Chat GPT in Foreign Language Learning: A Short Experiment With Tourism Students

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Abstract

ChatGPT presents significative potential as a versatile tool for foreign language learning, particularly for improving reading and writing skills, so in the context of higher education, it is important to find out how to take advantage of it, especially for argumentative writing, which involves a higher-order thinking skill.

To explore the practicality and benefits of integrating ChatGPT into the pedagogical framework, a quantitative study was conducted involving 38 undergraduate Tourism students.

The central focus of the investigation is to gauge their perceptions of ChatGPT as a supplementary tool for English language learning. This is assessed through their experiences engaging in discussions with the chatbot.

The results of the study reveal that students not only find ChatGPT to be a valuable asset in their English language learning journey but also recommend its use within the classroom setting. The positive feedback underscores the potential of ChatGPT as an effective aid in language acquisition.

Research shows that the use of Chat CPT can bring numerous advantages but requires careful consideration of ethical and academic principles, so a few suggestions are given in this context.

Objective: to describe Tourism students' perception on the use of AI for English language learning.

Methods: online questionnaire (quantitative data)

Results: Students were generally satisfied with the use of Chat GPT and recommend its use.

Conclusions: Other studies regarding the use of chatbots for foreign language learning show similar results. Regarding ethical issues, educators should plan activities thoroughly and provide guidelines for students by also discussing the potential benefits and risks of Chat GPT

Keywords: higher education, foreign language learning, chat gpt, argumentative writing

1. Introduction

The use of Artificial Intelligence (AI) has been a major trend in Education for the past few years, especially through the use of chatbots, but the advent of ChatGPT in 2022 brought new challenges to higher education institutions and forever changed the way teaching methods are addressed and developed.

A few examples of AI applications in Education are personalized learning experiences, adaptive testing, predictive analytics (Wang, Lund, Marengo, Pagano, Mannuru, Teel, & Pange, 2023) and others, as learning opportunities seem to be endless.

There are many benefits associated to the use of AI in Education: it "has the potential to make library resources and services more accessible for users with disabilities, including visual impairment, by providing real-time transcriptions, translations, and audio descriptions" (Wang, Lund, Marengo, Pagano, Mannuru, Teel, & Pange, 2023) (p. 9), as well as other accessibility tools.

Nevertheless, there are also some limitations and risks that need to be considered when dealing with such technologies, namely ethical issues such as authorship and plagiarism (Su, Lin, & Lai, 2023).

A recent study shows the most common subject domain of AI-based higher education research was language learning (Crompton, & Burke, 2023). In this context, ChatGPT can assist students with outline preparation, content revision, proofreading and post-writing reflection (Su, Lin, & Lai, 2023). Besides, argumentative writing can be a useful strategy to develop students' higher order thinking skills (Mokhtar, Jamil, Yaakub, & Amzah, 2020; Nejmaoui, 2018) A few examples of these skills include advanced cognitive abilities such as critical thinking and problem solving. In the context of higher education, equipping students with these skills is essential for academic and real-world challenges.

In this study, we are going to focus on the use of this tool for developing writing skills, in particular by using a counter-argument strategy. A counter-argument strategy in a foreign language can be helpful as it encourages students to challenge their own arguments and consider alternative perspectives (Zhang, 2023). This approach not only enhances their language proficiency but also fosters critical thinking, helping them engage in more nuanced and persuasive argumentative writing.

We tried to follow the guidelines presented in the UNESCO report regarding the use of Chat GPT in higher education, in which it is suggested that teachers provide clear guidance and connect the use of ChatGPT to course learning outcomes (Sabzalieva, & Valentini, 2023).

The studies we mentioned focus mainly on the technical skills that students can develop by using this technology, namely higher order thinking skills, but fail to emphasize the students' perspective, so we believe this study can shed a new light into this context, by bringing clear results on their perception, especially on motivation.

2. Methods

Educators face a major problem nowadays, which is the lack of a pedagogical framework for using new technologies in foreign language education, especially in the context of AI, so it is indispensable to engage students in new experiences to try to understand their impact. Therefore, the main purpose of this quantitative study is to describe Tourism students' perception on the use of AI for English language learning.

The group of students had a first informal contact with AI through a worksheet that included a check-in dialogue created by the teacher with Chat GPT, which purposely contained mistakes for students to correct. They were informed that, according to the platform, the mistakes were not necessarily common or realistic, but were added to provide opportunities for students to correct them.

As students were generally receptive to this first activity and a few advantages and risks of this technology were discussed, the teacher decided to create an opportunity for students to interact with Chat GPT. In particular, within the topic of Customer Care in Tourism, the students had a debate in class under the topic "Is the customer always right?". The next day, they were invited to start the same discussion with Chat GPT, in pairs, by applying the arguments they had developed the day before and somehow developing their argumentative skills by using a counter-argument strategy. Three different groups of students had a 90-minute class to do the activity using a mobile device but, due to some technical problems, only part of that time was actually allocated to the Chat GPT debate. Each mobile device was used by two students who worked together in the discussion in a collaborative argumentation activity.

Data were gathered through an online survey in the Spring semester of 2022/2023. The instrument included nine questions using a five-point Likert scale, one open-ended question and two questions for social characterization (age, gender).

The analysis of the data was conducted using the Statistical Package for Social Sciences (SPSS, version 28).

The respondents were 38 undergraduate Tourism students from a Portuguese higher education institution, namely a polytechnic institution. Most students were female (57,9%) and were in the age group of 18-24 (97,4%), as only one student was in the >30 group.

After the activity, the students were sent a link with the online questionnaire and answered it. Confidentiality was ensured throughout the research process.

3. Results

Tourism students were surveyed about their perceptions on the use of Chat GPT for the context of English language learning and were asked to indicate their level of agreement with nine statements by using a 5 level Likert scale.

Statement		Mean	Std Dev
1.	I find AI (Chat GPT) useful in a foreign language learning class	4,18	1,010
2.	Chat GPT is useful for Education	3,63	1,239
3.	Chat GPT can develop students' critical thinking, as it allows them to think about a specific topic under different perspectives	3,71	1,037
4.	This Chat GPT activity helped me feel motivated in class	4,05	1,089
5.	I recommend the use of Chat GPT in other English lessons	4,18	,955
6.	I prefer traditional method classes, without resorting to Chat GPT	3,11	1,158
7.	I liked using Chat GPT in my English class.	4,13	,991
8.	I consider Chat GPT potentially useful for developing my English language skills	3,82	,926
9.	I consider Chat GPT potentially useful for developing my skills as a future professional in the Tourism area	3,47	1,224

Table 1. Tourism students'	nercentions on the	a use of Chat GPT	for English language	loorning
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As shown in Table 1, the results were generally positive and the two statements that gathered the highest mean score were related to the perception of usefulness of Chat GPT in a foreign language learning class (m = 4,18; sd = 1,010) and to the recommendation for the use of Chat GPT in other English lessons (m = 4,18; sd = ,955). On the other hand, the lowest mean score has to do with the preference for traditional methodologies (m = 3,11; sd = 1,158).

Regarding the open-ended question, which was created for students to possibly add more information about their experience using Chat GPT in English class, there were 10 valid answers and most of them were positive comments. A few examples of favourable remarks include the fact that students found this tool interesting, useful and were able to create sentences for the discussion. Other students mentioned negative aspects, like technical issues that affected the activity or finding GPT a repetitive tool that is limited to dialogues, although it can be useful for collecting information. One student mentioned ethical problems related to the use of Chat GPT, namely because it allows students to copy content and in that case the benefits may not outweigh the drawbacks; however, the student considers the use of this tool to promote learning when activities are developed by educators. Another student considered this activity to lack spontaneity and could be more dynamic because it was formally planned and organised; nevertheless, the student considered that, depending on the context, Chat GPT can also be useful and fun.

4. Discussion

Other studies regarding the use of chatbots for foreign language learning show similar results. According to Guo, Wang, & Chu (2022), chatbots can scaffold students' argumentative writing by means of two specific strategies, namely (i) backing idea generation and (ii) triggering counterargument integration, so they are a potential solution to the problem of finding an ideal partner to interact with in practice.

Furthermore, Barrot (2023) states that ChatGPT has the potential to be an effective tutor and source of language input, whereas Dergaa, Chamari, Zmijewski, & Saad (2023) assert that ChatGPT and other NLP (Natural Language Processing) technologies have the potential to enhance academic writing and research efficiency.

A study by Zhang, Zou, & Cheng (2023) showed that chatbots were advantageous in high-quality human-computer interactions, study plan making, and high accessibility. Moreover, Li, Sha, Yan, Lin, Raković, Galbraith, Lyons, Gašević & Chen (2023) state that ChatGPT may be capable of generating high-quality reflective responses in writing assignments administered across different pharmacy courses.

However, there are a few ethical issues that are associated with the use of these tools. Kohnke, Moorhouse, & Zou (2023) recommend that teachers and learners develop digital competencies to use ChatGPT ethically and effectively to support language learning (with respect to technological proficiency, pedagogical compatibility and social awareness), so the teacher should have a guiding role in the whole process. In particular, we suggest educators should plan activities thoroughly and provide guidelines for students by also discussing the potential benefits and risks of Chat GPT. Moreover, they should also provide feedback in order to ensure that students have used the tool effectively and ethically.

There are some limitations in this study, namely the fact that the sample is small sized, which means the results cannot be generalized.

Further studies are needed to assess the actual impact of Chat GPT in the development of writing skills, namely the need to use a larger sample and the use of control and experimental groups that could allow for a more thorough study that could actually measure how writing skills are developed. Other studies could focus on the impact of this technology on long-term writing development.

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