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# **Exploring Applications of ChatGPT to English Language Teaching: Opportunities, Challenges, and Recommendations**

\* \* \* On the Internet \* \* \*

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### Abstract

By utilizing a massive corpus of textual data, large language models can generate unique human-like outputs to questions and interact with users in a natural conversational way. ChatGPT is one such platform, and since it emerged into the public consciousness in November 2022, it has generated both excitement and concern among educators. A growing body of scholarship has considered the pedagogical use of ChatGPT and its ability to enhance teachers' roles (e.g., Kohnke et al., 2023; Rudolph et al., 2023). Scholars have also raised concerns about ChatGPT's impact on academic integrity and scholarly publishing (Teng, 2023). Nonetheless, AI has existed for some time (Holmes & Tuomi, 2022) and, rather than a beginning of the end of education, it may guide educators into an era of pedagogical innovation (Heaven, 2023). In this paper, we explore the role of ChatGPT in English Language Teaching (ELT). We first provide background information about ChatGPT and its functions. We then draw from literature to describe current thinking on its benefits and challenges then describe how we have experimented with ChatGPT at our own university. We conclude by discussing implications for using ChatGPT in ELT and offering recommendations for future directions in teaching and research.

*Keywords:* ChatGPT, generative AI, English language teaching, 21st century skills, humanmachine collaboration, higher education ChatGPT is a form of generative artificial intelligence (AI), a term which refers more broadly to technology that can produce nearly an infinite amount of new content. ChatGPT is a powerful web-based large language model that can sort through textual data to generate unique responses to prompts that a user inputs. Prompts can be engineered in myriad ways to customize responses to any language proficiency level and to users' knowledge of content, as well as in the voice or style of historical figures or particular rhetorical styles or formats. Even though AI tools have evolved over many years, ChatGPT has disrupted a wide range of disciplines, perhaps because it developed rapidly and is now readily accessible to the public (Holmes & Tuomi, 2023). As Tlili et al. (2023) note, "[w]hile ChatGPT's primary function was to mimic human conversation, its capabilities extend far beyond that; it can literally create new things, such as a poem, story or novel, or act like anything within its capability" (p. 2). With ChatGPT's ability to create an array of output, there are tremendous implications for educators.

Precise definitions of artificial intelligence are elusive (Mitchell, 2019), tend to vary (Ji et al., 2023), and change over time (Holmes & Tuomi, 2023; Long & Magerko, 2020). Nonetheless, a useful starting point is a definition from the United Nations Educational, Scientific, and Cultural Organization (UNESCO), which refers to AI as "systems which have the capacity to process data and information in a way that resembles intelligent behaviour, and typically includes aspects of reasoning, learning, perception, prediction, planning or control" (2023, p. 10). Though the term AI implies that "intelligence" is involved, the truth is that ChatGPT is currently a stochastic parrot, a term first coined by Bender et al. (2021) meaning that ChatGPT can analyze textual data for identifiable patterns to generate responses, but it does not have actual knowledge (Stening, 2023). Similarly, Holmes and Tuomi (2023) remind us that AI is "a specific field of inquiry and development, rather than a type of intelligence that is artificial" (p. 546). Thus, despite fears that ChatGPT will replace the need for teachers (Hié, 2023), "AI is being integrated in ways that promote and necessitate human involvement in what experts have coined 'human-in-the-loop'" (Stening, 2023, para. 3). In addition, the Office of Educational Technology in the U.S. Department of Education (2023) recommends that AI use in education remain human-centric, which reinforces teachers' essential role as "instructional decision makers" (p. 54). Sims (2023) further suggests that viewing AI as a tool to enhance teaching but not replace humans in education can in turn lead to its useful integration in the classroom.

Since ChatGPT processes language and functions as a personal conversational interface, it is worth examining how it may support instruction and strengthen students' AI literacy skills (UNESCO, 2023). AI literacy can be defined as the competencies needed to interact with humans and with machines (Long & Magerko, 2020). According to a report about the future of education and skills published by the Organisation of Economic Co-operation and Development (2023), students will need to continually strengthen their digital skills in order to keep up with accelerated technological developments and prepare for a future that is unpredictable and unknown. As AI tools become a common platform in 21st century learning, work, and life (Schroeder, 2023), education will also need to equip students with the ability to critically analyze AI-generated output and become "technologically literate in an increasingly tech-centric world" (Abramson, 2023, p. 5). For these reasons, familiarizing students with AI tools such as ChatGPT has real-world relevance far beyond the classroom.

In recent months, advances in generative AI have taken the world by storm, and the field of English Language Teaching (ELT) has also been affected. In discussions with fellow English language teachers at recent conferences and in webinars, we have observed both curiosity and trepidation regarding ChatGPT. We thought we would ask ChatGPT-4 itself how it can support English language teaching. As shown in Table 1, ChatGPT provided nine numbered responses to our question. While the responses may not have been comprehensive, a closer look reveals ChatGPT's suggestions served as a useful starting point for further discussion. In the following section, we discuss both strengths and limitations of ChatGPT, provide an overview of the current state of scholarship in English language teaching and ChatGPT, discuss our classroom experiences, and offer recommendations for use.

# Table 1. ChatGPT Response to the Question, "How can ChatGPT be Useful for EnglishLanguage Teaching?" in August 2023

Prompt: How can ChatGPT be useful for English Language Teaching?

**Response:** ChatGPT can be a valuable tool in English Language Teaching (ELT) by providing various opportunities for learners to practice and refine their skills. Here's how it can be utilized:

1. Conversation Practice: ChatGPT can engage students in interactive conversations, allowing them to practice real-time dialogue. This can help students improve their fluency and responsiveness in English, developing their ability to think and speak in the language.

2. Grammar and Syntax Correction: ChatGPT can correct grammatical errors and provide explanations for the corrections. This real-time feedback can reinforce understanding of English grammar rules and structures.

3. Writing Practice: Students can write paragraphs or essays and receive feedback on their writing from ChatGPT. This can help them improve their writing skills, including coherence, cohesion, and proper use of vocabulary.

4. Reading Comprehension: Teachers can use ChatGPT to create reading comprehension exercises or provide explanations of difficult texts. ChatGPT's ability to summarize or clarify complex texts can aid in students' understanding.

5. Pronunciation Guidance: Though ChatGPT is text-based, it can still provide phonetic transcriptions and explanations of pronunciation rules. While not a substitute for auditory practice with native speakers, it can supplement pronunciation teaching.

6. Cultural Context: ChatGPT can provide information about English-speaking cultures, offering insights into idioms, customs, and traditions. This cultural knowledge can enhance students' communicative competence.

7. Personalized Learning: ChatGPT can be used for self-study, allowing students to work at their own pace. They can ask questions and practice areas where they need more support, tailoring their learning to their needs.

However, it's essential to remember that while ChatGPT offers many advantages, it's not a replacement for a qualified human teacher. Effective integration of ChatGPT into an English language classroom would require thoughtful planning and a blended approach, combining technology with human interaction, guidance, and feedback. A teacher's expertise in understanding individual student needs, offering encouragement, and fostering a supportive learning community is irreplaceable and would complement the benefits offered by ChatGPT.

# **Literature Review**

At the time we wrote this article, literature examining generative artificial intelligence in English language teaching was relatively unexplored. Nonetheless, we can draw insights from a larger body of scholarship that has examined ChatGPT in education more broadly to explore critical issues that may also impact English language instruction. For instance, one issue is the importance of keeping a human involved in both evaluating output and deepening ideas when conceptualizing ChatGPT as a tool for 21st century learning (Koehler, 2023). Other scholarship has considered the potential of AI on second language development (e.g., dos Santos et al., 2023) and its use to support teachers' creation and curation of instructional materials. Another prominent issue that has been raised centers on ChatGPT being an imperfect tool with serious ethical implications (Holmes & Tuomi, 2023; Sims, 2023), and scholars have highlighted the need for critical thinking and a focus on the process of learning (e.g., Supiano, 2023; Zhai, 2022), while others have emphasized the need for developing a clear vision of how to use AI responsibly (Eke, 2023). Finally, there are significant concerns about technological equity, bias, and access to AI tools (UNESCO, 2023, p. 11), as well as the risk for language biases that privilege certain varieties of English (D'Agostino, 2023). In the following section, we discuss both opportunities and challenges and concerns around using ChatGPT in educational settings.

# **Exploring Opportunities**

Though the development of AI has been underway for decades (Holmes & Tuomi, 2023), it has gained momentum in recent years, as evidenced by the doubling of publications on the topic in the last decade (Maslej et al., 2023). Similarly, the emergence of ChatGPT into education seems to have increased the speed of innovation. For instance, the vast majority of educational systems in existence today retain a basic structure which was first conceptualized during the Industrial Revolution, when "[s]ystems of mass education were designed to mold students to certain requirements" (Robinson & Aronica, 2016, p. 35) and the process of innovating education has been slow to make large scale shifts to better meet 21st century needs. However, the rapid changes in the educational landscape, driven by AI tools such as ChatGPT, "are forcing a much-needed opportunity to reimagine the role of education in the 21st century" (Sims, 2023, para 11). This reimagining will likely require major shifts in educators' philosophies (Tilil et al., 2023, p. 19), which could yield significant innovation in assessment and teaching methods (Rudolph et al., 2023).

Many scholars and institutions have begun examining these promising uses of ChatGPT in education (e.g., Lo, 2023). For example, because ChatGPT can serve as a personal tutor, answering student questions and summarizing key information (UNESCO, 2023), class time can move beyond knowledge acquisition to focusing on applying knowledge to solve real-world problems (Supiano, 2023) through collaborative and critical engagement (Abramson, 2023). AI-generated text can also be leveraged as a launching pad into projects or as a comparative tool alongside student-generated work, thus encouraging "learn[ing] through experimentation and experience" (Rudolph et al., 2023, p. 12). Indeed, Koehler (2023) notes that the flurry of new approaches in education inspired by ChatGPT may also serve to create space for realigning learning experiences to current knowledge of how humans learn, which echoes a recommendation by the U.S. Department of Education (2023) to align the use of AI with theoretically-grounded learning principles. For example, Koehler (2023) discusses how

retrieval practice, or intentional recall exercises, and interleaving, the intentional recycling of topics, are known to support learning as students review course content by generating questions to ChatGPT. Similarly, Robinson and Aronica (2016) list creativity, curiosity, and critical engagement as essential components of modern schooling. If used with critical intentionality, caution, and care, ChatGPT may allow for innovative teaching.

While empirical research on the affordances of ChatGPT for fostering second language acquisition is scarce in terms of developing speaking skills and grammatical knowledge, a small body of literature has proposed ways of leveraging ChatGPT to develop second language (L2) writing skills (e.g., dos Santos et al., 2023; Kim et al., 2023; Yan, 2023), vocabulary (Kohnke et al., 2023), and assessments (Sims, 2023). For instance, dos Santos et al. (2023) describe how ChatGPT can be used to scaffold L2 writing instruction in English language teaching. The authors suggest drawing from Bloom's revised framework (Anderson et al., 2001) to guide the use of ChatGPT at varying stages of the writing process. They also discuss using ChatGPT to remember and understand ideas, which is low on Bloom's taxonomy, and to critically evaluate ChatGPT responses, which require evaluation skills at the top of the taxonomy. Additionally, Kohnke et al. (2023) describe the affordance of ChatGPT as a vocabulary learning tool, as ChatGPT can define unknown words, generate dialogues that can be adjusted to varying proficiency levels, and explain vocabulary terms in students' first languages. A common underlying thread among these articles is that ChatGPT can create new opportunities to provide customized support to learners in the process of second (or subsequent) language development.

Finally, an emerging body of literature has explored the potential of ChatGPT for supporting teachers in varying ways, such as using ChatGPT to generate lesson plans (Farrokhnia et al., 2023; Skrabut, 2023) and saving teachers' time by creating teaching materials, worksheets, and assessments (Finley, 2023). Another area of focus in terms of teacher support centers on customizing content. Warner (2023) discusses how teachers can use ChatGPT to develop materials related to the local region, economy, and culture, which allows them to pique students' interest and engage them in learning. Warner goes on to discuss how teachers can customize content by incorporating video games and pop culture into stories and guizzes, respectively. Finally, a project developed by the Stanford University Graduate School of Education (n.d.) provides resources to support teachers in high school and post-secondary settings. The project, which is titled "Curricular Resources about AI for Teaching" (https://craft.stanford.edu/), offers readings, lesson plans, videos, and interactive materials for teachers to use in building students' AI literacy skills in a range of subject areas, which will be regularly updated. Given the fast pace in which artificial intelligence is developing and given the growing interest in the field, we anticipate that materials for English language instructors will also proliferate in the near future, as well as specialized AI-powered tools used for lesson planning, materials development, and assessments.

# **Challenges and Concerns**

While ChatGPT provides ample opportunities for innovation, there are also widespread concerns surrounding the use of ChatGPT in educational settings. Since the release of ChatGPT, concerns about academic integrity were raised almost immediately. Noam Chomsky referred to ChatGPT as "high-tech plagiarism" (Stewart, 2023, para. 2), while Weismann (2023) essentially decried the end of the teaching profession. According to Cotton et al. (2023), one major fear educators have is that students will no longer write their own assignments. To illustrate the seriousness of this claim, the authors reveal that the first pages of their article were essentially drafted by ChatGPT. They note that though plagiarism has long been an issue, ChatGPT adds a new layer to risks for cheating and heightened concerns about academic integrity, which are views shared by many. An initial reaction to safeguard against the enhanced risk for cheating was to ban it, as in public school systems in New York City and Los Angeles, or to revert to pen and paper assessments (Tlili et al., 2023). Lo (2023), after a systematic review of academic articles published on ChatGPT from January 2022 through February 2023, states that "immediate action must be taken to mitigate the impact of ChatGPT on education," such as revising assessments and institution-wide policies, developing student and instructor training on these tools and their limitations, and ensuring that teachers can detect AI-generated writing (p. 10). Though approaches to addressing academic integrity vary, scholarship thus far highlights the need for new reflection on approaches to academic integrity.

Some institutions are exploring the development of more sophisticated AI-generated text detection programs (Hamilton, 2023). However, the current reliability of these tools is questionable, as they may produce either false negatives (i.e., AI-generated text that is not detected) or false positives (i.e., a false detection of AI-generated text that is not generated by AI) (Dalalah & Dalalah, 2023). Multilingual writers whose first language is not English are particularly susceptible to such false positives from AI-detection software (Reed, 2023). However, tools to "catch" students in the act of cheating neglect to consider why a student might cheat and how detection can be an opportunity for growth rather than a "gotcha" academic violation. Such debates are reminiscent of the early days of the Internet, when many educators were concerned about students abusing it for academic work. In response, matchedtext detection software, such as Turnitin, was developed and is still used by countless universities across the world. Nevertheless, these types of tools may be used by teachers to support instruction on source-based writing rather than detect plagiarism (e.g., Kostka & Maliborska, 2016), as it was before ChatGPT was available. Similarly, since ChatGPT is already in use by faculty and students, we might find strategies to use it as a pedagogical tool, as well. Many scholars suggest considering new creative approaches to assessing learning, such as developing assignments that focus on evaluating and applying knowledge to problem solve (Eke, 2023; Rudolph et al., 2023; Supiano, 2023), and establishing trust in interactions with students (Hamilton, 2023), a process which likely demands explicit reflection on the greater purposes of education with students.

This push and pull between concerns about cheating and opportunities for innovation is also reflected in the media hype and public discourse relating to ChatGPT. For instance, Sullivan et al. (2023) analyzed 100 news articles in English-dominant countries (e.g., United States, United Kingdom, Australia, New Zealand), and despite findings indicating that academic integrity was the most common concern associated with ChatGPT, each article also presented positive opportunities, such as "enhanc[ing] academic success from non-traditional students"

(p. 6). In a similar study, Tlili et al. (2023), in their analysis of tweets and interviews with stakeholders regarding ChatGPT, found mixed reactions to the potential uses and misuses of these technologies in education. This idea is echoed by Lodge (2023) who explores the motivation students may have already had to cheat, which is enhanced by the ease of generative AI. Lodge suggests that students may cheat because they lack control over the learning process and concludes that revolutionizing assessments to encourage creative application of concepts, as well reflection on the learning process, may be the solution to assessment of learning in the context of AI. Nevertheless, as García-Peñalvo (2023) reminds us, hysteria and worry are typical reactions to disruptive changes, and the range of reactions to generative AI may be "a true reflection of general behaviour towards innovation" (p. 2). Such mixed reaction to ChatGPT may be an immediate response to change, yet its impact on education should be considered via a balanced approach that weighs both risks and pedagogical benefits.

In addition, the ease with which information is available places pressure on educators to prioritize critical evaluation of information as an essential skill in the 21st century (Hié, 2023; Heaven, 2023). While ChatGPT may impact teachers' use of traditional written assessments, some scholars are concerned that the readiness of information and the ease with which unique text can be generated will lead to a lack of critical thinking (Sullivan et al., 2023; Tlili et al., 2023). However, it is precisely the abundant availability of not only information, but also misinformation and disinformation, which, if included in the data corpus that ChatGPT has been trained on, may lead to false information in its output. Thus, the possibility that ChatGPT can provide false information will require educators to include a strong focus on critical evaluative skills (Heaven, 2023). Valverde-Berrocoso et al. (2022) also note that we live in a world in which we often cannot easily identify the original source or intention of information. ChatGPT exacerbates this challenge because the corpus of data used to train it contains biased and stereotypical information (Bender et al., 2021; Lo, 2023). Bender et al. (2021) indicate that large language models generate unique output by recombining linguistic data based on probability without a systematic or comprehensive ability to check the quality of the dataset, so, in utilizing AI-generated text, "we risk perpetuating dominant viewpoints, increasing power imbalances, and further reifying inequality" (p. 614). Therefore, applying a critical lens to any AI-generated text is essential and warrants that education intentionally fosters critical thinking skills (McMinn, 2023; Zhai, 2022).

Along with worry about increased cheating and a lack of critical thinking stemming from abuses of generative AI, serious unanswered questions related to the ethics of ChatGPT abound. For instance, some scholars (e.g., Eke, 2023; García-Peñalvo, 2023) suggest that ChatGPT forces us to think more deeply about epistemological issues and perhaps even redefine our definitions of intellectual property and source acknowledgement. Because ChatGPT essentially remixes the corpus of information it has been trained on, which includes copyrighted work, it is nearly impossible to accurately acknowledge its sources (Eke, 2023; García-Peñalvo, 2023). McAdoo (2023) notes that citation style-guide teams themselves have begun to define approaches to citing generative AI and are engaging more deeply in discussions about copyright and plagiarism concerns. Others have raised concerns about discrimination, bias, and data privacy (e.g., Akgun & Greenhow, 2022; Department of Education, 2023), as well as the increase in time and labor needed to adjust teaching practices and build AI literacy skills (MLA-CCCC Joint Task Force, 2023). When considering the use of AI in educational settings, teachers must be aware of these kinds of concerns and ensure that AI tools are used safely and ethically.

# **Experiences from the Classroom**

Pasquale (2020) suggests that the integration of AI into any field should be done in a humancentric way, meaning that while AI may be used to enhance productivity, humans must remain central to decision making. According to Farrokhnia et al. (2023), "[t]he last and most promising scenario is to reflect deeply on the issue and take advantage of ChatGPT's opportunity for education while attempting to minimize its threats to education" (p. 10). Many additional scholars in education agree that addressing the challenges and concerns of ChatGPT is important, but also important is leveraging its capabilities (e.g., Eke, 2023; Tlili et al., 2023). In this spirit, we began engaging in discussions about responsible use policy and exploring the use of ChatGPT in our classes.

In the spring 2023, we asked ourselves what ChatGPT could help us do better as teachers and what new spaces it could open to English language instruction. We were particularly interested in learning more about students' familiarity with ChatGPT and their perspectives towards our use of the tool to support learning during in-class activities. We were also curious about how the tool might be used to foster interaction, critical thinking, and engagement in class activities. In Table 2, we share examples of lessons we implemented in an undergraduate public speaking and graduate academic listening and speaking course for international students in a pathways program at our university. These two lessons focused on persuasive argumentation and formal presentation skills and were taught by the two authors.

In the implementation of these first applications of ChatGPT to in-class activities, we observed many positive outcomes. First, students' engagement in the course material and peer interaction seemed to increase. When we used ChatGPT in some of our classes, students seemed even more talkative and enthusiastic about the content. They also seemed to enjoy critically analyzing output from ChatGPT. For instance, students were eager to compare their ideas against ChatGPT output and seemed happy to affirm that the output was interesting but not necessarily comprehensive. Perhaps most interestingly, students did not appear overly eager about ChatGPT or using the tool for cheating or replacing their own work. Instead, we noticed that many of them questioned the accuracy of the output and its overall usefulness as a tool. They were also eager to point out the technical limitations of ChatGPT based on their class experience. Table 3 includes student quotations that indicate positive attitudes towards using ChatGPT.

Course Title	Public Speaking (undergraduate)	Advanced Listening and Speaking (graduate)
Lesson	Persuasive Argumentation	Academic Presentation Skills
Prior Learning	• Aristotle's conceptualization of ethos, pathos, and logos in persuasive argumentation	• Formal presentation skills such as delivery (e.g., body language, fluency), visual aid design, introductions and conclusions, and transitions and cohesion
Lesson Objectives	<ul> <li>Analyze ChatGPT-generated debate constructives for presence and quality of ethos, pathos, and logos</li> <li>Execute all elements of a debate, using student-improved constructives, and performing cross-examination, rebuttal, and judging in mock debates.</li> </ul>	<ul> <li>Evaluate ChatGPT output about presentation skills</li> <li>Compare and contrast ChatGPT output to students' prior learning</li> </ul>
Materials	• ChatGPT; shared Google Doc; laptops	• ChatGPT; laptops; hard copies of Venn diagrams; instructor-created prompts questions to input into ChatGPT
In-class activity	<ul> <li>In groups of 3, students craft ChatGPT prompts to generate either an affirmative or negative constructive for debate topic selected by instructor</li> <li>Students confirm prompt with instructor and generate constructives which are pasted into shared Google doc</li> <li>Groups analyze their constructive for ethos, pathos, and logos by adding comments to the Google Doc</li> <li>Groups conduct research to improve constructive, including finding credible sources to enhance ethos and adding personal stories to enhance pathos</li> <li>Groups are paired to deliver mock debates using revised constructives</li> </ul>	<ul> <li>In groups of 2-3, students engage in retrieval practice (i.e., list what they remember about one of the five major presentation skill topics given by the instructor)</li> <li>Instructor gives each group one question to put into ChatGPT that is based on their topic (e.g., <i>How can I engage my audience during an academic presentation?</i>)</li> <li>Students input their question into ChatGPT and read its response</li> <li>Students create a Venn diagram to compare their knowledge with ChatGPT output, focusing on similarities and differences</li> </ul>
Assessment	<ul> <li>Two groups debate at a time and those not debating serve as debate judges, which requires them to evaluate the effective use of ethos, pathos, and logos in performed constructives, as well as in cross-examinations and rebuttals</li> <li>Short written reflection on whether mock debate has helped them think about preparation for subsequent individual debates</li> </ul>	<ul> <li>Class presentation of Venn diagrams</li> <li>Short electronic survey about ChatGPT and its accuracy and potential for learning, as well as students' personal opinions about using ChatGPT</li> </ul>

# Table 2. Lessons Utilizing ChatGPT in Undergraduate and Graduate Courses

Common themes	Student voices
Use of ChatGPT is motivating and engaging	"I think this is really a creative and fun way of teaching. It combines teaching with Artificial Intelligence to help students broaden their understanding of the knowledge. It successfully catch students' attention and make the class more active."
	"I liked the experience of using Chat GPT in class this week. It is interesting for letting us now what the difference of the answer from us and the ChatGPT."
	"I like it. I think using AI for education is a trend, so we need to learn how to use in the right way."
Proceed with caution	"It's ok to use, but if we use it carefully and consciously since some answers could be wrong or fake for just some of the assignments. For example, to find new ideas if we do not have any, or compare our ideas with that chatGPT can provide."
	"Chat GPT is a support tool for us to have a more convenient life. Discussions about it in class helped me better understand its benefits and limitations. We should only use it as a support tool, not use it to replace everything, especially. especially in studying."
	"Using Chat GPT in class this week I thought it allowed me to see some summarized and concise answers and sometimes added something we didn't know, but sometimes I didn't think it was accurate. For example, when talking about what good presentation skills are, it says to walk back and forth on stage, which I don't think is a good skill."

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While both undergraduate and graduate students' attitudes towards ChatGPT were generally positive, we observed skepticism and resistance to using ChatGPT for learning purposes in some students' comments. For instance, some students highlighted the technical limitations of ChatGPT and questioned its value for fostering learning. One student even referred to the use of ChatGPT as involving "tricky shortcuts." Other students were mindful that human intervention is still needed when using ChatGPT, asking whether the tool could truly replace humans. These insights align with scholars who emphasize the importance of keeping humans in the loop (Sims, 2023; Stening, 2023), as ChatGPT was used as one tool of many that supported instruction in our courses. Table 4 includes student voices that are critical of ChatGPT.

<b>Common Themes</b>	Student voices			
Limitations	"I would consider that most of the suggestions of ChatGPT is correct, but it does not help a lot. For instance, we all know that we should use ethos and pathos in our debate. However, it does not teach us how to achieve this. Although my group takes a lot of time on thinking these opinions, they are much more helpful and achievable than ChatGPT's."			
	"No. It's better to gather information myself instead of using tricky shortcuts. After all, Chatgpt involves those information from the internet and could not really give "real" feedbacks on how my learning has improved."			
	"I think it is NOT an effective tool for learning. It is useful in an industrial era, but when it comes to learning, we should avoid using it. There are definitely pros to using ChatGPT, but there are way more cons to using it. As an international student, I am afraid that people might get used to using ChatGPT and lose the basic ability to write."			
Humans-in-the- loop and learning matter.	"I think ChatGPT is an efficient tool, but it still doesn't have the capacity to replace or alternate the use of human work completely. It may give you a structure for some questions but humans still need to fill the gap."			
	"I think Chatgpt seems quite insightful. But it's not omniscient or smart enough to replace all humans, it can be very creative and its answers sound authoritative. You can't trust his answers completely because he can be wrong too."			
	"Yes, it is a good tool on enhancing learning, but it can only provide some basic information on our learning. If we dig deeper, we still need to use our own ability on doing research."			
	"I like it, and I think Chat GPT is a interesting and useful tool to for learning if we use it appropriately."			

#### Table 4. Sample of Critical Student Perspectives about ChatGPT (Spring 2023)

#### **Recommendations**

As we hope to have shown, there are both opportunities and drawbacks to consider when incorporating ChatGPT into English language courses. Students appeared to be intrigued yet skeptical about the powers of ChatGPT and its role in English teaching and learning. As we reflected on our use of ChatGPT, student comments, and the growing body of literature, we developed three key recommendations for using ChatGPT to support English language instruction.

#### **Collaborate and Learn**

Experimenting with teaching innovations and exploring new approaches can be facilitated by collaboration and collegial inquiry among educators. Honigsfeld and Dove (2023) describe several ways in which teachers can collaborate to improve their teaching, including but not limited to curriculum and course planning, developing teaching materials and assessments, co-teaching, and engaging in professional learning (e.g., participating in book clubs, and conducting action research). While the authors do not focus specifically on ChatGPT, their ideas regarding collaboration are applicable to educators aiming to experiment with AI or other technologies. In our program, we worked together to brainstorm ideas about using ChatGPT, review each other's lessons and materials, and discuss preliminary insights from the classroom. When teachers work together through a process of collegial inquiry which "provides opportunities to seek out and develop more complex perspectives by thinking with and listening to others" (Drago-Severson, 2016, p. 77), knowledge is greatly enhanced. Collaboration is a valuable exercise for any teaching endeavor, and we believe that the evolving nature of ChatGPT and other AI tools necessitate even greater collaboration among teachers, staff, and stakeholders.

Professional collaboration should also extend beyond the classroom as educational institutions establish responsible use policies that recognize the ethical challenges to academic integrity and concerns relating to intellectual property, privacy, and recognition of authorship (García-Peñalvo, 2023). Broad discussions about institutional policy to guide faculty and students are necessary, and equally necessary is the development of a responsible use policy at the classroom level. Guidelines for AI use in a particular course can be co-created with students once the course begins and refined as the semester goes on if needed. Faculty, staff, and administrators may also come to develop their own community of practice over time (Lave & Wenger, 1991), as they co-construct knowledge about ChatGPT and keep up with the latest advances. A community of practice can be beneficial for enhancing professional development by "galvaniz[ing] knowledge sharing, learning, and change" (Wenger & Snyder, 2000, p.139) and helping participants develop mutual understanding (Wenger, 1998). At our own university, the community of practice that has evolved and centered on explorations of ChatGPT has helped us to feel confident to begin exploring applications and addressing challenges.

Collaboration with colleagues and students is more likely to be successful if educators are also given opportunities to enhance their own learning in the area of generative AI. Therefore, professional development and training should play a significant role in developing educators' digital AI literacy skills (International Society for Technology in Education, n.d.; Tlili et al., 2023). Upskilling may involve taking free online courses, participating in online discussions with other teachers, and maintaining currency in AI literature (Paiz & Kostka, 2023). Herft (2023) notes that educators share insights from professional development opportunities and goes on to say that ChatGPT itself can be used to generate ideas for collaboration and classroom observation among educators, an example of which is asking ChatGPT to develop questions to be asked while observing another teacher. Building teachers' knowledge of ChatGPT and their confidence to weave the tool into their instructional approaches will remain critical as the technology continues to develop.

#### **Reflect on AI Use with Students and Teachers**

In addition to collaboration, we would like to emphasize the importance of reflecting *with* students about ChatGPT, its uses, and implications for learning (Farrokhnia et al., 2023; Lo, 2023; Supiano, 2023). One way of bringing students into conversations about ChatGPT is simply by using the tool during in-class activities, as described above. Including students in an intentional way can create authentic opportunities to discuss its potential uses and abuses. As Abramson (2023) reminds us, engaging students in explicit discussions about academic integrity, and more broadly, the purposes and goals of education, is essential to readjusting teaching and learning in the age of AI. By focusing on the use of AI as one of many other digital tools that can play a role supporting the process of learning, students' educational focus can shift to strengthening critical digital competency and critical thinking skills. Collecting student feedback, as we described earlier in this paper, is another important way of understanding students' perspectives while giving them an opportunity to voice concerns and ask questions anonymously.

Similarly, it is critical for teachers to be involved at all levels of AI implementation and use, from curricular, instructional, and assessment design to decision-making (Department of Education, 2023) and receive support from their institutions and programs (MLA-CCCC Joint Task Force, 2023). Rather than a top-down approach to redefining teaching and learning in the age of AI, the perspectives of educators and students alike should be included from the beginning to establish new practices and ensure transparency at their institution. Allowing teachers to experiment with AI and similar tools on their own is a key part of learning and understanding their benefits and limitations (International Society for Technology in Education, n.d.). This idea aligns with our own personal experiences of learning to use ChatGPT-3 when we created accounts and began inputting and refining prompts. Through such hands-on experimentation, we were better equipped to join broader academic conversations and engage in decision making about the use of AI in English language teaching.

Finally, rather than banning ChatGPT or enforcing strict top-down mandates about its use, UNESCO (2023) suggests that educational institutions "[i]ntroduce clear guidance for students and instructors about how and when ChatGPT can be used (and when it cannot). Such guidance should be negotiated with students and teachers, not imposed on them" (p. 13). This process ensures students have a sense of agency over their learning, which potentially reduces motivation for cheating (Lodge, 2023). Rudolph et al. (2023) note that students will now need new kinds of training on academic integrity, and the initial responses from our own students affirm the value of transparent discussions on the appropriate use of ChatGPT as a tool to support their learning.

#### **Redesign Learning Activities**

In our last recommendation, we emphasize the importance of pedagogical flexibility and experimentation. Our initial experiences of making space for new kinds of activities with our students revealed ChatGPT's usefulness as a launching pad into critical thinking, an idea which aligns with other scholars who suggest that educators should lean into the positive opportunities generative AI affords in order to reimagine learning (e.g., Lang, 2023; Supiano, 2023). Similarly, Heaven (2023) notes that by disrupting "a system with too much focus on grading and not enough on learning, ChatGPT is forcing a debate that is overdue" (para. 22). Educators should see this challenge as an overdue call to action towards innovation to teach about

credibility and the importance of evaluating the validity and accuracy of information (García-Peñalvo, 2023). While the demand for developing critical digital literacy skills predates ChatGPT (Valverde-Berrocoso et al., 2022), ChatGPT has heightened its urgency. Because the source of ChatGPT-generated text cannot be understood and biases from the source corpus dataset can be passed forward (Bender et al., 2021; Lo, 2023), students have an increased need for skills such as sorting through and evaluating information.

As we continue reframing new opportunities for learning activities in the era of ChatGPT, we also recognize that there will be a need for new forms of assessment with a greater focus on creativity, critical thinking (Rudolph et al., 2023; Zhai, 2022), and process over product (McMinn, 2023). Supiano (2023) suggests that new assessment approaches should encourage learners to make use of all available resources, including AI-generated information, as part of a process of problem solving, analysis, and evaluation. Rethinking assessment to include a reflective focus on the learning process, which may or may not utilize ChatGPT as a potential tool along the way, can provide a promising path forward for educators. Guiding questions that educators will likely need to address in the near future include: What is the future of learning? How do we know that students have achieved learning outcomes in the era of AI? As educators, how can we keep up with the pace in which AI is developing? These questions and others will be essential as we collectively explore new avenues of learning in the 21st century.

## Conclusion

As Torres and Mayo (2023) state, developments in AI encourage reflection on new ways of learning, and "the burden is on all of us to model, frame, and guide responsible relationships" (para. 9). The emergence of ChatGPT and AI tools will undeniably continue to impact change education in ways in which we cannot yet foresee. To navigate this new and evolving terrain, we might consider courageously experimenting with AI tools while also carefully and critically evaluating their risks. We must also remember to keep humans in the loop and ensure that teachers' expertise and needs are at the forefront of decisions regarding AI in education. As one of our students aptly noted after using ChatGPT during an in-class activity:

AI's response is not that novel and intriguing that as long as there's plenty of time, we could figure it out. The activity is interesting and funny, but at the same time horrible if in the future everyone could not get rid of it.

The current moment requires nuanced evaluation of the benefits and challenges of teaching and learning in a world with AI because AI will inevitably continue to develop and evolve. Empirical research is also needed to investigate students' perceptions of AI (Chan & Hu, 2023) and effective practices and models of AI implementation in English language teaching. García-Peñalvo (2023) wisely notes that, when it comes to ChatGPT, "[d]enying it or banning it will do absolutely nothing to stop the tsunami effect that has already begun" (p.1). Thus, a commitment to exploring the applications of ChatGPT in teaching is essential for preparing students for a world with AI (Warner, 2023). For now, it is safe to say that educators' roles are changing but not being eliminated (Heaven, 2023), which presents a valuable opportunity for all educators to weigh in on innovative practices regarding what new knowledge and skills students need and what learning and assessment should look like in the 21st century.

As we consider the unique application of ChatGPT to English language teaching, we are comforted by recognition that language is a social communicative process through which humans connect to each other (Lee et al., 2009). Integral to this connection are the valuable

relationships that students develop with each other and with their teachers (Farrell, 2015). Though we must prepare students to thrive in the 21st century, we must do so in a way that promotes authentic linguistic interaction and peer collaboration, both of which serve the development of language skills as well as social-emotional wellbeing (Shapiro et al., 2023). AI cannot ever replace us in these essential aspects of our work as educators, yet it might make our work more interesting, engaging, and innovative.

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