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AI Chat-bots as Interlocutors in EFL Learning: A Mixed-Methods Study

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Dedication

Words cannot fully express the depth of my feelings.

I dedicate this achievement to my beloved mother, whose unwavering care, patience, and sacrifices have supported me from my earliest years to this very day.

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Abstract

This research illustrates the usefulness of AI chat-bots as AI chat-bots as conversational interlocutors in English as a Foreign Language (EFL) learning. In many EFL contexts, learners have restricted opportunities to practice speaking, which affects their communicative competence unfavorably. This study aims to examine how AI-mediated interaction can support the development of speaking skills. The study is grounded in Interactionist Theory (Long, 1996), Sociocultural Theory (Vygotsky, 1978), and the concept of Communicative Competence (Canale & Swain, 1980), which emphasize the importance of interaction, scaffolding, and meaningful communication in language learning.A mixed-methods research design was chosen, involving 28 undergraduate EFL students at an intermediate level. Data were collected through pre-test and post-test speaking assessments, a questionnaire, and semi-structured interviews. The speaking performance was assessed based on fluency, accuracy, vocabulary, coherence, and pronunciation. The results uncovered a statistically significant improvement in overall speaking performance.A paired-samples t-test revealed statistically significant differences between pre-test and post-test scores ($p < .05$), indicating a moderate positive effect of AI-mediated speaking practice on learners' oral performance. The most noteworthy gains were witnessed in fluency and vocabulary, while improvements in accuracy and pronunciation were more moderate. Qualitative findings signify that learners became more confident, produced longer responses, and showed reduced hesitation over time. Questionnaire and interview data further confirmed that students understood AI chatbots as useful, accessible, and effective tools for speaking practice, although some limitations were noted regarding the simplicity of interaction. The study concludes that AI chatbots can assist as valuable supplementary tools in EFL learning by providing easygoing environments and enhanced opportunities for practice. However, they should be used alongside traditional teaching methods to ensure balanced language development.

Keywords:
AI chat-bots, EFL learning, Speaking skills, mixed methods, communicative competence.

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General Introduction

Recently AI has been seeing rapid development and has significantly revolutionized various domains, including education. Language learning, specifically EFL, has been influenced by these technological advancements. The traditional teacher-centered instruction and limited interaction opportunities are being challenged by AI-powered tools that offer personalized, interactive, and adaptive learning experiences.

The development of communicative competence is one of the key challenges faced by EFL learners, especially in speaking skills. Learners often encounter barriers such as lack of exposure to real language use and limited practice opportunities; fear of making mistakes; as well as anxiety when communicating in a foreign language. As a result, students may not receive enough meaningful practice to develop fluency and communicative competence effectively. In this context, tools such as chat-bots and virtual assistants are some of the AI-based conversational agents that present promising solutions by providing learners with accessible, low-pressure environments in which they can practice and enhance their language skills.

Despite the growing interest in AI technologies within education, research concerning the effectiveness of AI chat-bots as a speaking partner in EFL contexts, in terms of combining quantitative and qualitative perspectives, remains relatively limited. While some studies are suggesting that AI tools can enhance learners' motivation and speaking fluency, to understand both their actual impact on speaking skills and learners' perceptions toward their use, further investigation is still needed. The successes of technological integration in education often depend not only on effectiveness but also on learner acceptance, motivation, and engagement,

so exploring students' attitudes is particularly important.

Therefore, the present study entitled "AI chat-bots as a speaking partner in EFL learning: a mixed-method study" seeks to investigate the role of AI chat-bots in improving speaking skills and to investigate students' awareness of AI-assisted speaking practice. More precisely, the study aims to answer the following research questions:

1. Does interaction with AI chat-bots improve speaking skills?
2. How do students perceive AI-assisted speaking practice, and how can integrating AI be helpful in EFL learning?

To address these questions, the study aims to adopts a mixed-method study approach combining quantitative and qualitative data collection and analysis. this research aims to provide a more comprehensive understanding of the educational value of AI chat-bots in language environment, by examining both measurable improvements in speaking performance and learners' personal experiences .

Problem Statement:

Despite the expanding relevance of English-speaking abilities in academic and professional contexts, many EFL learners struggle to achieve oral competency due to limited authentic interaction, lack of confidence, and excessive speaking anxiety. Traditional classroom constraints and limited instructional time frequently deprive EFL learners of opportunities for authentic oral interaction, particularly in contexts characterized by a lack of target language exposure outside the classroom. AI chatbots can provide engaging, low-anxiety speaking practice for learners thanks to recent advances in AI technology. AI chatbots are being employed in language learning; however, there is little evidence on their usefulness in assisting EFL learners' speaking ability improvement, particularly in higher education. This study examines how AI-mediated interaction may improve speaking abilities and EFL learners' perspectives and confidence.

Research Objectives

The present study aims to investigate the role of AI chatbots in supporting the development of speaking skills among EFL learners. Specifically, the study seeks to achieve the following objectives:

- To investigate the impact of AI-mediated interaction on thedevelopment of speaking skills among EFL learners.
- To examine the effectiveness of AI chatbots as conversational interlocutors in EFL learning.
- To identify the advantages and limitations of AI chatbots in supporting speaking skill development.
- To evaluate learners' improvement in fluency, accuracy, vocabulary, coherence, and pronunciation.
- To explore learners' perceptions and attitudes toward using AI chatbots for speaking practice

Research Questions:

The study is guided by three main research questions focusing on the impact of AI-mediated
interaction, learners' attitudes toward AI chatbots, and the potential strengths and weaknesses of AIsupported speaking practice.

- How does AI-mediated interaction affect EFL learners' speaking skills?
- What are learners' perceptions of AI chatbot interaction?
- What are the benefits and limitations of AI chatbots in speaking practice?

Methodology:

Research design:

This study adopted a mixed-methods research design combining quantitative and qualitative approaches. The study involved 28 undergraduate EFL students and aimed to investigate the impact of AImediated interaction on speaking skill development.

Data Collection:

Data were collected through pre-test and post-test speaking assessments, questionnaires, and semi-structured interviews. Learners interacted with AI chatbots during speaking practice sessions over 4 weeks period of time.

CHAPTER-II. Theoretical Framework

1.1 Introduction

This chapter is about the ideas that support our study on AI chat-bots as conversational interlocutorsin English as a foreign language (EFL) learning. We start with ideas about how people learn a second language and then move on to more specific ideas about how AI chat-bots can help with speaking development.

We first talk about the ideas from second language acquisition that are related to communication and speaking practice. Then we look at the ideas behind speaking development like interactionist theory and sociocultural theory because these ideas show how important it is to interact with others and get support when learning a language. Next we discuss speaking skills in English as a foreign language, learning how well people can communicate and how anxious they get when speaking because these things are crucial to understanding how well people can speak.

We also look at how technology has changed language learning, from using computers to help with language learning to using devices and finally to using artificial intelligence (AI) in language learning. We pay attention to AI chat-bots in English as a foreign language, what they can do to help people learn, and the feedback they give to learners. The chapter ends by connecting these ideas to what we want to achieve with our study on AI chat-bots in English as a foreign language learning tool.

1.2 Second Language Acquisition

Second language acquisition is the process by which people learn a language that's not their native language (Ellis, 1997). Second language acquisition is a field that looks at how people learn language and develop the ability to communicate in a second or foreign language.

When people learn English as a language, they usually only get to practice English in the classroom. They do not get to use English in life situations very often. This can hurt their ability to speak English well and feel confident when they talk. It is different for people who learn English as a language because they get to use English all the time. For people who learn English as a language, it is especially important to practice talking to other people.

Historically, people who studied second language acquisition thought that learning grammar was the most important thing. For example, Krashen said that people learn language when they hear or read things that are a little bit harder than what they already know. But now we know that it is not about hearing or reading things; people also need to practice talking and using the language.

Swain said that speaking is very important because it helps people realize what they do not know and it helps them learn more.

Long also said that people learn language when they talk to people and try to understand each other. These ideas are important for this study because AI chatbots give people a chance to practice talking all the time.

People can use second language acquisition to learn any language. This study is about English. Second language acquisition is a process, but it is easier when people get to practice talking.

1.3 Theoretical Foundations of Speaking Development in EFL

1.3.1 Intreactionist theory

This Theory represents a significant framework in the investigation of second language acquisition. This theory proposes that learners acquire language through engaging in meaningful interactions and communications with others (Long, 1996). It underscores the notion that langauge learning transpires when learners are actively involved in dialogues and strive to comprehend and negotiate meaning during these interactions.

The Foundation of the Interactionist Theory rests on the premise that intreaction is povital to langauge learners can:

- Receive comprehensible input

- Generate langauge output

- Indentify gaps in their linguistic knowledge

- Adjust their language usage based on feedback

These activities play a crucial role in facilitating language development (Long, 1996; Swain, 1985)

Long (1996) argues that negotiation of meaning occurs when learners experience communication difficulties and attempt to resolve them through clarification requests, confirmation checks, and reformulation. These interactional adjustments help learners notice gaps in their language production and facilitate acquisition.

Clarification, rephrase their statements, or rectify their errors, is what learners may seek, when they face challenges. This negotiation of meaning is helpful in enhancing learners' linguistic proficiency and fostering improved communicative skills (Gass & Selinker, 2008)

In English as a Foreign Language (EFL) settings, where real communication opportunities are often rare, technological innovation such as AI chat-bots can offer learners additional methods for interaction and speaking practice. AI chat-bots are capable of imitating conversational exchanges, motivating learners to articulate language, and delivering quick feedback. Viewed through an interactionist lens, this form of AI-facilitated interaction may bolster language acquisition by augmenting learners' exposure to communication and practice opportunities (Long, 1996)

1.3.2 Sociocultural Theory

The Sociocultural Theory was developed by Lev Vygotsky in 1978. This theory says that talking to people is really important for learning new things and getting better at language. When we learn something it usually happens because we are talking to other people and doing things with them that make sense. When people are learning a

language they need to talk to each other and work together. The Sociocultural Theory says that this is how people get better at using language and communicating with others. Lev Vygotskys theory is, about the Sociocultural Theory and how it helps people learn new languages. The Sociocultural Theory is a part of language learning and it says that we need to talk to other people to get better at language (Vygotsky, 1978).

The idea of the Zone of Proximal Development is really important in Sociocultural Theory. The Zone of Proximal Development is the difference between what people can do on their own and what they can do with help from someone who knows more. This help lets people do things they could not do before.

The help people get when they are learning is called scaffolding. Scaffolding is when someone gives you help in ways. This can be telling you how you are doing, giving you hints showing you how to say things and explaining things to you. The Zone of Proximal Development and scaffolding go together because scaffolding helps people learn and become better at using language. The Zone of Proximal Development is like a bridge that helps people get from where they're to where they want to be. Scaffolding is what helps people cross that bridge.

According to Lantolf (2000), sociocultural theory views language learning as a socially mediated process in which learners develop linguistic competence through interaction and collaborative support. Within this framework, mediation plays a central role, as tools and interactional resources assist learners in performing beyond their current level of competence

People, like Vygotsky and Wood, Bruner and Ross have written about the Zone of Proximal Development and scaffolding. They say that when people get the kind of help they can do more than they thought they could. The Zone of Proximal Development is a part of Sociocultural Theory because it shows how people learn and grow (Wood, Bruner, & Ross, 1976).

Wood, Bruner, and Ross (1976) define scaffolding as the temporary support provided to learners in order to help them accomplish tasks that would otherwise be beyond their independent capabilities.

In language learning with technology AI chat-bots can be helpful tools that support people talking to each other. AI chat-bots can give answers help people say things in different ways suggest other things to say and encourage people to keep talking. This helps people get better at speaking by giving them chances to practice and talk to others.

Even with all these good things AI chat-bots are very different from human teachers or friends. Human teachers or friends can understand how people feel and know about the culture and can fully understand what is going on. AI chat-bots do not have these abilities so they may not be able to help people learn well as humans can. For this reason we need to look at what AI chat-bots can and cannot do when people are learning a language, with technology.

1.4 Speaking Skills in EFL Leaning

Speaking is often considered one of the most challenging skills in second and foreign language learning because it requires learners to process language and produce speech simultaneously (Levelt, 1989). Unlike reading or writing, speaking takes place in real time, which means learners must quickly organize their ideas, select appropriate vocabulary, apply grammatical rules, and pronounce words clearly while maintaining communication.

Several components contribute to effective speaking performance. These include:

- Fluency
- Accuracy
- Pronunciation
- Vocabulary
- Interactional competence
- Interactional competence refers to the learner's ability to participate effectively in conversations by managing turn-taking, responding appropriately, maintaining communication, and negotiating meaning during interaction (Young, 2011). In EFL contexts, interactional competence is essential because successful communication depends not only on linguistic knowledge but also on the ability to interact naturally and collaboratively with others.

When we talk about speaking a language we need to think about a things. Fluency is the ability to speak smoothly and keep going without stopping much. This means that fluency is really important for speaking.

We also need to think about accuracy. This is about using the grammar and sentence structures. So accuracy is a part of speaking well.

Then there is pronunciation. This is important because when we say words clearly it is easier for people to understand what we are saying. So clear pronunciation is really helpful, for speakers and listeners.

We also need to know a lot of words and expressions to be able to speak. This is called vocabulary. Vocabulary is what learners need to know to be able to talk about things.

Finally we need to be able to talk to people and have conversations. This is called competence. Interactional competence is the ability to respond to what other people saying and to keep the conversation going. Fluency and interactional competence are connected because when we can speak smoothly we can also have conversations, (Richards, 2008; Luoma, 2004).

In learning settings students often struggle with speaking. This is because they do not get to practice speaking in real-life situations

* Many students do not get chances to speak English outside of class.

They are worried about making mistakes when speaking.

This worry, along with confidence and anxiety about speaking can make it hard for them to join in and do well in conversations.

The fear of mistakes and low self-confidence affect how well they speak and take part in discussions.

Students, in classes face challenges in speaking because of limited chances to communicate in real-life settings, (Horwitz, Horwitz, & Cope, 1986).

Some people who are learning English may know a lot of grammar and vocabulary. They still have a hard time talking to people in real life. This is a problem when people are trying to learn English as a foreign language.

Technology can really help with this problem. For example English learners can use computer programs like AI chatbots to practice speaking outside of class. When English learners talk to AI chatbots they can have conversations. Get better at using English. The AI chat-bot talks back, to them away. This can help English learners feel more confident when they speak English. It can also help them talk smoothly and be more willing to speak English. English learners can use AI chat-bots to practice speaking English. This can really help them.

1.5 Communicative Competence

Dell Hymes (1972) initially proposed the idea of communicative competence, arguing that language learners require more than just grammatical understanding to speak successfully. According to Hymes, effective communication requires knowledge of both grammatical principles and the proper use of language in various social and cultural settings.

This idea was further developed by Michael Canale and Merrill Swain (1980), who distinguished four key elements of communication competence:

Grammar proficiency
Proficiency in discourse
Proficiency in sociolinguistics
Strategic aptitude

Vocabulary, grammar, sentence structure, and pronunciation are all considered aspects of grammatical competence. In oral or written communication, discourse competence refers to the capacity to arrange ideas logically and make meaningful connections between phrases. Knowing what is socially and culturally acceptable in various communication contexts is known as sociolinguistic competence. When communication issues arise, strategic competency entails using communication tech-

niques to overcome obstacles and sustain contact (Canale & Swain, 1980; Canale, 1983).

Learners frequently have communication issues during speaking exercises, such as losing words, misinterpreting messages, or finding it difficult to articulate their thoughts. In order to successfully continue communicating, learners with strategic competency might employ strategies including paraphrasing, seeking clarification, and reformulating phrases (Canale & Swain, 1980).

By promoting engagement, prolonged speaking, and conversational practice, AI chat-bots may aid students in developing some aspects of communicative competence in the setting of AI-mediated language acquisition. Learners may enhance their discourse structure, fluency, and use of communication skills through ongoing conversation. However, because AI chat-bots are unable to completely mimic genuine human interaction, emotional intelligence, or cultural awareness, they may be less successful in promoting sociolinguistic competency.

Consequently, communicative competence offers a crucial theoretical foundation for comprehending the possible advantages and drawbacks of AI chat-bots as speaking partners in EFL instruction.

1.6 Speaking Anxiety in EFL Learning

For students learning English as a foreign language (EFL), speaking anxiety is a major obstacle that frequently shows up as physical and mental discomfort during oral output. Horwitz et al. (1986) described foreign language anxiety as a distinctive complex of self-perceptions, attitudes, feelings, and actions associated with classroom language acquisition that results from the particularities of the language learning process. Usually, a number of interconnected variables cause this anxiety:

Fear of receiving a bad grade: Students worry about being judged by their teachers or classmates.

Fear of language mistakes: Fluency might be hampered by an obsession with grammatical correctness.

A lack of trust in one's own communication skills is known as poor self-efficacy.

“Students who are anxious have a hard time participating in class and speaking up, and that’s a barrier to learning. This is supported by Krashen’s (1985) Affective Filter Hypothesis, which states that language learning is most effective when the learner’s “affective filter” is low, or in other words, the learner feels at ease, motivated and confident.

One possible answer to this problem is AI chatbots. AI chatbots can provide a low stakes, no judgment environment for you to practice your voice. By removing the social pressure of an audience of humans, these technologies may make learners more comfortable making mistakes and experimenting with the language, lowering their emotional filter and increasing their readiness to communicate.

1.7 Technology in Language Learning

1.7.1 Computer-Assisted Language Learning (CALL)

The search for and study of computer applications in language teaching and learning is known as computer-assisted language learning, or CALL (Levy, 1997). Early CALL systems, which concentrated on repetitive "drill-and-practice" exercises, grammar lectures, and vocabulary translation tasks, were primarily influenced by behaviorist learning theories (Warschauer, 1996).

The nature of the connection was intrinsically limited, even if these early systems offered controlled chances for reinforcement. According to Kern and Warschauer (2000), classical CALL was essentially a tool for language manipulation rather than a medium for organic social engagement, and it lacked the ability for genuine, reciprocal conversation.

1.7.2 Mobile-Assisted Language Learning (MALL)

By utilizing the mobility and widespread use of smartphones and mobile devices, Mobile-Assisted Language Learning (MALL) brought about a dramatic change in the way that education is delivered. Students can interact with the target language outside of the classroom thanks to MALL's "ubiquitous learning" environment (Kukulska-Hulme & Shield, 2008). The main benefit of MALL, according to Stockwell (2010), is its capacity to facilitate individualized learning, allowing students to practice in a variety of settings and at their own speed.

In particular, MALL settings give students the following affordances:

The capacity to practice anywhere and at any time is known as spatiotemporal flexi-

bility.
Multimodal input: Having access to rich audio-visual resources, such as pictures and movies, to improve understanding.
Learner autonomy: Possibilities for independent study without ongoing guidance from a teacher.
Many MALL applications have always lacked the ability for complex, real-time conversational interchange, notwithstanding these developments. Despite their great accessibility, they frequently lacked the interaction depth required to foster spontaneous speech proficiency (Burston, 2014).

1.7.3 Artificial Intelligence Language Learning (AILL)

AILL, or artificial intelligence language learning, is a revolutionary development in educational technology that goes beyond static software to dynamic, adaptive systems. In contrast to earlier versions of CALL, AILL systems use machine learning algorithms to evaluate performance in real-time, monitor learner behavior, and offer a highly customized learning trajectory (Chassignol et al., 2018).

By emphasizing natural language processing (NLP), which enables the system to modify its complexity to satisfy the unique linguistic requirements of the user, these technologies promote communicative ability. As a result, AILL makes learning more intuitive and responsive by changing the educational focus from rote memorization to active, conversational involvement (Hockly, 2019).

1.7.4 AI Chat-bots in EFL Learning

Artificial intelligence (AI) chat-bots are complex computer programs created to mimic human-like dialogue using text or voice-based interfaces. These chat-bots act as virtual conversationalists that support language learning in the context of English as a Foreign Language (EFL) by:
Creating a secure environment where students may have productive conversations is one way to simulate real-world discourse (Fryer & Carpenter, 2006).
Giving prompt, flexible answers: Giving rapid feedback that promotes ongoing communication.
Increasing readiness to communicate by lowering the social pressure related to human connection is one way to improve learner motivation.
Increasing practice opportunities: Making speaking practice available around-the-clock outside of the restricted classroom hours (Kohnke, 2023).

Research indicates that using AI chat-bots can greatly improve students' confidence and speaking fluency, especially for those who don't have access to native speakers

or real-world communication settings (Kim, 2019).

Nevertheless, there are several restrictions on the use of AI chat-bots. According to research, these systems may occasionally generate repeating verbal patterns or have difficulty with the subtleties of emotional intelligence and pragmatic meaning. Additionally, they continue to face difficulties navigating intricate cross-cultural sociolinguistics situations (Shawar & Atwell, 2007). As AI chat-bots continue to advance toward more complex human-computer interaction, it is crucial to comprehend these affordances and limitations for their successful integration into EFL courses.

1.8 AI Feedback in Language Learning

Feedback is an essential part of learning a language since it helps students find language gaps and improve their effective speaking and writing abilities. Ellis (2009) asserts that corrective feedback is a crucial tool for bringing learners' attention to form and enabling the "noticing" necessary for interlanguage development.

Language learners receive a variety of comments from AI chat-bots, which fall under the following taxonomies:

- Implicit feedback: Subtle fixes, such recasts or reformulations, in which the bot replicates the right form without specifically highlighting the mistake.

- Explicit correction is the direct identification of lexical or grammatical errors, frequently supported by a metalinguistic explanation.

- Positive feedback: Encouraging learners to use language correctly in order to boost their confidence.

- Negative feedback: Signs that a statement is inaccurate or maybe misinterpreted.

There are several obvious advantages to using AI for feedback in an EFL context.

Immediacy. Students receive immediate feedback that allows them to make adjustments on the spot.

Accessibility. Students can practice independently, outside of class time, with feedback available on demand.

Personalization: Sophisticated AI systems can tailor feedback to the individual learner's skill level and common error patterns.

But even with those benefits, the feedback AI generates is inherently limited. The pedagogical richness of present-day systems may be too limited to properly account for complex nuances or to incorporate the specific situational and pragmatic context of a discourse. So AI feedback could help with speed and fluency but could not guarantee perfect grammatical accuracy or sociolinguistics appropriateness every time. However, the incorporation of AI feedback is already a significant step forward to assist the iterative process of language acquisition and promote learner autonomy.

1.9 Theoretical Framework and Link to the Present Study

In order to investigate the effectiveness of AI chat-bots in language acquisition, this study is based on a coherent theoretical framework that incorporates interactionist and sociocultural viewpoints.

The Interaction Hypothesis, which holds that language acquisition is fueled by meaning negotiation and receiving corrective feedback during interpersonal conversation, lies at the heart of this theory (Long, 1996). Sociocultural theory, particularly the idea of the Zone of Proximal Development (ZPD), complements this. The ZPD, as put out by Vygotsky in 1978, shows the gap between a student's capacity for autonomous learning and their potential for growth through "scaffolding," or supported engagement.

AI chat-bots are positioned in this research as digital instruments that can support these theoretical processes. They aid in the growth of communicative competence, which includes discourse coherence, grammatical precision, and strategic communication, by:

- provide regular chances for practice in output and dialogue.

- using simulated conversation to promote active participation.

- providing prompt feedback to help with "noticing" language mistakes.

- reducing emotional obstacles like speaking nervousness to improve the learning environment.

Despite the widespread use of AI technology, little empirical study has been done on how students use chat-bots to practice speaking in real-world situations. In particular, there is little data on the long-term effects of AI-mediated engagement on speech

proficiency and learners' subjective experiences. By assessing whether AI chat-bots successfully enhance speaking abilities and investigating learner perceptions using a mixed-methods approach, this study seeks to close this research gap. In doing so, this study offers a critical evaluation of artificial intelligence's place in contemporary EFL instruction.

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Chapter-II. Methodology

2.1Introduction

This chapter presents the methodology used to investigate the effectiveness of AI chatbots as a speaking partner in EFL learning. It outlines the research design, participants, research instruments, data collection, procedures, and methods of data analysis employed in the study.

Providing a comprehensive understanding of both learners' speaking development and their perceptions of AI-mediated interaction, the study adopts a mixed-method study in order to.
While qualitative data were gathered through interaction analysis, questionnaires, and semi-structured interviews, quantitative data were collected through pre-test and post-test speaking assessments.
This chapter also explains the procedures followed during the speaking sessions and outlines the ethical considerations taken into account throughout the research process

2.2 Research Design

This study adopts a mixed-method research design, with both quantitative and qualitative approaches. The quantitative aspect of the study aims to measure the impact of the AI-mediated interaction with speaking learners' speaking performance through pre-test and post-test assessment. The qualitative aspect focuses on analyzing learner interactions and investigating students' perceptions of AI chat-bots as speaking partners.
The use of a mixed-methods approach allows for a more comprehensive understanding of the research problem by combining numerical data with detailed descriptive insights. This design was considered appropriate because it enables the researcher to examine not only whether improvement occurred, but also how learners experienced AI-mediated speaking practice

2.3 Participants

28 undergraduate students from Kasdi Merbah University's English department participated in the study. Convenience sampling was employed due to the exploratory nature of the study and the accessibility of participants within the selected academic context. Such sampling is commonly used in small-scale classroom-based research., the researcher used a convenience sample methodology, a non-probability method (Dörnyei, 2007). This method made it possible to conduct a thorough study in a particular institutional setting.

People in the sample ranged in age from 18 to 24. The participants were categorized as having an intermediate level of English ability based on their linguistic characteristics. This categorization suggests that even while they had a functional command of the language, they nevertheless struggled with complicated conversation and sponta-

neous oral creation. The participants' past familiarity with smartphones and other mobile applications also revealed their high levels of digital literacy. They were able to successfully traverse AI-based chat-bot interfaces throughout the trial thanks to their expertise with technology.

To ensure internal validity of the research, some inclusion and exclusion criteria were applied. Although some students had some small attendance problems because of personal or academic commitments, only data of participants who completed the whole experimental cycle (pre-test, intervention period and post-test) was included in the final analysis. This guaranteed that the results were enough to mirror the effect of the AI-mediated practice on the intended audience.

2.4 Research Instruments

This study used a triangulation of data gathering tools to guarantee the validity and reliability of the results. This multi-method approach made it possible to gather both quantitative and qualitative data, giving researchers a thorough grasp of how AI chat-bots affect learners' views and speaking abilities.

2.4.1 Speaking Proficiency Tests (Pre-test and Post-test)

Language development was mainly measured by a standardized test on speaking competence. It was applied before and after the intervention (pre-test and post-test). The examination was designed on the basis of the IELTS Speaking Module and included picture-description tasks and structured interviews.

The reason to choose this test is that it focuses on five basic criteria: fluency, grammatical accuracy, lexical resource, coherence and pronunciation. The researcher employed a standardized methodology to guarantee the evaluation was not biased and the enhancement could be specifically ascribed to contact with AI chat-bots rather than external factors.

2.4.2 Questionnaire

To collect quantitative information on the learners' opinions of AI catboats, a standardized questionnaire was created. There were two primary parts to the instrument:

Likert-scale questions: These assessed "Perceived Usefulness" and "Perceived Ease

of Use" in relation to the Technology Acceptance Model (TAM) (Davis, 1989). This made it possible for the researcher to quantitatively examine how successful learners thought the chat-bots were.

Open-ended questions: These were added so that participants may provide personal thoughts and qualitative insights that might not be expressed through predetermined options.

This method was selected because surveys are a very effective way to collect information from a big number of people and give a measurable picture of students' levels of confidence and motivation.

The reliability of the questionnaire was examined using Cronbach's alpha, which indicated acceptable internal consistency for the instrument.

2.4.3 Semi-Structured Interviews

A subset of individuals were subjected to semi-structured interviews after completing the questionnaire. This instrument was chosen to provide a "thick description" of the learners' experiences, allowing the researcher to probe deeper into the "why" behind their questionnaire responses.

The learners' perceived advances, the difficulties they encountered while engaging with the AI, and their recommendations for future use were all covered in the theme interview format. In contrast to a rigorous survey, the semi-structured style allowed for the exploration of unanticipated ideas while guaranteeing that a consistent set of leading questions met all primary study goals.

2.5 Research Procedure

This study's experimental phase lasted for four weeks. In order to sustain high levels of student interest without running the danger of "participant fatigue" or attrition, this period was chosen to provide enough longitudinal exposure to the AI interface for discernible language improvement (Dörnyei, 2007).

2.5.1 Pre-test Phase

To create a baseline for the participants' initial speaking skills, a pre-test was given at the beginning of the research. In order to make sure that any further advancements

could be impartially compared to the trainees' initial levels, this step was crucial. Reliability in the original data set was ensured by the pre-test's use of a defined rubric to evaluate speech performance.

2.5.2 The Intervention: ChatGPT Speaking Sessions

Eight speaking sessions using ChatGPT's voice mode made up the primary intervention. The following is how these sessions were set up:

Frequency and Length: Participants attended two sessions a week, each lasting fifteen to twenty minutes. This duration is supported by science since it is consistent with the cognitive load hypothesis, which allows for sufficient time for meaningful engagement without taxing the learner's working memory (Mayer, 2005).

Task Design: Rather than unstructured "fun" activities, participants were given particular communication tasks to guarantee disciplined practice. Among them were:

Role-plays: To improve situational language usage, students acted out real-life circumstances, like as placing an order at a restaurant or going to a job interview.

Information exchange: Developing discourse coherence through back-and-forth discussion on certain subjects.

Opinion Sharing: Using persuasive techniques to defend a position on a contentious issue (such as "The impact of social media").

Problem-Solving: To demonstrate strategic competency, discuss hypothetical difficulties (such as "Planning a budget trip").

Every session was recorded and timestamped within the program to confirm the data's legitimacy. The main corpus for the ensuing language study was these recordings.

2.5.3 Data Analysis and Post-test

The recorded exchanges were transcribed and subjected to language and thematic analysis after the intervention. The purpose of this analysis was to determine the learners' communication techniques, improvements in fluency, and recurrent mistakes.

A post-test was given at the end of the four weeks. This exam, which lasted around 10 to 12 minutes, was the same as the pre-test in terms of both nature and complexity. It was comparable to an IELTS Speaking interview. To gauge the ultimate proficiency increase and assess the efficacy of the AI intervention, a comparable post-test was required.

2.5.4 Qualitative Follow-up

Lastly, the participants took part in semi-structured interviews and finished the questionnaire. These interviews were conducted in order to accomplish triangulation, which enables the researcher to comprehend the "how" and "why" of the quantitative findings. Participants offered insights on the psychological elements of AI engagement, such as perceived ease of use and anxiety reduction, by sharing their experiences. To enable a thorough micro-analysis of the language "repair" maneuvers performed by the learners during their talk with the AI, some of the conversations were also turned into written transcripts.

2.6 Data Analysis

In order to provide a comprehensive assessment of the intervention, the data gathered for this study were examined utilizing a mixed-methods approach that included quantitative and qualitative techniques.

2.6.1 Quantitative Analysis

The data from the pre-tests and post-tests were analyzed using descriptive and inferential statistics. To gauge overall performance and score variance, descriptive statistics, such as mean scores and standard deviations, were first computed. In order to assess the direct effect of the AI intervention on oral proficiency, a paired-samples t-test was used to see if the statistical differences between the pre-test and post-test scores were substantially different.

2.6.2 Qualitative Analysis

We used theme analysis to examine the open-ended questionnaire items, interview replies, and session transcripts. We looked at the data to find important trends and new topics, like:

- Fluency indicators include student utterance length, speaking pace, and hesitation patterns.

- Lexical variety and vocabulary choices are linguistic characteristics.

- Self-correction techniques and repair techniques after communication failed are examples of communication tactics.

- Student confidence levels and changing anxiety perceptions are examples of affective variables.

By using this dual-method approach, we were able to collect detailed information on the learners' language progress as well as their psychological perspectives on AI-mediated communication.

2.6.3 Technical Specifications of the Chat-bot

The AI system used in this investigation was ChatGPT (GPT-4o version), which was created by Open-AI and made use of its Advanced Voice Mode. This particular tool was chosen because it can comprehend authentic spoken dialogue without text input and offers real-time, low-latency voice interaction with realistic speech inflections.

2.7 Ethical Considerations

For the implementation of the study, we followed the institutional ethical principles for research involving humans. An informed consent form explaining the aim, nature, and extent of the research was provided to all participants before the data collection started.

Absolute anonymity and confidentiality were guaranteed to protect the rights of the participants. Data were not attached with personal identifiers and all participants were given pseudonyms during the transcription and analysis stages. Participation was also completely voluntary and we explicitly told students they could opt out of the study at any time with no consequences to their academics or personally.

Finally, all digital assets were secured. All audio recordings, screenshots of the application, and text files were stored securely on a password protected, encrypted cloud drive. Access to this repository was limited to the research team and the data was used solely for academic purposes related to this investigation.

Chapter- IV. Results

3.1 Introduction

This chapter presents the empirical findings derived from the explanatory sequential mixed-methods design. The chapter is divided into three primary sections. First, the quantitative results from the pre- and post-test speaking assessments are detailed, incorporating inferential statistics to measure the magnitude of proficiency shifts. Second, the qualitative findings from interaction transcripts and semi-structured interviews are analyzed, exploring both positive developmental trends and negative cases of interactional friction. Finally, the questionnaire data contextualizing learner perceptions are reported.

3.2 Quantitative Results: Speaking Proficiency

The primary quantitative objective was to determine whether a statistically significant difference existed in learners' oral proficiency following the four-week AI intervention. Performance was assessed across five speaking components: fluency, grammatical accuracy, lexical resource (vocabulary), coherence, and pronunciation.

Descriptive statistics indicate observable improvements across all measured components. The most substantial gains were recorded in fluency (Pre-test M = 5.2; Post-test M = 7.1) and lexical resource (Pre-test M = 5.7; Post-test M = 7.3). Conversely, structural elements such as grammatical accuracy and pronunciation exhibited more modest score increments.

To determine the statistical significance of the overall speaking performance shift, a paired-samples t-test was conducted. The preliminary assumption of normality was met. The analysis revealed a statistically significant improvement in overall speaking scores from the pre-test to the post-test, $t(27) = 9.57$, $p < .001$. The mean difference was 1.52 ($SD = 0.84$), with a 95% Confidence Interval ranging from $[1.19, 1.84]$. Furthermore, to establish the practical significance of this intervention, Cohen’s d was calculated, yielding a large effect size ($d = 1.81$).

These statistical metrics indicate that the improvement is highly unlikely to be the result of random chance, thereby rejecting the null hypothesis. However, while the proficiency components demonstrated quantifiable gains, the variance in improvement rates between fluency and accuracy requires careful qualitative contextualization.

3.3 Qualitative Results: Interactional and Affective Analysis

Three main themes about the nature of AI-mediated contact were identified using thematic analysis (Braun & Clarke, 2006) of the spoken transcripts and semi-structured interviews.

3.3.1 Enhanced Lexical Experimentation, Fluency, and Output

The increase in student output and decrease in hesitation signs was the most noticeable behavioral change over the course of the four weeks. Participants sometimes depended on shortened, closely watched responses with fillers (such as "uh," "hmm") during early sessions. Early exchanges, for example, were typified by single-clause responses like "I like music." By the last week, learners were attempting compound phrases and providing uninvited explanations (e.g., "I enjoy listening to music because it helps me relax after studying, especially when I feel stressed"). Transcripts also showed improved continuity and increasing discourse complexity.

Additionally, more descriptive lexical choices replaced simple, repeated adjectives in vocabulary usage (e.g., changing from "The movie was good" to "The movie was really interesting and emotionally powerful"). Students also started actively applying self-repair techniques. Instances of active noticing were found in the transcripts, where students stopped mid-utterance to fix morphosyntactic problems (e.g., "She go—sorry—she goes to university every morning"). This self-correction shows a developing procedural control over their language production as well as an evolving metalinguistic awareness.

3.3.2 Reduction of Affective Filters

The quantitative finding of improved fluency was largely corroborated by interview data, which directly linked it to a decrease in anxiety. Participants frequently stated that their greater readiness to interact was mostly caused by the lack of social judgement. The learners' affective filter was decreased by the low-stakes setting established by the AI's non-evaluative character. As stated by Participant 7:

"I am constantly afraid of seeming foolish if I make a grammatical error when I speak to my teacher or fellow students. I spoke freely and tried complicated sentences that I typically avoid because I knew the AI didn't care or judge me.

Learners were able to experiment with language formation without the crippling dread of being judged by peers or teachers because they felt psychologically comfortable.

3.3.3 Interactional Friction and Negative Situations

Importantly, in order to prevent confirmation bias, qualitative analysis requires that negative situations be examined. The chat-bots computational limitations caused interactional discomfort for a number of participants, and not all of them adjusted to the AI interface with ease.

Participants observed that although the tool was pedagogically helpful for fluency, the AI often failed to understand pragmatic nuances or cultural references, resulting in responses that were excessively literal or inflexible. Over time, it also became clear that genuine human spontaneity was lacking. As stated clearly by Participant 19:

"The responses occasionally seemed a little robotic or overly well-organized. It doesn't sound quite like a real person because it doesn't utilize slang or hesitate naturally. Although conversational agents offer excellent structural practice, they currently lack the pragmatic flexibility and emotional atonement required of authentic human-to-human discourse, which is highlighted by this interactional friction.

3.3.1 Increased Output and Lexical Experimentation

The most prominent behavioral shift observed over the four weeks was the expansion of learner output. During early sessions, participants frequently relied on truncated, highly monitored responses. For example, early interactions were characterized by single-clause answers (e.g., "I like music"). By the final week, transcripts demonstrated increased discourse complexity, with learners attempting compound sentences and offering unsolicited justifications (e.g., "I enjoy listening to music because it helps me relax after studying"). Additionally, learners began actively utilizing self-repair strategies. Transcripts revealed instances of active noticing, where learners paused to correct morphosyntactic errors mid-utterance (e.g., "She go—sorry—she goes..."), indicating an evolving metalinguistic awareness.

3.3.2 Affective Filter Reduction

Interview data overwhelmingly supported the quantitative finding of increased fluency, linking it directly to anxiety reduction. Participants consistently cited the absence of social judgment as the primary catalyst for their increased willingness to communicate. As Participant 7 articulated: "With the AI, I knew it didn't care or judge me, so I spoke freely and tried complex sentences I usually avoid." This perceived psychological safety permitted learners to engage in trial-and-error linguistic formulation without the paralyzing fear of peer or instructor evaluation.

3.3.3 Negative Cases and Interactional Friction

Crucially, the qualitative data also revealed significant limitations, preventing a universally positive narrative. Not all participants adapted seamlessly to the AI interface. Negative case analysis identified instances of interactional frustration stemming from the chat-bot algorithmic constraints. Several learners noted that the AI frequently failed to grasp pragmatic nuances or cultural references, leading to literal, rigid responses. Furthermore, two participants reported feeling "bored" by the final week, describing the AI's conversational style as overly polite and structurally repetitive, which occasionally stifled organic conversational flow.

Although most learners reported positive experiences, a few participants expressed frustration with repetitive responses and occasional misunderstandings generated by the AI chat-bot. Some learners also indicated that the interaction lacked emotional authenticity compared to human communication.

CHAPTER IV: DISCUSSION AND CONCLUSION

4.1 Introduction

This final chapter synthesizes the empirical findings, situating them within the theoretical frameworks of the Interaction Hypothesis and Sociocultural Theory. It provides a critical interpretation of the data, acknowledges the study's methodological limitations, and outlines specific pedagogical recommendations for the integration of AI conversational agents in EFL curricula.

4.2 Discussion of Findings

The results of this study address the core research questions by confirming that while AI chat-bots can facilitate specific dimensions of oral proficiency—particularly fluency and lexical retrieval—their utility is constrained by the nature of algorithmic interaction.

4.2.1 Automated Scaffolding and The Interaction Hypothesis

The quantitative divergence between fluency gains and accuracy improvements aligns directly with Long's (1996) Interaction Hypothesis. The AI chat-bot functioned effectively as an engine for continuous comprehensible output, forcing learners to negotiate meaning in real-time. Because the AI interface prioritized semantic comprehension over strict syntactic correction, learners developed greater automaticity (fluency). However, the chat-bots tendency to employ implicit recasts rather than explicit corrective feedback meant that structural errors were often overlooked if the underlying message was intelligible. Consequently, while learners became more confident speakers, their grammatical accuracy did not improve at a commensurate rate.

4.2.2 The Limits of Algorithmic ZPD

From a Vygotskian (1978) perspective, the chat-bots successfully provided a baseline level of "scaffolding" within the learners' Zone of Proximal Development (ZPD) by offering immediate vocabulary alternatives and maintaining conversational momentum. Nevertheless, the negative qualitative cases highlight a fundamental limitation in AI-mediated Sociocultural Theory: true scaffolding requires empathetic attunement. Human instructors dynamically adjust their pedagogical support based on a learner's emotional state and cultural context—capacities currently absent in LLM architectures.

4.2.3 The Hawthorne Effect and Affective Variables

While the reduction of speaking anxiety via a lowered affective filter (Krashen, 1985) was clearly documented, the interpretation of the resulting proficiency gains must be approached with caution. It is highly probable that a portion of the observed engagement and fluency improvement is attributable to the Hawthorne effect (or novel-

ty effect). The integration of cutting-edge AI voice technology provided a stark departure from traditional classroom routines, potentially artificially inflating motivation during the brief four-week intervention.

4.3 Limitations of the Study

To ensure academic rigor, several methodological limitations must be acknowledged:

1. **Absence of a Control Group:** The pre-experimental design lacked a control group, making it impossible to definitively isolate the AI intervention as the sole variable responsible for proficiency gains, rather than test-retest practice effects or general academic maturation.

2. **Intervention Dosage:** The cumulative exposure time (approx. 160 minutes over four weeks) is insufficient to claim permanent, fossilized changes in interlanguage development.

3. **Sampling Parameters:** The study utilized a relatively small convenience sample (N=28) from a single institutional context, limiting the generalizability of the findings to broader EFL populations.

4. **Researcher Bias:** Although blinding procedures were employed, the reliance on human raters for speaking assessments introduces potential subjectivity.

4.4 Pedagogical Recommendations

Based on the synthesized findings, the following pedagogical recommendations are proposed:

- **Targeted Blended Integration:** AI chat-bots should not be viewed as replacements for human interlocutors. Instead, they should be deployed in a flipped-classroom model where learners utilize the AI for asynchronous fluency and vocabulary practice, reserving valuable classroom time for complex pragmatic and sociolinguistic instruction with the teacher.

- **Task Complexity Calibration:** Educators must sequence AI tasks according to Robinson's Cognition Hypothesis, starting with simple information-exchange tasks and progressing to cognitively demanding problem-solving scenarios to prevent the repetitive interactional fatigue observed in this study.

- **Explicit Accuracy Training:** Because conversational AI tools prioritize fluency, teachers must supplement AI practice with explicit, form-focused grammar instruction to prevent the fossilization of syntactic errors.

4.5 General Conclusion

This mixed-methods study investigated the efficacy and perception of AI chat-bots as conversational interlocutorin an Algerian EFL context. The findings indicate that generative AI voice interfaces serve as highly effective supplementary tools for reducing communicative apprehension and fostering oral fluency and lexical expansion. By providing a low-pressure, accessible environment, these tools successfully mitigate the affective barriers that traditionally hinder spontaneous target language production. However, the study also reveals that algorithmic interaction lacks the pragmatic depth, cultural reflexivity, and explicit corrective precision inherent in human instruction. Ultimately, AI chat-bots represent a powerful technological accordance for language practice, but realizing their full pedagogical potential requires deliberate, structured integration alongside traditional, human-guided teaching methodologies.

4.6 Recommendation

Future research could involve larger participant populations, longer intervention periods, and comparative studies including control groups. Further studies may also explore the effectiveness of advanced AI systems in developing pronunciation, interactional competence, and pragmatic communication skills.

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Appendices

Appendix A: Pre-Test Speaking Tasks

Task 1: Personal Interview

Students answered general speaking questions related to daily life, hobbies, studies, and future goals.

Sample Questions

1. Can you introduce yourself?
2. What do you usually do in your free time?
3. Why are you studying English?
4. What are your future plans?
5. Describe a memorable experience in your life.

Task 2: Picture Description

Students were shown a picture and asked to describe it in detail for approximately 2–3 minutes.

Instructions

- Describe what you can see in the picture.
- Explain what the people are doing.
- Give your opinion about the situation shown.

Appendix B: Post-Test Speaking Tasks

The post-test followed the same structure as the pre-test in order to compare learners' speaking performance before and after the intervention.

Task 1: Personal Interview

Students answered questions similar in difficulty and topic to those used in the pre-test.

Task 2: Picture Description

Students described a new picture using complete sentences and detailed explanations.

Appendix C: Speaking Assessment Rubric

Criterion	Excellent (8–10)	Good (6–7)	Fair (4–5)	Weak (1–3)
Fluency	Speaks smoothly with minimal hesitation	Minor pauses	Frequent hesitation	Speech is very limited
Accuracy	Few grammatical errors	Some errors	Many errors	Constant grammatical problems
Vocabulary	Wide range of vocabulary	Adequate vocabulary	Limited vocabulary	Very basic vocabulary
Coherence	Ideas are well organized	Mostly organized	Some organization problems	Ideas unclear
Pronunciation	Easily understood	Minor pronunciation issues	Several pronunciation issues	Difficult to understand

Criterion	Band Description
Fluency	ability to speak smoothly
Accuracy	grammatical correctness

Criterion	Band Description
Vocabulary	lexical range
Coherence	organization of ideas
Pronunciation	clarity and intelligibility

Appendix D: Questionnaire

The questionnaire consisted of 15 items measured using a five-point Likert scale:

1 = Strongly Disagree
2 = Disagree
3 = Neutral

4 = Agree
5 = Strongly Agree

Section 1: Background Information

1. Gender:
   □ Male
   □ Female
2. Age: _____
3. English Level:
   □ Intermediate (B1)
   □ Uper Intermediate (B2)

Section 2: Perceptions of AI Chat-bots

Please indicate your level of agreement.

Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
AI chat-bots improved my speaking skills	□	□	□	□	□
I feel less anxious when speaking with AI chat-bots than with people	□	□	□	□	□
AI chat-bots helped increase my confidence in speaking English.	□	□	□	□	□
The AI chat-bot was easy to use.	□	□	□	□	□
The AI chatbot responses were clear and understandable.	□	□	□	□	□

Section 3: Open-Ended Questions

1. What did you like most about using AI chat-bots for speaking practice?

.....

2. What difficulties did you face while using AI chatbots?

.....

3. What are the main limitation of AI chat-bot?

.....

Appendix E: Semi-Structured Interview Questions

Semi-structured interviews were conducted with 8 participants in English and Arabic. Each interview lasted approximately 10–15 minutes and was audio-recorded with participants' consent for thematic analysis purposes.

1. How did you feel when speaking with AI chatbots?
2. Did AI chat-bots help improve your speaking confidence?
3. What aspects of your speaking improved the most?
4. What limitations did you notice during the interaction?
5. Would you continue using AI chat-bots for language learning in the future? Why?

Appendix F: Sample AI Chatbot Speaking Activities

Activity 1: Role-Play

Topic: Ordering food at a restaurant

Instructions

Students interacted with the AI chat-bot by simulating a restaurant conversation.

Activity 2: Daily Conversation

Topic: Talking about hobbies and daily routines

Instructions

Students answered follow-up questions and maintained a conversation for 10 minutes.

Activity 3: Problem-Solving Task

Topic: Planning a group trip

Instructions

Students discussed travel plans, budgets, and preferences with the AI chat-bot.

Appendix G: Sample Learner Responses

Early Session Example

AI Chat-bot: What do you usually do on weekends?
Student: I stay home.

Later Session Example

AI Chat-bot: What do you usually do on weekends?
Student: On weekends, I usually stay home and relax. Sometimes I watch movies, study English, or spend time with my family and friends.

Appendix H: Ethical Consent Form

Consent Statement

I voluntarily agree to participate in this study entitled:

"AI Chat-bots as Speaking Partners in EFL Learning: A Mixed-Methods Study."

I understand that:

- My participation is voluntary.
- My responses will remain confidential.
- I can withdraw from the study at any time without consequences.

Participant Name: _____

Signature: _____

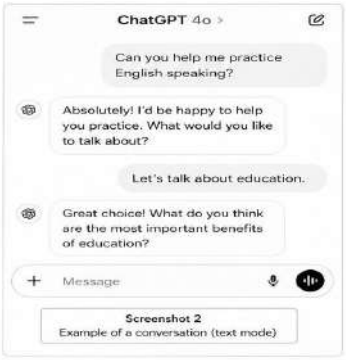
Date: _____

Appendix F: AI Chat-bots Interaction Samples

Composite screenshots from the ChatGPT GPT-4o interface illustrating AI-mediated speaking interaction, including voice-mode conversations, learner responses, AI-generated feedback, and voice settings used during the

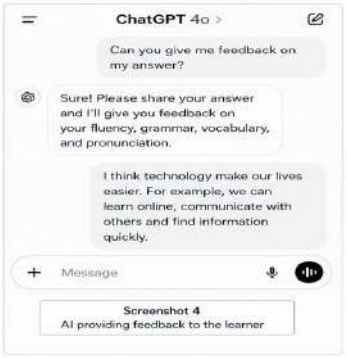
study.

Screenshot 1
ChatGPT Voice Mode interface

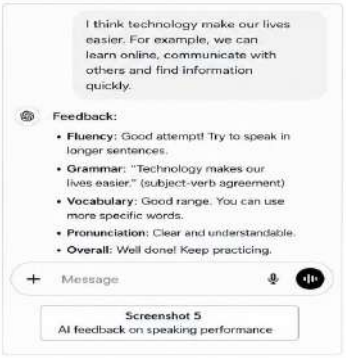


Screenshot 2
Example of a conversation (text mode)

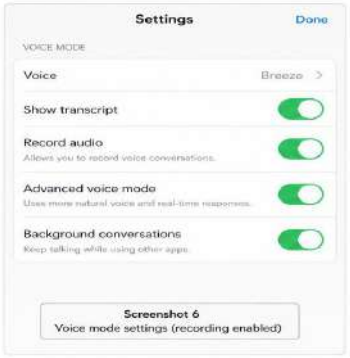
Screenshot 3
Example of a voice conversation



Screenshot 4
AI providing feedback to the learner



Screenshot 5
AI feedback on speaking performance



Screenshot 6
Voice mode settings (recording enabled)

ملخـص: بالعربي

في ممارسة مهارة التحدث في تعلم اللغة الإنجليزية كلغة أجنبية (EFL). ففي العديد من بيئات تعلم اللغة الإنجليزية كلغة أجنبية، يواجه المتعلمون فرصًا محدودة لممارسة التحدث، مما يؤثر سلبًا على كفاءتهم التواصلية. وتهدف هذه الدراسة إلى فحص كيفية مساهمة التفاعل المدعوم بالذكاء الاصطناعي في تطوير مهارات التحدث. تم اعتماد تصميم بحثي قائم على المنهج المختلط، وشملت الدراسة 28 طالبًا جامعيًا من متعلمي اللغة الإنجليزية كلغة أجنبية في مستوى متوسط. وتم جمع البيانات من خلال اختبارات قبلية وبعدية لمهارات التحدث، بالإضافة إلى استبيان ومقابلات شبه موجهة. وقد تم تقييم الأداء في مهارة التحدث بناءً على الطلاقة، والدقة اللغوية، والمفردات، والترابط، والنطق. كشفت النتائج عن وجود تحسن ذي دلالة إحصائية في الأداء العام لمهارة التحدث، وكانت أبرز التحسينات في الطلاقة واستخدام المفردات، في حين كانت التحسينات في الدقة اللغوية والنطق أكثر اعتدالًا. كما أظهرت النتائج النوعية أن المتعلمين أصبحوا أكثر ثقة، وأنتجوا استجابات أطول، وأظهروا ترددًا أقل مع مرور الوقت. كذلك أكدت بيانات الاستبيانات والمقابلات أن الطلبة اعتبروا روبوتات الدردشة المعتمدة على الذكاء الاصطناعي أدوات مفيدة وسهلة الوصول وفعالة في ممارسة التحدث، رغم الإشارة إلى بعض القيود المتعلقة ببساطة التفاعل أحيانًا. وتخلص الدراسة إلى أن روبوتات الدردشة المعتمدة على الذكاء الاصطناعي يمكن أن تُستخدم كأدوات مساندة قيّمة في تعلم اللغة الإنجليزية كلغة أجنبية من خلال توفير بيئات مريحة وفرص أكبر للممارسة، إلا أنه ينبغي استخدامها إلى جانب أساليب التدريس التقليدية لضمان تنمية لغوية متوازنة.

كلمـــات دلاليـــة:

الذكاء الاصطناعي، روبوتات الدردشة، تعلم اللغة الإنجليزية كلغة أجنبية، مهارة التحدث، التفاعل المدعوم بالذكاء الاصطناعي، الكفاءة التواصلية، تعلم اللغات، التعليم الإلكتروني، الطلاقة اللغوية، القلق اللغوي