The Effect Of English Speech Assistant Application On Second Grade Arabic Speaking Students

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Abstract

This study examines how the ELSA Speak app improves second-grade Arab students' English-speaking competency at Alfaruq Intermediate and quantifies the improvement. It aims to show the students' ability and performance in the second intermediate school. The study included one English teacher and 15 second-graders. A Classroom Action Research (CAR) approach, combined with qualitative and quantitative methods, was adopted to analyze the data. Qualitative data were collected using observation checklists, whereas quantitative data were obtained by comparing students' pre- and post-tests. The first cycle is 5.501, the second 7.663. Initial-cycle post-assessment. The post-test means of 62.43 and 52.71 exceeded pre-test scores. In the second cycle, the post-test mean exceeded the pre-test. After test II, the score was 73.91, up from 61.32. Students' progress shows improvement. KKM passing graders improved 13.34% in the first cycle and 60% in the second. These findings show that the ELSA Speak app improves Arabic-speaking students' English-speaking skills.

Keywords: English Language Speech Assistant Application; ELSA; Student; Second Mediate

INTRODUCTION

Humans use language to communicate and send messages to other people. Language is frequently thought of as a human communication system that people use to share information, feelings, thoughts, and ideas with one another. Language is a tool that people use to communicate their thoughts, feelings, and desires to the other person they are interacting with, claims (Sardjunani, 2020). Language is a tool that people use to communicate their thoughts, feelings, and desires to the other person.Spoken and written language can take many different forms and is made up of symbols like words, sentences, and other signs with specific meanings. More specifically, there are two primary components to language meaning: Contextual Meaning (Pragmatic): The context of a language determines its meaning. For instance, a word or sentence may have multiple meanings based on the circumstances or state of the context in which it is used. Semantic Meaning: This is the meaning that a word or phrase has by itself which is governed by linguistic conventions, like dictionary definitions (*cf.*Kanaan et al, 2022; Mohammed et al, 2025). When speaking, using clear and precise language will help the other person grasp the main idea of what is being said. In order for the information to be understood and used for its intended purpose, linguistic factors must be taken into account. Effective communication relies on language clarity. "The proper delivery style and language clarity are closely linked, so that the The speaker's intended context is taken into consideration in addition to the literal meaning of the message (Jalaludin, 2020). English emerges as the world's most important language. Many people use it as a communication tool, and

using English makes it simpler for people from other nations to interact and communicate with one another. Additionally, in the age of globalization, English is essential in many domains such as politics, economics, culture, education, and communication. English proficiency is therefore crucial in Indonesia. There are essentially four abilities needed to teach English. Aside from reading and listening, they are also writing and speaking. In recent years, speaking has grown in importance as a component of ordinary communication in contexts including second or foreign languages (see also, Hazem and Jasim, 2025). Since assisting students in developing their oral communication skills is a primary responsibility of educators dealing with ESL students, it stands to reason that students should prioritize honing their speaking talents above the other three (O'Malley and Pierce, 1996).

An application for learning English called ELSA Speak (English Language Speech Assistant) was developed specifically to help users pronounce words correctly and become more proficient speakers. This application analyzes user pronunciation using artificial intelligence (AI) technology and gives immediate feedback on intonation, fluency, and pronunciation errors. Because of its visually appealing and user-friendly interface, ELSA Speaking makes learning more enjoyable and less tedious. Users are encouraged to keep practicing by this application's use of gamification, which makes learning more engaging (Krishna & Latha, 2019). Elsa Speak is a popular English teaching app because it uses technology. Elsa Speak, a free media app from Google Play or the AppStore, allows 4.0 teaching (Samad & Ismail, 2020).When built, Elsa Speak has capabilities to help students speak English better.Samad & Aminullah (2019) say the Elsa Speak app can be used to practice vocabulary, vowels, consonants, sentence emphasis, and intonation. Additionally, Elsa Speak allows two-way learning. Users can recite English words or sentences (Istiara et al., 2023), and the computer provides scores and adjustments (Fitria, 2021). It is also of benefit to understand the meaning as well as the context of a sentence (see among others: Estaifo et al, 2023; Hazem and Mohammad, 2021). According to (Becker, 2019) that ELSA's fundamental interface is easy to use and offers switching between topics, levels, and skills ,reports as well as additional features. Customers can establish a display language, such as Vietnamese, English, or Japanese are reliable markers of the intended audience.for this application). Depending on the level of expertise level of the user, the abilities consist of drills such as opening and closing noises, little consonant clusters, schwa, the-sounds, and pairs. These are commonly referred to by applied linguists as individual sounds that make up segmental phonemes within One word. Among the subjects are cuisine, entertainment, culture, technology, everyday discussions, and relationships, to name a few. The author came to the following conclusion about the benefits of the ELSA based on the description above:

1. This app utilizes "proprietary artificial intelligence" (AI), which encompasses automated speech recognition, to provide users with feedback regarding the accuracy of their pronunciation.
2. By picking a subject, students get access to a range of lessons.
3. Lessons are labeled according to proficiency level and include a variety of speaking and listening opportunities.
4. After the target sound is said, users can choose to videotape themselves making the sound.
5. The ELSA, which stands for English Language Speech Assistant, checks the file for accuracy and provides comments on right and wrong pronunciation.

The following could then be listed as the disadvantage of the (ELSA) Speak application:
1. To download and install the app, pupils require a smartphone.
2. Paid content restricts the topics.
3. In order to function, it requires an internet connection.
4. The only restriction is an accent.

METHOD

Participants

Ten to fifteen students and their English teacher participated in this study, which focused on second-class mediate students from Alfaruq. The main emphasis of The ELSA Speak application was used in the study as a tool to improve the speaking abilities of the pupils.

Design

In this study, Classroom Action Research (CAR) uses qualitative and quantitative methods to evaluate the ELSA Speak app for English speaking. The four phases of the research are preparation, action, observation, and reflection. Teachers and researchers use ELSA Speak to identify problems and create action plans during the planning stage. Pre-tests, app-based lessons, and post-tests are all part of the acting phase. Researchers monitor students' progress and app usage while they are being observed. Lastly, during the reflection phase, educators and students evaluate the app's usefulness as well as any difficulties encountered. To get thorough results, this procedure is carried out over two cycles.

Data Collection

This study collected qualitative and quantitative data. The researcher watched and documented the classroom learning process, focusing on the strategies and techniques used in two to four sessions to attain the best results, to collect qualitative data. The quantitative data comprised pre- and post-ELSA scores, which assessed pupils' English-speaking competency. Talk tests and an observation checklist were employed in this study.

Data Analysis

Both process and outcome data were gathered for this classroom action study. While result data showed the results, process data documented the activities that took place during the study.
Data analysis used both descriptive and statistical techniques. This descriptive study used observation checklists to look into how the ELSA Speak app helped students' English speaking skills.
The statistical analysis calculated average scores, variability, and gain significance between pre- and post-tests using mean, deviation, and t-test methods. This measured the app's performance numerically.

RESULTS AND DISCUSSION

The second-class mediate students at alfaruq had their English language abilities enhanced through the usage of the ELSA Speak program.

Table 1. Outcome of Cycle I Student Observation Checklist

No.	Name	Paying Attention	Being active in class	Completing the task	Getting excited when using ELSA Speak application
1.	AHMED	✓	—	✓	✓
2.	KAREEM	✓	—	✓	✓
3.	ALI	✓	—	✓	✓
4.	YOUSIF	✓	—	✓	✓
5.	HUMAM	✓	✓	✓	✓
6.	LOAY	✓	✓	✓	✓
7.	HASSAN	✓	✓	✓	✓
8.	JASIM	✓	✓	✓	✓
9.	HUTHAFA	✓	✓	✓	✓
10.	AWS	✓	✓	✓	✓
11.	AYMEN	✓	—	✓	✓
12.	HATEM	✓	—	✓	✓
13.	AMER	✓	—	✓	✓
14.	OMAR	✓	✓	✓	✓
15	QASIM	✓	✓	✓	✓

Table 2. Outcome of Cycle I Teacher Observation Checklist

No.	Name	Yes	No
1.	The instructor had well-prepared the lesson materials.	✓	
2.	The class was preempted by the instructor inquiring about the condition of the pupils.	✓	
3.	The instructor verified the pupils' presence.	✓	
4.	Students were inspired by the teacher.	✓	
5.	The instructor reviewed earlier content with the class.	✓	
6.	The teacher gave apperception	✓	
7.	The instructor gave the students an explanation of the subject matter.	✓	
8.	To teach English speaking, the instructor utilized the Elsa Speak app.	✓	
9.	Students were given the chance to ask questions by the instructor.	✓	
10.	Following the class, the instructor provided feedback.	✓	

Table 3. Outcome of Cycle II Student Observation Checklist

No.	Name	Paying Attention	Being active in class	Completing the task	Getting excited when using ELSA Speak application
1.	AHMED	✓	✓	✓	✓
2.	KAREEM	✓	✓	✓	✓
3.	ALI	✓	✓	✓	✓
4.	YOUSIF	✓	—	✓	✓
5.	HUMAM	✓	✓	✓	✓
6.	LOAY	✓	✓	✓	✓
7.	HASSAN	✓	—	✓	✓
8.	JASIM	✓	—	✓	✓
9.	HUTHAFA	✓	✓	✓	✓
10.	AWS	✓	✓	✓	✓
11.	AYMEN	✓	✓	✓	✓
12.	HATEM	✓	✓	✓	✓
13.	AMER	✓	—	✓	✓
14.	OMAR	✓	✓	✓	✓
15	QASIM	✓	—	✓	✓

Table 4. Outcome of Cycle II Teacher Observation Checklist

No	Name	Yes	No
1.	The instructor had well-prepared the lesson materials.	✓	
2.	The class was preempted by the instructor inquiring about the condition of the pupils.	✓	
3.	The instructor verified the pupils' presence.	✓	
4.	Students were inspired by the teacher.	✓	
5.	The instructor reviewed earlier content with the class.	✓	
6.	The teacher gave apperception	✓	
7.	The instructor gave the students an explanation of the subject matter.	✓	
8.	To teach English speaking, the instructor utilized the Elsa Speak app.	✓	
9.	Students were given the chance to ask questions by the instructor.	✓	
10.	Following the class, the instructor provided feedback	✓	

These conclusions were drawn from each cycle's observation checklist. Following an analysis of Cycle I and Cycle II results, the researcher can say that using the ELSA Speak app to improve English Speaking of Alfaruq Intermediate School's second-class mediate students is employed when the instructor first introduces the Elsa's features. Talk about the application. The dictionary feature is the primary tool utilized in this class, supplied through ELSA Speak. Score for the word or phrase they wish to use. Because it teaches kids the proper intonation to use while pronouncing words and sentences, this function is a huge hit with pupils. Pupils demonstrate proficiency in English as a result.
2.The improvement of second-class mediate students' speaking skill at alfaruq in the after being taught using ELSA Speak application.

The data in the table 5 showed that students' proficiency in speaking English improved dramatically after using the ELSA Speak tool. The t-test findings for the first cycle show this to be 5.501, while for the second cycle, they show a value of 7.663. Evaluation at the end of the initial cycle Both the pre- and post-test means were higher

than the pre-test; the post-test mean was 52.71 and the post-test mean was 62.43. Next, in cycle two, we see that the post-test mean was higher than the first pre-test as well: 73.91 on post-test II compared to 61.32 on pre-test. In The students' progress also shows that things are getting better. in particular, those who passed the KKM exam had an improvement of 13.34% in the first cycle and 60% in the second. The results show that pupils' speaking skills have improved thanks to the Elsa Speak app. Cycle II's greater t-test value compared to cycle I's t-test value indicates a significant influence from cycle I to cycle II.

Table 5. Cycle I and Cycle II T-Test Scores

Analysis	Cycle I	Cycle II
Mean of Pre-test	52.71	61.32
Mean of Post-test	62.43	73.91
Total students who passed the passing grade (≥72)		
a. Pre-test	6.65%	20%
b. Post-test	21%	81%
c. Improvement	13.34%	60%
T-table N=15	1.760	1.760
T-test	5.501	7.663

Students' performance and engagement with the ELSA Speak application increased during Cycle I and Cycle II, according to the observation checklists. Although most students paid attention and finished tasks, and their enthusiasm for the app was still strong, active involvement only marginally improved from Cycle I to Cycle II. Observations of teachers revealed that they consistently used successful teaching techniques, including efficiently creating lesson plans, inspiring pupils, and giving feedback.

Students' high levels of interest and successful task completion demonstrate how effectively the ELSA Speak application works to improve English speaking abilities (Ghufron, 2024). The optimistic outlook on learning that was evident during the observation by the students could be a distinguishing feature, as attitude is a predictor of academic achievement (Hasbi, 2013). Additionally, both teachers and students preferred ELSA Speak's feedback feature. It encouraged students to get better by offering corrections and enabling the teacher to re-explain errors. This feedback system is in line with earlier studies, like Kholis (2021), which emphasized how ELSA Speak can provide immediate feedback, facilitating students' rapid learning and pronunciation improvement in English. Feedback of this kind, particularly when given appropriately and directly, may encourage students to develop their speaking abilities quickly (Utami et al., 2020). The researcher found that the ELSA Speak program improved students' English speaking skills in Cycles I and II, which totaled 5,501 and 7,663, respectively. Final evaluation of the initial cycle Both the pre- and post-test means were higher than the pre-test: 52.71 and 62.43. Second cycle pre- and post-test averages were higher than first cycle. contrasted with pre-test 61.32 and post-test II 73.91. In the first cycle, 13.34% more students passed; in the second, 60% more. This shows that ELSA Speak improved students' speaking skills from Cycle I to Cycle II.

Thus, it is evident from the findings of this empirical study and the backing of other earlier research groups that ELSA speak application media is a helpful resource for teaching students pronunciation. the characteristics of identifying and altering English pronunciation. This allows the application to diagnose user errors and provide precise instructions for fixing them. Users can practice speaking English like native speakers by using the pronunciation training feature. These characteristics include visual aids like tongue compression, instructions for opening the mouth shape, and automatic evaluation. In the meantime, ELSA helps users communicate in English by mimicking native speakers, which boosts user confidence.

CONCLUSION

This study shows that in cycle two, students' performance was below average. Nevertheless, students' performance in the ELSA Speak application significantly improved after it was implemented. This suggests that ELSA Speak improves students' ability to articulate English words. Students' enthusiasm for ELSA Speak and active engagement in the learning process helped them advance, even though not all of them were able to pronounce words perfectly. The study's recommendations include advising teachers to think about incorporating ELSA Speak into their lesson plans and to look into resources and instructional techniques that support their learning goals. The ELSA Speak app boosted students' English-speaking skills, according to the study. The pre- and post-tests demonstrate this. Within the first cycle, the post-test means were 52.71 and 62.43, greater than the pre-test. Second-cycle pre- and post-test averages were higher than first cycle. contrasted with pre-test 61.32 and post-test II 73.91.

These studies confirm that the ELSA Speak app improves pupils' English. Students use the ELSA Speak app's dictionary and built-in capabilities to record themselves. ELSA Speak is recommended as an additional resource for teaching English pronunciation. Its application in the classroom can improve on traditional techniques, particularly when it comes to helping specific students with their pronunciation issues. In addition, teachers should make sure that pronunciation is incorporated into other speaking components of language instruction and assist students in using the application efficiently. By examining the efficacy of ELSA Speak in additional linguistic domains like intonation, stress, rhythm, and irregular verbs, future research could build on this study. To evaluate the application's wider applicability, research involving students from various educational backgrounds, such as college students or adult learners, is also advised.

REFERENCES

Becker, Kimberly and Edalatishams, Idée. (2019). "Technologi Review: Elsa Speak Accent Reduction". A Journal of /Conference in second language learning and teaching. ISSN 2380-9566: P. 1-5.

Estaifo, R. Q., Meteab, W. Y., & Hazem, A. H. (2023). A Pragmatic Study of Connectives in Mosuli Dialect with Reference to English. *World Journal of English Language*, *13*(6), 491. https://doi.org/10.5430/wjel.v13n6p491

Fitria, T. N. (2021). The use technology based on artificial intelligence in English teaching and learning. ELT Echo: The Journal of English Language Teaching in Foreign Language Context, 214-223. https://doi.org/10.24235/eltecho.v6i2.9299.

Ghufron, A M. (2024). Improving speaking skills using ELSA AI-powered application. In Hasbi, M., Alamsyah, A., Faozan, A., Astawa, N. L. P. N. S. P., Fauzi, A. R.,

Utomo, H. Y., Devi, A. P., Nor, H., Adimarta, T., Kristanto, Mandasari, B., Dewi, R. F., Nisa, B., Hartati, E., Pricilia, G. M., Saputra, R. M., Purnami, I. A. O., Nisa, I. K., Mangendre, Y., Nurohman, Fajaria, N. H., Amna, S., Ariawan, S., Widodo, J. S., Ghufron, A. M., Adzhani, S. A.,Fadhilawati, D., Sari, A. S., Rejeki, S., & Rohqim, A. I. F. (2024). Useful AI Tools For English Teachers, Pp. 301-311. Rizquna. http://e-repository.perpus.iainsalatiga.ac.id/21414.

Hasbi, M. (2013). The attitudes of students from ESL and EFL countries to English.RegisterJournal,6(1),1-16. https://doi.org/10.18326/rgt.v6i1.1-16.

Hazem, A. H. and Jasim, F.F. (2025). Affix Recognition Among University Students of English. *The Journal of Education for Humanities*.

Hazem, A. H., & Mohammed, S. I. (2021). Mitigating Devices in Mosuli Iraqi Arabic with Reference to English. *Ijaz Arabi Journal of Arabic Learning*, *4*(2), 518-534. https://doi.org/10.18860/ijazarabi.v4i3.13130

Istiara, F., Hastomo, T., & Indriyanta, W. A. (2023). A study of students' engagement and students' speaking skill: A correlational research. TEKNOSASTIK, 21(1), 1–7. https://doi.org/10.33365/TS.V21I1.2198.

Jalaludin, M. (2020). Komunikasi efektif: Teori dan praktik. Prenadamedia Group.

Kamil, D. F., & Hazem, A. H. (2020). The Impact of Arabic on The Written English Performance of Second-year Students in Relation to Prepositions. *Journal of University of Babylon for Humanities*, *28*(2), 14–24.

Kanaan, M. H, Hazem, A. H. and Kamil, D. F. (2022). Strategies for Teaching English Grammar to Students of Iraqi Universities. *EDUCASIA: Jurnal Pendidikan, Pengajaran, dan Pembelajaran*, *7*(2). 83-93.

Kholis, A. (2021). Elsa Speak app: Automatic Speech Recognition (ASR) for supplementing English pronunciation skills. Journal of English Language Teaching, 9(1), 1-14. https://doi.org/10.32332/joelt.v9i1.2723.

Krishna, S., & Latha, R. (2019). The impact of AI-based language learning applications on pronunciation skills. Journal of Educational Technology, 12(3), 45–60. https://doi.org/10.1016/j.jet.2019.03.002.

Mohammed, R.W., Hazem, A. H. and Salman, Z. M. (2025). Ellipsis In The Narrative Structure Of Ghassan Kanafani's Men In The Sun. *Ijaz Arabi Journal of Arabic Learning*, *8* (1). 479-492. https://doi.org/10.18860/ijazarabi.v8i1.31724

O'Malley, J. M and Pierce L.V. 1996.Authentic Assessment for English Language Learners. Addison-Wesley Publishing Company.

Samad, I. S., & Aminullah, A. (2019). Applying ELSA Speak software in the pronunciation class: students' perception. Jurnal Edumaspul, 56-63 .https://doi.org/10.33487/edumaspul.v3i1.85.

Samad, I. S., & Ismail. (2020). ELSA Speak application as a supporting media in enhancing students' pronunciation skill. Majesty Journal, 1-7. https://doi.org/10.33487/majesty.v2i2.510.

Sardjunani, N. (2020). Bahasa sebagai alat komunikasi. PT Gramedia Pustaka Utama. Thesis.

Utami, E. P. N., Islamiah, N., & Perdana, I. (2020). The Implementation of direct method in teaching speaking at junior