

CAPÍTULO 2

ELSA Speak application based on artificial intelligence the development of English-speaking skills

Aplicación ELSA Speak basada en inteligencia artificial en el desarrollo de las
habilidades de habla inglesa

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1. INTRODUCTION

The Ministry of Education in Ecuador is striving to elevate the English language proficiency of students in secondary education. They have developed the National Curriculum for English as a Foreign Language, which aligns the levels established by the Common European Framework of Reference in languages. Despite these efforts, students are still facing challenges in their speaking abilities. These include difficulties in effectively conveying a message, expressing ideas fluently, and pronouncing or understanding spoken language correctly. These challenges stem from speaking with a big fear of making mistakes in the classroom, to lack of emphasis on self-directed language learning. Enhancing speaking skills is crucial, as it includes not only the ability to communicate effectively, but also the ability to pronounce words clearly, use proper intonation, and have a natural flow in speech (Leong et al., 2017). In addition, students must be encouraged to practice speaking in real-life scenarios, to overcome their fear and to improve speaking skills in a more natural and authentic way.

However, based on observations done during the practicum, it has been possible to observe that second year high school students did not reach the B1 proficiency level in speaking skills. It is supported by other researchers who also found that students are not able to produce or being involved in speaking activities due to fear of making mistakes, lack of confidence or motivation, ineffective traditional methods or being judged by their peers (MacIntyre & Noels, 1996; Gardner & MacIntyre, 1992; Krashen, 1985). Based on these problems, ELSA speak application was seen as a suitable solution that motivated the researcher to formulate the following research question: What is the effectiveness of artificial intelligence-based applications on enhancing speaking skills among second-year high school students at a public institution in Loja?

Previous studies have demonstrated the importance of using ELSA speak application to improve the students' speaking skills and learn the English language through its artificial intelligence-based assistance (Kholis, 2021; Lesmana, 2022). At the same time, other researchers have found that ELSA speak application helps users to acquire vocabulary, pronunciation, learn grammar and gain fluency (Aswaty & Indari, 2022). Likewise, it provides students with an intrinsic motivation to develop their speaking skills through a motivational and heartening learning environment (Fakdawer, 2020).

The main purpose of this research was to improve speaking skills by using ELSA speak application among second-year high school students at a public school in Loja during the school year 2022-2023. From this aim, the researcher included one specific objective which was to validate the effectiveness of ELSA speak application on enhancing speaking skills among second-year high school students at a public institution in Loja, during the 2022-2023 year.

This study contributed to this book chapter for many reasons. Firstly, it showed teachers the benefits of using ELSA speak application to improve their students' speaking skills. Secondly, it provided the audience with an overview of the impact of this artificial intelligence-based application on the English language learning process. Finally, it allowed second-year high school students to experience a potent helping-source in the language learning journey, equipping them with the tools needed to enhance pronunciation, vocabulary, grammar and overall communication skills in a dynamic, fluent and engaging way.

2. LITERATURE REVIEW

○ Artificial Intelligence

Artificial intelligence (AI) is a broad field of study that includes a wide range of subfields and applications. Different authors have offered diverse definitions of AI, depending on the perspective and focus.

One definition of AI is provided by the father of AI, McCarthy (2007) who defines AI as "the science and engineering of making intelligent machines" (p. 22). This definition emphasizes the goal of creating machines that can perform tasks that normally require human intelligence, such as understanding natural language, recognizing objects, and making decisions.

Artificial intelligence aims to improve learning, thinking, and perception using computers, AI is now applied in a variety of sectors, including banking, healthcare and educational purposes like it is the intention of this paper. "Strong AI" handles jobs that are more sophisticated and human-like, whereas "weak AI" often focuses on simple, single tasks. According to Mohammed and Saleh (2018) "It involves developing computer programs to complete tasks which would otherwise require human intelligence" (p. 3).

○ **Artificial Intelligence in Education**

Artificial intelligence (AI) has the potential to address some of the major issues facing education today, it has revolutionized methods of teaching and learning, and has enhanced the achievement of the Sustainable Development Goals. Hew (2018) points out that "Artificial Intelligence in Education is the use of computers and related technologies to simulate human intelligence, particularly in the fields of education and training" (p. 1).

Artificial intelligence (AI) has the potential to revolutionize education by personalizing learning, increasing efficiency and effectiveness, and enhancing the learners' experience. Dimililer and Tuncal (2019) stated that artificial intelligence could help teachers improve personalized education for their students. These tools may also give students assistance and feedback

in real-time, enabling a more customized learning environment. However, considering the benefits of AI in education, it is crucial to strike a balance and ensure that technology enhances, rather than replaces, the role of teachers. While Artificial Intelligence can offer valuable insights and support, human educators bring essential qualities such as empathy, creativity, and emotional connection that are integral to effective teaching and fostering a positive learning atmosphere.

Kang (2017) outlines that “AI can also be used to enhance the learner experience, for example through the use of virtual tutors or assistants” (p. 215). The concept of virtual tutors or assistants powered by Artificial Intelligence brings several advantages to the learning process. Moreover, the availability of virtual tutors or assistants on-demand allows students to access help and support whenever they need it. This aspect of 24/7 availability ensures that learners can receive immediate assistance and feedback, promoting continuous learning and avoiding delays in solving doubts or challenges.

In conclusion, the potential of Artificial Intelligence in enhancing the learner experience through virtual tutors or assistants is indeed exciting. As technology continues evolving, finding the right blend of Artificial Intelligence and human interaction will be key to maximizing the benefits and creating a well-rounded and effective educational system.

- **ELSA Speak application**

ELSA Speak (English Language Speech Assistant) is a mobile application designed to help users improve their English pronunciation. According to Nushi and Sadeghi, (2021) "ELSA is an EFL/ESL pronunciation development application based on American English, with over 1200 exercises to help learners sound like native speakers" (p. 289). This argument points out the applications' use of game-like features, such as

interactive exercises, to make the learning experience more engaging for users.

Marjun and Sa'adah (2022) defines ELSA speak as, “an English pronunciation application that helps people speak English confidently and clearly. The most accurate and useful test people can take to discover their English-speaking proficiency level” (p. 42). This definition clearly denotes a more detailed, precise and conducive to the acquisition of fluent conversational and speaking skills, with the ELSA speak application approach.

In addition, ELSA Speak is a language learning application that uses AI to provide personalized pronunciation feedback and coaching to English language learners. When students pronounce words or certain sentences, the system of ELSA Speak does an analysis and gives corrective feedback (Kholis, 2021). The application would provide us with a work environment suitable for the enjoyment and dynamic learning process, very original with emphasis on the most appropriate characteristics of the language for the user.

○ **Features of ELSA speak application**

Maria (2022) reports the different features that ELSA application may provide:

- Progress tracking;
- Virtual AI coach;
- Learning path and customizable to preferences;
- Pronunciation feedback; speaking and listening practice;
- Conversation practice with native speakers;

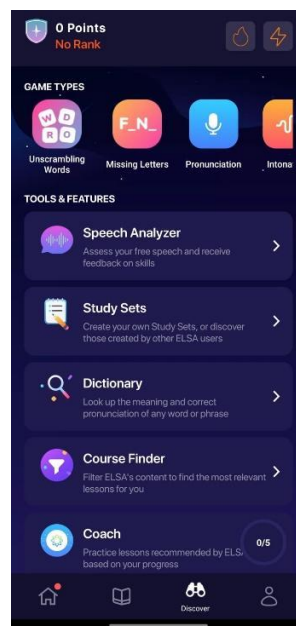
As the ELSA Speak application keeps up with regular platform updates, the researcher highlights the incorporation of brand-new functionalities and tools into the repository of this Artificial Intelligence based application:

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- Speech Analyzer
- Study Sets
- Dictionary
- Course Finder
- Coach

Figure 1

Image from the ELSA Speak application which shows its platform and features



Note. Source: Screenshot taken by the author, (2023)

- Speaking

Speaking is an interactive process of constructing meaning that involves producing and receiving and processing information (Burns & Joyce, 1997). Its form and meaning depend on the context in which it occurs, including the participants, their collective experiences, the physical environment, and the purposes for speaking.

Jia and Leutner (2020) defines speaking as "the ability to produce spoken language in a clear and appropriate way, using appropriate pronunciation, intonation, and grammar" (p. 45). This definition emphasizes the idea that speaking involves the ability to use appropriate pronunciation, intonation, and grammar when producing spoken language. Moreover, Celce-Murcia et al. (2010) outlines that "Speaking involves the use of sounds, words, and sentences to convey meaning and it involves both the production of language and the comprehension of others' speech" (p. 2).

- **Elements of Speaking**

- **Vocabulary**

Vocabulary is all about words. in sentences can be found nouns, verbs, adjectives etc. They are a component of words, therefore to be able to make sentences someone has got the words and vocabulary. Nation (2013) defines vocabulary as "the words and word-like units of a language, including collocations and fixed phrases, that a person knows and can use" (p. 3). This argument states the idea that vocabulary includes not only individual words, but also collocations and fixed phrases that a person knows and can use. Laufer (2017) defines vocabulary as "all the words that learners are expected to have acquired in a given context" (p. 8). This definition presents the idea that vocabulary includes all the words that learners are expected to have acquired in a given context.

- **Grammar**

An essential component of learning English is grammar. When grammar is difficult for students to comprehend, they have trouble structuring sentences in English. Grammar serves as a means to structure sentences and establish proficient language use.

Moreover, Gerot and Wignel (1994) defined grammar as the theory of language which shows the process of language happened. Basically,

grammar is the forming of meaning from the combination of words and it describes how the language works. Besides that, Crystal (2008) argued that grammar is the way to state our feelings through the structural form of language. Grammar serves as the framework that allows us to organize and convey our thoughts, emotions, and intentions effectively. It provides the rules and structures that govern how we construct sentences, which, in turn, influence the tone, emphasis, and overall meaning of our expressions.

- **Pronunciation**

It's important to remember that proper pronunciation entails more than just producing words or sounds correctly. It should be regarded as an essential element of communication seamlessly integrated into educational endeavors. Instructors can motivate students to assess their pronunciation and engage in speaking exercises both within and beyond the classroom environment. Clarity in pronunciation holds paramount importance in effective communication, as it pertains to the sound of words in spoken language.

- **Fluency**

Fluency refers to the ability to speak a language easily and accurately. Fluency is not just determined by the speaker's ability to access linguistic knowledge, but also by the order in which grammatical structures are acquired and used by the speaker (VanPatten & Williams, 2015). Fluency, however, is very distinct from other variables, despite the fact that words are frequently addressed together and appear to be tested similarly on the surface. In studies on accentedness, intelligibility, and comprehension.

Elements of fluency in grammar include the smoothness of sentences using variable sentence structure, words, and literary devices to create a flowing quality of speech. The flow and efficiency in which ideas are expressed, the ease with which a learner can explain themselves without

pauses or mistakes. What is more, fluency means how well a learner communicates meaning rather than how many mistakes they make in grammar, pronunciation and vocabulary.

3. MATERIALS AND METHODOLOGY

In order to determine the effectiveness of Elsa Speak application on improving the English-speaking skills, a mixed action research approach has been considered appropriate. Qualitative processes involve the examination and analysis of non-numeric data. Additionally, to ensure the reliability and validity of this study, quantitative data was obtained by numerical indicators about the participants' performance in speaking skills, as it is demonstrated in the pre-test and post-test results.

The research work was developed by using the action research cycle's steps, following a mixed method suggested by Sagor (2005), that helped to effectively address the issue presented in the development of speaking skills:

- Identifying a problem

Based on extensive observations conducted in the EFL classroom, the researcher identified a prominent problem concerning the lack of speaking skills among students. This problem encompasses vocabulary limitations, issues with grammar and sentence structure, and lack of fluency and confidence required to speak English comfortably. Based on these findings, the researcher proposed the implementation of the ELSA Speak application as a viable solution to effectively address this problem. Consequently, to begin the study, the researcher formulated the following research problem: How does ELSA Speak application enhance speaking skills among second-year high school students at a public institution in Loja?

- Gathering background information

As a subsequent step, a comprehensive review of the existing literature and previous studies about the key variables of speaking and ELSA Speak application was conducted. In this study, speaking was identified as the dependent variable, encompassing indicators such as vocabulary, pronunciation, grammar, and fluency. On the other hand, ELSA Speak was identified as the independent variable, with indicators classified as motivation, convenience, flexibility, eloquence, resources, feedback, engagement, coach, speech analyzer, study sets, dictionary, and course finder. By examining the relationship between these indicators, this research aimed to provide valuable insights about the impact of the ELSA Speak application on enhancing speaking skills. The theoretical framework was then presented, which provided a general understanding of the research work by outlining the conceptualizations of the two variables and their respective indicators, highlighting the importance of them in the EFL teaching learning process.

- Designing the proposal

From all these postulations, an action plan was developed with a strategy focused on improving the students' speaking skills, the researcher made adaptations to the different features of ELSA Speak application aligned with the stages of speaking that are pre, while, and post speaking phases during a lesson. The aim was to enhance students' vocabulary, pronunciation, grammar and fluency through an artificial intelligence-based application like ELSA Speak. In the first stage, the teacher applied activities to stimulate the students' interest and curiosity before speaking to the artificial intelligence-based application. In the second phase, the teacher used activities that were completed by students while speaking to the ELSA Speak application material. In the third phase, the teacher provided students with activities on each of ELSA Speak's features to assess their speaking skills. These stages encompass the general understanding and use of the speaking

stages framework (Richards, 2006). The intervention proposal took place over a period of five weeks, spanning the academic year of 2022-2023, a number of 15 lesson plans which included the ELSA Speak application under Richard's speaking stages approach. The topics used were adapted from the internet, an English course book for second-year high school students "Live Escalate Lite 3", and other sources which were relevant to the student's needs. The researcher carried out the intervention plan as an active participant observer and collaborator.

It is necessary to mention that this proposal was aligned with the research question, the characteristics of the participants and the study design, in order to provide an effective solution to the problem.

- Collecting data

In the next stage, the previously designed instruments were used to collect the information that was addressed to answer the research question. A pre-test was administered to the students before the intervention plan to gauge their current level of speaking. The purpose of this pre-test was to serve as a diagnostic assessment. During the administration of the pre-test, a flexible and open-minded approach was adopted. The students were informed about the researcher's presence in their classes and the purpose of the assessment. It was also emphasized that the results of the pre-test would not affect their grades or disrupt the normal course of the subject.

Thus, following the full implementation of the intervention plan, a post-test was administered at the end of it. The main purpose was to compare the impact of the ELSA Speak application on students' speaking skills. Additionally, field notes were taken by the researcher in order to explain quantitative results. This critical step was intended to determine the extent to which the ELSA Speak application contributed to the development of students' speaking skills.

Furthermore, in strict adherence to the ethical principle of privacy, a comprehensive code system was implemented within the pre-test and post-test to anonymize the identities of the participants.

- **Analyzing and interpreting data**

This step was aimed to represent quantitative data in statistical tables and graphs. So, it was possible to analyze and interpret the quantitative and qualitative data, which was useful to establish the research outcomes. The general results and findings were reported by drawing conclusions and recommendations that helped to respond to the research question formulated at the beginning of the process.

- **Implementing and sharing findings**

The results obtained from this research have been shared within the educational community with the aim of inspiring and facilitating additional studies. These future endeavors are intended to assist educators in enhancing their students' speaking abilities through the utilization of artificial intelligence, specifically by incorporating the ELSA Speak application.

4. RESULTS

The following section shows the results and findings obtained by the researcher about the use of ELSA Speak application on the second-year high school students' speaking skills in order to demonstrate how the specific objectives were accomplished during the research process.

4.1. Pre-test Results

Table 1

Pre-test scores on the performance of second-year high school students' speaking skills

Grading scale (2.5/2.5)	V		FL		P		G	
	F	%	F	%	F	%	F	%
Grades (0 - 0,5)	0	0	2	11	0	0	2	11
Grades (0,6 - 1)	4	22	3	17	3	17	3	17
Grades (1,1 - 1,5)	14	78	11	61	6	33	9	50
Grades (1,6 - 2)	0	0	2	11	8	44	3	17
Grades (2,1 - 2,5)	0	0	0	0	1	5.6	1	5.6
Total of students	18	100	18	100	18	100	18	100
Mean	1.1		1.12		1.48		1.17	

Note. V=Vocabulary, FL=Fluency, P=Pronunciation, G=Grammar

The data presented in Table 1 reveals that 78% of students attained scores ranging from 1.1 to 1.5 in the "vocabulary" skill, reflecting a challenge in comprehending word relationships. In contrast, 22% of students scored between 0.6 and 1 due to difficulties aligning words with their contextual meanings accurately. Overall, these findings yield an average score of 1.1 out of a possible 2.5.

Regarding "fluency," the findings indicate that 61% of the individuals obtained scores within the range of 1.1 to 1.5, signifying a challenge in their ability to communicate smoothly and logically using the ELSA Speak

application. This difficulty emerged as students displayed hesitancy and a tendency to overanalyze words during their spoken interactions. Moreover, 17% of them obtained grades between 0,6-1 since they often paused mid-sentence, searched for the right vocabulary, or self-corrected their grammar, which interrupted the flow of the speech and flexibility. Besides, learners made too many pauses and/or hesitations, which interfered with coherence as well.

Likewise, 11% of the participants scored within the range of 0-0,5 since when recording, students performed with fear and shyness, because their classmates paid close attention to their speaking, driven by the fear of being muffed by their partners. During this recording session, students put more emphasis into avoiding the attention from their classmates and stayed away from each other, thus failing to produce a fluent speech. In conclusion, the outcomes revealed an average score of 1.12 out of a possible 2.5.

Furthermore, Table 1 offers insight into the "pronunciation" skill, where 44% of the sample achieved scores ranging from 1.6 to 2. This suggests that students' ability to produce and identify words based on stress patterns displayed a partial effectiveness. In contrast, 33% of the participants received grades between 1.1 and 1.5, indicating difficulties in appropriately applying stress to the correct syllables when both listening to and pronouncing words. These combined results granted an average score of 1.48 out of a potential 2.5.

Lastly, the outcomes concerning the "grammar" skills showcase that 50% of the participants obtained scores within the range of 1.1 to 1.6 due to the students' ineffective utilization of punctuation, tenses, and aspects. Similarly, 17% of them obtained grades in the range of 0,6-1 since they struggled with verb tenses, such as the past, present, and future, along with their continuous forms. It was difficult to consistently use the correct tense, resulting in errors such as using present tense when past tense was needed

or vice versa. Together, these results provided a mean score of 1.17 out of 2.5.

To sum it up, students' lowest performance was seen in "vocabulary", which refers to the entire set of words, phrases, and expressions that individuals have knowledge of, and they can use to communicate effectively. On the other hand, the highest performance was seen in "pronunciation", which stands for the way in which words are spoken or articulated. Thus, it can be deduced that students could somewhat produce or have knowledge about written words. As a consequence, the production of spoken words and overall speaking production was the real issue that helped the researcher to carry out the intervention plan in this population.

4.2. Post-test Results

Table 2

Post-test scores on the performance of second-year high school students' speaking skill

Grading scale (2.5/2.5)	V		FL		P		G	
	F	%	F	%	F	%	F	%
Grades (0 - 0,5)	0	0	2	11	0	0	0	0
Grades (0,6 - 1)	0	0	2	11	0	0	1	6
Grades (1,1 - 1,5)	3	17	11	61	5	28	4	22
Grades (1,6 - 2)	1	6	3	17	5	28	9	50
Grades (2,1 - 2,5)	14	78	0	0	8	44	4	22
Total of students	18	100	18	100	18	100	18	100
Mean	2.26		1.24		1.97		1.8	

Note. V=Vocabulary, FL=Fluency, P=Pronunciation, G=Grammar

On the other hand, after a five-week period of intervention, a post-test was applied to students to measure their speaking skills such as "vocabulary", "fluency", "pronunciation" and "grammar". Table 2 shows the number and percentage of second-year high school students who obtained

scores between 0-0,5; 0,6-1; 1,1-1,5; 1,6-2 and 2,1-2,5 in the four speaking skills.

As depicted in Table 2, a significant 78% of the participants achieved scores falling within the 2.1 to 2.5 range in the "vocabulary" skill following the implementation of the intervention plan. This improvement was marked by students' enhanced ability to accurately discern, employ, and comprehend word relationships and meanings. Notably, their vocabulary comprehension had broadened and become more precise. These collective results unveiled an average score of 2.26 out of 2.5.

Furthermore, Table 2 highlights the "fluency" skill, where learners exhibited partial proficiency in producing and recognizing sounds with fluidity. Specifically, data indicates that 61% of students garnered scores ranging from 1.1 to 1.6. This was attributed to their apprehension of receiving unfavorable feedback from their peers. It is noticed that students slightly improved due to several reasons: the class was small, and students were clustered among them so they stayed bothering one another, resulting in undesired laughs which blocked the microphone of the device. Thus, the speech recognizer that ELSA Speak possesses could not recognize nothing of the speech. In brief, the findings pointed to an average score of 1.24 out of 2.5.

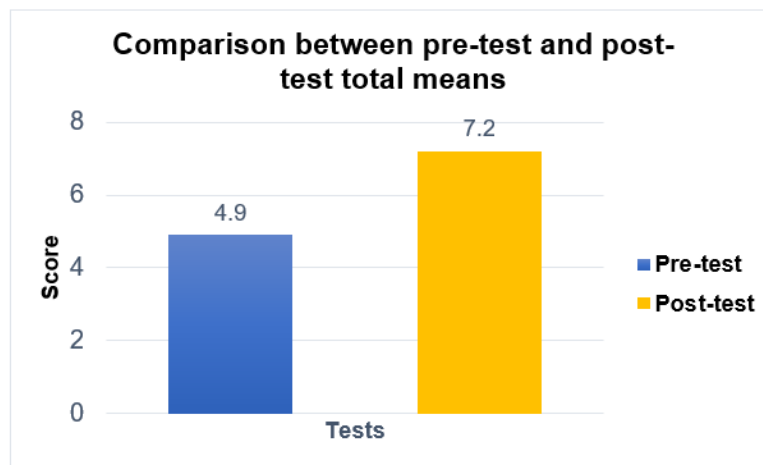
Regarding "pronunciation", the data shows that 44% of the students achieved scores falling within the 2.1 to 2.5 range, since students showed a significant improvement in the production and recognition of words through stress patterns. In the same way, 28% of the participants achieved a score between 1,6-2 because they passed from partially good to a very good pronunciation level. It highlights the learner' clear pronunciation, recognition and stress into the correct syllable of words. Combining these results, an average score of 1.97 out of 2 was obtained.

Ultimately, the findings showcased in Table 2 reveal that 50% of the students secured scores within the range of 1.6 to 2 in the "grammar" skill. This increase is attributed to notable enhancements in their utilization of punctuation, tenses, and aspects. Thus, 22% of them obtained grades in the interval of 2,1-2,5 since they had a clear understanding of tenses. Students consistently used accurate verb tenses to convey different time frames, they effortlessly switched between past, present, and future tenses, choosing the appropriate tense based on the context. In summary, the results gave a mean score of 1.8 out of 2.5.

Overall, students' speaking skills improved with the use of ELSA Speak Application, However, students still needed more training to master their speaking to become active language users.

Figure 2.

Comparison between pre-test and post-test means in the achievement of students' speaking skills



The following bar graph presents a comparison between the average scores of second-year high school students in their pre-test and post-test assessments, aiming to illustrate the impact of the ELSA Speak application on their speaking skills, encompassing areas such as "vocabulary," "fluency," "pronunciation," and "grammar."

Based on the above findings, it becomes evident that in the pre-test, all students achieved a collective mean score of 4.9 out of 10, indicating their proximity to meeting the required learning standards, as outlined by the Ministry of Education's criteria. Conversely, the post-test results displayed an overall mean score of 7.2 out of 10, showcasing those students had indeed reached the required learning standards, as depicted in the bar graph. This data unequivocally underscores the significance of employing the ELSA Speak application to enhance students' speaking skills.

5. DISCUSSION

The present study was designed to improve Speaking skills by using ELSA Speak application among second-year high school students at a public institution in Loja, during the 2022-2023 school year. In the forthcoming section, we embark on an engaging discussion that illuminates the convergence of this study's outcomes with those of previous research studies expounded upon earlier.

Moreover, the present study was designed to answer the main research question: How does ELSA Speak application enhance speaking skills among second-year high school students at a public institution in Loja, during the 2022-2023 school year? The research demonstrated a notable improvement in the speaking skills after using the ELSA Speak application, comparing the mean post-test score with the pre-test score. It is supported by Kholis (2021), who found that ELSA Speak application can help students to improve the students' motivation and pronunciation skills. Previous research has also acknowledged the effectiveness of ELSA Speak in enhancing vocabulary, pronunciation, grammar, and fluency in language learning. The application's features, including the dictionary, video lessons,

simulations, and instant feedback, were highly beneficial and contributed to an authentic learning experience. However, some limitations in content and device availability pose challenges requiring future research attention.

Regarding the posed sub-question about what is the effectiveness of artificial intelligence-based applications to enhance speaking skills among second-year high school students at a public institution in Loja, during the 2022-2023 school year? The results indicated that students obtained a total mean score of 4.9 out of 10 during the application of the pre-test, while the overall mean score of the post-test increased to 7.2 out of 10 with a statistical difference of 2.3 which means that the use of ELSA Speak application helped them to develop their speaking skills. In the same way, prior studies have noted that this application is characterized by effectively improving speaking skills specifically, vocabulary, pronunciation, grammar and fluency (Aswaty & Indari, 2022). Hence, these findings align with the concepts put forth by Lesmana (2022), who similarly demonstrated that the ELSA Speak application serves as an effective approach for teaching speaking skills. This is because it captures students' engagement by offering various features that facilitate a better understanding of the English language, making it an appealing tool for language learning. Nevertheless, one limitation identified by the researcher was the lack of free content and specialized features for learning English language learning.

Another limitation that emerged from the research was the absence of up-to-date smartphones, which acted as a barrier for the application. This resulted in speech being muffled and hindered the speech recognition system from fully embracing it. The system could not provide high-quality audio for diagnosis and improvement, and the students had to speak louder and more clearly in order to be understood in the application. This was tiring and frustrating, and it slowed down the process of helping the students to

learn. As a result, it is an important issue to be considered in future research.

6. CONCLUSIONS

The ELSA Speak app made a big difference for second-year high school students. It helped them get better at speaking in English. They improved their vocabulary, grammar, fluency, and pronunciation. Plus, it made them feel more comfortable using English and talking confidently with the help of this cool AI-powered app called ELSA Speak.

Another finding from the research was that students who were curious about the ELSA Speak app found it really interesting. They used the app a lot because it gave them instant and helpful feedback, it made them feel motivated and challenged to go forward into language learning and it encouraged them to practice English with their friends in real-life situations, helping them to improve their language skills and have better conversations and communicative interactions.

7. AUTHORS' CONTRIBUTION

BB: Introduction, literature review, and results

MC: Materials and methodology, guidance in the research process, and final revision of the chapter

AC: Discussion and revision of the work

EP: Processing data and conclusions

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