improving writing fluency and reducing the anxiety associated with language production (Jeon, 2022: 112). Studies have also shown that AI-assisted revisions can lead to higher scores, particularly for students who initially struggle with writing, thereby offering a potential mechanism for levelling the playing field (Gao, 2023: 5).

2 CHALLENGES AND ETHICAL CONSIDERATIONS

Despite these benefits, the challenges are formidable. The most significant concern is academic integrity. Submitting AI-generated text as one's own work constitutes a new form of plagiarism, and while tools like Turnitin are adapting, detection remains a complex issue (Elkhatat et al., 2023: 7; Wignall and Hart, 2024). Another major risk is the potential for over-reliance on technology, which can hinder the development of students' own critical thinking, research, and writing skills (Hwang et al., 2020: 225; Sahli et al., 2024: 293). If students use AI as a crutch rather than a tool, they may fail to engage deeply with their subject matter. Accuracy is another critical issue; AI models are known to 'hallucinate' and generate factually incorrect information or fabricate non-existent sources, which can severely undermine the credibility of academic work (Oklahoma State University Library, 2024;

Thesify, 2024). Furthermore, AI algorithms can perpetuate biases present in their training data, potentially leading to the exclusion of diverse perspectives and the reinforcement of stereotypes (SciTechEdit, 2024). Finally, data privacy is a significant concern, as uploading unpublished research or personal reflections to third-party platforms carries inherent risks (Research Com, 2024).

AI-INTEGRATED PEDAGOGY IN THE BALTIC CONTEXT

Addressing the challenges of AI requires a deliberate pedagogical shift away from prohibitive measures towards fostering critical AI literacy. This involves teaching students how to use these tools ethically and effectively as allies in their learning journey (Cooper, 2023). This approach is gaining traction in the Baltic region, where institutions are beginning to formalise their strategies. The University of Tartu's Centre for Academic Writing and Communication (AVOK), for example, is actively involved in projects like FLAIR (Fostering Learners' AI Readiness), which aims to promote an ethical and meaningful use of generative AI by developing self-learning modules and transdisciplinary activities (University of Tartu, 2024a). AVOK also offers virtual exchange courses where students from different European universities can learn writing strategies, experiment with AI-based tools, and reflect on the writing process, thereby strengthening both their academic and intercultural competencies (University of Tartu, 2024b).

Such initiatives are crucial because, as the BWRITE research group highlights, academic writing is culturally dependent, with distinct rhetorical traditions in Estonian, Latvian, and Lithuanian (bwrite, 2024). A key pedagogical task is to teach students to critically evaluate AI-generated text, which often defaults to a generic, anglocentric style, and adapt it to fit specific disciplinary and cultural conventions. Effective pedagogical strategies include redesigning assignments to focus on the writing process rather than just the final product. For example, instructors can ask students to critique AI-generated summaries, use AI to brainstorm counterarguments, or document and reflect on their prompting process (University of Kansas, 2024). By making the use of AI transparent and a subject of analysis, educators can transform it from a potential tool for cheating into a valuable object of study that enhances critical thinking and metacognitive awareness (Mollick and Mollick, 2023).

CONCLUSIONS

The integration of artificial intelligence into the acquisition of English academic writing is an irreversible trend that presents both profound opportunities and significant risks. AI tools can demonstrably enhance the writing process by offering powerful support for research, drafting, and revision, leading to improved efficiency and linguistic quality. However, these benefits are counterbalanced by serious ethical challenges, including threats to academic integrity, the potential for deskilling, and issues of bias and inaccuracy. Simply banning these tools is an untenable and ultimately counterproductive strategy. Instead, the path forward lies in a proactive and pedagogical response.

Educational institutions, including those in the Baltic states, must develop clear, nuanced policies that guide the responsible use of AI. More importantly, educators must embrace the challenge of teaching AI literacy. This means equipping students with the skills to critically evaluate AI-generated content, to understand its limitations, and to use it as a tool to augment, not replace, their own intellectual

engagement. By redesigning curricula and assessments to focus on process, reflection, and critical thinking, educators can transform AI from a perceived threat into a powerful educational ally. The future of academic writing will not be about choosing between human and machine, but about fostering a new synergy where technology, guided by human intellect and ethical principles, enhances our capacity for scholarly inquiry and communication.

REFERENCES

- Alhalangy, B. and Abdalgane, M. (2023) The role of artificial intelligence in enhancing EFL students' writing skills. *Shanlax International Journal of English*, 12 (1): 14-21.
- Artiana, Y. and Fakhurriana, A. (2024) The transformative role of artificial intelligence in English language learning. *Journal of English Language Teaching and Linguistics*, 9 (1): 111-125.
- Blainy (2024) *11 Best AI Tools for Research Paper Writing in 2025*. Available from <https://blainy.com/best-ai-tools-for-research-paper-writing/>.
- bwrite (2024) *About BWRITE*. Available from <https://www.bwrite.ut.ee/>.
- Babayev, J. (2023, December). Usage of audio and video tasks in language teaching. In *Publisher. agency: Proceedings of the 5th International Scientific Conference «Modern scientific technology»(December 21-22, 2023). Stockholm, Sweden* (p. 6).
- Babayev, J. (2023, December). How to teach a foreign language through CLT. In *Proceedings of the 4th International Scientific Conference" Interdisciplinary Science Studies* (p. 123).
- Babayev, J. (2021). The role of instructional materials in language learning. *ELMI XƏBƏRLƏR, Humanitar elmlər seriyası*, 2, 29-35.
- Cooper, G. (2023) Examining science education in ChatGPT: an exploratory study of generative artificial intelligence. *Journal of Science Education and Technology*, 32: 444-452.
- Dwivedi, Y. K., Kshetri, N., Hughes, L. et al. (2023) Opinion paper: 'So what if ChatGPT wrote it?' Multidisciplinary perspectives on opportunities, challenges and implications of generative conversational AI for research, practice and policy. *International Journal of Information Management*, 71, Article 102642.
- Elkhatat, A., Elsaid, K. and Almeer, S. (2023) The impact of artificial intelligence on academic integrity: a review and future research directions. *Journal of the American Society for Information Science and Technology*, 74 (11): 1-15.
- European Commission (2018) *Council Recommendation on Key Competences for Lifelong Learning*. Brussels: European Commission.
- Farneste, M., Leijen, D. and Roze, L. (2025) (forthcoming) Artificial Intelligence Integration in Acquisition of English Academic Writing: a comparative analysis of student perspectives in school and university settings. *Baltic Journal of English Language, Literature and Culture*, 15: 31-50.

- Gao, Y. (2023) A study on the impact of ChatGPT-assisted revision on the quality of English writing. *Journal of Educational Technology Development and Exchange*, 16 (2): 1-18.
- Goyibova, N., Muslimov, N., Kannazarova, Z. et al. (2024) Exploring the impact of artificial intelligence on academic writing: a bibliometric analysis of trends, advancements, and ethical challenges. *Forum for Linguistic Studies*, 6 (3): 1-18.
- Haristiani, N. (2019) Artificial intelligence (AI) chatbot as language learning medium: an inquiry. *Journal of Physics: Conference Series*, 1387, Article 012020.
- Hwang, G. J., Chien, S. Y. and Li, J. J. (2020) A study of the effects of a personalized learning environment on students' learning outcomes and cognitive load. *Computers & Education*, 144, Article 103702.
- Jeon, J. (2022) The effects of AI chatbot-based learning on EFL learners' speaking competence and learner perception. *Multimedia-Assisted Language Learning*, 25 (3): 107-128.
- Kasneci, E., Seßler, K., Küchemann, S. et al. (2023) ChatGPT for good? On opportunities and challenges of large language models for education. *Learning and Individual Differences*, 103, Article 102274.
- Mollick, E. and Mollick, L. (2023) Using AI to implement effective teaching strategies in classrooms: five strategies, including prompts. SSRN. Available from <https://dx.doi.org/10.2139/ssrn.4406333> [Accessed on 25 June 2025].
- Nesi, H. and Gardner, S. (2012) *Genres Across the Disciplines: Student Writing in Higher Education*. Cambridge: Cambridge University Press.
- Oklahoma State University Library (2024) *AI Tools*. Available from <https://info.library.okstate.edu/AI/tools> [Accessed on 25 June 2025].
- Praphan, W. and Praphan, K. (2023) AI technologies in the ESL/EFL writing classroom: the villain or the champion? *Journal of Second Language Writing*, 62, Article 101072.
- Research Com (2024) *The Role of AI in Academic Research*. Available from <https://research.com/research/the-role-of-ai-in-academic-research> [Accessed on 25 June 2025].
- Sahli, N., Boughena, K. and Abdelhadi, A. (2024) A systematic review of empirical studies on the impact of artificial intelligence on university students' writing skills. *Annals of the University of Craiova, Psychology, Pedagogy Series*, 46 (2): 285-297.
- SciSpace (2024) *AI Writer for Research*. Available from <https://scispace.com/ai-writer> [Accessed on 25 June 2025].
- SciTechEdit (2024) *AI in Academic Writing: Pros, Cons, and Ethical Considerations*. Available from <https://scitechedit.com/ai-in-academic-writing/> [Accessed on 25 June 2025].

- Su, Y., Wu, Y. and Liu, Y. (2023) 'The impact of AI-powered writing assistance on EFL learners' writing performance and self-efficacy. *Journal of Language Teaching and Research*, 14 (4): 986-998.
- Thesify (2024) *When Does AI Use Become Plagiarism?* Available from <https://www.thesify.ai/blog/when-does-ai-use-become-plagiarism-what-students-need-to-know> [Accessed on 25 June 2025].
- Tran, T. V. B., Nguyen, T. T. H. and Tran, V. B. U. (2024) AI tools in learning academic writing: benefits and challenges for MA students in the English language studies at the Industrial University of Ho Chi Minh City. *International Journal of AI in Language Education*, 2 (1): 1-15.
- University of Kansas (2024) *Ethical Use of AI in Writing Assignments*. Available from <https://cte.ku.edu/ethical-use-ai-writing-assignments> [Accessed on 25 June 2025].
- University of Tartu (2024a) *Centre for Academic Writing and Communication*. Available from <https://ut.ee/en/centre-academic-writing-and-communication> [Accessed on 25 June 2025].
- University of Tartu (2024b) *FLAIR: Fostering Learners' AI Readiness*. Available from <https://maailmakeeled.ut.ee/en/content/centre-academic-writing-and-communication> [Accessed on 25 June 2025].
- Wignall, G. and Hart, E. (2024) School-research partnerships – plagiarism and student use of AI. *Teacher Magazine*. Available from https://www.teachermagazine.com/au_en/articles/school-research-partnerships-plagiarism-and-student-use-of-ai-tools [Accessed on 25 June 2025].
- Yomu AI (2024) *10 Best AI Tools for Clear Academic Writing in 2025*. Available from <https://www.yomu.ai/blog/10-best-ai-tools-for-clear-academic-writing-2025> [Accessed on 25 June 2025].