

The Impact of the “Pi app” as a Digital Tool on Students' Speaking Skills.
El impacto de la aplicación “Pi” como una herramienta digital en las
habilidades orales de los estudiantes

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Resumen

La Inteligencia Artificial (IA) se ha convertido en una herramienta crucial en varios campos, incluido la educación, donde la misma mejora el proceso de enseñanza-aprendizaje, ayudando a los docentes a simplificar la enseñanza, personalizar el aprendizaje y mejorar la experiencia en la clase. Este estudio tiene como objetivo analizar y describir el impacto de Pi, una aplicación de inteligencia artificial, en las habilidades de expresión oral de los estudiantes de inglés como lengua extranjera. Los participantes involucrados en esta investigación fueron 34 estudiantes de entre 15 y 16 años, pertenecientes a la “Unidad Educativa Chordeleg” en Ecuador. Este trabajo se realizó utilizando el diseño explicativo secuencial de métodos mixtos. Se aplicaron 4 instrumentos para obtener la información: una encuesta basada en el modelo de escala Likert, la cual se divide en cinco secciones: actitudes de los estudiantes, estrategias de los profesores, habilidades más comunes practicadas en las clases, tecnología usada en las clases y familiaridad con la aplicación “Pi”. También se aplicó un pretest y un postest de habilidades orales para evaluar el nivel de inglés hablado de los estudiantes y comparar los resultados. Adicionalmente, se llevó a cabo una encuesta de aprobación sobre el uso de la aplicación “Pi”. Después del proceso, los resultados demostraron que los estudiantes tenían dificultades en la comunicación oral en inglés y que en sus clases estaban expuestos mayormente a actividades gramaticales. Además, los resultados mostraron que la aplicación “Pi” jugó un papel importante en la mejora de las destrezas orales de los estudiantes.

Palabras clave: Inteligencia Artificial; Pi app, habilidades orales; aprendizaje del idioma inglés.



Abstract

Artificial Intelligence (AI) has become a crucial tool across various fields, including education, where it enhances the teaching and learning process by helping educators simplify instruction, personalize learning, and improve the classroom experience. This study aimed to analyze and describe the impact of the “Pi app” on the speaking skills of EFL students. Thirty-four second-grade students aged 15 to 16 from “Unidad Educativa Chordeleg” high school in Ecuador participated in the study. An explanatory sequential mixed-methods design was used, and four instruments were employed. A five-section Likert scale survey was administered, covering students’ attitudes, teachers’ strategies, common abilities practiced in class, technology used in class, and familiarity with the “Pi app.” A speaking pretest and posttest were used to assess students’ English levels and compare the results. Additionally, a dichotomous satisfaction survey was conducted to gather insights about the application of Pi. The results revealed that students had difficulties communicating in English and that they were primarily exposed to various grammar activities in their classes. Findings also indicated that the artificial intelligence app “Pi” played a significant role in enhancing students’ speaking skills at the end of the investigation.

Keywords: Artificial Intelligence; AI app Pi; speaking skills; English language learning.



Introduction

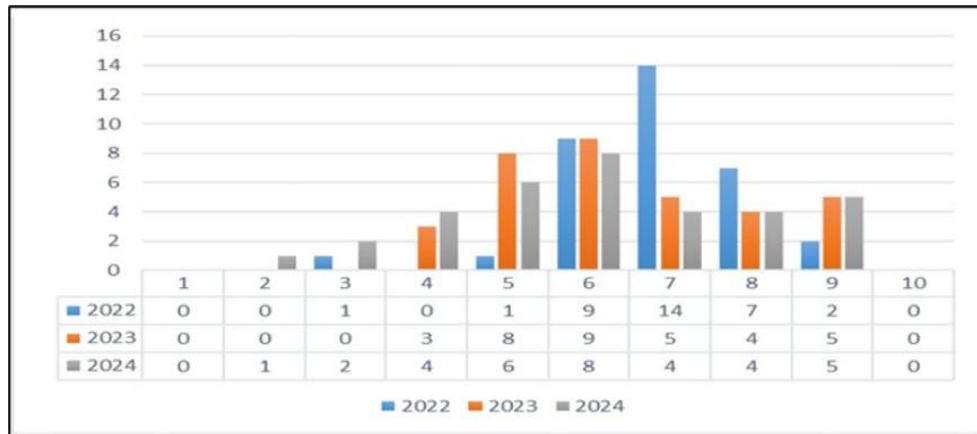
Nowadays, the ability to master English as a means of communication has become a crucial skill for people striving to grow in professional, academic, and personal contexts (Sari, 2023). According to Alonso (2018), speaking is a fundamental and challenging ability that EFL students urgently need to develop to communicate and interact with others. Ironically, this is the skill that most students struggle with the most. Consequently, teachers and researchers are examining new innovative methods and tools to improve language learning outcomes. Artificial intelligence has rapidly become one of the best options to help teachers and students overcome language learning issues (Sharma et al., 2024). Many AI apps available on the internet can be used as tools to help pupils refine their language skills, speaking, listening, reading, and writing. The Pi app is a conversational model that uses a learning machine to communicate and generate intuitive responses to human requirements. One of the most important features of the Pi app is that it is well-equipped with properties to help students develop their language skills. It can maintain conversations on different levels and situations, provide feedback, ask for clarification and correction, and simulate authentic situations to interact with people. That is why the Pi app could be the appropriate option to help the students involved in this research overcome their English learning issues.

Based on the researcher's experience, most students involved in this study had obtained low grades, between 3 and 7 out of 10 on oral exams in the last three years, see Figure 1. The grades showed that students were struggling with speaking skills. This has led to search for strategies and tools that help students enhance their communication skills. The Pi app has several characteristics that can help students develop and boost their speaking abilities since it offers various alternatives, such as immediate answers, advice for improvement, and the creation of conversations on different topics, levels, and situations to promote effective oral communication. The Pi app is also appropriate to address issues related to the classroom environment, such as a lack of participation and low student motivation.

Figure 1



Grades obtained over the last three years. (2021-2024)



Source: own elaboration

This study seeks to define the effect of the Pi app on the students' speaking skills by addressing two important research questions. (1) Which specific skills can be improved the most by incorporating the AI app Pi? (2) How does the Pi app impact students' attitudes towards learning English? This research was carried out by collecting information, organizing it, and analyzing the data. Finally, based on the results, the conclusions were drawn.

Even though many studies exist related to the use of technological apps to improve students' language skills, further investigation on this subject is necessary to deepen our understanding of the real benefits of the app since the language learning process takes place in a diversity of environments, with different students, ages, cultures, and needs. In this sense, educators are driven to continue seeking appropriate strategies and tools that adapt better in a certain context.

Theoretical framework

This study is based on the communicative language teaching approach (CLT), which focuses on developing communicative rather than lexical ability through participants' interaction (Littlewood, 1981). This approach focuses on helping students naturally use language to communicate real meaning by applying original materials and real-life environments to make a meaningful learning process. CLT is not considered a methodical system because it does not use a book to teach the language, but emphasizes developing oral skills before reading and writing. Anandan (2011) states

that role-plays, conversations, dialogues, interviews, group work, and activities for sharing opinions are helpful tools included in this method.

Since CLT stimulates interaction between participants and Artificial Intelligence applications, designed to perform various tasks and place students in realistic scenarios, they become an effective option to assist pupils in enhancing their communicative competence. An example of these technological tools is ChatGPT, a computer program designed to interact with users by simulating real human dialogues, asking questions, providing feedback, and requesting clarifications on various forms of written communication, such as news articles, social media content, academic essays, computer code, and emails (Hetler, 2025).

Huang et al. (2022) state that ChatGPT is designed to participate in interactive dialogues and conversations with human users. In like manner, Pi is another sophisticated AI app that could help students develop the four language skills to improve their communication. In the context of learning English, these tools offer potential as intelligent teaching assistants, particularly to develop speaking skills. These AI apps can generate factual dialogues and simulate authentic conversational scenarios, allowing students to practice their oral communication under low pressure, while creating an engaging environment. Also, these AI apps are designed to provide immediate feedback on language use, grammar, and vocabulary. They help students improve their spoken fluency and communicative skills. Another benefit that these apps offer is that their adaptive nature allows them to tailor their answers based on students' learning processes and needs. They can make adjustments to the content and styles of interactions according to the learners' levels. Crompton and Burke (2023) claim that this individualized approach enhances learning efficiency by identifying specific language challenges and providing targeted practice in areas where learners require improvement.

Kaisheng (2007) explains that CLT requires communication as the main tool for teaching a language, and communication requires the ability for an individual to accurately convey a message or exchange information, opinions, and feelings with another person or group of people. It means that students need to develop active listening, nonverbal communication, assertiveness, clarification, and other communication skills to communicate and express themselves effectively.

Literature review

Speaking skills and Artificial Intelligence

In this globalized world, using English properly has become vital for those pursuing to qualify in diverse personal, academic, and professional disciplines (Sari, 2023); furthermore, oral competence is one of the most important abilities involved in authentic communication (Brown, 2008). Therefore, developing speaking skills should be a priority for EFL students to enable effective communication with others. However, speaking is considered one of the hardest skills to master for EFL students. With this premise, artificial intelligence has become an indispensable ally in English acquisition. The incorporation of AI in developing students' communication skills has enhanced English learning results. AI technologies, such as language detection systems, virtual instructors, and chat assistants, are crucial tools for refining learners' speaking skills, such as pronunciation and fluency (Rusmiyanto, 2023).

Rohmiyati (2025) concludes that the English learning process has become considerably easier with the development and use of digital tools. He also suggests that artificial intelligence is a significant tool to help pupils and educators in their education process due to the multiple benefits that technology with AI brings to EFL classrooms. Crompton et al. (2024) stated that AI provides benefits to the English language acquisition experience, specifically in speaking, writing, and reading skills, as well as providing new alternatives for teaching. They also say that pronunciation was the speaking skill most improved by students in Taiwan. Hockly (2023) states that AI can be used to enhance education for every student by giving personal training, making it more efficient and enjoyable. Despite the extensive adoption of technology in the English-teaching process as a second language (ELT), instructors have the responsibility of identifying and understanding the pros and cons of AI tools now to continue preparing for the future. Alsaleem (2021) investigated how writing, vocabulary, word choice, and spoken English can be enhanced using AI tools, such as WhatsApp software for English publications. The results of this research showed that AI tools are a useful option to support students in improving their written and oral competence and vocabulary.

Current investigations have revealed the benefits of AI tools in enhancing speaking communicative competence when learning a second language. Smith and Johnson (2022) state that learners who



utilized a human language recognition system to practice English improved their pronunciation and fluency more than those who did not use the chatbot. Learners who practice communicative activities, such as conversation and dialogues using speech recognition, increase their ability to apply English fluently in different situations (Garcia et al., 2023).

Pronunciation and Artificial Intelligence (AI)

Pronunciation refers to how the sounds of the words are made, which is acquired by repeating and correcting imprecisions. When EFL students learn pronunciation, they implement new habits to overcome the difficulties related to their native language (Yates & Zielinski, 2009). Aspects such as personality, attitude, age, instruction, motivation, accent, stress, intonation, rhythm, and native language influence how individuals articulate or say the words (Pourhosein, 2011). Pronunciation requires considerable time to be enhanced since it is a hard skill for an EFL student to acquire (Aliaga et al., 2009). Given the difficulty of learning pronunciation, instructors have explored new alternatives to improve instruction. Artificial intelligence (AI) is one such alternative that can help students improve their pronunciation. Liu et al. (2019) state that Automatic Speech Recognition (ASR) is one of the AI apps that provides a realistic method for EFL/ESL students to improve their English pronunciation and offers a creative way for instructors to teach English pronunciation.

AI App technology in education

Artificial intelligence is an innovation that seeks to imitate humans' fundamental characteristics, such as learning, comprehension, creativity, autonomy, and even decision-making through computers or robots. Therefore, AI technology is revolutionizing various areas, including education (IBM, 2024). AI has become an essential tool for improving the teaching-learning process. Second language learning has become easier since technology provides more alternatives every day (Fryer & Carpenter, 2006).

The use of AI in educational settings can bring some benefits to the teachers and students. For example, AI is designed to evaluate students' progress immediately and allow them to practice spoken English in authentic situations. One of the most interesting benefits is that it is accessible at any time, in some cases, even without an internet connection. AI is also beneficial for users who



are not confident in their learning characteristics, such as social, cognitive, and academic aspects. AI apps have a pressure-free learning environment (Okunlaya et al., 2022).

ChatGPT as a tool for language learning:

Pratiwi et al. (2024) state that ChatGPT is a useful technological tool in classroom contexts, especially for speaking practice, since it offers various benefits related to versatility, availability, and individualized feedback, which can enhance language learning experiences. According to their study, learners can practice speaking in a low-pressure environment and immediately receive feedback on pronunciation and fluency. Also, students can engage with the language more dynamically. Ortiz (2024) contributes to this statement and states that ChatGPT is a sophisticated speech processing tool that provides some benefits for users. For instance, it helps us save time on doing our tasks, works as a writing assistant, and increases the opportunity to improve the learning process. Nevertheless, ChatGPT not only provides benefits but also presents disadvantages. Users may become over-reliant on ChatGPT, leading to other negative consequences, such as a decrease in creativity, and students might be accused of plagiarism (Hasanein & Sobaih, 2023).

Personal Assistance (Pi app)

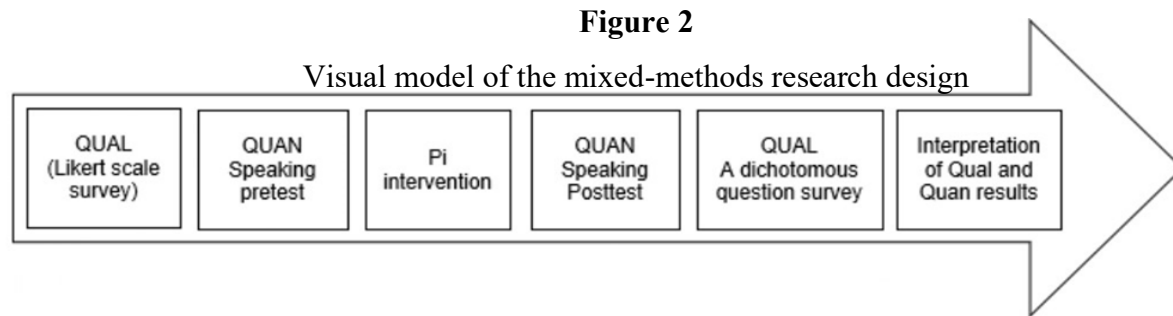
Similar to ChatGPT, Pi is a new AI app that provides answers, advice, and various functions, such as creating and engaging in conversations to improve speaking skills, including vocabulary, pronunciation, and fluency (Nguyen, 2023). The Pi app is also an interesting app that can adjust its level of English to the user's level, meaning that anyone at any level can use Pi to practice English. One of the most important things about this app is that learners can subscribe for free. In other words, it is available for everyone. Since this application is rather new, it is not possible to find information or other research to support its impact on the learning process. Currently, Pi is a free app ready for use on both iOS and Android devices. Additionally, Pi is accessible on PCs, even though the voice feature is not currently available for PC.

Materials and methods

A mixed-methods approach was employed to collect information and assess the effects of the Pi app on students' speaking skills and attitudes toward English. To gauge the levels of English



competence and the students' attitudes toward the language, both quantitative and qualitative data were gathered before and after the intervention. An explanatory mixed-methods sequential design was used for the research (Creswell, 2012). The following steps were taken to accumulate data for this mixed-methods study, as shown in Figure 2.



Source: own elaboration

First, a “Likert scale” design survey was used before the research to acquire the needed evidence about the students` attitudes toward English. For this survey, five questions were created, and each question contained various items. (1) The first question had a set of six items related to students' attitudes toward English. (2) The second question was composed of five items, which had to do with the skills the teacher was focused on the most. (3) In the third question, there were five items, which had the intention of exploring the methodologies and strategies the teacher was using for the teaching process. (4) The fourth question contained a group of four items that were designed to investigate the use of the communicative approach in the class. (5) Finally, the fifth question had a set of ten items concerning the technology used in the classroom.

Second, to determine the English-speaking level of the class, an oral examination was administered. This activity took place in a well-equipped recording studio at school, and it was divided into two parts: A) a pretest was applied before introducing the Pi app into the process, and B) a posttest was administered after applying the Pi app. The test consisted of two parts, which were graded using two assessment criteria extracted from the International Baccalaureate website (Betancourt, 2017). Criterion A aimed to assess how good the students are at using the English language effectively and accurately by describing a picture. (productive skills). Criterion B aimed to evaluate how good the students are at interacting and giving answers by having a general conversation using oral communication (interactive and receptive skills).

The procedure for this test was as follows. The student was presented with two pictures from which they had to choose one to use for the speaking test. The learner had 15 minutes to prepare a description focused on the picture they had chosen. During that time, they could make brief working notes if necessary. Consequently, in the first stage, they were given 2 minutes to describe the picture. During the description, the teacher did not provide any help to the student. After the description, in the second stage, the teacher involved the student in a three-minute-long general interactive conversation about various familiar topics. Each student took a 5-minute-long oral test in total, which was administered by a fellow teacher.

Finally, to comprehend the students' perception of the benefits of applying the Pi app as a tool to improve speaking skills, a dichotomous question survey was applied by the teacher. This survey had 10 yes/no questions. The results from the Likert scale survey were examined to identify the students' attitudes toward English. The pretest and posttest data were compared to evaluate the extent to which the students' speaking abilities improved while using the Pi app in the classroom. The results obtained from the dichotomous question survey were analyzed using Microsoft Excel to identify the number of people who agreed or disagreed with the use of the PI app, and additionally, to measure or identify the impact on speaking skills.

The Pi app application procedure

Applying the Pi app to the process took several steps. a) The students received various instructions related to the way Pi works and the various traits it has by presenting the app and modeling each step. It familiarized the students with the use of the Pi app. b) Since the Pi app is a chat-based personal AI, the instructor provided the students with a set of phrases to facilitate the interaction with the Pi app. c) The teacher established a routine for the speaking classes to help students follow an independent process. First, each class began with a tongue twister. In that activity, the Pi app was useful to motivate the students and check their fluency and pronunciation. Then, the teacher displayed a picture by using a projector screen, and the students had ten minutes to prepare or write important notes about the image. After that, the students had two minutes to describe a picture. In this step, the students used the Pi app to check vocabulary, phrases, and pronunciation. d) The use of short dialogues was another activity used in the classes to help students enhance their speaking abilities. The dialogues used were on different topics, such as sports, places in a city, food, and

clothes. They were incorporated as part of an interactive activity (Communicative approach). In that activity, the Pi app was used to check grammar, phrases, spelling, and pronunciation.

Participants

This study was carried out in a class of 34 students (21 females and 13 males) who are in the 15 to 16 age range. The participation in the investigation was voluntary and required parental consent and student agreement. The participants were EFL beginner learners. They belong to the second grade of Baccalaureate (juniors) at “Unidad Educativa Chordeleg” High School in Ecuador. The students had been studying English for three hours a week during the last three years, where they were primarily instructed through the Grammar Translation Method. They had been completing many grammar exercises, and the communicative part was not the priority of the teachers.

To properly carry out this study, it was important to ensure that students had the necessary supplies or tools, including tablets or cellphones, and internet service to practice at school. All the students were provided with internet in the classroom, the Pi app, and some key phrases to work and interact with the application.

Results

The speaking pretest and posttest were divided into two tables according to Criterion A and Criterion B.

Table 1

Results for pretest and posttest according to criterion A

Marks	Criterion A Level descriptor	Pretest		Posttest	
		N	%	N	%
(0)	Communication does not reach a standard described by the descriptors below	1	2.9%	0	0.0%
(1-2)	The response and communication are of limited effectiveness.	17	50.0%	3	8.8%
(3-4)	The response and communication are partially effective.	16	47.1%	19	55.9%
(5-6)	The response is generally accurate, and communication is generally effective.	0	0.0%	12	35.3%
(7-8)	The response is accurate, and communication is effective.	0	0.0%	0	0.0%
(9-10)	The response is accurate, and communication is very effective.	0	0.0%	0	0.0%
Total		34	100.00%	34	100.00%



Source: own elaboration

Table 1 shows the findings of the pretest and posttest regarding the speaking test for criterion A, related to picture descriptions. Table 1 illustrates a considerable difference between the grades on the pretest and posttest. For the pretest, in the first descriptor, one student, who represents 2.9 %, obtained a grade of zero, while the posttest showed no students, representing 0%. In the second descriptor, the pretest showed 17 students, who represent 50 %, scored 1-2, while the posttest showed 3 students representing 8.8%. In the third descriptor, the pretest revealed that 16 students, who represent 47.1%, obtained a grade of 3-4; meanwhile, in the posttest, 19 students, representing 55.9%. In the fourth descriptor, the pretest showed no students, who represent 0%, while in the posttest, 12 students, representing 35.3%, achieved grades of 5-6. Although no students scored between 7-8 or 9-10 in the fifth and sixth descriptors in either the pretest or posttest, the results illustrate a considerable overall improvement in the posttest.

Table 2

Results for pretest and posttest according to criterion B

Marks	Criterion B Level descriptor	Pretest		Posttest	
		N	%	N	%
(0)	Communication does not reach a standard described by the descriptors below	0	0.0%	0	0.0%
(1-3)	The response and communication are of limited effectiveness.	3	8.8%	0	0.0%
(4-6)	The response and communication are partially effective.	18	52.9%	11	32.4%
(7-9)	The response is generally accurate and communication is generally effective.	13	38.2%	23	67.6%
(10-12)	The response is accurate and communication is effective.	0	0.0%	0	0.0%
(13-15)	The response is accurate and communication is very effective.	0	0.0%	0	0.0%
Total		34	100.0%	34	100%

Source: own elaboration



Table 2 illustrates the findings of both the initial and subsequent speaking tests. Criterion B aimed to measure the students' capability to comprehend and sustain an open conversation. For the first descriptor, no students received a grade of zero in either the pretest or the posttest. In the second descriptor, there was a slight improvement, as the number of students increased from 3, representing 8.8% in the pretest, to 0 students, representing 0% in the posttest. In the third descriptor, the pretest showed 18 students, who represent 52.9%, scored 4-6, while the posttest showed a slight improvement with 11 students, who represent 32.4%, in this range. The fourth descriptor revealed better results in the posttest than in the pretest. Thirteen students, who represent 38.2%, acquired scores between 7-9, while in the posttest, 23 learners, who represent 67%, moved up, showing a considerable improvement. In the last two descriptors, fifth and sixth, no students obtained grades of 10-12 and 13-15, neither in the pretest nor in the posttest.

Results of the Likert scale survey

This survey revealed important information that helped in understanding the possible cause of why students could not develop their speaking skills. The survey was divided into five sets of questions.

Table 3
 Question 1: Results regarding the students' attitude toward English.

Why do you study English?												
I like it		School requirement		To get a better job in the future		Studying abroad		Traveling		My parents forced me		
Answers	N	%	N	%	N	%	N	%	N	%	N	%
S. disagree	0	0%	2	6%	0	0%	0	0%	0	0%	11	32%
Disagree	2	6%	1	3%	0	0%	2	6%	1	3%	10	29%
Neutral	3	9%	5	15%	6	18%	6	18%	5	15%	9	26%
Agree	12	35%	20	58%	4	12%	6	18%	4	12%	2	6%
S. agree	17	50%	6	18%	24	71%	20	59%	24	71%	2	6%



Source: own elaboration

The first question related to the students' attitude toward English contained six items, and they revealed the following results. A) For the question "Why do you study English?", 17 students, who represent 50%, strongly agreed, and 12 other students, representing 35%, agreed with the statement, "Because I like English," while 3 students, who represent 9%, remained neutral. Only 2 participants, representing 6% disagreed, and no students strongly disagreed. In the statement "because it is a school requirement," 26 participants representing 76% either strongly agreed or agreed with the statement. Specifically, 6 students, who represent 18% strongly agreed, and 20 learners, constituting 58%, agreed. Five participants representing 15% stayed neutral, while 1 student, who represents 3% disagreed, and the remaining 2 learners representing 6% strongly disagreed.

For the statement "I study English to get a better job in the future," 28 participants, who represent 83%, either strongly agreed or agreed. Precisely, 24 participants who represent 71% strongly agreed, while the other 4 participants representing 12% agreed. The remaining 6 students, who represent 18%, were neutral. In this statement, no students strongly disagreed or disagreed. For the statement "I study English to study abroad," 26 learners, who represent 77% either strongly agreed or disagreed with this statement. Exactly, 20 students who represent 59% strongly agreed, and the other 6 students representing 18% agreed. Similarly, 6 other participants, who represent 18% remained neutral; only 2 students, representing 6% disagreed, and no students strongly disagreed.

In the statement "I study to travel," 28 students, who represent 83%, strongly agreed or agreed. Specifically, 24 participants, representing 71%, strongly agreed, and the other 4 learners, representing 12% agreed, while 5 students, representing 15%, stayed neutral. Only 1 student, representing 3%, disagreed. In this statement, no students strongly disagreed. In the last statement, "I study because my parents force me," the results were extremely different. Only 4 students, representing 12%, either strongly agreed or disagreed. Specifically, 2 students strongly disagreed, and the other 2 disagreed. Nine students who represent 26% remained neutral, while 10 others representing 29% disagreed. The last 11 students, who represent 32%, strongly disagreed. Even



though there are a few students who stated that they did not like English or were forced by their parents to study English, these results indicate a strong positive sentiment toward English.

Table 4

Question 2: Results regarding the language skills that the students mostly prefer to be used in the classroom instruction...

When do you understand English better?										
I understand English better when.....										
	The teacher mostly focuses on grammar.		The teacher mostly focuses on reading		The teacher focuses on writing		The teacher focuses on speaking		The teacher focuses on vocabulary	
Answers	N	%	N	%	N	%	N	%	N	%
S. disagree	1	3%	0	0%	0	0%	0	0%	0	0%
Disagree	4	12%	2	6%	0	0%	3	9%	1	3%
Neutral	8	24%	12	35%	7	21%	0	0%	9	26%
Agree	7	21%	10	29%	12	35%	9	26%	9	26%
S. agree	14	41%	10	29%	15	44%	22	65%	15	44%

Source: own elaboration

Question number 2 was developed to reveal which language skills students prefer teachers use in classroom instruction. For the statement, “I understand English better when the teacher mostly focuses on grammar,” 21 participants, who represent 62%, either strongly agree or agree with the use of grammar. Specifically, 14 students representing 41% strongly agree, and 7 others representing 21% agree. Eight students who represent 24% remained neutral, and 12% of them disagreed. On the other hand, 4 participants, who represent 12% disagreed, and only 1 learner, representing 3% strongly disagreed.

In the second statement, “I understand English better when the teacher mostly focuses on reading,” 20 students, who represent 58% of the people in the survey, strongly agree or agree. Exactly, 10 students who represent 29% strongly agreed, and the other 10, representing an equal percentage, agreed. Twelve students, who represent 35% were neutral, and 2 participants, representing 6% disagreed, while no students strongly disagreed.



For the statement “I understand English better when the teacher mostly focuses on writing,” 27 participants representing 79% of learners surveyed either strongly agree or disagree. Precisely, 15 students who represent 44% strongly agreed, and 12 learners representing 35% agreed. Seven students representing 21% of participants stayed neutral, and no students either agreed or strongly disagreed. For the statement “I understand English better when the teacher mostly focuses on speaking,” the results indicated that 31 students, who represent 91%, either strongly agreed or agreed with the statement. Exactly, 22 students representing 65% disagreed, 9 students representing 26% agreed, and only 3 participants, who represent 9% disagreed with the statement. No students stayed neutral, disagreed, or strongly disagreed. Finally, for the statement “I understand English better when the teacher mostly focuses on vocabulary,” 24 participants, who represent 70% of the people surveyed, either strongly agreed or agreed. Specifically, 15 students representing 44% strongly agreed, and the 9 other learners who represent 26% agreed. Similarly, 9 students, representing 26% maintained neutral, while only 1 participant, representing 3% disagreed. In this statement, no student strongly disagreed. Even though the percentages are significantly similar, they indicate that most students understand and feel engaged with the English learning process when the teacher focuses on activities related to speaking skills rather than grammar, writing, reading, and vocabulary.

Table 5

Question 3: Results regarding the methodology and strategies the teacher mostly uses in the teaching process

What kind of strategies do the English teachers use in the classroom?									
The teachers in my classroom...									
	Use a variety of strategies		Speak English to teach		Bring activities to enhance speaking skills		Answer my doubts		
Answers	N	%	N	%	N	%	N	%	
S. disagree	0	0%	3	9%	0	0%	0	0%	
Disagree	0	0%	4	12%	0	0%	0	0%	
Neutral	3	9%	12	35%	1	3%	1	3%	
Agree	8	24%	8	24%	7	21%	2	6%	
S. agree	22	67%	7	21%	26	76%	31	91%	

Source: own elaboration



Question 3 contained four statements aimed at obtaining information about the strategies teachers use in classroom instruction. For the statement “The teachers use a variety of strategies,” 30 students, who represent 91%, either strongly agreed or agreed. Specifically, 22 participants who represent 67% strongly agreed, and the other 8 participants representing 24% agreed. Three participants representing 9% remained neutral, while no students either disagreed or strongly agreed.

For the second statement, “The teachers speak English to teach,” 15 of the surveyed participants, representing 45%, either strongly agreed or agreed. Exactly, 7 participants representing 21% strongly agreed, and 8 participants representing 24% agreed with this statement, while 12 of the surveyed students representing 35% stayed neutral. Moreover, 4 participants who represent 12% disagreed, and the 3 remaining participants representing 9% strongly disagreed. As for the statement “The teachers bring activities to enhance speaking skills,” 33 students representing 97% stated strong agreement. Specifically, 26 students who represent 76% strongly agreed, and 7 others representing 21% agreed. On the other hand, only 1 student, representing 3% of the participants, remained neutral. No one strongly disagreed or agreed with this statement.

For the final statement, “The teachers answer my doubts,” 33 of the surveyed students, representing 97%, strongly agreed or agreed. Precisely, 31 of the students, representing 91%, strongly agreed, while the other 2 students agreed. Only 1 student, representing 3%, stayed neutral, and no student expressed disagreement or strong disagreement with this statement. The results obtained in this set of statements indicate that teachers use a variety of strategies and are exceptionally skilled in using activities to enhance speaking skills; however, instruction is mostly delivered in the native language (Spanish).

Table 6

Question 4: Results of the questions related to the use of the communicative approach in the class



**What does the English teacher do to promote communicative English?
 To promote communicative English, the teacher.....**

	Encourages you to use English as a means of communication		Corrects pronunciation problems		Brings activities to practice pronunciation		Uses tech tools to enhance pronunciation & fluency	
Answers	N	%	N	%	N	%	N	%
S. disagree	0	0%	0	0%	0	0%	0	0%
Disagree	0	0%	0	0%	0	0%	0	0%
Neutral	1	3%	1	3%	1	3%	2	6%
Agree	5	15%	4	12%	12	35%	11	32%
S. agree	28	82%	29	85%	21	62%	21	62%

Source: own elaboration

Question 4 aimed to find information about the use of a communicative approach in the class. In this group of 4 statements were explored and showed the following results. For the statement “The teacher encourages you to use English as a means of communication,” 33 of the participants, representing 97%, either strongly agreed or agreed. Specifically, 28 of the surveyed students, representing 82%, strongly agreed, and the other 5, representing 12%, agreed, while 1 student, representing 3%, maintained neutral. Moreover, no students either disagreed or strongly disagreed. For the statement “The teacher corrects pronunciation problems,” the results showed a parallel average to the first one, where 33 of the interviewed participants, representing 97%, strongly agreed or agreed. Exactly, 29 of the students, representing 85%, strongly agreed, and the other 4, representing 12%, agreed with this statement. Only 1 student, representing 3%, stayed neutral. No student either disagreed or strongly disagreed.

For the statement “The teacher brings activities to practice pronunciation,” 33 of the surveyed students, representing 97%, either strongly agreed or agreed. Specifically, 21 of the students, who represent 62%, strongly agreed, and the other 12 students, representing 35%. agreed. Only 1 student, representing 3%, stayed neutral, while there were no students who disagreed or strongly disagreed with this statement.



Finally, for the statement “The teacher uses tech tools to enhance pronunciation and fluency,” 32 of the participants, representing 94%, either strongly agreed or agreed. Precisely, 21 students representing 62% strongly agreed, and the other 11 students, representing 32% agreed with this item. The results indicate that the teacher is mostly focused on the communicative approach, and the majority of participants feel comfortable when the teacher uses activities to encourage them to use English.

Table 7

Question 5: Results of the question about the students' perspectives on the use of AI technology in the teaching process.

Does technology help to improve the learning process?												
Answers	Question 1		Question 2		Question 3		Question 4		Question 5		Question 6	
	The teacher uses tech to help you improve your speaking skills.		I use AI to practice English.		I know AI apps to practice English.		I know the Pi app.		I use ChatGPT to practice conversations in English.		I think AI apps can help improve speaking skills.	
	N	%	N	%	N	%	N	%	N	%	N	%
Yes	31	91%	27	79%	28	82%	4	12%	32	94%	33	97%
No	3	9%	7	21%	6	18%	30	88%	2	6%	1	3%

Source: own elaboration

Question number 5 was designed to research how the scholars felt about using technology in the classroom. For the statement “The teacher uses tech to help you improve your speaking skills,” 31 of the participants, representing 91%, stated the teacher did, while 3 others, representing 9%, said the teacher did not. It suggests that teachers are open-minded to new ways of instruction. For the second statement, “I use AI to practice English,” 27 of the surveyed students, representing 79%, said they used AI to practice English, while the other 7 students said they did not use it.

For the third statement, “I know AI apps to practice English,” 28 of the participants, representing 82%, declared that they knew about AI apps for practicing English. However, the 6 remaining students, who represent 18%, mentioned that they did not. For the fourth statement, “I know the



Pi app,” 4 of the participants, representing 12%, stated that they knew about the Pi app, but 30 of them, representing 88%, mentioned that they did not. For the fifth statement, “I use ChatGPT to practice conversations in English,” 32 of the participants, who represent 94%, said they used ChatGPT to practice English. However, 2 students representing 6%, stated they did not use it. For the final statement, “I think AI apps can help improve speaking skills,” 33 of the participants, representing 97%, were convinced that the use of AI might boost their communicative skills, while only 1 student, representing 3%, did not think it could happen.

Dichotomous questions survey

This survey aimed to explore students’ perceptions related to the use of the Pi app in the classroom as a technological tool to improve the class environment. The survey contained 13 questions, which had to be answered by choosing yes or no.

Table 8
 Survey about the use of Pi in the classroom

N°	Questions	Yes		No		Total
		N	%	No	%	
1	Did you like the Pi app?	32	94%	2	6%	34
2	Did you learn something new?	32	94%	2	6%	34
3	Do you think Pi is a boring tool to learn English?	13	38%	21	62%	34
4	Do you think English is boring now?	8	24%	26	76%	34
5	Is Pi difficult to use?	9	27%	25	73%	34
6	Do you think English is difficult?	23	68%	11	32%	34
7	Do you use Pi to practice English at home now?	30	88%	4	12%	34
8	Would you like all the English teachers to use Pi?	34	100%	0	0.0%	34
9	Do you feel shy to practice with Pi?	21	62%	13	38%	34
10	Did you improve your vocabulary?	34	100%	0	0.0%	34
11	Did you improve your grammar?	32	94%	2	6%	34
12	Did you improve your pronunciation?	33	97%	1	3%	34
13	Did you improve your fluency?	33	97%	1	3%	34

Source: own elaboration

The results showed the following. In question 1, most participants, exactly 32 of them, representing 94%, mentioned that they liked the Pi app, and only 2 students, representing 6%, stated that they



did not like it. Question 2 presented similar results to the first question; 32 students, who represent 94%, said they learned something new by using the Pi app, while the remaining 2 students, representing 6%, said they did not. For question 3, the results showed something different: 13 students, representing 38%, mentioned that the Pi app was a boring tool for learning English; however, the other 21 students, representing 61%, said it was not, showing a different conception about the Pi app.

The results for question 4 showed that 8 students, who represent 24%, mentioned that English was boring, while 26 of the surveyed students, representing 76%, responded that English was not boring. Question number 5 related to how difficult it is to use the Pi app; 9 students, who represent 27%, said it was hard to use; however, 23 of the participants, representing 73%, responded that it was not. Question 6, where participants were asked if English was hard to learn, 23 of the interviewed students, who represent 68%, stated that it was; on the other hand, 11 students, representing 32%, said it was not. In question 7 about the use of the PI app at home, 30 of the surveyed students, who represent 88%, stated that they were using it at home, and 4 of them, representing 12%, said they were not.

In question 8, the students were asked if they would like all the English teachers to use the Pi app as a tool for classroom instruction. All 34 interviewed students, who represent 100%, responded that they would. Question 9 referred to the confidence students feel in the Pi app while practicing. Twenty-one students, who represent 62%, confirmed they felt shy when practicing English with the Pi app, while the other 13 students said they did not feel shy.

The last four questions aimed to observe if the Pi app helped students improve their language skills. In question 10, related to vocabulary, all 34 students, representing 100%, stated that their vocabulary had improved using the Pi app. In question number 11, related to grammar, 32 scholars, constituting 94%, mentioned that they could improve their grammar skills, whereas only 2 participants, representing 6%, said they could not. Question number 12, related to the improvement of pronunciation skills in students, indicated that 33 participants, who represent 97%, said they enhanced their pronunciation skills, while only 1 of them, who represents 3%, mentioned that they did not improve. Finally, question 13 related to the improvement of fluency skills in students. The results were similar to the previous question: a substantial majority of the scholars, specifically 33 individuals, representing 97%, declared they could refine their fluency, with only 1 scholar,



representing 3%, saying he could not. Even though the results indicate that many scholars (21) feel shy when practicing with the PI app, they also show that students consider the application to be an interesting and important tool to be used in the teaching-learning process.

Discussion

Technology has been introduced to help people make their lives easier in various areas. Education has adopted AI technology as a valuable tool to improve the teaching process, enhance the learning environment, and create more understandable learning experiences, especially in English language learning (Shin, 2018). Using two pertinent questions that guided the research, this discussion attempts to establish a connection with the findings.

In an effort to address the first research question, which specific skills can be improved the most by incorporating the AI app Pi? Understanding the impact of Pi on improving communicative skills in the group of EFL learners was key. The results of quantitative data from the pretest and posttest were crucial. The results from the pretest showed that most students had a low level of communication in English. According to criterion A, all students scored between 1 and 4 out of 10, indicating that their communication was limited and only partially effective when using the language freely, specifically for describing a picture. The second activity involved general conversation, which is related to interactive skills, where criterion B was applied; most participants demonstrated the ability to respond and generally sustain a conversation, occasionally providing appropriate information. These results are consistent with Bueno and McLaren (2006) study on speaking skills, highlighting that speaking is one of the most challenging language skills for students to master.

However, the post-test results showed some improvement in both productive skills (describing a picture) and interactive skills (conversation). Most participants scored between 3 and 6 out of 10 for describing photos, indicating that students could respond and communicate more effectively after the Pi app was incorporated in the process. In the general conversation, all learners improved their performance, achieving marks from 4 to 9 out of 15. Although they did not reach the highest scores, these results are encouraging in terms of developing students' verbal skills. This aligns with a prior study on the improvement of oral communication after using AI technology in English instruction (García et al., 2023). The results in this study highlight students' progress in (a) pronunciation, (b) intonation, (c) vocabulary, and (d) grammar (according to criterion A).



Additionally, students demonstrated enhanced abilities to respond and understand exchanges, answer appropriately, and maintain conversations (according to criterion B).

As for the second research question, how does the Pi app impact students' attitudes towards learning English? An attitudinal impact analysis was central in understanding the impact of the PI app on students' perceptions; the results of the Likert scale design and the dichotomous survey helped answer this study's question. Most students strongly agreed with the idea of studying English because of its importance today. The second set of questions explored the students' preferences regarding the language skills they prefer to be taught. The results demonstrated that the students found speaking and writing to be their favorite skills.

However, some students responded that they prefer the teacher to use grammar and reading activities in the classes, challenging the teacher to organize the classes with a variety of activities to encourage the students to develop all their English language competence. The third set of questions, which were related to the strategies the teacher uses to impart classes, showed the following results: three-fourths of students found the strategies were appropriate, but a fourth mentioned disagreement, showing the lack of diversity of activities used by the instructor to involve all the students in the learning process. The fourth set of questions received positive support. More than 90% of students strongly agreed with the activities and strategies used by the teacher to promote communicative English. It reflected the instructor's interest in creating an appropriate environment to learn and practice communicative English. Question number five revealed that most students declared that some AI apps used in the classroom by the teacher were familiar to them. Besides, many students said they started using AI apps before the teacher brought them to the class to practice their English skills. For instance, ChatGPT, Promova, Duolingo, Talkpal, and others. These results showed that applying AI technology apps to the teaching and learning experiences would not be a problem; not only that, but it could promote autonomous learning behaviors, which, in turn, could translate to engagement in learning outside the classroom thanks to the use of AI tools.

The dichotomous survey was the other tool used to answer the second question. The findings, which are shown in Table 8, indicated that the Pi app was highly effective in giving students the chance to practice and improve speaking abilities, such as pronunciation, fluency, grammar, and vocabulary. The outcomes also reveal that the Pi app played an important role in enhancing the



classroom atmosphere. According to the students, the classes became more dynamic, and they were allowed to participate, contributing to this improvement. Finally, considering the outcomes of both Likert and dichotomous surveys, it can be concluded that Pi had a positive impact on the students' attitudes due to the enhanced motivation and engagement it produced during classes, thus addressing affective barriers that are usually encountered in regular instruction classes.

Study Implications

This research proposed an alternative for helping students improve their abilities to communicate effectively and accurately. For many years, English has not been considered important for students in rural highlands schools in Ecuador, but the results of this research reveal the contrary. Therefore, the social community researchers should investigate the reasons for this change. Furthermore, **it was** found that students were positively impacted by integrating the Pi app as a technological learning tool in the classroom. This study can be beneficial for both students and teachers, as it provides them with valuable insights into effective strategies for enhancing not only speaking skills but also the overall teaching and learning process. However, although Pi as an AI app has been demonstrated to be a practical tool, it could take time to establish classroom rules and policies for the use of electronic devices and the internet. These are important elements to pay attention to, or the class can become chaotic.

Limitations

There are several limitations of this research. For instance, although today nearly everyone owns a cellphone, it is not always the case, as some students do not have an appropriate cellphone to download the application. It did not allow them to practice the exercises as they were required. Other limitations of the study were the deficient internet service, which interrupted the process, causing various problems, as well as the short time that the Pi app was applied (a month). It did not allow for the collection of more specific information related to the real impact the application could have on the development of oral communicative skills.

The English level of the learners was a final limitation that should be considered when trying to bring this kind of technology to the classes. Since Pi is a chatbot created to follow instructions, the instructions should be clear and concise; otherwise, the interaction would be affected, especially



in conversations. Even though using Pi in the teaching and learning environment has multiple advantages, the application was somewhat limited in efficiency and validity because external factors like electricity outages, unreliable internet connections, and device issues hindered the process's effectiveness.

Conclusion

In current times, AI technology is considered one of the latest breakthroughs that many areas are incorporating to make work easier. English language instruction is one of the many fields where AI has had a significant impact. Since the objective of this study was to determine how "Pi" could affect the scholars' oral abilities, the results from all the surveys and tests show that Pi, as a technological tool, could have a positive impact not only on the development of the students' speaking skills but also on the classroom environment. This affirmation is supported by the grades obtained by the students in the posttest, which were compared with the grades from the pretest. Also, the results obtained from the dichotomous questions survey showed that the application of Pi is well accepted by the EFL students. Based on the information and results from the speaking test, the Pi app has been demonstrated to be a useful tool to help students increase their vocabulary range and improve their grammar, fluency, and pronunciation, with the pronunciation being the skill in which the students improved the most due to the different types of voices and intonations that the application has.

In sum, the incorporation of AI tools in language learning seems to promote a significant pedagogical innovation which is able to address both cognitive and affective elements in second language acquisition. However, although the Pi app has been demonstrated to be a useful tool in teaching and learning environments, the research is not conclusive yet. There is still a gap in the development of listening skills since it was not included in the study, and that could be studied further in future research.

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