

Bridling, Taming and Riding the AI Beast

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Abstract

When ChatGPT was broadly released in the fall of 2022, university faculty and administrators struggled to evaluate and predict AI's impact on higher education. They also faced the immediate need to create policies for its ethical use in academic settings, as well as devise ways to incorporate AI into daily teaching and learning. This article offers the description and results of a teacher-led student group incorporating AI into a learning experience using three distinct projects. Generally students found the use of AI, used in a thoughtfully prescribed manner, in filling knowledge gaps, as a thought partner, and in analyzing original L2 writing, as a positive tool in their learning. It is recommended that higher education instructors design learning and assessment experiences using AI to enhance the learning process.

Keywords: *Keywords: AI, ChatGPT, language learning, thought partner, prompt writing.*

1. Introduction

Bridling, taming and riding the artificial intelligence (AI) beast to benefit and advance student learning has been and continues to be a bit of a wild adventure in higher education. When a major AI release occurred in fall 2022 in the form of ChatGPT, it sent university administrators and faculty scrambling to evaluate and predict its impact as well as create and implement policies for its ethical use in academic settings. At many institutions of higher learning instructors were largely left to their own devices when it came to its use and implementation in the classroom. AI systems analyze large datasets and generate content with great speed and relative accuracy based on the input or prompts by the user. A variety of computer assisted learning tools have been incorporated into the classroom across the decades, and yet the introduction of large model machine learning technology has raised concerns to the next level, especially regarding its use in educational settings.

The incorporation of AI into the classroom has certainly been controversial in nature. Alharbi (2023) notes, "As AI-powered digital writing assistance goes beyond vocabulary and grammar

to more sophisticated and “human-like” help, then language educators and researchers may have reservations about the authenticity of students’ submitted writing” (p. 2). Alharbi (2022) also notes that as AI is incorporated into learning experiences there are likely to be a range of accessibility, abilities, perceptions and reactions. One of the common ethical concerns is that it has become increasingly difficult to detect plagiarism in AI-generated content submitted as original student work (Eaton, 2021). Owing to this difficulty, Godwin-Jones (2021) suggests that educators find creative ways to assign credit and design tasks that blend AI-generated material with original student effort and analysis. Sumakul et al. (2022) suggest that when deciding to incorporate AI in the classroom both teachers and students must engage in a collaborative effort, essentially investigating and co-designing for the best possible outcome. Ranalli (2021) recommends that learners be given opportunities to critically analyze AI-generated material to determine its usefulness and validity. Raising awareness about the limitations and biases, as well as the generation of potentially invalid content helps establish a healthy relationship with this type of technology. Educators should both acknowledge the amazing aspects of AI and its generated content along with opportunities to discover the drawbacks, in order to establish a balanced approach to the incorporation of AI into the learning environment. It is important to note that while AI can be used to develop students’ writing skills, Huang and Wilson (2021) state that it should play a supporting, not leading role. Pellet and Myers (2022) suggest that students record their experiences and encounters specifically with writing tools as a reflective practice.

Seasoned instructors understand that students will use emerging technology regardless of their effectiveness or ethics. According to Otsuki (2020), educators are responsible for adapting existing learning and assessment methodologies to allow students to use AI tools in a collaborative fashion. AI tools are being used throughout the world in the workplace in a variety of professions. Otsuki (2020), Hellmich et al. (2021), and Carvalho (2022) all agree that appropriate guidance in the use of AI tools is needed and it behooves educators to enhance students’ digital literacy in both educational and professional settings. Fredholm (2019), Lee (2020) and Sumakul et al. (2022) noted significant improvement when teachers mediated the learning process and provided training on the use of computerized learning tools.

2. Research Questions

With every AI update there is an opportunity for educators to respond with dread, excitement or indifference. Being a part of the vanguardian group incorporating AI into the classroom and in education administration can be risky, exciting and frustrating. Harkening back to the analogy of a bridle, this tool, when properly used by the horse’s rider, serves to give directional control to the left or right, as well as forward and reverse. Bridling an entity that is inherently unpredictable, offers a semblance of control. In my role as an instructor of Spanish for Business Professionals as well as English as an additional language, I felt motivated to hop in the corral

as it were and see what benefits I might experience by incorporating AI into the language learning classroom. By thoughtfully designing projects and setting specific parameters around its use, I planned to pose the following questions to study participants after the completion of several group assignments utilizing ChatGPT:

1. How well did ChatGPT serve as a thought partner?
2. What were the advantages/disadvantages in using ChatGPT?
3. What results were found after analyzing and validating information produced by ChatGPT?
4. Was ChatGPT helpful as a grammar tool?
5. What is your attitude about using AI in the academic environment?

3. Methodology

I have engaged AI in the classroom in a number of ways that have served to introduce this technology in cautious and reasonable ways. Incorporating the use of AI as a thought partner, to fill knowledge gaps, to assist with organizing projects, and in analyzing original L2 writing has shown AI's potential to help students expand their knowledge base, use their time more effectively, and better develop and use their critical thinking skills. The learning objective of the first project in this study was for participants to work in groups to use their knowledge and skills to develop a well-rounded diversity, equity and inclusion event highlighting aspects of specific regional cultures in countries where Spanish is the predominant language. When prompted by the participants, AI provided the template for such an event. Participants then generated prompts to discover what cultural content might be generated by AI. They were instructed to validate the content with outside refereed sources.

The second project of this study tasked participants with using AI to evaluate a short essay that the students had originally produced in the target language (Spanish) without outside assistance, during a face-to-face exam. Participants entered their essays into ChatGPT and then prompted it to evaluate the essay, looking specifically for the accuracy of grammar, spelling, syntax, and vocabulary. The students evaluated the AI-generated suggestions for patterns in what ChatGPT determined to be mistakes in the target language. Participants then reported the patterns as a type of formative assessment and created personal language goals based on the AI-generated feedback, paired with their personal evaluation. By doing so, both participants and the instructor benefitted from and engaged in an assessment and evaluation of the original writing sample in the target language. Study participants responded to a Google form survey about their experiences in using and evaluating content produced by AI.

The third project was conducted in an Advanced Oral Communication course designed for international students whose first language is not English. The language objective of the overall

project was to become familiar with and practice point/counterpoint debate protocol, pragmatics and suprasegmentals. Participants used ChatGPT to help generate content and verify structure for the debate topic of The Right to Know vs. The Right to Privacy.

4. Results

Thirteen students (11 females and 2 males) enrolled in a Spanish for Business Professionals course participated in the first and second projects and completed a survey regarding the experience. Seventy percent of the participants had never used ChatGPT prior to the start of the project, which was conducted roughly one year after the AI platform had become widely available. When asked how well AI assisted in planning a cultural event, 84% of the participants noted that it generated a helpful timeline and outlined a series of recommended activities, but 62% felt that the recommendations were vague. Some students postulated that it might be owing to a general lack of published information on the more obscure cultures chosen, while others questioned and revised their original prompts to gain further information.

As shown in Figure 1, when asked about the advantages of AI as a thought partner, 61% of the participants indicated that AI helped them generate content that they otherwise would not have thought of on their own and 54% indicated that it saved them time by gathering relevant content. Eighty four percent of participants indicated that AI helped them organize the structure of the project and 54% said that AI helped guide the group discussion.

One of the parameters of the project was for participants to use outside resources to verify AI-generated content. Based on their findings, 53% of the respondents reported that they felt AI generated questionable content. Part of the design of the group project entailed the participants discussing the validity of the AI generated content. Seventy seven percent indicated that the team members felt comfortable in questioning the generated material and 46% felt comfortable questioning the usefulness of the content in the overall project. When asked about their experience with prompt writing, 38% of respondents felt it was complicated to create prompts that would generate the content they were seeking and more than 60% of participants noted that they had to submit more than one prompt to generate useful information. Participants shared that they had to specifically describe the types of tasks that they wanted AI to perform. Eighty five percent of participants also noted that while academic language was not necessary, thorough and more detailed wording generated more satisfying results.

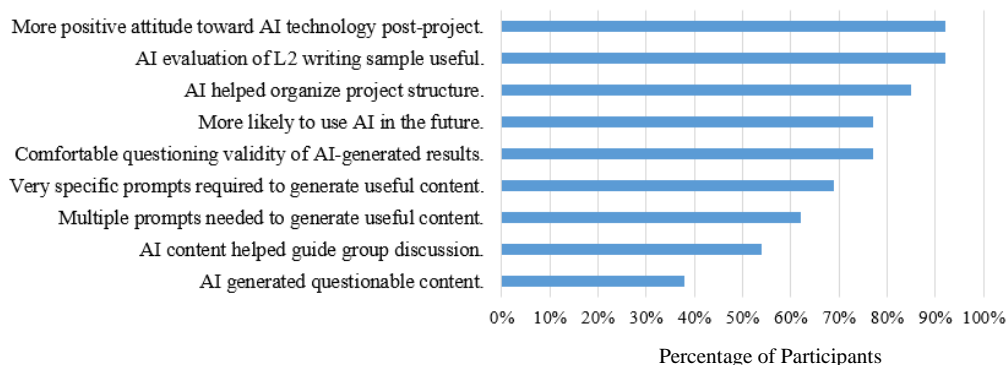


Figure 1. Summary of AI Project 1 Survey Results. Source: Despain (2024)

In the second project, participants in the study used AI to review an original paragraph that they had written in the target language without a computer or any outside assistance during a face-to-face proctored exam. After inputting the paragraph into ChatGPT with a prompt to correct the grammar, spelling, verb tense, written stressmarks and word choice, etc., 39% of the participants noted spelling errors, 23% found mistakes in their use of written stress marks, 23% highlighted subject/verb agreement issues, 30% noted their overuse of subject pronouns, 31% had verb tense issues, 39% recognized sentence structure errors and 77% identified word choice suggestions. Study participants tracked and recorded patterns of errors identified by AI and made notes for future compositions. Based on their experience using AI, 92% of the participants indicated that they had a more positive outlook regarding AI technology and when asked if they would likely use AI as a thought partner in future classes and assignments, when authorized, 77% indicated they would. Based on their experience using AI in the class, 66% of the participants indicated they would use AI to evaluate target language content they create in the future. When asked if professors should incorporate the use of AI in the learning process, 77% of the participants had a favorable response.

In the third project, conducted in an Advanced Oral Communication course roughly four months after ChatGPT became widely available, all participants (5 females, 4 males) reported a positive attitude regarding the use of AI in preparation for a debate. Authorization was given to use ChatGPT as a thought partner, to clarify and generate material as well as anticipate possible counterpoints. The participants, all graduate students in various academic fields, acknowledged the specific parameters of the project and noted the significant amount of time saved on the portion of the assignment that was not directly related to the learning objective, namely generating and organizing content on a topic unrelated to course content, allowing more time to be spent on practicing the task of presenting, backing up facts and opinions, listening for and acknowledging opposing viewpoints, firmly taking a cooperative stance and employing suprasegmentals to accurately convey a message.

5. Discussion

The purpose of this study was to gauge the experience, interest and response of participants in the use of AI. With the capabilities of AI expanding at an incredible rate, it is imperative that instructors make deliberate decisions regarding its use in the academic setting. The in-class design of these three highlighted projects was intentional. As the researcher, instead of assigning the investigative process with AI as a homework experience, it was essential that I observe and supervise participants as they engaged with ChatGPT, which, for the majority of the participants, was their first authorized opportunity in an academic setting. One of my first observations related to the participants' attitude about using AI as they began projects #1 and #2. The majority of participants expressed uncertainty and questioned the ethical use of AI regardless of instructor-authorized use. On the other hand, one student was visibly excited about testing out the capabilities of AI, and shared with the participants the fact that their roommate, who was in a STEM field, had been highly encouraged to use AI in several courses. They noted that the field in which they were majoring had very strict and punitive no-use policies in place for all Humanities and Social Sciences based major courses. Another student shared about their parent's use of AI on a regular basis in their employment.

Generally speaking I was able to witness both the excited discovery at how ChatGPT responded to prompts as well as the vocal skepticism and questions that came with experimenting with new technology. After observing and receiving the participants' feedback from the three different projects it became apparent that it would benefit students in higher education to obtain additional instruction and opportunity to better learn how to construct effective prompts and to uncover the various capabilities of generative AI as a thought partner, organization tool or evaluator of originally work in a target language and to discuss ethical use parameters in the academic setting.

Limitations in this study could be addressed in future research by increasing the number of student participants, by assessing faculty knowledge and attitudes regarding the use of AI and by expanding the types of academic projects incorporating AI.

6. Conclusion

While the introduction and expansion of AI technology has generated robust conversations about its value and ethical use, specifically in the academic circles, it cannot be denied that societal trends indicate its acceptance and broad use in professional venues. It has been shown that using AI in guided learning experiences as a thought partner, an assistant for organization purposes, a filler of gaps in knowledge and in evaluating original L2 writing are all viable tasks that can be incorporated into the classroom without pushing ethical boundaries. When students are guided through and document the process, and are given opportunities for critical analysis of generated content, they develop a balanced mindset about what AI can and cannot produce

as well as the value of what it produces. It is evident that the skill of prompt writing can and should be taught in a variety of academic settings so that students can more effectively harness the valuable aspects of AI and manage it in ways that are productive and ethical in academic and professional settings. Mindfully bridling technology and designing constructive ways for its use in the academic arena provides a smoother riding experience for students as they transition into a professional setting.

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