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IMPROVING FOREIGN LANGUAGE SPEAKING SKILLS THROUGH AI: COMPREHENSIVE LITERATURE REVIEW

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Nowadays AI chatbots are evolving and becoming a commonly used tool for learning purposes. AI chatbots were found to be widespread in terms of developing different components of language proficiency, particularly in speaking skills development, its aspects such as comprehension, appropriate use of language and fluency. Therefore, the current article aimed to examine opportunities and challenges of the usage of AI chatbots for speaking skills development. A narrative literature review explores the pedagogical potential and challenges of chatbots for speaking skills development in an EFL (English as Foreign Language) context. The sources from non-empirical and empirical sources ranging from 2021 and 2026 were used to explore potential challenges and opportunities of AI chatbots. The research sources are taken from major academic platforms such as Google Scholar, Scopus, and Web of Science. The main criteria for selecting 20 sources are their emphasis on AI chatbots usage, with emphasis on speaking skills, key words related to AI and chatbots, language learning and period of published papers.

Keywords: Artificial Intelligence, AI chatbots, foreign language learning, opportunities, challenges, speaking skills.

Introduction

Artificial Intelligence (AI) is a competitive tool continuing its enhancement of position and role in the educational field. The speaking section is an integral part of language, demonstrating and proving performance and proficiency. Within recent years, there is a growing trend in utilization of AI chatbots for communication and language proficiency purposes (Zhang, & Zhang, 2023, as cited in Du & Daniel, 2024). The development of speaking skills is found to be challenging due to limited opportunities for practice. AI chatbots are software tools, stimulating human-like conversation between the user and a computer. They can not only provide answers, but also give feedback that make the current tool promising in language learning.

Chatbots can serve as an assistant tool for learners with a high level of affective filter or anxiety due to the absence of potential pressure in the process of speaking. Despite evolving attention and interest regarding AI chatbots, they remain sensitive to context, requiring additional pedagogical interference. AI-driven tools require proper decision-making and organization from the instructor's side. Therefore, there is ongoing discourse regarding relevance and practicality. There is one aspect that is questioned based on existing knowledge: an including component of speaking, pronunciation, and replacement of instructors by chatbots for speaking skills practice. This aspect remains debatable and requires additional exploration. There is still a limited amount of research conducted systematically based on existing studies and literature. Moreover, existing literature mostly focuses on general peculiarities of AI-powered tools, hindering deeper focus on a particular skill or section of language (Du, J., & Daniel, B. K., 2024).

This study aims to explore opportunities and challenges of integrating AI chatbots for speaking skills improvement by systematically reviewing existing research and literature. The current research investigates the following research questions:

- 1) What are key opportunities AI-powered chatbots integration may provide learners for speaking skills development?
- 2) What are the key limitations or challenges of AI-powered chatbots in terms of speaking skills?

The identification of advantages, limitations or challenges may assist educators, learners and all stakeholders in understanding how chatbots can affect in understanding the potentials of AI in developing specific speaking skills. Finally, this research provides practical insights by providing an opportunity to create more effective chatbots for speaking development. Moreover, it ensures theoretical and practical insights for further studies.

Methods and Materials

A narrative literature review approach was employed in order to examine potential opportunities and challenges of the usage of AI chatbots. Within major databases such as Google Scholar, Scopus and Web of Science, the combination of search through key words such as "Artificial Intelligence", "AI chatbots in language learning", "speaking skills" with Boolean operators were used. Another criteria for selection was time frame, studies and papers published within the last 5 years 2021-2026 were chosen. The current article gave priority to studies addressing parts related to conversation, interaction and communication in the scope of usage of AI chatbots speaking skills in EFL context. Their potential opportunities and challenges in usage became the central focus. The main criteria for exclusion was highlighted on other language skills such as listening, reading and writing. Moreover, in order to give

emphasis on recent advancements in education, namely pedagogical context, the studies earlier than 2021 were excluded to ensure recent general relevance of data.

Potential of AI chatbots in Speaking Skill Development

This part of the literature review will emphasize opportunities of AI-powered chatbots in speaking skills development. AI (Artificial Intelligence) is found to be a competitive and common tool in the educational sphere. According to Huang et.al (2022), the level of interest toward AI chatbots is rising due to its ability to retain conversation and language naturally. They are capable of being a “partner” in speaking due to its capacity to recognize pragmatics. Ouchenne and Belmekki (2025) examined the usage of AI chatbots for speaking skills enhancement. The overwhelming majority of respondents agreed on the improvement of pronunciation and accent after chatbots. It resonates with the previous claim about chatbots’ potential to be “speaking partners”. Due to its ability to give immediate correctional feedback, AI chatbots can scaffold and assist with a wide range of accents, giving phonological accuracy. The blend of other researchers represent the positive attitude towards chatbots, reflecting on improved pronunciation, accuracy in grammar, increased level of engagement and motivation and overall less anxiety (Du & Daniel, 2024; Saeed & Mahmoud, 2023; Ye et al., 2022). Additionally Zoe. et al (2024) have highlighted the improvement in organizational flow of ideas, reading aloud and skills of delivery. Mahmoud (2022) has indicated the results, denoting a notable progress in their speaking as a result of usage of post test, where 61% of students managed to achieve the A grade. This perception did not differ with inexperienced or experienced users but instead reflected the overall positive attitudes towards the use of technology in language learning. A recent paper by Warman et al. (2023) demonstrates how artificial intelligence (AI) technology can help surmount these difficulties by providing a supportive, low-anxiety environment for language practice. Chatbots, voice recognition software, and virtual assistants provide students with the opportunity to speak without fear or anxiety of judgment. They can influence not only 4 dimensions : vocabulary range, and accuracy. fluency and pronunciation, but considerably assist in building confidence and managing flow of interaction (Huong, 2026). These AI-based tools permit interactive, customized, and flexible learning experiences. Students are allowed to take part in simulated dialogues, do exercises repeatedly as many times as needed, and receive immediate feedback, which gives a boost to fluency and confidence. Recent studies support the application of these theories in AI-assisted language learning. For example, Qu and Wu (2024) reveals that AI chatbots can produce a low-anxiety context that is conducive for speaking practice, hence mitigating language learning anxiety and increasing relaxation in the learning context. Secondly, the flexibility of chatbots in addressing specific learners' requirements is also in line with the strategies of personalized learning, further testifying to the building of speaking competence in a relaxed environment (De La

Vall & Araya, 2023). AI chatbots have the potential to encourage self-correction that significantly enhances self-awareness of learners. By comparing it with traditional, teacher-centered feedback that can be delayed. AI chatbots can immediately regulate and adapt between responses throughout interaction, which positively affects speaking practice (Grab, 2025). Rouabhia (2025) has conducted a recent quantitative study, where within 8 weeks occurred. The intervention has showcased that AI chatbots assisted in improving academic speaking. The following components such as flexible response, presentation skills and fluency in academic context have been boosted. Moreover, the participants reported on reduced frequency of code-switching to their L1 across interaction. The results of this study, where anxiety level has dropped by more than 30%. AI chatbots have potential to minimize cognitive load which serves as an additional one to cognitive skills caused by anxiety, stress and overall pressure. Finally, they have potential in developing pragmatic awareness that was also demonstrated in a recent study (Elov et al., 2025). Pragmatics imply an ability to comprehend implied meaning of words, turn taking in interaction and proper choice of expressions dependent on the context of a dialogue.

Challenges and Limitations of AI chatbots

As regards to this part, the literature will discuss potential challenges and limitations of AI chatbots. Kim et al. (2021) claimed that students found humanized interaction over AI-powered one due to several factors: unnatural communication, presence of technical errors, and irrelevant or repetitive responses. According to Zou et. al. (2024), several limitations in the form of voice recognition and responses were noticed, reducing overall users' reliance on chatbots. It was pointed out that while EAP Talk, an AI-based speech assessment system, offers immediate feedback on speaking practice, it fails to offer more elaborated explanations and guidance, particularly regarding grammar accuracy and speech coherence. Thus, students are not able to pinpoint and rectify more complicated errors because of the absence of in-depth feedback. AI is particularly useful to learners who worry that collaborative work is too stressful or overwhelming to have a space that allows for repetition and individualized practice. It is clear how AI technology has the potential to transform language learning for less extroverted speakers, building confidence in speaking. Nevertheless, Vy and Pham (2024) have contended that AI chatbots work better for higher-level learners, yet there is limited research on how to make these tools accessible to lower-level learners. This gap is huge since the majority of language learners are beginners and would have been benefited from features such as simple language, step-by-step instructions, and clear grammar explanations. Their study could have provided additional insight into how AI chatbots could be designed to help learners at various proficiency levels. Another essential challenge is cultural misunderstandings, as Mudawy (2025) and Saeed and Mahmoud (2023) indicated. While they acknowledge this issue, their research lacks a detailed examination of the

particular cultural misinterpretations learners face and how these might be resolved through improved AI design. Vy and Pham (2024) also call for the need to enhance cultural adaptation in AI-based chatbots, particularly by rendering these instruments more suitable to non-Western learners. This is particularly relevant in a context like Vietnam where the effective teaching of English needs to be attuned to native cultural values and communication styles. Üstünbaş (2024) has pointed out that although ChatGPT can mimic human communication, it does not have non-verbal communication like gestures and emotions that are vital in actual communication. This resonates with the view that AI should enhance human interaction and not a replacement for it. Notwithstanding mounting evidence on the efficacy of AI tools, specifically chatbots, in EFL speaking skill improvement by alleviating anxiety, boosting motivation, and individualizing feedback, there are a number of research gaps that call for further research. Future research should investigate the complex interplay of AI utilization and learner anxiety in varied emotional and cultural settings, since results are still inconclusive. There is a clear need for longitudinal studies of larger and more diverse groups to ascertain long-term outcomes and generalizability. Second, there is underrepresentation of beginner-level learners, with extremely little research exploring how AI tools might be tailored to such needs as simplified complexity instructions and stepwise skill progression. Many studies also lack long term and rigorous comparisons to traditional or hybrid instructional methods, control groups, and objective measures beyond self-report data, compromising the validity of findings. In addition, the limited ability of current AI systems for providing detailed corrective feedback and for interpreting non-verbal communication cues requires technological development and pedagogical models better integrating AI and human instruction. Finally, cultural adaptation remains an underexplored area; future research should address how AI tools can be designed to align with learners' sociocultural backgrounds for more authentic and effective language learning experiences.

Conclusion

In conclusion, AI chatbots provide the learners and users with opportunities and challenges in terms of speaking skills development. On the one hand, chatbots serve like a personal assistant, by giving immediate feedback, keeping natural and humanized conversation that also ensures a comfortable and non-judgmental atmosphere. On the other hand, there are still unresolved issues in using AI chatbots in developing speaking skills as challenges in AI chatbots such as repetitive errors, failure in voice or inquiry recognition, and a gap in terms of cultural orientations. However, despite existing challenges, AI and its chatbots are evolving and have a potential to be indispensable tools in learning and polishing language proficiency, where speaking can be highlighted.

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ЖИ АРҚЫЛЫ СӨЙЛЕУ ДАҒДЫЛАРЫН ЖЕТІЛДІРУ: ЖАН-ЖАҚТЫ ӘДЕБИЕТ ШОЛУЫ

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Қазіргі таңда ЖИ негізіндегі чат-боттар білім беру саласында құрал ретінде кеңінен таралған. Олар тілді меңгерудегі құрамдас бөліктер, атап айқанда, түсіну, тілді дұрыс қолдану және еркін сөйлеу, яғни ауызша қарым-қатынасты жақсарту мақсатында қолданылатыны анықталған. Сондықтан бұл мақала сөйлеу дағдысын дамыту мақсатында ЖИ негізіндегі чат-боттардың бар мүмкіндіктері мен ықтимал қиындақтарын зерттеуге негізделген. Әдебиет шолуы ағылшын тілін, оның ішінде сөйлеу дағдыларын дамыту үшін пайдаланудың педагогикалық мүмкіндіктері мен қиындықтарын қарастырған. ЖИ негізіндегі чат-боттардың, сөйлеу дағдыларын жетілдіру мүмкіндіктері мен қиындықтарын анықтау мақсатында 2021 мен 2026 жылдар аралығындағы дереккөздер, яғни зерттеу жұмыстары таңдалған. 20 мақалаларды таңдаудағы басты критерийлері болып ЖИ чат-боттар,

олардың сөйлеу дағдысына негізделгені, ЖИ-ге қатысты кілт сөздері және жарияланым кезеңдері болып табылған.

Кілт сөздер: жасанды интеллект, ЖИ негізіндегі чат-боттар, шет тілдерін үйрену, мүмкіндіктер, қиындықтар, сөйлеу дағдылары.

УЛУЧШЕНИЕ РАЗГОВОРНЫХ НАВЫКОВ НА ИНОСТРАННОМ ЯЗЫКЕ С ПОМОЩЬЮ ИИ: ВСЕСТОРОННИЙ ОБЗОР ЛИТЕРАТУРЫ

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В настоящее время чат-боты на основе ИИ широко используются в качестве инструмента в образовательных целях. Было установлено, что они широко используются для улучшения компонентов языковой компетенции, особенно для развития устной речи куда также входит понимание, правильное использование языка и беглость речи. Тем самым, данная статья направлена на изучение существующих возможностей и потенциальных проблем использования чат-ботов на основе ИИ для развития разговорной речи. Нарративный обзор литературы исследует педагогический потенциал и проблемы использования чат-ботов для развития навыка разговорной речи в контексте изучения английского языка в роли как иностранного. В целях изучения возможностей и проблем использования чат-ботов на основе ИИ, были отобраны неэмпирические и эмпирические источники за период с 2021 по 2026 год. Источники были взяты с академических платформ таких как Google Scholar, Web of Science. Основными критериями отбора 20 статей являлись акцент на использовании чат-ботов на основе ИИ, с упором на навык разговорной речи, ключевые слова связанные с ИИ чат-ботами, и период публикаций статей.

Ключевые слова: искусственный интеллект, чат-боты на основе ИИ, изучение иностранных языков, возможности, проблемы, разговорные навыки