

A Survey on Tertiary Students' Use of AI Chatbots for English Learning at the University of Finance - Marketing

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Received: 9/7/2024; Accepted: 14/7/2024; Published: 17/7/2024

Abstract: *With a significant increase in the number of students using AI chatbots for learning English, there is a growing interest in understanding the effectiveness of this approach. This survey aims at exploring how students at the University of Finance – Marketing use AI chatbots for their English learning. Based on the findings, the study provides valuable recommendations on how to support students in effectively utilizing this technology for their studies.*

Key words: *Use of AI chatbots, English learning*

1. Introduction

In the age of “big data”, the use of artificial intelligence (AI) technology has greatly facilitated the teaching and learning process. As one of the popular applications of AI, Chatbots have proved to be very effective tools for EFL teaching and learning. Although several studies on this field have been carried out, there is an underexplored research area focusing on learners' perspectives. Thus, this research was conducted to get a deep insight into how students at university use AI chatbots in their EFL learning. In order to gain a full understanding of this matter, the following three questions were addressed:

1. What are tertiary students' perceptions of using AI chatbots in English learning?
2. What learning activities do students usually do with the support of AI chatbots?
3. What difficulties do they encounter when using AI chatbots to study English?

2. Content

2.1. Literature review

2.1.1. Definitions of AI chatbots

AI chatbots can be fully written as artificial intelligence chatbots which are systems designed to engage in human-like dialogue using natural language understanding and generation, capable of learning from interactions to improve their responses (Ray Kurzweil, 2012).

According to Daniel Jurafsky and James H. Martin (2019), AI chatbots are computer programs that use natural language processing and machine learning techniques to understand and respond to user input in

a conversational manner.

Maes, P. (2021) also defines AI chatbots as “Software agents that interact with users through text or voice, utilizing artificial intelligence to understand context, interpret intent, and provide relevant responses.”

2.1.2. Benefits of AI Chatbots in Language Learning

Soon after their emergence, AI chatbots have widely been applied in the educational sector and proved to offer significant benefits for language learning.

Several studies have found that AI chatbots can help improve students' oral communication skills. According to Buckingham Shum, S., & Luckin, R. (2019), AI chatbots can engage students in interactive conversations, making learning more engaging and less monotonous. This technology can be adopted as learning tools for promoting interactive communication in a target language (Yang, J. 2022). In her research on the role of artificial intelligence (AI) applications in speaking practice, El Shazly, R. (2021) concluded that AI chatbots may be beneficial in advancing FL learning with significant potential in EFL contexts, facilitating improved interaction and oral communication.

Another benefit that AI chatbots bring to language learning is that they can facilitate students' self-study by providing immediate feedback. As Holmes, W; Bialik, M; Fadel, C; (2019) put it “AI chatbots are available around the clock, allowing students to access learning materials and receive assistance at any time. This flexibility can be particularly beneficial

for students in different time zones or with varying schedules.”

Na-Young, K. (2019) confirmed that AI chatbots help students improve their English grammar skills. A Study on the Use of Artificial Intelligence Chatbots for Improving English Grammar Skills. *Journal of Digital Convergence*, 2019, Vol 17, Issue 8, p37

Mustafa, Y. (2023) proposed using ChatGPT as an effective method for vocabulary expansion in language learning.

2.2. The study

2.2.1. Participants

89 students were randomly selected from different classes at the University of Finance – Marketing to give responses to a questionnaire. Subsequently, 3 students from the advanced proficiency group (B2-C1), 3 students from the B1 group, and 3 students from the A2 and below group were chosen for an interview.

2.2.2. Data collection instruments, procedure and preliminary results

An online questionnaire was delivered via Google Forms to collect data from tertiary-level students regardless of their gender and academic year at university.

The questionnaire was written in Vietnamese so that the subjects can understand it thoroughly and was divided into four main parts. The first section is about background information. The second section asks about students' perceptions of using AI chatbots in English learning. The third section aims at seeking information on learning activities students usually do with AI chatbots. The final section focuses on difficulties students encounter when using AI chatbots to study English. The analysis of the questionnaire data was performed using Microsoft Excel with tables and charts.

After the data on students' English proficiency level were synthesized, a follow-up interview was employed to gain more accurate information about what learning activities students usually do with AI chatbots. The responses from the interview were processed by means of qualitative data analysis.

The research showed that while a large majority of participants have used AI chatbots for English learning, their usage frequency is generally low. Students employ chatbots mainly for translation, grammar, and vocabulary, with less frequent use for studying other English aspects. Students with higher proficiency levels tend to view the effectiveness and interaction capabilities of chatbots more positively than those

who rated themselves at lower levels. However, many students have to struggle with understanding chatbot features with insufficient guidance from teachers or instructors. They often rely on self-study and online resources to learn how to use the technology.

The findings will be discussed in more detail in the next section.

2.3. Findings and discussion

2.3. 1. Students' perceptions of using AI chatbots in English learning

Although 87 out of 89 students revealed that they have used AI chatbots for English learning, the frequency of their usage was low. Only about 40% of the participants reported that they often or usually used this technology to improve their English study. Approximately 41% thought AI chatbots could effectively or very effectively support their English learning and nearly 35% of the students rated the interaction and support capabilities of AI chatbots in the process of learning English highly or very highly. Surprisingly, positive evaluation of AI chatbots usage in English learning was primarily given by students who rated their English proficiency at a good level (B2 – C1).

2.3.2. Learning activities students usually do with AI chatbots

Results from the questionnaire show that the majority of students reported using AI chatbots for translation (92%), grammar study (79%), and vocabulary acquisition (76%). However, fewer students utilized this technology for writing (32%), speaking and pronunciation (21%), and reading (13%).

The analysis of interview data revealed distinct differences in AI chatbot usage among the three groups of interviewees.

A1 – A2 Group:

Grammar and Vocabulary: Students in this group often turned to AI chatbots for help with difficult exercises, frequently copying the suggested answers.

Speaking and Writing: For assignments, they wrote their ideas in Vietnamese and used AI chatbots to translate them into English. However, they found that the English versions provided by the chatbots were often above their proficiency level and difficult to remember.

B1 Group:

Grammar and Vocabulary: Similar to the A1 – A2 group, but with an added request for explanations from the chatbots.

Advanced Group:

Grammar and Vocabulary: Their approach was similar to the B1 group.

Writing and Speaking: They would write some ideas in English and ask AI chatbots to evaluate and suggest improvements. If the suggestions were too advanced, they requested simplified versions. Additionally, they used English prompts to seek specific information from the chatbots.

2.3.3. Difficulties students encounter when using AI chatbots to study English

It is encouraging that several students reported not facing many problems when using AI chatbots to study English. However, a significant majority (89.6%) admitted they did not fully understand how to use the chatbot features and felt that the chatbots did not fully meet their learning needs. Additionally, few students received guidance from their teachers or instructors on using AI chatbots for English learning. About 63% of the participants resorted to searching online materials or guides for assistance, and nearly 70% indicated that they relied on self-study to explore and understand the chatbot guidance independently.

2.3.4. Recommendations

Based on the research outcomes, we would offer some key recommendations on how to help university students use AI chatbots to improve their English language learning.

Firstly, English language teachers should be encouraged to integrate AI chatbots into their teaching methods. By doing that teachers can help students with practical guidance on how to use this technology to improve their English study. Particularly, teachers will instruct students how to write prompts for chatbots, and how to ask chatbots to provide resources for improving writing, speaking, and reading to balance the current emphasis on translation, grammar, and vocabulary.

Secondly, students should be given more group activities where students can use AI chatbots collaboratively, promoting peer learning and support. When working in groups, students with lower English proficiency can benefit from the guidance of advanced students, learning how to use AI chatbots effectively for their English studies.

Finally, there is a need for workshops that support students how to use AI chatbots for learning English. These workshops can provide activities where students practice writing prompts, asking chatbots to suggest

ideas, and requesting improvements or simplifications in language.

3. Conclusion

In conclusion, the research has uncovered several findings related to students' perceptions of using AI chatbots in English learning, learning activities students usually do with AI chatbots, and difficulties students encounter when using AI chatbots to study English. In order for these problems to be addressed, several practical recommendations have been proposed.

Because of time limitation, the research conducted with a questionnaire and an interview could not provide a comprehensive overview of the topic. Therefore, experimental research on tertiary students use of AI chatbots to study English should be taken into serious consideration.

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