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# AI-writing tools in education: if you can't beat them, join them

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**Abstract:** The release and rapid diffusion of ChatGPT has forced teachers and researchers around the world to grapple with the consequences of artificial intelligence (AI) for education. For second language educators, AI-generated writing tools such as ChatGPT present special challenges that must be addressed to better support learners. We propose a five-part pedagogical framework that seeks to support second language learners through acknowledging both the immediate and long-term contexts in which we must teach students about these tools: understand, access, prompt, corroborate, and incorporate. By teaching our students how to effectively partner with AI, we can better prepare them for the changing landscape of technology use in the world beyond the classroom.

**Keywords:** artificial intelligence; generative AI; second language learning; writing instruction

With the release and rapid diffusion of ChatGPT, teachers and researchers alike have been forced to grapple with the beast that is artificial intelligence (AI) and its consequences for education. Reactions have ranged from optimism regarding its capabilities (Greene, 2022; Roose, 2023) to fear for the future of education, especially writing instruction (Herman, 2022; Weissman, 2023). For second language educators in particular, AI-generated writing tools such as ChatGPT seem especially problematic, as the vast potential of these tools for communication across languages regardless of the user's own skill level threatens to rob second language learners of essential learning opportunities.

These fears are reasonable and unavoidable; as with any technological innovation, there are numerous important factors involved in implementing new technologies that must be considered to best support student learning. From an instruction perspective, AI-generated writing appears to offer students an easy way out of the challenges involved in learning a second language, as the tool allows

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anybody to generate native-like text on any subject without needing expertise in that topic. From an ethical perspective, these tools can further blur the line between acceptable use of external learning aids and academic dishonesty – a boundary that is already often difficult for second language learners to navigate in their studies. Even considering just these two issues, it is only natural that educators may be hesitant to introduce their students to AI-based tools at all.

However, as tempting as it is to resolve the problem of ChatGPT and other AI tools by banning them from education altogether, we argue that doing so would be impossible. ChatGPT and similar AI-based tools are ubiquitous and will continue to be present for the foreseeable future, both inside and outside the classroom. The integration of generative AI into other products such as Microsoft's Bing, the recent release of GPT-4, and the development of similar tools by Apple, Google, and other major companies all suggest that AI-generated writing is here to stay and will be widely accessible to the public.

Furthermore, even if we could ban AI from education, we shouldn't. ChatGPT and similar tools offer powerful affordances for second language learners that should not be discounted. For students who are not native English speakers, AI-based writing tools offer functionalities that can help these learners meet expectations placed upon them to communicate effectively in English in academic and career spheres. While these functionalities, including translation help, paraphrasing suggestions, and spelling and grammar checks, are common in many other software products already, they are often offered in piecemeal fashion, requiring the user to navigate many distinct platforms in order to get assistance. AI-based tools, on the other hand, roll all these into one platform – and the tool can even serve as a thinking partner capable of adapting its responses to the specific needs and wants of the user. In terms of accessibility and functionality, there are clear advantages that these tools can offer.

We must also consider the changing landscape of education and how those changes reflect the expectations and demands of the workplace. If AI-based tools are banned in the classroom, students will lose essential opportunities to learn how to effectively use those tools in their future workflows. In a world that increasingly values the use of AI in the workplace, students who lack experience with manipulating AI tools to increase their productivity and efficiency will fall behind those who do have the experience and skills to effectively make use of those tools. Second language learners already “start behind” those who have the capital, both linguistic and financial, to be able to exploit and benefit from new technologies; failing to provide these learners with guidance on how to effectively use AI-based tools will not only detract from their opportunities for future career success, but also further exacerbate existing inequalities.

The capacity of these powerful tools to shape the future of education is undeniable. As teachers and education researchers, we must take responsibility for our roles in helping students develop the skills and knowledge they need to succeed. We argue that prohibiting the use of AI-based tools in the second language classroom will only hurt our students' learning and chances for success beyond the classroom – thus, we must find a way to tame the beast of AI to support our students in their future endeavors.

This is, of course, easier said than done. When considering how to integrate AI-based tools into the second language classroom, we must center the needs of second language learners. With this in mind, we propose a pedagogical framework that recognizes both the immediate and long-term contexts in which we must teach our students about these tools. This framework focuses on promoting AI literacy and consists of five elements: understand, access, prompt, corroborate, and incorporate.

First, students need to understand the capabilities of and biases inherent in AI-based tools, as this will help them with identifying when these tools would advantage or disadvantage them. By discussing and modeling the use of these tools in the classroom, instructors can guide students' exposure to these tools and help students recognize when it is or is not appropriate to use AI-generated text in their own learning process. If integrated alongside sound second language pedagogy, these tools can promote student learning by adjusting the difficulty of complex reading passages, revising written work and explaining those revisions, and provoking reflection on differences between students' own writing and AI-generated writing. Through teaching students how they can tangibly use these tools in their own learning, educators can create strong foundations for their students' immediate learning and long-term use of AI-based tools in educational and professional contexts.

Second, students need to be able to access and navigate AI-based tools to assist across varied tasks. As discussed above, these tools can offer many distinct functionalities through just one interface, which can make it easier for second language learners to easily access different features as needed. However, for students to identify the functionality that is most useful in fulfilling a specific goal or task, they need to be exposed to and shown all of the possibilities. If students do not know what the tool they are using is capable of—for example, generating example sentences and adapting those sentences to a particular writing task—they will not be able to fully navigate and use the tool to its fullest potential. In this way, students' access to the tool is limited by their understanding of the tool's capabilities.

Third, students need to prompt the AI effectively to generate useful and good content. Without adequate knowledge of how to ask and “talk” with AI, students' access to these tools will be restricted to just generating surface-level or overly general content. Good prompting requires that learners are aware of how the tool

works, including knowledge of how to interact with the tool's interface and the AI itself. This is in addition to the requirement that users know what the text output of the tool should look like regarding, for example, the tone of the text and the audience for which the text should be generated. Pedagogical efforts to support students in constructing and refining their prompts should thus focus on orienting their questions to match their goals for using the tool – a process that can be additionally beneficial for second language learners' development as writers and communicators.

Fourth, students should have frequent opportunities to corroborate the accuracy of the content generated by AI. These tools are based on large-language models that are typically trained on vast amounts of text data and work via text prediction based on that training; as such, while the text they generate is consistently coherent and natural sounding, they are often not reliable or accurate when asked to provide interpretations of what they have generated. In addition, the potential for these AI-based tools to reproduce biases present in the text they are trained on makes it even more important for second language instructors to work with their students to build a strong understanding of how to engage with, fact-check, and question these AI tools.

Finally, students need to learn how to appropriately and ethically incorporate AI-generated content into their own work. In the same way that students should be taught how to cite their references in their work, so should they be taught how to note and cite the role of AI-based tools in their writing process. This is no small task, however, especially as there has yet to be a consensus on how to properly do so. While OpenAI's policy that text generated by ChatGPT should be "clearly disclosed in a way that no reader could possibly miss, and that a typical reader would find sufficiently easy to understand" (OpenAI, 2023) doesn't address this concern entirely, it is a sufficient, if temporary, stopgap. As we work toward a more concrete and refined measure, inviting students to engage in this conversation regarding ethics will be important in shaping their understanding of how to engage with AI-based tools and informing future discussions among teachers and educational researchers about best practices for ethical use.

AI-based tools such as ChatGPT certainly bring something new to the table; however, they are not the first to substantially transform language education. In the 1990s, we began to grasp that computers were not just a useful tool for teaching language, but were reshaping the entire terrain of language use – and we set out to meet the challenge of teaching new forms of digital literacy (see, e.g., Warschauer, 1999). More recently, we have also begun to realize that Google Translate is not an enemy to be avoided but a tool to be exploited in language instruction (see, e.g., Knowles, 2022). ChatGPT now presents the biggest challenge yet, but it is one we can meet by helping our students learn what Paul Allison has called "emergent AI discourse" (personal communication, March 2023).

In conclusion, as the idiom goes, “If you can’t beat them, join them.” AI-generated writing is far too strong to beat – but we can, and must, teach our students how to partner with it. Let’s get started!

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