

## **Promoting AI Literacy among English Language and Literature and Translation Majors**

Malila Carvalho de Almeida Prado  
BNU-HBKU United International College

### **Abstract**

This paper explores the effects of instruction that promoted AI literacy in English Language and Literature and Translation courses at an English as a Medium of Instruction (EMI) institution in southern China following the launch of ChatGPT-3, which prompted a global debate on the role of AI in education. It explores how pedagogical frameworks and teacher-student relationships shaped student engagement with AI while considering the technologization of education and its impacts on second language writing instruction. The study involved two different groups: Year 1 students in an Introduction to Corpus Linguistics course, and Years 3 and 4 students in a Learning through Digital Narratives course. Following the AI literacy framework suggested by Tseng and Warschauer (2023), the courses incorporated a variety of activities intended to facilitate students' reflection on the affordances and limitations of AI tools and AI-generated products. Findings show that while AI tools can enhance text quality, they can also produce results that can be either vague or authoritative, potentially erasing the students' voice or style. The paper concludes by highlighting how teachers and students can benefit from their increased awareness of the potential and limitations of AI as well as the integration of AI into the curriculum to promote AI literacy in EMI higher education.

*Keywords:* AI literacy, L2 writing; corpus linguistics, digital narratives, higher education

---

Corresponding author: Malila Carvalho de Almeida Prado. Email: [malilaprado@uic.edu.cn](mailto:malilaprado@uic.edu.cn)

## Introduction

More so than ever given recent advances in Artificial Intelligence (AI), the digital world is reshaping society and communication and redefining interactions, information exchanges, teaching, and assessment (Kohnke et al., 2023a; Rudolph et al., 2023). In particular, the impact of AI around the world is evident in the common issues it has raised, including, among others, fear of textual appropriation and plagiarism (Eaton, 2023; Moorhouse et al., 2023; Warschauer et al., 2023), lack of authenticity, creativity and reliability (Bishop, 2023; Blodgett et al., 2020; Habib et al., 2024), and cultural bias (Blodgett et al., 2020; Dai & Hua, 2024). Above all, the quality of AI-generated texts and machine translation tools is perceived to be a threat to both current and future translators and language teachers but also to prospective students in the field (Tavares et al., 2023).

AI chatbots such as ChatGPT (OpenAI, 2023) have gained momentum among students, particularly thanks to the human-like, natural-sounding responses (Bishop, 2023) generated by those tools. However, students might judge AI-generated texts to be more “natural” than those that they may be able to produce (Kohnke et al., 2023a). As a result, students may fail to identify elements of those texts that

might sound robotic and make a negative impression on the reader (Berber Sardinha, 2024). In fact, Liang et al. (2023, p. 3) argue that texts produced by non-native writers of English are more likely to be labeled as AI-generated because they “may increasingly use GPT legitimately as a way to improve their English and adopt certain grammatical structures common in GPT models.” This, in turn, would marginalize this very large group of English writers (including the author of this paper), thus promoting inequity, an outcome that is very much against the aims of the *AI for All* campaign initiated by UNESCO. To tackle this difficulty, Liang et al. argue for promoting dialogue among all stakeholders involved, including policy makers, teachers, students, and materials developers.

This paper reports on how I personally worked to address these issues while working with English and Translation majors in an English as a Medium of Instruction (EMI) institution based in China when the launch of ChatGPT-3 provoked a global response from universities around the world. It discusses how and why pedagogical frameworks guiding the use of AI in the classroom were particularly helpful, and even more notably, it highlights the importance of teacher-student relationships in the use of technology in teaching and learning.

## **The Technologization of Education**

Studies have consistently demonstrated that teachers often lack an understanding of the affordances of digital technologies and pedagogical implications (Chiu, Moorhouse, et al., 2023; Kohnke et al., 2023b). Nevertheless, the issue goes further; even with advances in pedagogies that are more inclusive of multiliteracies (Mills, 2009) and digital literacies (Jones & Hafner, 2012), the digital world does not appear to have come close to the English language classroom, where decontextualized texts, essay writing, and overt grammar correction retain their preeminence (Mills, 2009).

As Jones and Hafner (2012, p. 13) have argued, “digital literacies involve not just being able to operate digital tools like computers and mobile phones but also the ability to adapt the affordances and constraints of these tools to particular circumstances.” Digital literacy encompasses the skills needed to communicate, interact, and create meaning using various digital modes and formats (Warschauer, 1999). This suggests a need for a more comprehensive view of multiliteracies, particularly regarding the understanding of what a text is, ranging from questioning the prioritizing of canonical literary texts at the expense of popular, accessible, online texts (Mills, 2009) to problema-

tizing the continued preference for texts that adhere to monolingual discourse and present normalized, highly regulated language (Galante et al., 2023), the language model on which AI chatbots are trained (Blodgett et al., 2020; Rudolph et al., 2023). The recent Covid pandemic spurred the adoption of technology through efforts to make classrooms virtual, and the surge in the use of computer and mobile devices strongly impacts education and research, with questions arising as to how to promote interaction when the teacher-student relationship is mediated by a screen (Eaton, 2023; Zawacki-Richter et al., 2019). A second wave soon followed suit, with sudden attention given by the media to AI technologies and to their potential to impact the classroom, especially following the launch of ChatGPT-3 in 2022. Above all, the changes brought about by these emerging technologies have spawned debates in the mainstream media and led some critics to imply that teachers were not ready to adapt (Verma, 2023).

However, these critics seem to have failed to recognize that students suffered considerable negative consequences from online classes during the pandemic, with many countries’ educational systems still working to catch up to this day. The exposure to too much screen time is now being investigated as a major cause of anxiety,

depression, and social disorders (Boer et al., 2023). Similarly, excessive use of technology in the classroom, or the technologization of education, may have brought about a “systemic depersonalization of human relations” that has caused “social disconnection, alienation and dehumanization” (Laura & Chapman, 2009, p. 289), affecting relationships between students and, most dramatically, between teachers and students (Guilherme, 2017).

To tackle these challenges and with a view to assisting teachers with the proper use of technology, some pedagogical frameworks designed to employ AI tools in the classroom have been suggested, particularly in higher education settings (Kohnke et al., 2023a; Tseng & Warschauer, 2023). Moreover, these frameworks do not suggest that AI will take over teachers’ jobs; on the contrary, they place the teacher at the center of the decision-making process. As Guilherme (2017) argues, the teacher-student relationship needs to be grounded in a mutual, empathetic understanding of each other, and even if they seem to be capable of having human-like conversations, AI cannot substitute nor transcend real human relationships. Guilherme also posits that “the technologization process favors a diminished understanding of education as the mere learning of skills” (p. 50), when education should in fact incorporate “character formation” (p. 48).

In this regard, UNESCO (2024) affirms that:

UNESCO’s human-centric approach advocates that the design and use of AI should serve the development of human capabilities, protect human dignity and agency, and promote justice and sustainability throughout the entire AI life cycle and all possible human-AI interaction loops. Such an approach must be guided by human rights principles and respect for the linguistic and cultural diversity that defines the knowledge commons. A human-centered approach also requires that AI be used in ways that ensure transparency and explainability, as well as human control and accountability. (p. 15).

If we teachers are responsible for guiding their students through the new requirements the AI era imposes, the next questions we need to ask ourselves are: “How can we do this?”, and “Are we ready?”

### **In the Eye of the Storm**

In their review of studies on AI and education over a span of 30 years, Zawacki-Richter et al. (2019) note that very few of these address teachers; instead, the usual focus is on the tools or the students. Following the launch of ChatGPT-3, teachers rushed to workshops, conferences, and

courses in AI. According to a Washington Post article, teachers are ill-equipped to deal with the challenges that await them, including fabricated citations and texts that are too good to have been written by students (Verma, 2023). For decades now teachers have been blamed for a reluctance to welcome technology (including computer-related technology) because of concerns over accessibility, teachers' choice over their pedagogical practices, even top-down impositions not under the control of the teacher, such as curriculum and assessment policies (Berendt et al., 2020; Blodgett et al., 2020; Rudolph et al., 2023). Even when technology is at the disposal of teachers, it is used to perpetuate traditional practices: we may use classrooms fully equipped with computers, smartboards, top-quality sound boxes and microphones, and state-of-the-art projectors, but the seating configuration remains as it has been for centuries: board at the front, teacher looking at the students, who are sitting at their stationary desks positioned to face the board (Rudolph et al., 2023). This alone limits the teacher's options.

Moreover, pedagogical effectiveness is further complicated by gatekeeping practices such as assessing students' work and

attempting to grade it fairly. A common concern among teachers is that because we may be experiencing the end of essay writing, we need to rethink assessment strategies (Rudolph et al., 2023). In fact, AI has been long studied as an Intelligent Tutoring System (ITS), or a set of tools that can generate simultaneous feedback to students even as they are writing (Baker & Smith, 2019; Rudolph et al., 2023; Zawacki-Richter et al., 2019). AI has also demonstrated usefulness in grading students' work, helping to reduce teachers' workloads (Cotos, 2023), follow students' progress, and detect plagiarism (Baker & Smith, 2019). Today, AI appears to be able to generate seemingly high-quality essays, thus allegedly replacing humans and taking away the need for learning and practicing writing altogether (Rudolph et al., 2023). Ironically, AI can also assist teachers in developing AI-resistant assessments, as suggested on the websites of some universities. For example, the website of Northern Michigan University<sup>1</sup> suggests "going medieval" by incorporating hand-written tasks into their assessment practices. Meanwhile, the University of Queensland's website<sup>2</sup> recommends adopting continuous, frequent, low-stakes assessments. By and large, both

---

<sup>1</sup> <https://nmu.edu/ctl/creating-ai-resistant-assignments-activities-and-assessments-designing-out>

<sup>2</sup> [https://www.psy.uq.edu.au/~uqjtange/academic\\_ai/t\\_ai\\_proof\\_assessments.html](https://www.psy.uq.edu.au/~uqjtange/academic_ai/t_ai_proof_assessments.html)

websites point to the use of tools that help teachers focus on students' progress rather than on the final product, in other words tools that educators may employ to assess students' learning (Eaton, 2023; Kohnke et al., 2023a). To educators, none of this is new. What is novel is that teachers are simultaneously urged to employ AI tools to assist teaching and learning while refraining from using the technology for the assessment of that learning.

Contrary to the belief that high-tech skills have yet to reach the classroom, technology-mediated teaching has long been applied, albeit in different ways and under different names (Baker & Smith, 2019; Chiu, Xia et al., 2023; Galante et al., 2023; Rudolph et al., 2023; Zawacki-Richter et al., 2019). Technology helps teachers to connect with students as well as the real world. For example, we have witnessed the inclusion in our teaching of multilingual, digital, and multimodal practices made possible through the use of computers and mobile devices (Prado & Huggins, 2023). Through such practices, teachers and students can engage with digital literacy through collaboration, critical assessment, and contextualized learning (Galante et al., 2023). As Guilherme (2017) argues, this refocuses teaching and learning on the teacher-learner relationship. In response, teachers need to promote flexible strate-

gies that will enable students to adjust to innovations, assist them as they build the confidence to face new challenges, allow for criticality in the construction of knowledge, instill ethics, and encourage student collaboration with peers (Guilherme, 2017; Laura & Chapman, 2009).

AI literacy “involves the essential abilities that people need to live, learn and work in our digital world through AI-driven technologies” (Ng et al., 2021, p. 2). As mentioned earlier, AI literacy frameworks have been developed with a view to instrumentalizing teachers' willingness to work with AI in an ethical manner (Warschauer et al., 2023). Tseng & Warschauer (2023, p. 258) propose a framework for AI literacy specific to writing tasks, suggesting that students must learn how to actively and creatively understand, access, prompt, corroborate, and incorporate AI technology in their academic and professional work. In L2 writing, with students often relying on AI tools to support their learning (Chiu, Moorhouse, et al., 2023), these tools have proved to be effective, especially if adjusted to the requirements of working with lower proficiency students.

Regarding ethics, Tseng and Warschauer (2023) suggest that the data AI tools are trained on are likely to be biased, and helping students understand this is key to effective L2 writing. In particular, Teachers

need to ensure that they promote not only engagement with AI tools but especially discussion, examination (i.e., fact-checking), and questioning of such tools among students so that they learn how to “ethically incorporate AI-generated content into their own work” (p. 261). Thus the focus of the ethical use of AI should be more on the use of the tool itself than the outcome of the tool, and students should learn how to consistently report this interactive process to make sure that their final product can truly be their own rather than AI-generated. While we should not ignore the “profound implications for human agency” (UNESCO, 2024, p. 14) AI tools might bring about, it is as yet unknown how we educators may work through such implications.

### **Context of the Study**

The discussion presented in this paper is based on two courses I delivered from September to December 2022 to 41 Year 1 students, and then from February to June 2023 to 30 Years 3 and 4 students in the Department of Languages and Cultures at an EMI university located in the south of China. The first course, Introduction to Corpus Linguistics, was in progress when excitement over ChatGPT came about, and it spurred concerns over which field of study Year 1 students should choose

in response to rumors that language professionals (translators, English language teachers, proofreaders and so forth) would no longer be needed in the near future (Tavares et al., 2023). Students were also worried about AI detectors, which were being adopted in university settings (Moorhouse et al., 2023). Some students reported being wrongly accused of using AI-generated texts in other courses, even if they confessed to having used machine translators and automated writing software without realizing that these tools were in fact AI-driven. The second course, Teaching through Digital Narratives, was designed for the Teaching English to Speakers of Other Languages (TESOL) concentration, which caters for future teachers of English but is open to all students in the department (i.e., TESOL and English for Professional Communication, Literature Studies in English, and the Applied Translation program). The course reached full capacity on the first day of enrollment, which showed high demand for it. When asked about the reasons for their interest in the course on the first day of class, students expressed fear for their future careers and lack of preparation for the AI era.

The reasons why these two courses were selected out of the six courses I delivered in those semesters are as follows. Corpus linguistics (CL) studies start from the

premise that language consists of patterns: the more frequent the pattern, the more idiomatic it is. Corpus tools that statistically predict collocates, namely the next word in a string, have been developed and are used largely to assist academic English writing (Frankenberg-García et al., 2022). Among other outcomes, this enables me to use corpus linguistics tools to show students how texts are generated through AI (Rudolph et al., 2023). CL tools also enable students to analyze the linguistic output along with the linguistic choices that permeate the context of their writing. The second course, Learning through Digital Narratives, addressed technology-mediated teaching and assessment of creative storytelling (Chiu, Xia, et al., 2023). The multimodal nature of this course facilitated the development of activities that combined visual images with words, allowing me to graphically deal with topics such as copyrights, plagiarism (Eaton, 2023), creativity, student and teacher agency, and AI-generated images and texts.

The reports, group discussions, narratives, reflection papers, and analysis papers the students produced during these courses were collected with a view to verifying their progress as it related to the use of AI in the classroom. A thematic analysis of the students' productions along with open-ended interviews conducted at the

conclusion of each course are in progress. This paper presents my reflection on the key steps in Tseng and Warschauer (2023)'s framework, which guided the implementation of activities, namely understand, access, prompt, corroborate, and incorporate. These will now be addressed along with a discussion of how they were implemented and what the students took away from each one.

### *Understand*

The first activity within the above framework involved AI-generated texts. Students needed to discuss the texts and potentially fact-check any information they contained. One of the assessment tools prescribed in the syllabus of the CL course was a research report in which students were required to think of ways in which CL could benefit their future studies, mainly academic writing (Frankenberg-García et al., 2022). This was the first task of this nature assigned to Year 1 students and, as such, required preparation. I used the same instruction of the assignment as a prompt to generate a report through ChatGPT-3. The report presented false data and fabricated citations, but this was not revealed to the students. Instead, they were given a checklist of items they needed to verify as a group, following which one group member would submit their findings.



Group discussions were recorded, transcribed, and analyzed. Two main gains emerged from this activity:

- (1) The students had the opportunity to explore how to retrieve digital papers through a reference list. Because students could not find the papers through the titles listed in the references, they needed to learn how to locate the journal, issue, volume, and year until they reached the conclusion that that specific paper did not exist (Bishop, 2023; Habib et al., 2024; Rudolph et al., 2023). For freshman students, this was a novel experience.
- (2) A second benefit is that students could practice how to analyze the lexical profile of a text. They noted that the text contained many unfamiliar words and that they did not know whether this was because this was a new genre for them (here, academic) or because the words were technical. By using the tool Analyze Text in the Corpus of Contemporary American English (COCA – English-corpora.org (Davies, 2009), they learned how to identify genre (academic, fiction, blog, magazine, newspaper etc), topic, and collocates of words that were unfamiliar to them and realized that dictionaries would not suffice for this purpose. Though the tool had already

been demonstrated to the students, the hands-on practice of checking the lexical profile of a text was an eye-opening demonstration of how to employ such tools.

In the Learning through Digital Narratives course, which attracted more senior students, I generated a short narrative with ChatGPT-3 using the prompt: “Write a short story about a Brazilian teacher at a Chinese university teaching Chinese students.” The prompt was intended to resonate with our specific setting, namely a Brazilian teacher working with Chinese students at a university in China, and to compare the output with reality. No changes were made to the AI-generated product. The text was read aloud to the students, and it did not take long for them to recognize that this fictional story was not creative (Habib et al., 2024) and to some extent biased (Blodgett et al., 2020; Dai & Hua, 2024) because the teacher was portrayed as an old male professor whose nationality seemed to be underplayed, and the students were pictured as obedient replicators of the message, apart from one, who became the center of the story. This gave rise to discussions of the nature of creativity, and of what bias in AI-generated texts might be like (Blodgett et al., 2020). In the process, students began to perceive more limitations to AI, including oversim-

plification of the message, excessive use of sophisticated and infrequent words, and reductive and limited lexical choices.

These insights helped students to better grasp the nature of AI-generated products and their constraints along with a better understanding of how AI tools operate as well as the ability to critically assess the quality of the output. Finally, because ChatGPT had just been launched and I was unaware of any similar tools that might be available in China at the time, thus limiting our *Access*, this type of task (*Understanding*) was the only one employed in the Introduction to Corpus Linguistics course. In contrast, the Learning through Digital Narratives course, which was held in 2023, had at its disposal ErnieBot (yiyao.baidu.com), a chatbot developed in China, which allowed for the implementation of the activities described below.

### ***Access and Prompt***

To work with *Access* and then *Prompt*, we used ErnieBot. Though it could be argued that this choice reflects the so-called digital divide, or unequal access to technology (Guilherme, 2017), in the case reported here, all students had access to computers and the internet through a computer lab designed for writing and various linguistics-related purposes in my department. However, we worked with the free

version of ErnieBot, and students were able to identify differences when the chat generated responses in English and Chinese, with students arguing that ErnieBot generated better responses in Chinese). This was a good opportunity to talk about the language models used for machine training and the kinds of outcomes students could expect from chatbots designed in the US (such as ChatGPT) and in China (ErnieBot) (Blodgett et al., 2020).

The students wrote an analysis report of a narrative-making digital tool as part of the assessment of the Learning through Digital Narratives course. I reviewed the reports and left comments without any corrections or grades. I then asked the students to use ErnieBot to review their reports based on the scoring guide (rubric) for the assignment. Students revised their texts using both my comments and the chatbot's suggestions. This process encouraged students to assess their work more critically. Interestingly, ErnieBot graded every paper identically, giving each one a score of 3 out of 4 regardless of quality. This sparked a discussion about automated assessment and the limitations of AI tools in evaluating complex student work (Baker & Smith, 2019; Cotos, 2023).

Students were also encouraged to explore how specific prompts could lead to more targeted feedback from the AI tool.

Some students noted that vague prompts such as “revise this paragraph” produced minimal improvement, with the output consisting merely of a paraphrased version of their texts rather than true feedback. However, when students provided more precise prompts, such as requests to incorporate teacher feedback (e.g., “My teacher said there’s a subject missing; can you spot it and explain why?”), AI-generated feedback became more focused and hence useful. In particular, according to the students, the explanation function targeted the points I, the teacher, made was one of the strongest benefits. Receiving answers focused on their own examples provided them with insights into why they were making specific mistakes. This highlighted the importance of understanding the relationship between input and output when using AI tools for language learning, thus allowing students to grasp the importance of providing the AI tool with more detailed information (Eaton, 2023). This also corroborates studies of the use of AI as intelligent tutoring systems (Baker & Smith, 2019; Cotos, 2023).

However, despite an emergent call for prompt engineering aimed at improving the outputs generated by chatbots (Knoth et al., 2024), students quickly learned how to improve the tool’s output by exploiting its conversational aspect without the need

to become specialists (Battle & Gollapudi, 2024; Genkina, 2024). When the students failed to receive a satisfactory answer, they rephrased the question or asked the chatbot to specify a specific point. Nevertheless, the greatest gain made from employing Tseng and Warschauer (2023)’s AI-literacy framework was the Corroborate step, which is addressed in the next subsection.

### ***Corroborate***

To corroborate their use of ErnieBot as a writing assistant, reviewer and, automated essay grader (Baker & Smith, 2019; Zawacki-Richter et al., 2019), the students were asked to discuss the following three questions in groups after working on revising their texts through AI:

- Can AI be used for your own text corrections? If so, how?
- What texts does AI correct or review better?
- What type of correction works better: grading or reviewing?

The students unanimously stated that ErnieBot was not a reliable tool for assessment (i.e., grading) because it awarded everyone’s reports the same grade. However, they reported that while ErnieBot was helpful in matching the criteria in the rubric with their reports’ content, it did not assist them in identifying which descriptor

(i.e., missing, not meeting, approaching, meeting, exceeding) their reports met. They concluded that the AI chatbot helped address the criteria but not the quality. They also questioned whether ErnieBot would have done a good job with texts that were not so formulaic such as software analysis reports.

Regarding language choices, during the revision activity, students were introduced to corpus tools such as COCA and Collocaid ([collocaid.uk](http://collocaid.uk)) to refine their lexical choices. One notable activity involved students using COCA's word and phrase analysis tool to evaluate the complexity and appropriateness of vocabulary in AI-generated texts. Similarly to the Year 1 students in the Introduction to Corpus Linguistics course, the Learning through Digital Narratives students learned how to check their texts for synonyms, collocates, and the genre-specific frequency of certain words. For example, students compared the use of transition words such as "moreover" and "additionally" to assess their appropriateness within different genres, given that ErnieBot had changed the students' choice of "additionally," leading the students to wonder whether they had made a mistake. By noticing that both words had the same meaning and could be used interchangeably in academic English, the students decided to retain their original choice. This

not only helped them improve their writing but also encouraged them to adopt more data-driven approaches to linguistic decision-making, thus enacting their agency in their own writing.

In another case, a student realized that when asking ErnieBot to review a text, the revision generated what the student considered an overuse of words such as "crucial" and "important." In response, the student as well as peers sought synonyms using COCA. They learned not to simply choose synonyms randomly but to consider the behavioral profile of each option, ensuring they matched both context and genre. Another group of students noted that ErnieBot suggested too many conjunctions, making the text sound, in their term, "polluted". They asked ErnieBot to suggest ways in which they could use other structures to avoid this excess of conjunctions. After discussing the options, the students opted to balance complex structures that employed conjunctions with others that did not. Through these interactions, they improved the structure of their writing.

Students also noted that chatbots may be useful tools in practicing for widely-used English proficiency tests such as IELTS. For example, ChatGPT includes in its database the descriptors of IELTS along with examples of tasks test-takers are likely to face. Though it shows a degree of

reliability in the evaluation of essays produced for IELTS at lower proficiency levels, it does not award higher scores even to higher quality texts. Moreover, it is limited to those descriptors. While it may be useful as a practice tool, it is highly constrained for improvement of writing skills (Chen et al., in press).

### ***Incorporate***

As the final step in the framework, Tseng and Warschauer (2023) suggest that students will need to learn to incorporate the content generated through their interaction with AI into their work in an ethical manner. This is likely to be a particularly challenging task because matters of ethics can be culturally sensitive (Baker & Smith, 2019; Blodgett et al., 2020; Eaton, 2023; Tseng & Warschauer, 2023; Warschauer et al., 2023) and are not trainable skills that can be practiced and assessed (Guilherme, 2017; Laura & Chapman, 2009). Tseng and Warschauer (2023) themselves recognize the difficulties underlying this task, arguing that while no AI tools to date make it possible to assess matters of ethics, we can—and should—engage in discussions of ethical concerns with our students. Added to this are concerns over students' agency enactment when using AI-generated content in a future when "hybrid human-AI writing will become normal" (Eaton, 2023, p.

3): How can we help students identify the elements that make a text unconvincing or whose rhetorical style does not match that of the students? How can we ensure a human-centered use of AI in the classroom, as suggested by UNESCO (2024)? How can we address issues regarding equality, human rights, and accessibility when using tools that are not transparently regulated and may raise issues with data security (Berendt et al., 2020; Blodgett et al., 2020; Eaton, 2023; Rudolph et al., 2023)?

Given all these questions, I designed hands-on activities, either for textual analysis or for tool exploration, described in step-by-step fashion on worksheets that also invited students to reflect on the work they were doing, and to list the conclusions they may reach. In doing so, the students had not only to draw on reflective approaches to their experiences but also to take into account how they used the tools. This helped students to understand how to report their use of AI tools and simultaneously helped me to understand the process they were following. I also motivated the students to work in small groups so I could walk around and join their conversations while also often opening the discussion to the whole class. This showed that students mainly reported the limitations of the tools. Though they found the chatbot effective in the correction of grammar errors, sug-

gestions for word choice improvements, and even textual organization, it was not as useful in identifying what the students called “creativity” – a feature commonly addressed in my feedback. Some students also criticized what they saw as the excessive use of conjunctions as well as the fact that when asked to proofread a text, ErnieBot simply paraphrased it. The need for better tailored prompts thus emerged as a key takeaway, with students recognizing that AI tools perform better when given specific, contextualized instructions. However, as I intended to demonstrate, the output generated by AI was not their own production. To make texts their own, they needed to make their own choices.

What most impacted students, however, was the stereotypical images both ErnieBot and ChatGPT generated in pictures and in texts. While images are relatively easy to work with because they can be compared to the real-life settings in which we live, it is not as easy to perceive nuances in rhetoric. In the final reflection paper, the students needed to submit by the end of the course, one of them used a chatbot to correct her grammatical errors and reported its use appropriately. However, the student did not notice that the chatbot suggested the use of passive voice on the grounds that it would be preferable in academic style. This choice erased the student’s

voice, and her text, though authentically her own, did not mirror her reflections on her learning process, the very objective of this assessment. Even though this was the final report, I provided comments pointing out the problems changing the positionality of the author caused in her text. In an informal conversation, the student later reported that she could only understand what “voice” meant after she read my feedback justifying the reason why she did not get a higher grade. This shows that implications of AI use should not be taught in isolation in one class only but as part of the relationship teachers build with their students, as argued by Guilherme (2017).

## Conclusion

This paper highlighted the ways in which AI tools can both support and challenge pedagogical practices. It suggests that while AI can enhance learning by offering instant feedback and aid language production, its use must be carefully mediated by educators to ensure that it does not undermine student agency or ethical standards. The study demonstrated that although frameworks such as Tseng and Warschauer’s (2023) can guide AI integration in the classroom, the human element, particularly the teacher-student relationship, remains central.

While ChatGPT and similar AI tools may simulate human-like texts, their capacity to authentically replicate the features of human communication remains debatable (Berber Sardinha, 2024) even if students fail to perceive it (Liang et al., 2023). This drawback is compounded by the fact that algorithms are not neutral but operate within specific cultural and rhetorical frameworks (Blodgett et al., 2020; Dai & Hua, 2024), which can create misalignments when used in diverse educational contexts. As a result, many institutions have reacted unfavorably to AI in academic settings, viewing it as an unstable factor that disrupts established pedagogical practices, in turn affecting educators as well as students, who may struggle to find consistency in their teaching and learning strategies.

However, dismissing AI entirely is not a viable solution as these tools are already

part of many educational settings and, more broadly, of many aspects of our lives. Instead, the challenge lies in developing strategies for incorporating them effectively, not as a replacement for students' voice but as a complementary resource that can support and enhance their writing practices. Understanding the limitations as well as the potential of these technologies can empower teachers and students alike to engage with AI critically, ensuring that it serves as a tool for linguistic growth rather than a shortcut that undermines unique human perspectives. Educators, a profession unlikely to be replaced by AI tools, need to remain vigilant in promoting a human-centered approach to AI that values student voice, critical engagement, and ethical use. Future research should explore how to balance the affordances of AI with preserving the authenticity and individuality of student work in diverse educational settings.

## References

- Baker, T., & Smith, L. (2019). *Educ-AI-tion rebooted? Exploring the future of artificial intelligence in schools and colleges*. Nesta. [https://media.nesta.org.uk/documents/Future\\_of\\_AI\\_and\\_education\\_v5\\_WEB.pdf](https://media.nesta.org.uk/documents/Future_of_AI_and_education_v5_WEB.pdf)
- Battle, R., & Gollapudi, T. (2024). The Unreasonable Effectiveness of Eccentric Automatic Prompts. *ArXiv, abs/2402.10949*. <https://api.semanticscholar.org/CorpusID:267750405>
- Berber Sardinha, T. (2024). AI-generated vs human-authored texts: A multidimensional comparison. *Applied Corpus Linguistics*, 4(1), 100083. <https://doi.org/10.1016/>

j.acorp.2023.100083

- Berendt, B., Littlejohn, A., & Blakemore, M. (2020). AI in education: Learner choice and fundamental rights. *Learning, Media and Technology*, 45(3), 312–324. <https://doi.org/10.1080/17439884.2020.1786399>
- Bishop, L. (2023). A computer wrote this paper: What ChatGPT means for education, research, and writing. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4338981>
- Blodgett, S. L., Barocas, S., Daumé, H., & Wallach, H. (2020). *Language (technology) is power: A critical survey of bias in NLP* (Version 2). arXiv. <https://doi.org/10.48550/ARXIV.2005.14050>
- Boer, M., Cosma, A., Twenge, J. M., Inchley, J., Jeriček Klanšček, H., & Stevens, G. W. J. M. (2023). National-level schoolwork pressure, family structure, internet use, and obesity as drivers of time trends in adolescent psychological complaints between 2002 and 2018. *Journal of Youth and Adolescence*, 52(10), 2061–2077. <https://doi.org/10.1007/s10964-023-01800-y>
- Chen, X., Zhou, Z., Prado, M. (in press). ChatGPT-3.5 as an Automatic Scoring System and Feedback Provider for the IELTS exam. *International Journal of Assessment Tools in Education*.
- Chiu, T. K. F., Moorhouse, B. L., Chai, C. S., & Ismailov, M. (2023). Teacher support and student motivation to learn with artificial -intelligence (AI)-based chatbot. *Interactive Learning Environments*, 32(7), 1–17. <https://doi.org/10.1080/10494820.2023.2172044>
- Chiu, T. K. F., Xia, Q., Zhou, X., Chai, C. S., & Cheng, M. (2023). Systematic literature review on opportunities, challenges, and future research recommendations of artificial intelligence in education. *Computers and Education: Artificial Intelligence*, 4, 100118. <https://doi.org/10.1016/j.caeai.2022.100118>
- Cotos, E. (2023). Automated feedback on writing. In O. Kruse, C. Rapp, C. M. Anson, K. Benetos, E. Cotos, A. Devitt, & A. Shibani (Eds.), *Digital writing technologies in higher education* (pp. 347–364). Springer International. [https://doi.org/10.1007/978-3-031-36033-6\\_22](https://doi.org/10.1007/978-3-031-36033-6_22)



- Dai, D. W., & Hua, Z. (2024). When AI meets intercultural communication: New frontiers, new agendas. *Applied Linguistics Review*. <https://doi.org/10.1515/appl-rev-2024-0185>
- Davies, M. (2009). The 385+ million word *Corpus of Contemporary American English* (1990–2008+): Design, architecture, and linguistic insights. *International Journal of Corpus Linguistics*, 14(2), 159–190. <https://doi.org/10.1075/ijcl.14.2.02dav>
- Eaton, S. E. (2023). Postplagiarism: Transdisciplinary ethics and integrity in the age of artificial intelligence and neurotechnology. *International Journal for Educational Integrity*, 19(1), 23. <https://doi.org/10.1007/s40979-023-00144-1>
- Frankenberg-García, A., Pinto, P. T., Bocorny, A. E. P., & Sarmiento, S. (2022). Corpus-aided EAP writing workshops to support international scholarly publication. *Applied Corpus Linguistics*, 2(3), 100029. <https://doi.org/10.1016/j.acorp.2022.100029>
- Galante, A., Zeaiter, L. F., de la Cruz, J. W. N., Massoud, N., Lee, L., Aronson, J., de Oliveira, D. S. A., & Teodoro-Torres, J. A. (2023). Digital plurilingual pedagogies in foreign language classes: Empowering language learners to speak in the target language. *Language Learning Journal*, 51(4), 523–543. <https://doi.org/10.1080/09571736.2023.2179654>
- Genkina, D. (2024, March 6). AI prompt engineering is dead. *IEEE Spectrum*.
- Guilherme, A. (2017). AI and education: The importance of teacher and student relations. *AI & Society*, 34(1), 47–54. <https://doi.org/10.1007/s00146-017-0693-8>
- Habib, S., Vogel, T., Anli, X., & Thorne, E. (2024). How does generative artificial intelligence impact student creativity? *Journal of Creativity*, 34(1), 100072. <https://doi.org/10.1016/j.yjoc.2023.100072>
- Jones, R. H., & Hafner, C. A. (2012). *Understanding digital literacies: A practical introduction*. Routledge.
- Knoth, N., Tolzin, A., Janson, A., & Leimeister, J. M. (2024). AI literacy and its implications for prompt engineering strategies. *Computers and Education: Artificial Intelligence*, 6, 100225. <https://doi.org/10.1016/j.caeai.2024.100225>
- Kohnke, L., Moorhouse, B. L., & Zou, D. (2023a). ChatGPT for language teaching and learn-

- ing. *RELC Journal*, 54(2), 537–550. <https://doi.org/10.1177/00336882231162868>
- Kohnke, L., Moorhouse, B. L., & Zou, D. (2023b). Exploring generative artificial intelligence preparedness among university language instructors: A case study. *Computers and Education: Artificial Intelligence*, 5, 100156. <https://doi.org/10.1016/j.caeai.2023.100156>
- Laura, R. S., & Chapman, A. (2009). The technologization of education: Philosophical reflections on being too plugged in. *International Journal of Children's Spirituality*, 14(3), 289–298. <https://doi.org/10.1080/13644360903086554>
- Liang, W., Yuksekgonul, M., Mao, Y., Wu, E., & Zou, J. (2023). GPT detectors are biased against non-native English writers. *Patterns*, 4(7), 100779. <https://doi.org/10.1016/j.patter.2023.100779>
- Mills, K. A. (2009). Multiliteracies: Interrogating competing discourses. *Language and Education*, 23(2), 103–116. <https://doi.org/10.1080/09500780802152762>
- Moorhouse, B. L., Yeo, M. A., & Wan, Y. (2023). Generative AI tools and assessment: Guidelines of the world's top-ranking universities. *Computers and Education Open*, 5, 100151. <https://doi.org/10.1016/j.caeo.2023.100151>
- Ng, D. T. K., Leung, J. K. L., Chu, S. K. W., & Qiao, M. S. (2021). Conceptualizing AI literacy: An exploratory review. *Computers and Education: Artificial Intelligence*, 2, 100041. <https://doi.org/10.1016/j.caeai.2021.100041>
- OpenAI. (2023). *ChatGPT-3* (Version 3.5) [Computer software]. <https://chat.openai.com>
- Prado, M. C. A., & Huggins, T. J. (2023). Technological approaches to student participation while studying the history of psychology in an EMI institution. In J. Corbett, E. M. Y. Yan, J. Yeoh, & J. Lee (Eds.), *Multilingual education yearbook 2023* (pp. 49–69). Springer International. [https://doi.org/10.1007/978-3-031-32811-4\\_4](https://doi.org/10.1007/978-3-031-32811-4_4)
- Rudolph, J., Tan, S., & Tan, S. (2023). ChatGPT: Bullshit spewer or the end of traditional assessments in higher education? *Journal of Applied Learning & Teaching*, 6(1). <https://doi.org/10.37074/jalt.2023.6.1.9>
- Tavares, C., Oliveira, L., Duarte, P., & da Silva, M. M. (2023). Artificial intelligence: A

- blessing or a threat for language service providers in Portugal. *Informatics*, 10(4), 81. <https://doi.org/10.3390/informatics10040081>
- Tseng, W., & Warschauer, M. (2023). AI-writing tools in education: If you can't beat them, join them. *Journal of China Computer-Assisted Language Learning*, 3(2), 258–262. <https://doi.org/10.1515/jccall-2023-0008>
- UNESCO (with Miao, F., & Shiohira, K.). (2024). *AI competency framework for students*.
- Verma, P. (2023, August 13). Professors have a summer assignment: Prevent ChatGPT chaos in the fall. *The Washington Post*. <https://www.washingtonpost.com/technology/2023/08/13/ai-chatgpt-chatbots-college-cheating>
- Warschauer, M. (1999). *Electronic literacies: Language, culture, and power in online education*. Erlbaum.
- Warschauer, M., Tseng, W., Yim, S., Webster, T., Jacob, S., Du, Q., & Tate, T. (2023). The affordances and contradictions of AI-generated text for writers of English as a second or foreign language. *Journal of Second Language Writing*, 62, 101071. <https://doi.org/10.1016/j.jslw.2023.101071>
- Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education: Where are the educators? *International Journal of Educational Technology in Higher Education*, 16(1), 39. <https://doi.org/10.1186/s41239-019-0171-0>