## *[Editorial]* Implications and future directions for Language Teaching and Learning in Asia

## Integrating genAI tools in English language teaching and learning: Insights from Asia

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When ChatGPT by OpenAI launched in November 2022, it took the academic and professional worlds by storm with its capabilities and versatility. In the workplace, generative AI (genAI) tools like ChatGPT have proven invaluable, offering not just support but also assistance in various critical workplace tasks such as writing and communication, consolidation of sources and resources, as well as providing summaries, syntheses, and preliminary evaluations of documents and artefacts. These tools have significantly enhanced workplace efficiency.

The revolutionary impact of genAI tools is similarly felt in educational contexts, albeit with heightened scrutiny and skepticism. In the ensuing months, institutional responses ranged from barring the use of genAI tools for teaching and learning purposes to cautiously integrating these tools. Concerns relate to the implications of the very capabilities of these genAI tools. Prominent scholars, Chomsky, Roberts, and Watumull (2023) contend that machine learning is about learning patterns and making predictions based on these patterns, and while AI tools may surpass human processing speed and memory size, creativity, critical judgments, and intellectual insights, and other distinctively human cognition cannot be conveniently replaced by AI.

Two years after the launch of ChatGPT, those who anticipated the genAI wave to subside, like the pandemic, might be disappointed to find that advancements in large language models (LLMs) have led to the creation of more sophisticated models with enhanced capabilities. In response, educational institutions have introduced interim policies and guidelines for the use of genAI tools in teaching and learning. At the classroom level, instructors and students have started to learn about these tools and get familiarised with their use for educational purposes. At a broader level, as noted by Warschauer and Xu (2024), we have now entered an era where genAI applications are no longer merely pedagogical tools; instead, they have become essential components of how we approach reading, writing, accessing and producing knowledge.

In this special issue, we present five articles that, while focusing on diverse aspects of genAI tools, collectively offer valuable insights into their impact on English language teaching and learning within secondary school and higher education contexts.

The first two articles examined instructors' and students' readiness, perceptions, and anxiety regarding the use of genAI tools. The study by De Guzman, Tenedero, Gapas, and Deabanico focused on higher education, while Navales' research targeted senior secondary schools. Both studies revealed a positive attitude toward the use of these tools. Respondents particularly valued genAI tools as a writing assistant, addressing language-related issues, generating ideas, and organizing content. However, respondents in Navales' study also noted the tools' limitations in translation. Both articles emphasize the importance of ethical use such as definition of plagiarism and authorship, suggesting that it could be supported through clear guidelines and policies.

The next two articles explored the integration of genAI tools into classroom settings, illustrating use cases where these tools were incorporated into the writing process and the preparation for the Question and Answer section of oral presentations. E and Wai-Cook presented two cases: one involving an undergraduate course focused on academic writing and critical thinking, and another involving an English for Academic Purposes course at the graduate level. In the undergraduate course, students were introduced to Consensus as a tool for horizon scanning and sourcing materials related to their writing topics. In the graduate course, students were tasked with assessing the strengths and weaknesses of a ChatGPT-generated critique based on content, organisation, and language use. Consistent with the findings of De Guzman, Tenedero, Gapas, and Deabanico, as well as Navales, respondents found generative AI tools helpful in highlighting and suggesting language revisions and in gathering relevant resources, although they noted limitations in content production and accuracy.

In Toh's study, students used ChatGPT to simulate the Question and Answer session, with ChatGPT posing questions and students practising their responses. These questions were aligned with the revised Bloom's taxonomy. Toh discovered that, although ChatGPT was capable of asking higher-order thinking questions, its primary limitations lay in contextualization and providing feedback on prosodic elements.

The Special Issue concludes with Domingo and Lintao's systematic review of research on genAI tools for writing, which they refer to as AI-powered digital writing tools (AI-DWTs). Following the PRISMA model, their review focused on studies conducted from the launch of ChatGPT in November 2022 to the second quarter of 2024. Their findings indicated that research employing experimental designs used quantitative and mixed methods, with data collection involving pre- and post-tests along with perception survey questionnaires. Analysis methods predominantly included paired sample t-tests and independent-sample t-tests for the pre- and post-test model, as well as thematic analysis for qualitative data. They

recommend that future research designs incorporate observational studies to explore how students interact with generative AI tools.

The findings from these five articles reveal three key similarities regarding the use of genAI tools for learning. Firstly, despite the advanced capabilities of genAI tools, there remains a healthy skepticism concerning the accuracy and reliability of genAI-generated content. Secondly, there seems to be an urgent need for educational institutions to establish clear guidelines on the ethical use of such tools. Lastly, all articles emphasize the necessity for further research to better understand the implications and potential applications of genAI tools for various academic purposes.

Keeping these in mind, what's next? We suggest three key areas of focus and research.

Firstly, it is essential to re-assess our curricula for language, writing, communication, and critical thinking, including their learning outcomes, assessments, rubrics, and teaching methodologies. For example, given the advances in powerful and sophisticated genAI tools, we must consider whether students should continue to learn what have long been considered fundamentals of language learning, such as grammar, sentence structure, and vocabulary. It is equally important to be mindful of the diverse range of students, particularly in the Asian context, which spans from English as Foreign Language learners to near-native language users. For the latter group of students studying in an English as a Medium of Instruction environment, it is crucial to preserve voice and agency. Future research should focus on considerations for changes in curricula, assessments, rubrics, materials, and teaching approaches to establish good practices in the classroom.

Secondly, the nature of interactions needs to be re-examined. Interactions encompass not only peer-to-peer and student-to-teacher exchanges but also students' interactions with genAI tools, texts, audio, and video artefacts across multiple platforms and modes. In-depth research designs including observations suggested by Domingo and Lintao, ethnographic studies, or autoethnographic approaches, could provide richer insights into how and what students learn. These methods could also illuminate ways in which creativity, innovation, and critical thinking might be enhanced with the support and integration of genAI tools. Potential research areas could include interactional analysis, and feedback literacy, relational pedagogy.

Finally, to support these efforts, English Language Teaching (ELT) instructors need to develop AI literacy. It is essential for instructors to become familiar with genAI tools to understand their affordances, limitations, biases, risks, and potentials. While readiness and perception studies offer a good starting point, it would also be valuable to explore how instructors navigate these tools and make necessary adjustments to their teaching and assessment practices. Instructors should create assessment tasks that test students' higher order thinking skills and consider how they should evaluate students' responses in their written and oral assignments.

We anticipate that this Special Issue will serve as just the beginning of many exciting conversations and research opportunities.

## References

Chomsky, N., Roberts, I., & Watamull, J. (2023, March 8). The false promise of ChatGPT. https://www.nytimes.com/2023/03/08/opinion/noam-chomsky-chatgpt-ai.html

Warschauer, M, & Xu, Y. (2024). Generative AI for language learning: Entering a new era. Language Learning & Technology, 28(2), 1–4. https://hdl.handle.net/10125/73569

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