

The Advantages of Artificial Intelligence ELSA Speak Application for Speaking English Learners in Improving Pronunciation Skills

Pingky Widyasari¹, Ana Maghfiroh²

¹ Universitas Muhammadiyah Ponorogo
pingkywidyasari@gmail.com

² Universitas Muhammadiyah Ponorogo
ana_maghfiroh@umpo.ac.id

ABSTRACT

The use of AI technology in an application or learning media is now very common, one of that is the ELSA Speak application. This application is considered quite effective and very helpful in improving English speaking skills, especially in pronunciation. This study aimed to explain what are the advantages obtained by using this application compared to other applications for speaking English learners. The method used in this study is a literature review which will be described qualitative descriptive. Researchers took ten scientific articles with a range of 2019-2023 obtained from Google Scholar. Based on the 10 articles that have been analyzed, the writer can conclude that the ELSA Speak Application is an application or pronunciation software based on artificial intelligence (AI) including automatic speech recognition (ASR) to provide feedback about the pronunciation accuracy of the user. The advantages of this application include: the application can be downloaded for free, can detect pronunciation errors with as much as 90% accuracy, the user can get feedback to correct mistakes, the application provides 1,200 lessons with more than 60 topics, besides that the application also offers an interactive dictionary. Elements of assessment and scoring of the application also include pronunciation, fluency, intonation, word stress, and listening. From these elements and aspects it has been proven that the ELSA Speak application is the most complete in terms of stress, intonation, accuracy and fluency.

KEYWORDS: ELSA, artificial intelligence, pronunciation

INTRODUCTION

English is a tool to communicate around the world, and it has become a global language (Kholis, 2021). In the current era of technological development, it is not difficult to find ways to master speaking foreign languages, especially English as a second language. That is because there are lots of applications or online media platforms that offer various kinds of facilities for learning and developing English speaking skills. Applications in terms are ready-to-use programs that are designed to carry out a function for other users or applications and can be used by the intended target (Aziz et al., 2020). According to (Ardini, et al., 2022) mentions several examples of applications that can be used to improve pronunciation in spoken English, including: ELSA Speak, EPA (English Pronunciation Application), Learn English Sounds Right, TFLAT English Pronunciation -Speak English Pronunciation, Say it English pronunciation, English Pronunciation by Yobimi, English Sound pronunciation-Learn&Check, English phonetics-English pronunciation IPA, Quick pronunciation, Pronunciation-IPA pronunciation, Spell and pronounce it Right, Correct

spelling and pronunciation, English Pronunciation Training , Pronounce it, and PEP (Perfect English Pronunciation).

With a variety of applications developed to learn to speak English, it is not uncommon for application makers to create Artificial Intelligence (AI) technology as a human support tool. Artificial Intelligence (AI) itself is a simulation of human artificial intelligence which is modeled in the form of a machine and programmed to be able to think like a real human. According to John McCarthy (2007) artificial intelligence (AI) is a science and technique in creating intelligent machines, especially in creating intelligent computer programs or applications. AI is a step to create computers, robots or programs that work intelligently, like humans (McCarthy, 2007). One of the popular artificial intelligence to help develop the ability to speak English today is the ELSA speak application.

ELSA Speak (English Language Speech Assistant) is an English pronunciation application designed to help someone speak English clearly and confidently (Taqy, 2021). This application can be used to help hone our skills in speaking English, especially in terms of pronunciation. Pronunciation in English itself is one of the most important basic skills in building oral language skills, listening and speaking. Paulston & Burder, (1976) as cited in (Taqy, 2021) explains that pronunciation is the production of a sound system that does not interfere with communication from either the speaker's or listener's point of view. In other words, pronunciation can be interpreted in a way how we can pronounce words in English clearly and understandably. Therefore, by learning pronunciation we will know how to pronounce a word correctly (Anggraini, 2022).

The use of AI technology in the ELSA Speak application is considered quite effective and very helpful in improving English speaking skills, especially in pronunciation. With the existence of AI in the application, it can help its users to hone their skills in speaking English with several interactive features provided. On the other hand, there is one other feature that makes this application superior, namely Automatic Speech Recognition Technology which is also known as automatic voice recognition (ASR). Where the target of this feature is to convert the lexical content of the human voice into an input that can be read by a computer Yu, (2012) in (Taqy, 2021). Directly the application will provide corrections that are wrong and should be correct.

Apart from the ELSA Speak application, AI technology itself is actually quite widely used. From several previous studies, the use of AI in learning applications, especially language, is considered quite effective in increasing the ability of its users. An example is the use of Paperrater as an artificial intelligence that can help users improve their ability to write English texts. The language service provided is able to provide feedback and grade the quality of writing in just seconds (Prastiwi & Pujiawati, 2019).

In addition, the use of AI in the Duolingo application is considered suitable as a language learning tool for children. This is because, in the application there are many features that are obtained, one of which is a cartoon character that can move like playing a game, so that children feel enthusiastic in learning English. By using this application, the benefits obtained include improving English language skills, increasing vocabulary, knowing the correct pronunciation of words, and practicing communication in English (Lienggar, et al.,2022)

This research will explain what are the advantages of using the ELSA Speak application compared to other applications for speaking English learners. Because when viewed from the features provided, this application is quite effective to use to hone English speaking skills, especially in terms of pronunciation. So, in writing this article, the author will formulate several problem formulations which will be the main reference, namely (1) What does ELSA Speak Applications deal with? (2) What are the features of the ELSA Speak application? and (3) What are the advantages of the ELSA Speak application for speaking English learners compared to other applications? This research itself includes descriptive qualitative research. Therefore, in writing this article, it aims to explain what the advantages are obtained by using this application for

METHOD

The method used in this study is a literature review which will be described by qualitative descriptive. According to Creswell (2014), qualitative research is a type of research that can describe an event or incident in real terms (Ardini, et al., 2022). With that, researchers took 10 scientific articles with a range of 2019-2023 obtained from Google Scholar. This study aims to analyze a collection of scientific articles that discuss the ELSA Speak Application and the advantages for English learners, especially in terms of pronunciation. In addition, the review of articles in this study is intended to find out (1) What is the ELSA Speak application like? (2) What features are in the ELSA Speak application? and (3) What are the advantages of the ELSA Speak application for speaking English learners compared to other applications?

Article mining in this study used the Google Scholar database by carrying out several stages, such as (1) the author searched for articles using the keywords "ELSA Speak Application and Artificial Intelligence" which were identified through the category title, abstract, and keywords. (2) the documents are then limited to the previous 5 years publication from 2019 to 2023. (3) in the final stage, the documents will be sorted and the data obtained will then be compared and analyzed independently.

RESULTS AND DISCUSSION

3.1 ELSA Speak Application

Based on the 10 articles that have been analyzed, the writer can conclude that the ELSA Speak Application is an application or pronunciation software based on artificial intelligence (AI) including automatic speech recognition (ASR) to provide feedback about the pronunciation accuracy of the user. This application can be downloaded through the Play Store for Android users and the App Store for iOS users. The ELSA Speak Application also has two versions, free and paid versions. If we want to get more features, then the user must subscribe first by paying according to the price per month, three months, or one year. ELSA Speak Application is one of the world's best applications that can help people, especially English learners, to improve their pronunciation skills. It can be said that this application is a flexible programmer that features, as well as virtual language teacher software. This application can be used by anyone including individuals, schools and universities around the world.

As a pronunciation application that is enabled to reduce non-native English accents, of course this ELSA Speak has two accents used, they are British Accent and American Accent, where these two accents are accents that are commonly used throughout the world and have their own style or characteristics in pronunciation. Therefore, the ELSA Speak Application can be very useful for analyzing differences and characteristics in language use. That way this application can also be intended to improve the accuracy of word pronunciation like a native speaker.

3.2 The Features of ELSA Speak Application

Based on the research of (Becker & Edalatishams, 2019), the basic appearance of the ELSA application looks simple and provides navigation between topics and skills, levels, reports and other features. On the other hand, there are many display languages that can be used in ELSA applications. Users can set the display language according to the language used or mother tongue. Depending on the proficiency level of the user, this includes practicing skills such as beginning and ending sounds, minimal pairs, schwa, th- sounds, and consonant clusters. If according to applied linguistics they usually call it an individual sound within a word-segmental phoneme. Among the topics and skills in the ELSA application include food, entertainment, technology,

culture, daily conversation, and relationships. Figure 1 below shows the default skill-based page, which appears after a user selects their proficiency level.



Figure 1. The Skills-Based Start-Up

After selecting the desired skill (eg “/S/ /SH/” as shown in figure 2), they can select a topic again from several lessons. Each lesson is labeled for proficiency level and includes various speaking and listening opportunities. Figure 3 illustrates an exercise at the regular level with the target sound underlined.

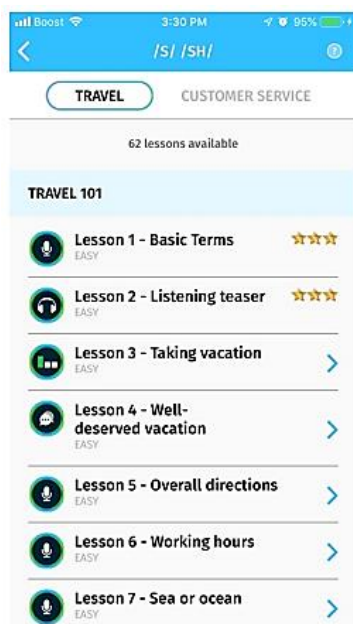


Figure 2. Lessons for the /S/ /SH/ “Skill”

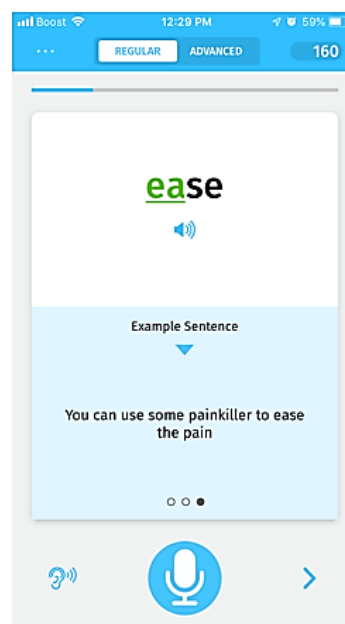


Figure 3. An Example Activity at the Regular Level

Users can listen to the pronunciation of the target voice then record themselves. ELSA determines the accuracy of the recording and provides feedback for correct and incorrect pronunciation. Correct pronunciation results in the sound of a bell accompanying a score of up to 100, whereas incorrect pronunciation results in a buzzing sound along with the correct pronunciation of a sound or word and the opportunity to review the recording of the incorrect sound for comparison purposes. An example of the feedback given for user's incorrect pronunciation can be seen in Figure 4. In addition to managing with ELSA skills, it also provides “Topics” in the bottom menu as shown in Figure 5.

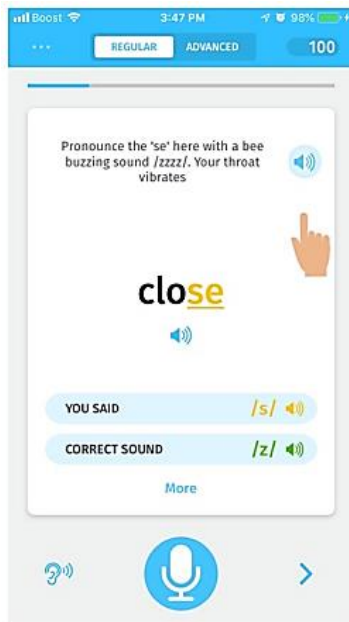


Figure 4. Incorrect Pronunciation Feedback



Figure 5. The Topic-Based Page

In addition, the app includes a dictionary that provides the pronunciation of any word plus the opportunity to connect to Younglish.com, a website that offers YouTube clips with an audiovisual emphasis on specific sounds, words or phrases. ELSA also offers a multi-faceted feature called “Progress” which contains a “Word Bank”, “ELSA Pronunciation Score” (ESP), and “Assessment”. “Word Bank” offers a summary of progress in three sections: “Word Sound”, “Word Stress”, and “Conversation”. Word sound determines feedback about individual phonemes and word stress assesses syllable stress.

The second progress feature, EPS, is a collection of scores from ELSA activities. The third progress feature, "Assessment", allows users to record 13 sentences and then provide feedback on segmental issues such as consonants, clusters, aspiration sounds, and schwa. ELSA also provides correct score percentage and user can also get detailed reports. Figure 6 illustrates an example of a detailed report.



Figure 6. An Example of Detailed Report

Green letters indicate that the user pronounced the sound correctly, yellow letters indicate that the sound is mostly correct, and red letters mean that the sound is pronounced incorrectly.

Despite the fact that the test is marketed as a way to measure “level of speech proficiency” and encourage users to construct sentences, the feedback remains focused on individual segmental voices.

In addition to these features, ELSA offers a user "Profile", where the user can customize settings regarding feedback, sharing, and notifications. Also, in the profile, users can identify goals, set daily reminders, and view application terms and policies.

3.3 Advantages of ELSA Speak Application

Regarding the benefits obtained from the ELSA Speak application, the writer refer to a study conducted by (Ardini, et al., 2022), where they found 15 pronunciation applications based on the concept of Artificial Intelligence (AI) with their respective advantages and disadvantages. These applications include: ELSA Speak, EPA (English Pronunciation Application), Learn English Sounds Right, TFLAT English Pronunciation-Speak English Pronunciation, Say it English pronunciation, English Pronunciation by Yobimi, English Sound pronunciation-Learn&Check, English phonetics-English pronunciation IPA, Quick pronunciation, Pronunciation-IPA pronunciation, Spell and pronounce it Right, Correct spelling and pronunciation, English Pronunciation Training, Pronounce it, and PEP (Perfect English Pronunciation). From the results of the analysis that has been concluded, it proves that the ELSA Speak application is the application that has the most advantages compared to the other 14 applications. These advantages consist of: the application can be downloaded for free, can detect pronunciation errors with as much as 90% accuracy, the user can get feedback to correct mistakes, the application provides 1,200 lessons with more than 60 topics, besides that the application also offers an interactive dictionary. Elements of assessment and scoring of the application also include pronunciation, fluency, intonation, word stress, and listening. From these elements and aspects it has been proven that the ELSA Speak application is the most complete in terms of stress, intonation, accuracy and fluency.

Based on the data that has been presented in the results, it is known that the ELSA Speak Application presents many features of learning about speaking, which are directed at practice. By providing many practice opportunities for language learners, they will improve their speaking skills, especially in pronunciation skills. This is in accordance with the statement (Kholis, 2021), which says that the ELSA Speak application can support and improve students' pronunciation skills and motivation. He has proven this through the performance of students and the scores obtained. Students can hear and imitate the same sounds in their native language. With the voice recording feature and interactive dictionary, students can increase their English vocabulary and successfully engage them in language learning. And of course in terms of practice students can be involved effectively in the learning process and get more motivation in class pronunciation by using the ELSA Speak application.

In addition, the ELSA Speak Application is a learning medium based on Artificial Intelligence (AI) technology. By learning language using technological media or multimedia it really helps students to improve their ability to speak correctly according to native speakers. Besides that, language learners will also be interested in learning English. According to research (Rinaepi et al., 2022) which was conducted on a number of class XI Vocational High School students, the ELSA Speak application used as a learning medium can meet students' needs by presenting theories that are relevant to daily activities and exercises that are quite easy to do. The ELSA Speak application learning media can also improve student attitudes and motivation because it uses interesting features and is quite easy to use via a smartphone. And the last, ELSA Speak application as a learning medium is also effective for improving students' pronunciation skills.

CONCLUSION

Based on the results and discussion, it can be concluded that the ELSA Speak Application is an application or pronunciation software based on artificial intelligence (AI) including automatic speech recognition (ASR) to provide feedback about the pronunciation accuracy of the user. This ELSA Speak Application is also one of the world's best applications that can help people, especially English learners, to improve their pronunciation skills. Besides, this application has many features that can be used to hone English speaking skills. With that, ELSA Speak is also considered to be an application that has the most advantages compared to other pronunciation applications. Even, this application can detect pronunciation errors with as much as 90% accuracy. The ELSA Speak application has also been proven to provide more practical opportunities for language learners in improving speaking skills, so that users are more interested in learning English.

REFERENCES

- Anggraini, A. (2022). Improving students' pronunciation skill using ELSA speak application. *Journey: Journal of English Language and Pedagogy*, 5(1), 135–141. <https://doi.org/10.33503/journey.v5i1.1840>
- Ardini, S., Wahyuni, S., & Suwandi. (2022). Analisis aplikasi pronunciation berbasis artificial intelligence bagi pembelajar bahasa asing tingkat pendidikan tinggi. *Prosiding Seminar Nasional Hasil Penelitian Dan Pengabdian Kepada Masyarakat (SNHP)*, 3, 1–12.
- Aziz, N., Pribadi, G., & Nurcahya, M. S. (2020). Analisa dan perancangan aplikasi pembelajaran bahasa Inggris dasar berbasis Android. *Jurnal IKRA-ITH Informatika*, 4(3), 1–5.
- Becker, K., & Edalatishams, I. (2019). Technology review: ELSA speak accent reduction. *A Journal of Conference in Second Language Learning and Teaching*. ISSN, October, 1–6.
- Kholis, A. (2021). ELSA speak app: automatic speech recognition (ASR) for supplementing English pronunciation skills. *Pedagogy : Journal of English Language Teaching*, 9(1), 1–4. <https://doi.org/10.32332/joelt.v9i1.2723>
- McCarthy, J. (2007). What is artificial intelligence? In *American Scientist* (pp. 1–15).
- Prastiwi, C. H. W., & Pujiawati, N. (2019). Penggabungan artificial intelligence dan kecerdasan alami dalam pembelajaran keterampilan menulis bahasa Inggris. *Prosiding Seminar Nasional Pascasarjana UNNES*, 1–7.
- Rahadiantino, L., Fahmi, A., Aparamarta, H. W., Moerad, S. K., & Shiddiqi, A. M. (2022). Implementasi pembelajaran artificial intelligence bagi siswa sekolah dasar di Kota Batu, Malang, Jawa Timur. *Jurnal Inovasi Pendidikan Dan Pembelajaran Sekolah Dasar*, 6(1), 308–317. <https://doi.org/10.24036/jippsd.v6i1.115857>
- Rinaepi, Triwardani, H. R., & Azi, R. N. (2022). The effectiveness of ELSA speak application to improve pronunciation ability. *Jurnal Fakultas Keguruan & Ilmu Pendidikan*, 3(1), 28–33.
- Taqy, M. (2021). The use of ELSA speak application as the media to learn pronunciation autonomously.