EXPLORING THE EFFECTIVENESS OF CHATGPT IN IMPROVING THE SPEAKING SKILLS OF UNIVERSITY STUDENTS

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Abstract:

The rapid rate of the Artificial Intelligence (AI) between 2020 and 2025 has changed the methods of learning English especially to the non-native speakers who want to improve their communication in the English language. The paper discusses how AI-based apps such as speech-recognition technology, chatbots, and virtual tutors can assist bilingual Urdu-English students to learn in Pakistan by improving their pronunciation, fluency, and overall communicative skills.

The study also uses the qualitative research design and convenience sampling as it examines the interactions of the learners in using AI-assisted speaking activities, evaluating the aspects of integrating the technologies and the traditional teaching strategies. The available literature and studies indicate that AI applications provide individual feedback, enhance motivation, reduce speaking anxiety, and promote practice. All these result in quantifiable positive changes in the speech accuracy and confidence.

Output of the four weeks of instructional program indicates slow yet consistent improvements in vocabulary acquisition, pronunciation, sentence coherence and the interactive communication. Despite these advances, a few issues can be mentioned, including absence of technological infrastructure, insufficient teacher training, technical issues and concerns over cultural suitability.

The research concludes that AI, when applied under teacher-driven guidance and culturally sensitive instruction, can promise a significant amount of potential to enhance the skills of spoken English. The outcomes indicate that in order to take full advantage of AI-based language learning, where resources are limited, we can use the improvement of digital infrastructure, more specific teacher training, and the optimization of the ratio between various teaching strategies.

Keywords: Artificial Intelligence (AI), Spoken English Proficiency, AI-Assisted Language Learning, Chat GPT, Bilingual Urdu-English Learners, Student Engagement, Qualitative Research

Introduction:

As AI technologies keep developing in the educational field, technologies like intelligent speech systems and web tutors are already playing a major role in the development of the spoken English language learning. This paper explores the role of AI tools in improving the learning outcomes of the non-native student population.

This paper aims to explore the ways AI technologies may be used to improve spoken English proficiency. The research will touch upon the ways in which AI tools can be introduced into the classroom setting and the ways they can be compatible with conventional pedagogies. Also, the investigation goes deeper into the barriers faced by teachers and students in using AI technology to enhance their level of spoken English. The question is how much AI-based speaking apps can increase student engagement.

This research is important because it addresses the growing need of creative and just methods of English language education. The paper explores how artificial intelligence can be used to improve the teaching of spoken English in schools with minimal resources with references to helping bilingual students utilize AI tools that are sensitive to sociolinguistic contexts. A systematic literature review found that AI applications, including chatbots and speech recognition tools, significantly contribute to improvements in vocabulary, grammatical accuracy, pronunciation, fluency, and learner confidence in speaking English, although challenges such as technology reliance and reduced human interaction remain.

This study focuses solely on AI applications that can improve the spoken English skills with the exception of their more general application in reading, writing, and general education. The geographic scope of this study is narrowed down to the Pakistani educational system, and special consideration is given to the bilingual Urdu-English speakers. The paper examines AI systems developed between 2020 and 2025, during which technology would develop fast.

Literature Review:

With the introduction of interactive tools in English language education, the learning process of non-native speakers has been transformed and helped in communication, pronunciation, and fluency improvement through the application of Artificial Intelligence (AI). As Ain and Azam (2025) point out, intelligent tutoring systems, speech-recognition software, and chatbots represent AI-driven platforms that have transformed the traditional approach to language teaching because they allow students to practice speaking by themselves and at their own pace. These programs provide real-time correctional feedback which helps the learner to improve his/her pronunciation accuracy and grammatical fluency as they practice it in real time. According to Li (2023), AI voice-recognition systems can significantly enhance speech rhythm and accent accuracy among learners, especially in the cases when there is a lack of an opportunity to speak in real life. Within the framework of Pakistan, Aftab, Sharif, and Nadeem (2025) discovered that university students have positive perceptions of AI-based English language learning tools, and that the technologies can greatly enhance such productive skills as speaking and pronunciation. Taken together, these studies indicate that AI helps to create an interactive and stress-free environment that allows learners to work on spoken English in confidence and autonomy. A systematic review examining AI applications for EFL learners documented that AI-based pronunciation tools such as ELSA Speak or Lyra Virtual Assistant have a positive impact on learners' pronunciation development and support overall improvement in spoken English proficiency (Aryanti & Santosa, 2024).

Several empirical studies have been carried out in Pakistan to study the specific role of AI in the spoken English proficiency. Aslam, Ullah, Gul, and Khattak (2025) studied students in Kohat University of Science and Technology and found out that students who used AI, such as chatbots and voice tutors, demonstrated higher levels of fluency, accuracy, and confidence when speaking in comparison with those who received traditional instructions. Similarly, Ishfaque, Kalhoro, and Shah (2025) established that conversational applications using AI resulted in more engagement and less anxiety of learners to make mistakes leading to improved oral performance. The authors of Shoukat, Mamoon, and Arif (2024) stressed the importance of the introduction of AI through the TPACK (Technological Pedagogical Content Knowledge) model facilitating the increase in student engagement and communicative competence in the Lahore classroom. According to the results of these researches, it is obvious that AI leads to better accuracy in language along with the enhancement of motivation, interaction, and general confidence of students in communication, which are all critical components of speaking English proficiency.

The number of errors in the use of pronouns and subject-verb agreement was also high indicating that the students are confused with grammar. Mistakes in pronoun use and subject-verb agreement were not uncommon as well which also demonstrates the lack of grammatical knowledge. Mistakes in preposition and the use of articles also indicated that it was more difficult to control subtle parts of language than it was to control punctuation errors, but the latter were also significant. (Jahan, J., Arif, B., & Mustafa, U. 2024). Research indicates that AI-powered language learning tools, such as speech recognition systems and intelligent tutoring systems, can facilitate individualized spoken English practice by providing immediate feedback, enhancing pronunciation, fluency, and learner engagement beyond the limits of traditional classroom instruction (Xu & Ismail, 2025). Studies on AI chatbots show that they offer increased opportunities for English speaking practice and learner engagement, but current research remains inconclusive regarding long-term educational outcomes due to inconsistencies in design and evidence (Safitri, Hidayati, & Ciptaningrum, 2025).

Although it has its benefits, researchers have found that there are many challenges in the integration of AI in language teaching. The major challenges in Pakistani schools are infrastructure constraints, lack of internet connectivity, and teachers training deficiency (Ahmed et al., 2025). Moreover, Ishfaque et al. (2025) noted that some AI tools lack cultural sensitivity and emotional sensitivity, which might hinder the ability to have a real conversation. Khan (2023) mentioned that it is crucial not to become over-relied on AI as the lack of integration with human interaction may put people at risk of losing interpersonal communication skills and critical thinking. An integrated approach - a combination of AI-based speech technology with the guidance of the instructor can be the most effective. To conclude, the existing literature is strong evidence that AI can contribute greatly to the fluency of spoken English and confidence of non-native language learners. Nevertheless, the successful implementation depends on the preparedness of infrastructure, the abilities of educators and the flexibility of technology to the cultures.

Methodology:

The present research uses qualitative research methodology and convenience sampling to explore the experience of the learners using AI tools in relation to learning spoken English. It is focused on the effect of AI on pronunciation, fluency, and practical communication skills. The convenience sampling also makes it easy to access students and teachers who are already using them; therefore, making the participation practical and passionate. The paper uses ChatGPT as a means of improving spoken English. ChatGPT is a convenient resource to improve spoken English, as it helps to engage in an interactive dialogue, correct grammar errors, give feedback, and develop vocabulary. It also helps in rephrasing and providing constructive feedback on how to enhance fluency and build self-confidence. However, ChatGPT cannot produce audio. As a result, people can either pronounce its answers aloud or use text to speech software to improve speaking efficiency and to develop effective pronunciation.

Data Analysis:

According to the students, AI is a resourceful tool that contributes to the improvement of speaking English skills. The qualitative data supports the importance of this in developing continuous interaction, responding feedback, and increasing confidence in a verbal form of communication. The results show that student performance is increasing steadily after the introduction of AI applications, such as vocabulary correctors, pronunciation trainers, and chatbots. Although some difficulties were discovered, including initial problems of getting used to the technology and the occasional technical breakdowns.

The chart below presents the weekly advancements of 10 students in enhancing their spoken English abilities.

Table 1.1

Students	Week 1 Outcome	Week 2 Outcome	Week 3 Outcome	Week 4 Outcome
St. 1	Basic self-introduction with pauses	Improved sentence flow	Practiced using idioms in conversation	Started speaking confidently for two minutes
St. 2	Limited vocabulary	Learnt more than 20 new words	Started using illustrative description	Gave feedback using progressive vocabulary
St. 3	Nervous during speaking	Practiced daily instructions	Reduced filler words	Presented topic graphically/ visually
St. 4	Mispronounced common words	Practiced phonetics for pronunciation	Improved pitch & tone	Clear and confidently delivered speech
St. 5	Avoided eye contact	Practiced in front of mirror	Started using gesture while speaking	Body language shows confident in speech
St. 6	Misused prepositions	Started using correct preposition in sentence	Use structural expressions	Started describing process step-by-step
St. 7	Feel hesitant to speak	Participated in a group discussion	Started asking questions confidently	Confidently explain idea in full sentence
St. 8	Dependent on an Urdu translation	Started using English only	Used humor in conversation	Shared a story with feelings
St. 9	Minimal engagement	Started daily practiced with ChatGPT	Gained confidence in group activities	Practiced in debates
St. 10	Avoided speaking	Started practicing in voice chat of ChatGPT	Started using expressions	Hosted Q&A session

Table 1.1 shows the weekly performance of ten students who have been enrolled in a four-week course to learn to speak English by applying the tools of artificial intelligence like

ChatGPT. The table is a good demonstration of how the journey of each student evolved throughout the effectiveness of how the student shifted to the state of being initially reluctant and limited to application of language but progressed to the state of being fluent and confident in their dialogue. Each week focuses on various aspects of the improvement of spoken English and includes pronunciation, sentence flow, grammar, vocabulary, and interactive speaking exercises.

The 1st week was characterized by the participants being on a basic level where they faced many obstacles such as limited vocabulary, anxiety, pronunciation, and not maintaining eye contact, using prepositions improperly, a lack of engagement, and reluctance to speak. The main goal during this phase was to determine the challenges, which are peculiar to each participant and encourage the first steps by means of simple self-guide and everyday speaking practices. This first step was a critical base towards improving confidence and inculcating self-realization in spoken English.

After Week Two, students gained significant progress because of regular use of AI-assisted instruments. They had more effective sentence flow, pronunciation and vocabulary acquisition and especially improvement in the usage of prepositions in their sentence construction with corrections. Also, voice communication during chats was greatly improved. Some of the learners have been able to get out of the dependence of Urdu translation and they have started to interact with English more aggressively. The ChatGPT sessions with the intention of practice included instant feedback, which stimulated linguistic accuracy and increased the motivation of the participants.

In the course of Week Three, the participants were more assertive and comfortable participating in real-time discussions. They began to incorporate the expressions of an idiom, sporadic gestures and human intonations into their speech. There was more organization and eloquence in their speech and their use of filler words was less. This step emphasized the high impact of habitual practice with the support of AI on the improvement of fluency and verbal expression.

At the end of Week Four, almost every respondent showed a significant improvement in the level of his/her confidence. They showed the skills in the ability to communicate during long periods of time, introduce ideas using visual and graphical tools, and actively engage in question and answer sessions and discussions. Their pronunciation and use of advanced vocabulary and their tone were highly refined. Those who were formerly unwilling to share their voices have gained the courage to make speeches, tell narratives and conduct question answer sessions and debates.

In general, Table 1.1 depicts a steady and significant progress of spoken English proficiency during the four weeks. Continuous absorption of AI tools offered the personalized support and created a nurturing non-judgment atmosphere that enhanced the motivation and fluency of learners. The results clearly indicate that AI can contribute to vocabulary enrichment, communication competence enhancement as well as confidence development among people who acquire the English language.

Conclusion:

In this study, it can be concluded that Artificial Intelligence contributes a lot to the development of spoken English in non-native learners through confidence, fluency, and communicative competence. Personalized, interactive, and real-time feedback, provided by the integration of AI-based products such as ChatGPT, speech-recognition systems and chatbots, contribute to the continuous growth of learners. The findings suggest that students who used AI-assisted technologies were more accurate, engaged, and motivated compared to traditional systems of learning. However, effective implementation requires adequate infrastructure, teacher training, and culturally competent materials. The paper highlights that

the most effective and moderate way of improving spoken English proficiency in the bilingual education system in Pakistan is to combine AIT technologies with traditional method of teaching.

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