

## PROMOTING EFL STUDENTS' SPEAKING PERFORMANCE THROUGH ELSA SPEAK: AN ARTIFICIAL INTELLIGENCE IN ENGLISH LANGUAGE LEARNING

<sup>1</sup>\*Sayit Abdul Karim, <sup>2</sup>Annisa Qotrunnada Sofyana Hamzah, <sup>3</sup>Nasywa Maudyna Anjani, <sup>4</sup>Juani Prianti, <sup>5</sup>Irene Gabriella Sihole

<sup>1</sup>English Language Education Study Program, Faculty of Business & Humanities, Universitas Teknologi Yogyakarta, Indonesia

\*Corresponding Author Email: [sayit.a.k@uty.ac.id](mailto:sayit.a.k@uty.ac.id)

Article Info	Abstract
<b>Article History</b> Received: August 2023 Revised: September 2023 Published: October 2023	<i>The presence of a technology-based speech learning application namely English Language Speech Application (ELSA), an artificial intelligence (AI) may promote EFL students' speaking performance. This research attempts to examine EFL students' speaking performance by using the ELSA speak application, further explore their perceptions, and find out the inhibiting factors influencing low performance in their speaking. A mixed-method research design was applied to obtain both quantitative and qualitative data. 21 EFL students (5 Males and 16 Females) were involved in the data gathering process which was collected by using a test, questionnaire, and semi-structured interview. Furthermore, pre-test and post-test were conducted to examine their speaking ability, and a questionnaire using a 4-point Likert scale. In addition, a semi-structured interview was conducted to further explore the inhibiting factors of their low speaking performance. The findings revealed that students' speaking ability has significantly improved after using the ELSA application. It can be known the mean score of pre-test results was 75, meanwhile, the post-test score was 88. Of 20 respondents, 16 or 80% of respondents have positive perceptions that using ELSA may increase their speaking performance. Moreover, of 20 respondents, 19 or 95% of respondents perceived ELSA to be a great speech application that could boost their motivation to improve their speaking performance. 18 or 90% of respondents perceived that this application has a good quality learning design. Meanwhile, internal and external factors were identified as the inhibiting factors influencing their low speaking performance.</i>
<b>Keywords</b> ELSA Speak Application; EFL Students; Speaking Performance	
<b>How to cite:</b> Karim, S.A., Hamzah, A.Q.S., Anjani, N.M., Prianti, J., & Sihole, I.G. (2023). Promoting EFL Students' Speaking Performance through ELSA Speak: An Artificial Intelligence in English Language Learning. <i>JOLLT Journal of Languages and Language Teaching</i> , 11(4), pp. 655-668. DOI: <a href="https://doi.org/10.33394/joltt.v%vi%i.8958">https://doi.org/10.33394/joltt.v%vi%i.8958</a>	

### INTRODUCTION

The English language plays an important role in many sectors, including in the educational field (Makhlouf 2021; Kadamovna, 2019). Over time, technology began to dominate in all aspects of human life, and has a significant impact on changing the world today. The development of technology of smart phone applications, for instance, ELSA speak application, an integrated artificial intelligence (AI) speech recognition program, may support teaching and learning, especially for improving students' pronunciation ability (Pinontoan *et al.*, 2022). In addition, today's technology will actively engage students in language learning and inspire them to acquire English skills in a useful and realistic way to achieve students' learning goals.

The ELSA speak application is highly recommended for students to improve their speaking skills because it provides several facilities and features, including speech recognition

technology, a custom, tested curriculum, a free online dictionary, pronunciation and intonation checker, and free assessment exams throughout the program. It is designed to help learners to speak English clearly, fluently, and confidently (Samad & Aminullah, 2019). Furthermore, it makes learning English fun and memorable and provides various kinds of themes that can be adapted to user needs and training needs. Moreover, ELSA speak provides some learning levels, ranging from beginner to advanced level, and determines whether or not the user's speech is accurate. Learners are free to voice their thoughts and ask questions about the subject being discussed (Hanna *et al.*, 2022a).

Speaking is considered the most important of the four essential language skills for acquiring a second or foreign language. According to (Islam *et al.*, 2022), speaking skill is considered a very important skill because it is necessary for oral communication. Furthermore, speaking is defined as the process of creating and exchanging meaning in various circumstances using verbal and nonverbal signals (Kuning, 2019). According to Brown & Yule, (1983) speaking is an important component in second language acquisition and teaching. Producing words that listeners can understand is a sign of good speaking ability.

Speaking is a learning tool that can help communicate with one another to achieve goals or express opinions, intentions, and hopes (Ghareeb, 2020). Everyone must practice speaking with the right nuances and language because it is an important element in everyday life (Schmitt, 2008). In the last forty years, speaking skills in second language learning have grown rapidly (Derakhshan *et al.*, 2016). The importance of the English language and its globalization have increased the demand for English speakers who are proficient in various fields. Data shows that some aspects of speaking talent can be taught in second or foreign language classes (Derakhshan *et al.*, 2016).

Speaking is a talent that makes communication in any language easier. It can be difficult for EFL students to establish effective communication because they need to pay attention to the fluency and accuracy of speech, as well as vocabulary and grammar (Makhlouf, 2021). Having the ability to speak English will strengthen the identity of EFL students which can be of great benefit to them. In general, EFL students do not use the language in real-world contexts and are unable to effectively and appropriately. Besides, learners lack practice in English, motivation, low level of vocabulary mastery, and lack of self-confidence in speaking English. As a result, students have no confidence in their ability to communicate with native English speakers (Oradee, 2012). Moreover, they lack the motivation to improve their speaking skills despite the numerous internet-based learning platforms available in this modern era to improve learners' speaking skills.

Self-confidence is one of the aspects that can make people successful in an important role. According to Hasan *et al.*, (2020), students should possess high self-confidence when learning English, particularly in speaking performance. Learners frequently exhibit a passive and silent demeanor in language lessons. However, English as a Foreign Language (EFL) teachers urgently need to boost their students' confidence to encourage them to participate more actively in classroom oral activities in the age of globalization (Nazarova & Umurova, 2021). All of these factors are known to contribute to successful of language learning. Due to these challenging circumstances, a student is extraordinarily motivated to succeed in learning a foreign language (Gilakjani *et al.*, 2012).

The ability to speak is very dependent on the correct pronunciation (Vasbieva, *et al.* 2016), provide further evidence to support the need for English learners to practice the pronunciation of the new words they learn. An important micro skill in dealing with the communication process is pronunciation. On the other hand, bad pronunciation might make communication difficult. Due to its complex phonological structure, English pronunciation appears to be a challenging skill for EFL learners to master (Giba & Ribes, 2011).

English skills are often considered difficult to learn because they involve the production of words orally to convey ideas or messages. The teaching and learning process is monotonously carried out in class, so students feel bored and less interested in participating in their classes. In addition, the absence of learning media is also one of the reasons why students have low levels of English proficiency. Therefore, teachers should provide interesting and fun teaching methods to motivate students to learn and speak English (Hulu, 2018). Review literature showed that technology-based learning platforms including English podcasts, video conferencing, videos, mobile learning, and speech recognition software are great resources and benefit EFL learners in learning foreign languages (Panagiotis & Krystalli, 2021). Furthermore, students' oral communication skills can be improved by using English learning applications, which also encourage students to practice speaking the language and acquire it organically rather than being forced (Ngu *et al.*, 2021).

The learning process involves hearing an audio sample of a word or sentence which will then be re-enunciated according to what is seen on the screen and heard. By turning spoken words into an input that computers can understand, speech recognition in the ELSA speak application can also help students become better speakers. As users' abilities improve, the technology scans less material, enabling students to read more (Nyandra *et al.*, 2018). In addition, the app evaluates and gives scores, pronunciation, comprehension, word stress, vowel, and correct use of forms; for example, if a student says the wrong word, learning tools can instantly identify it and help correct it. Since distance learners do not have teachers who can correct their speech, this speech recognition may be of great help to them in terms of developing their speaking skills (Kuning, 2019).

The ability to speak is very dependent on the correct pronunciation (Vasbieva *et al.*, 2016). provide further evidence to support the need for English learners to practice the pronunciation of the new words they learn. An important micro skill in dealing with the communication process is pronunciation. On the other hand, bad pronunciation might make communication difficult. According to (Giba & Ribes, 2011), English pronunciation appears to be a challenging skill for EFL learners to master due to its complex phonological structure.

Another key aspect of learning and teaching a language is having the right vocabulary. Vocabulary is another area that requires precision to improve speech (Ramezanali, 2017; Schmitt, 2008; Zarei & Mahmoodzadeh, 2014). Therefore, effective communication depends on how appropriate the vocabulary is used when speaking and listening. According to (Kontogeorgou & Zafiri, 2016), strengthening grammatical structures increases the success of EFL students in speaking skills. They emphasize that for children to engage in meaningful communication, teachers must pay special attention to helping them learn grammar.

There have been several previous studies on the topic of teaching speaking using "ELSA Speak" or application-based learning, for instance, (Gelu, 2020), conducted a study to find out the benefits of using the "ELSA Speak" application in role-playing learning at SMA Negeri 9 Yogyakarta. The data which were obtained from the questionnaire and the test revealed that the "ELSA Speak" application has beneficial effects on students, such as improving their pronunciation and motivation to speak English. In addition, learning pronunciation using "ELSA Speak" makes for an easy, interesting, and inspiring learning environment.

Another study was conducted by Darsih *et al.*, (2021), who examined ELSA speak application in speaking class during Covid-19. The study attempted to improve the English pronunciation of college students at Nahdlatul Ulama University Yogyakarta by using the English Language Speech Assistant (ELSA) Speak Application. The results of the study showed that "ELSA Speak" can help students pronounce words more clearly, easily, and fluently. Besides, it motivates students to practice speaking English regularly. The relevance study was also carried out by Akhmad & Munawir, (2022), who assessed the development of students' English pronunciation skills (Supra-segmental) using the ELSA Speak program and

explored students' opinions of using the application at West Sulawesi University. is where this research was conducted. The results of quantitative data revealed that 82% of respondents perceived positive perceptions, and the score was considered as the "good," category. This indicates that the ELSA Speak is very acceptable to the respondent.

Despite the plethora of studies into the utilization of ELSA speak in similar issues, a study that focuses on examining students' speaking ability, and exploring inhibiting factors influencing EFL learners' low speaking performance is worth conducting because the emergence of the results will enrich the existing body of knowledge in the field of English skills, especially speaking skills. The current research is important to be carried out because most earlier studies mostly looked at the pronunciation component of the ELSA speak, meanwhile, the present research further investigates the use of the application towards students speaking ability, their perceptions, and how ELSA speak can enhance their confidence and motivation while learning to speak English.

When we did the classroom observation, we found out that students had some difficulties in expressing their ideas and thoughts. They felt insecure and worried of making mistakes because their vocabulary mastery are very low. Our discussion we had with the class teacher revealed that the students lack of practicing English because they have low motivation, and the class is held in conventional way. In addition, pronunciation has yet received special attention to the speaking class. Thus, they need an interesting learning media like ELSA speak application which can enhance their motivation, enrich their vocabulary which in turn to improve their speaking ability. The present study is conducted to examine the students' ability in their speaking performance, to explore students' perceptions of using ELSA speak application, and to figure out the inhibiting factors of students' speaking performance. Therefore, the following research questions are set as follows: 1) How is the EFL students' ability to speak by using the ELSA speak learning instructional model?; 2) What are the students' perceptions of utilizing ELSA speak as a learning instructional model in promoting their speaking performance?; 3) What are the inhibiting factors that influence their speaking performance?

## RESEARCH METHOD

A mixed-method research design was applied to obtain both quantitative and qualitative data from the respondents of the present study. 21 EFL students (5 Males and 16 Females) from the English Language Education Study Program at Universitas Teknologi Yogyakarta who had previously enrolled in the pronunciation and conversation classes involved in the data gathering process. The data were collected by using tests, questionnaires, and semi-structured interviews. Furthermore, a pre-test was conducted to examine their initial speaking performance, and a post-test was conducted to examine their speaking ability after having treatment using the ELSA learning instructional model. Moreover, a questionnaire using a 4-point Likert scale, ranging from 4 (Strongly Agree-SA) to 1 (Strongly Disagree-SD) was used to figure out the factors that influence their speaking performance. Meanwhile, a semi-structured interview was conducted to further explore their perceptions of using ELSA speak.

The treatment was given to the experimental group by using ELSA speak. The first step taken by researchers was to provide a test with an advanced level. At this level, students performed a conversation with the AI system that works on the application. Students had a conversation by listening to the audio first, then followed the audio they heard. After doing the test, the researchers showed the results they got. In the application, when students made a mistake while speaking, the researchers showed their mistakes directly detected and asked them to repeat the wrong word and repeat the pronunciation of the word continuously until they were correct. By doing this treatment, students are expected to correct their mistakes in their speaking performance. The aspects of this assessment test were vocabulary, word stress, intonation,

pronunciation, and fluency. Moreover, researchers asked them to listen to the audio carefully and see how to read the word phonemes before they reread and re-recorded their voices to speak.

During the speaking test, ELSA shows a conversation text between two people. On the pre-test, students were asked to just record their voice loudly based on the conversation text without correcting their mistakes to know their initial input. Right after students record their voices, ELSA Speaks will immediately show the score result and the level of achievement. Researchers, then, introduced and utilized the ELSA speak by asking and drilling them to listen to the audio text loudly many times and also record their voices until they got correct pronunciation and word stress so that they can get a higher score and determine their level of speaking achievement. Moreover, the respondents' scores were analyzed quantitatively using the scoring rubric as presented in Table 1 as follows.

Table 1.  
The Scoring Rubric

Interval	Predicate	Level of Achievement
90-100	A	Very Good
80-89	B	Good
70-79	C	Fair
<70	D	Less

Adopted from Nurgiyantoro (1998)

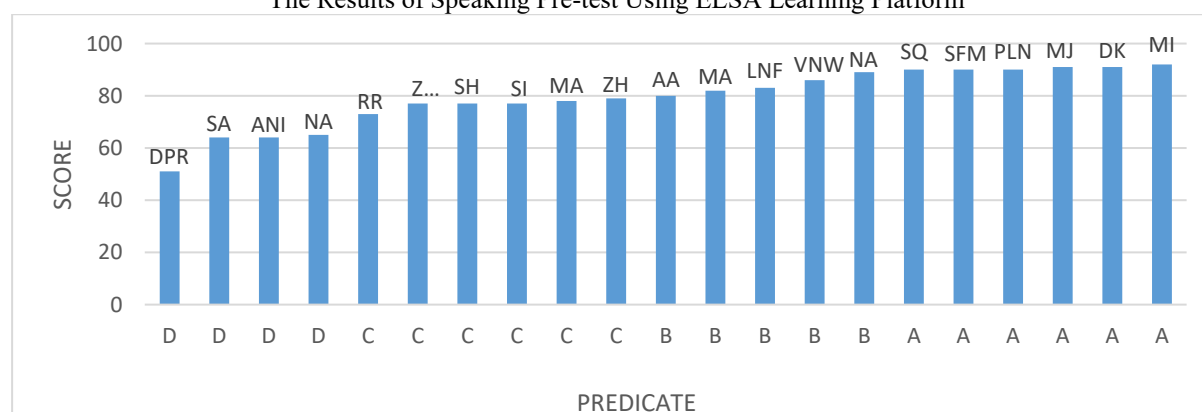
## RESEARCH FINDINGS AND DISCUSSION

### Research Findings

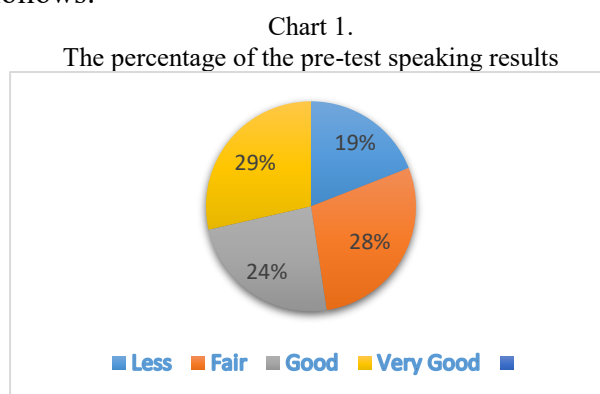
#### *EFL Students' Ability in Speaking Using English Language Speech Application (ELSA) Learning Instructional Model*

To find out the EFL students speaking ability, researchers administered a pre-test and post-test to the respondents who participated in the present study. Moreover, the pre-test was conducted by using the ELSA to speak to all respondents. A scoring rubric which is proposed by (Kemendikbud, 2017) was used to determine the students' predicate, as well as their level of speaking achievement. Meanwhile, the category percentage score used as follows; <70% is considered as a Less category, 70-79% is a Fair category, 80-89% is a Good category, and 90-100% is considered as a Very Good category. The findings of the speaking pre-test results are presented in Bar Chart 1 as follows:

Bar Chart 1.  
The Results of Speaking Pre-test Using ELSA Learning Platform



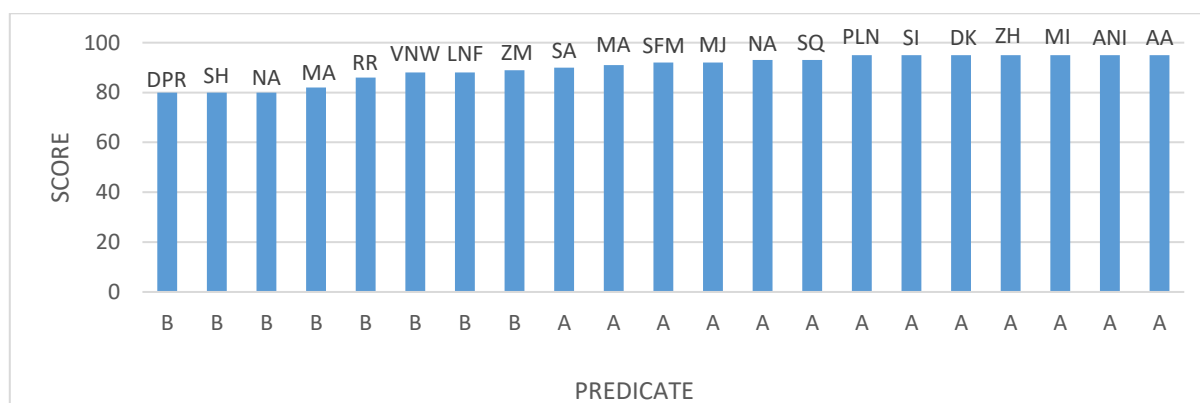
Bar Chart 1 shows students' pre-test speaking results, including score rate, and category of achievement. As we can see in Bar Chart 1, the highest score is 92, and the lowest score is 51. Meanwhile, the mean score 79. There are a variety of EFL students speaking categories from Less, Fair, Good, and Very Good, with 4 students (DPR, SA, NA, and ANI) are in Less category, 6 students (SI, RR, ZM, SH, MA, and ZH) are in Fair category, and 5 students in Good (AA, LNF, MA, VNW, and NA). Meanwhile, 6 students (MJ, SQ, MI, DK, PLN, and SFM) are in the Very Good category. The percentage of the pre-test speaking results can be seen in Pie Chart 1 as follows:



Pie Chart 1 shows the percentage of respondents' scores on the pre-test. The results of the speaking pre-test fell into four score categories, namely 29% of respondents are in the very good category, 28% of respondents are in the fair category, 24% of respondents are in the good category, and 19% of respondents are in less category.

Post-test was given after completing the treatment, and the results of the post-test are presented in Bar Chart 2 as follows:

Bar Chart 2.  
The Results of Speaking Post-test Using ELSA Learning Platform



Bar Chart 2 shows the results of post-test results after treatment. After the treatment was given to students, their speaking performance became better and as we can see from the diagram above, there is a significant difference in students speaking performance after treatment. The diagram shows that 21 EFL students have increased their predicate categories, the finding shows that 8 students (DPR, SH, NA, MA, RR, VNW, LNF, and ZM) are in a Good category, and 13 other students (SA, MA, SFM, MJ, NA, SQ, PLN, SI, DK, ZH, MI, ANI, and AA) are in the Very Good category. As we can see from the pre-test and post-test results, there is a significant difference in students' speaking achievement. On the pre-test 4 students are included in the Less category, 6 students are in the Enough category, 5 students are Good category, 6 students are in Very Good category. We can assume that ELSA Speak has a really big impact on EFL students' speaking performance.

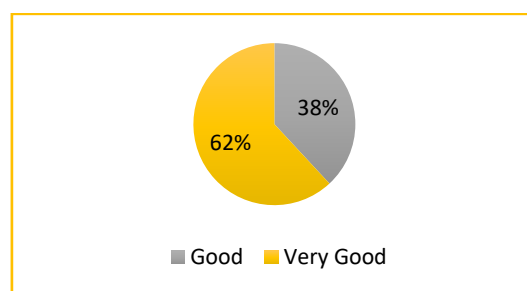


Figure 2. percentage of respondents' scores on the post-test

Pie Chart 2 shows the percentage of respondents' scores on the post-test. The results of the speaking pre-test fell into two score categories, namely 62% of respondents are in the very good category, and 38% of respondents are in the good category.

As we can see, it shows students' speaking performance development by using tools like the ELSA learning platform. As we can see from the pre-test, 4 students are included in the Less category, 6 students are in the Enough category, 5 students are Good category, and 6 students are in the Very Good category. After the treatment that researchers have given to students, their speaking performance became better and as we can see from the diagram above, there is a significant difference in students speaking performance after treatment. The diagram shows that 21 EFL students have increased their predicate categories, the finding results show that 8 students (DPR, SH, NA, MA, RR, VNW, LNF, and ZM ) are in a Good category, and 13 other students ( SA, MA, SFM, MJ, NA, SQ, PLN, SI, DK, ZH, MI, ANI, and AA ) are in Very Good category. We can say that ELSA speak has a really big impact on EFL students' speaking performance.

### ***Questionnaire Results on EFL Learners' Perceptions of the Utilization of ELSA Learning Platform in Improving Speaking Performance***

To explore EFL students' perceptions of the use of ELSA speak, students were asked to fill out an online survey to obtain information on how EFL students perceived using the ELSA learning platform as an instructional model for learning English to enhance their speaking performance. There were 20 respondents completed the survey, and the findings of the respondent's answers to the survey's question items are presented in Table 2 as follows:

Table 2.  
Students' Perceptions of the Use of the ELSA Learning Platform

No.	Questions	Strongly Agree	Agree	Disagree	Strongly Disagree
1.	I feel confident to enhance my speaking performance by using ELSA Speak.	3 (15%)	15 (75%)	2 (10%)	0 (0%)
2.	My speaking performance has increased after using ELSA Speak.	1 (5%)	15 (75%)	4 (20%)	0 (0%)
3.	ELSA Speak can boost my motivation to improve my speaking performance.	3 (15%)	16 (80%)	1 (5%)	0 (0%)
4.	ELSA Speak has a really good quality learning design based on what this application has provided.	3 (15%)	15 (75%)	1 (5%)	1 (5%)
5.	I will recommend this application to other EFL Students who are struggling with their speaking performance.	7 (35%)	11 (55%)	1 (15%)	1 (5%)

Table 2 shows the responses to the five questionnaires given to the respondents of the ELSA speak as a tool for learning English to enhance their speaking performance. In response to item 1, "I feel confident to enhance my speaking performance by using ELSA Speak". The results showed that 15% of the 20 respondents strongly agree and that 75% agree that utilizing this application makes them feel confident. However, 10% (2) of respondents disagree with the claim. The findings show that the majority of respondents concur with the assertion that they feel confident using the ELSA Speaking application to improve their speaking performance.

In response to item 2 "My speaking performance has increased after using ELSA Speak," the findings revealed that 5% of 20 respondents strongly agreed with the statement, and 75% (15) of the respondents agreed that their speaking skills had improved since they used the application. However, there were 20% (4) of respondents disagreed, and none strongly disagreed with the statement. Based on the results of item 3, "ELSA Speak can boost my motivation to improve my speaking performance," we acknowledge that 15% (3) respondents, strongly agree, and 80% (16) respondents agree with the statement. Meanwhile, 5% (1) respondent has a negative perception of the aforementioned statement.

In response to item 4 "ELSA Speak has a really good quality learning design based on what this application has provided", the results revealed that 15% of the 20 respondents strongly agree, and 75% (15) respondents agree with the statement. However, 1 respondent disagreed and 1 respondent strongly disagreed with the statement. It indicates that the majority of respondents though ELSA Speak have a high-quality learning design. Finally, in response to item 5, "I will recommend this application to other EFL students who are struggling with their speaking performance" 35% of 20 respondents strongly agree, and 55% (11) respondents agree with the statement. On the contrary, only 1 respondent disagrees and 1 respondent will not recommend ELSA application to other students.

### ***Interview Results on the Utilization of ELSA Learning Platform in Improving EFL Students' Speaking Performance***

Apart from the questionnaire, a semi-structured interview was conducted using a convenience sampling technique to further explore their perspectives on using the ELSA speak to improve their speaking performance. Seven respondents were available to be interviewed by the researchers in the current study. In addition, this interview was conducted to find out inhibiting factors affecting their speaking performance.

The majority of respondents stated that ELSA speak could help them to pronounce words correctly, raise their self-confidence in speaking sessions, and acknowledge their errors. The interview results with the respondents, for instance with MA, VNW, SQA, and RR, revealed that this application could help them correct their errors when they make mistakes in speaking practice, especially in the pronunciation aspect. The positive contribution of the ELSA learning platform in improving learners' pronunciation is reflected in MA's view, one of our respondents, as presented in excerpt 1 as follows:

*"ELSA Speak helps me correct my pronunciation when I speak in the English language, and I became aware of my pronunciation, whether it is correct or incorrect while speaking through the apps" (MA).*

A similar opinion was addressed by another respondent, VNW, who stated that the ELSA learning platform made her identify and correct her pronunciation, as depicted in excerpt 2 as follows:



*"...I have been struggling to understand the correct pronunciation at all times whenever I joined my English-speaking class, but nothing helped me until I utilized this ELSA App. I know I still have many errors in pronunciation. Indeed, it helps me a lot". (VNW).*

Another respondent, SQA, has similar perceptions of the utilization of the ELSA speak as a great way of improving speaking skills, especially in pronouncing difficult words while speaking English. SQA's thought can be seen in excerpt 3 as follows:

*"The ELSA application helps me in correcting my pronunciation, and it would be very helpful for EFL students to enhance their speaking performance" (SQA).*

The benefits of ELSA speak are addressed by a respondent, namely RR, who stated that ELSA speak is a very great application because it could detect learners' wrong pronunciation while they are pronouncing words at all times. The RR's thought can be seen in excerpt 4 as follows:

*"I think after using this application, my pronunciation is getting better and better because it always detects my wrong pronunciation in every word in a sentence. Therefore, I know my pronunciation, which one is correct and incorrect while uttering sentences during my talks" (RR).*

The ELSA speak is considered a helpful and great way of learning English, especially speaking and pronunciation for EFL learners. The interview results with SI, revealed that this application is one of the funny ways to learn English, especially speaking. The SI's opinion about the ELSA application can be seen in excerpt 5 as follows:

*"...a lot of fun because we can see our correct and incorrect pronunciation, and we may repeat it until we get it right This app is very useful and helpful"(SI).*

Despite the usefulness of ELSA speak as an English learning application in improving EFL learners' pronunciation skills which in turn enhances their speaking performance, the finding of the present study revealed that one respondent, namely SFM has different perceptions of the utilization of ELSA, as reflected in excerpt 6 as follows:

*"...Actually, ELSA is a good learning application for EFL learners who want to have great pronunciation skills, but to me, it is not enough, having native speakers of English as speaking partners will be a great way to improve my speaking skill and pronunciation" (SFM).*

### ***The Inhibiting Factors which Influence Students' Speaking Performance***

About the inhibiting factors affecting learners' low speaking performance, the interview results revealed that the majority of respondents thought that both internal and external factors. Furthermore, the internal factors include a lack of motivation and interest to improve their speaking proficiency level, lack of self-confidence, feeling insecure, and possessing a very limited amount of vocabulary. Meanwhile, the external factors are very limited speaking partners, especially native speakers of English to practice with, and very low support received from their environment. The results of the interview with one of the respondents, namely PLN, in relation to the aforementioned issues can be seen in excerpt 7 as follows:

*"In my opinion, there are numerous inhibiting factors why EFL students have low speaking performance, they are; lack of motivation to improve their knowledge and skills in speaking, as well as do not feel confidence if they are speaking in English before public" (PLN).*

Another respondent, VNW, stated that the inhibiting factors include a lack of interest in learning English, possessing a very limited amount of vocabulary, and environmental factors. VNW's thoughts dealing with this issue can be seen in excerpt 8 as follows:

*"...it could be because of lack of interest in the subject, the did not gain fully supported from their surroundings, and vocabulary mastery can also be reasons for students to have low speaking performance" (VNW)*

As one of the language skills, speaking as coursework will relate to other skills and components. For instance, when we learn to speak, we also deal with sentence construction in a reading passage or writing. SQA, addressed her concern as seen in excerpt 9 as follows:

*"In my opinion, EFL students lack interest and motivation to improve their speaking skills because they have to deal with other aspects such as grammatical aspect, and mechanics of writing" (SQA).*

Other inhibiting factors affecting learners' low speaking performance are a lack of self-confidence and feeling insecure about talking in front of the public because they did not receive good support from their surroundings. Excerpt 10, depicted SFM's thoughts concerning this concern:

*"Most EFL students are embarrassed to speak in English because of their insecurity in their environment. Sometimes, people will judge them as those who are trying to show off or sound more important or clever than they are" (SFM).*

## Discussion

The findings of the present study from both quantitative and qualitative data revealed that the majority of the respondents have positive perceptions of using ELSA speak to enhance their pronunciation which in turn improves their speaking performance. Furthermore, the quantitative data obtained from the survey result revealed that of 20 respondents, 18 (90%) of respondents feel confident to speak English by using ELSA. Only 2 (10%) of the respondents disagree and none strongly disagree about the statement. Therefore, it indicates that this application has a positive contribution to raising EFL learners' self-confidence to speak in English. Since the application makes it possible to raise learners' self-confidence, then, their speaking performance increases. This information can be obtained from the number of respondents who have positive perceptions. Of 20 respondents, 16 or 80% of respondents have positive perceptions that using ELSA speak may increase their speaking performance. The present findings are matched with Makhoul's findings, (2021), who states that significant differences in the mean scores showed that AI enhanced the students' speaking skills.

ELSA Speak is a very useful and helpful application to motivate EFL Learners to speak English. The results of the questionnaire revealed that of 20 respondents, 19 or 95% of respondents perceived ELSA speak to be a great speech application that could boost their motivation to improve their speaking performance. The present findings are in line with the findings of Aeni *et al.*, (2021), who state that the ELSA is a mobile app that offers instruction, native audio, practice, feedback, and simulated "conversation" practice, all of which have been proved to increase the motivation.

The application has several features and facilities that make it possible for learners to check their spelling, receive feedback on their speaking and pronunciation, and allow learners to speak at their own pace and level. As a learning application, ELSA Speak is equipped with a good-quality learning design and instructional model. The respondents' responses to the issue of the quality of ELSA speak showed that of 20 respondents, 18 or 90% of respondents

perceived that this application has a good quality learning design. Therefore, ELSA speech is highly recommended by the majority of respondents in the present study. It can be acknowledged from their responses to the last item of the questionnaire that 18 or 90% of respondents recommended ELSA speak to other EFL learners who wish to enhance their pronunciation and improve their speaking performance. Hanna *et al.*, (2022), confirm that the use of Elsa Speak is able to make student's more fluent with correct pronunciation in speaking.

Apart from quantitative data, the present study provides qualitative data to further explore respondents' views on how ELSA speak facilitates EFL learners to improve their speaking and pronunciation, as well as find out the inhibiting factors affecting their low speaking performance. The results of the interview with the respondents revealed that using the ELSA Speak could improve their speaking abilities. ELSA Speak has a positive effect on the speaking abilities of EFL students. Aeni *et al.*, (2021), confirm that students have optimistic views on learning speaking by using ELSA application. Furthermore, the ELSA Speak is an intriguing tool for enhancing English speaking abilities since it encourages and empowers users to participate in speaking activities, works hard to correct pronunciation, intonation, and fluency, and teaches users the phonemes that each letter makes. In addition, this application can also be used everywhere and anytime because it is convenient for students who lack of confidence in their speaking ability but don't have any speaking partners.

The majority of respondents of the present study have positive perceptions that ELSA Speak is an excellent tool for learning English which can improve their speaking ability, and make them feel self-confident to speak in English. Seven respondents (PLN, MA, VNW, SQA, RR, SFM, and SI) state that using ELSA Speak in their learning of English speaking has a positive impact on their English language development, particularly in improving their pronunciation. The present study supports the earlier studies of Yin *et al.*, (2010) who suggest that the ELSA application which is an AI-based Software/App may help EFL students to improve their speaking abilities and performance.

Bearing in mind the benefits of using ELSA speak for learning English, it is worth trying not only for EFL students but also for non-English major students to improve their speaking ability. It is in line with Makhlof, (2021), who confirmed that ELSA was successful in assisting non-English major students at Albaha University in developing their EFL speaking abilities during the preparation year.

The results of the students' self-reflection revealed that the advantages of AI include a greater sense of individual responsibility for learning and an awareness of individual variances. Another finding of this study was the availability of ELSA speak to provide feedback on learners' utterances. They were able to produce clearer and error-free oral texts as a result of their improved speaking abilities. Moreover, students' language knowledge and understanding of speaking were both enhanced by receiving AI feedback. As a result, the use of AI feedback in EFL speaking classes has been validated from both an empirical and theoretical standpoint. These findings support those of Malik *et al.*, (2019), who state that the application provides students with feedback on their speaking and pronunciation, which is incredibly encouraging for them to improve their speaking abilities.

ELSA Speak may have a positive impact on students' speaking abilities because of the usefulness features of its application which makes EFL learners feel safe to express their opinions freely. This application is adaptable and acceptable because it is user-friendly, and allows students to speak at their level, as well as taking into account the particular speaking variances among them. In short, ELSA speak assisted the students in gaining self-confidence in speaking English and improved their pronunciation of English language skills.

## **Pedagogical Implication**

The utilization of the ELSA speak has pedagogical implications for the EFL teaching context in Indonesia. EFL teachers and students may utilize this application as an alternative interesting learning instructional media for learning pronunciation, intonation, and vocabulary, which in turn improves learners' speaking performance and English skills both inside and outside the classroom setting. Furthermore, ELSA Speak may be utilized as a tool to provide practical guidance in speaking in a good way.

## **CONCLUSION**

### **Conclusion**

Several necessary points to be highlighted concerning with the findings and discussion of the present study are as follows: 1) ELSA speak is a useful and helpful instructional learning media for EFL learners to enhance their pronunciation and improve their speaking ability. Of 20 respondents, 16 or 80% of respondents have positive perceptions that using ELSA speak may increase their speaking performance. Meanwhile, of 20 respondents, 18 (90%) of respondents feel confident to speak English by using ELSA. Only 2 (10%) of the respondents disagree and none strongly disagree about the statement; 2) The results of the questionnaire at the English Education Study Program, Universitas Teknologi Yogyakarta, indicated that this application is a great tool and highly recommended by the respondents not only for students of English Education Study Program, but also for non-English Department students; 3) The results of the interview revealed that using ELSA Speak may improve their pronunciation, intonation, and enhance their speaking performance because it corrects learners' pronunciation and intonation when speaking English automatically. Meanwhile, several inhibiting factors influencing students' low speaking performance include internal and external motivation.

### **Recommendation**

Bearing in mind the great benefit of the application in terms of its features and functions, it is recommended that EFL teachers and students utilize ELSA speak as an effort to enhance their skills and knowledge of speaking aspects, especially for training how to pronounce correct words when performing speaking sessions. Since this application is simple to use, cost-free, and accessible, we recommend that teachers and students from both the English department and non-English department practice their English using ELSA speak when they do not have speaking partners because it provides feedback and evaluates their speaking performance accordingly. Indeed, ELSA Speak provides students with more opportunities to practice speaking confidently without fear of their own mistakes. Further researchers are recommended to carry out a similar study by including a large number of respondents from non-English Education Department students to cope with the shortcomings of the present study.

## **ACKNOWLEDGEMENT**

We would like to thank the Rector of Universitas Teknologi Yogyakarta and the *LPPM* for their financial support and research permits. Our deepest gratitude to all respondents for their availability and willingness to participate during the data-gathering process.

## REFERENCES

- Aeni, N., S, N. F., Hasriani, H., & Asriati, A. (2021). Inserting ELSA application in Hybrid Learning to Enhance the Students' Motivation in Speaking. *Celebes Journal of Language Studies*, 1(2), 271–277. <https://doi.org/10.51629/cjls.v1i2.70>
- Akhmad, N. W., & Munawir, A. (2022). Improving the Students' Pronunciation Ability by Using Elsa Speak App. *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature*, 10(1), 846–857. <https://doi.org/10.24256/ideas.v10i1.2868>
- Brown, G., & Yule, G. (1983). *Teaching the Spoken Language*.
- Darsih, E., Wihadi, M., & Hanggara, A. (2021). Using ELSA App in Speaking Classes: Students' Voices. Conference: Proceedings of the 1st Universitas Kuningan International Conference on Social Science, Environment and Technology, *UNISSET*. 1-5 <https://doi.org/10.4108/eai.12-12-2020.2304993>
- Derakhshan, A., Khalili, A. N., & Beheshti, F. (2016). Developing EFL Learner's Speaking Ability, Accuracy and Fluency. *English Language and Literature Studies*, 6(2), 177–186. <https://doi.org/10.5539/ells.v6n2p177>
- Ghareeb, A. A. S. (2020). Using an Artificial Intelligence Application for Developing Primary School Pupils' Oral Language Skills. *Education Arab Journal*, 75(75), 67–110. <https://doi.org/10.21608/edusohag.2020.97643>
- Giba, J., & Ribes, R. (2011). Improving Your pronunciation English. In *Preparing and Delivering Scientific Presentations* (pp. 1–15). <https://doi.org/10.1007/978-3-642-15889-6>
- Gilakjani, A. P., Leong, L.-M., & Sabouri, N. B. (2012). A Study on the Role of Motivation in Foreign Language Learning and Teaching. *International Journal of Modern Education and Computer Science*, 4(7), 9–16. <https://doi.org/10.5815/ijmecs.2012.07.02>
- Hanna, A. N., Harmayanthi, V. Y., & Astuti, S. (2022a). The Effect of Elsa Speak App Towards Students' Speaking Skill. *Proceeding of International*, 3(2), 16–20. <https://doi.org/10.37640/ice.01.240>
- Hanna, A. N., Harmayanthi, V. Y., & Astuti, S. (2022b). The Effect of ELSA Speak App Towards Students' Speaking Skill. *Proceeding of International Conference on Education-01*, 01, 16–20. <https://doi.org/10.37640/ice.01.240>
- Hasan, H., Hanafi, M., & Sadapotto, A. (2020). Correlation Between EFL Learners Self-Confidence and Speaking Skill. *Majesty Journal*, 2(2), 48–56. <https://doi.org/10.33487/majesty.v2i2.589>
- Hulu, F. (2018). *Kemampuan Speaking Mahasiswa Semester 4 Jurusan Sastra Inggris Universitas Putera Batam*. (1), 55–60.
- Islam, W., Ahmad, S., & Islam, M. D. (2022). Investigating the Problems Faced by the University EFL Learners in Speaking English Language. *International Journal of TESOL & Education*, 2(2), 47–65. <https://doi.org/10.54855/ijte.22223>
- Kadamovna, N. S. (2019). the Importance of Speaking Skills for Efl Learners. *International Journal of Innovations in Engineering Research and Technology (IJIERT)*, 8(1), 60–67. <https://repo.ijert.org/index.php/ijert/article/view/9>
- Kontogeorgou, K., & Zafiri, M. (2016). Using Grammar to enhance speaking. *Proceedings of The 5th Virtual International Conference on Advanced Research in Scientific Areas*, 5(February), 110–115. <https://doi.org/10.18638/arsa.2016.5.1.838>
- Kuning, D. S. (2019). Technology in Teaching Speaking Skill. *Journal of English Education, Literature and Linguistics*, 2(1), 50–59. <https://doi.org/10.31540/jeell.v2i1.243>
- Makhlouf, M. K. (2021). Effect of Artificial Intelligence-Based Application on Saudi Preparatory -Year Students' EFL Speaking Skills at Albaha University. *International Journal of English Language Education*, 9(2), 36–57. <https://doi.org/10.5296/ijele.v9i2.18782>

- Malik, G., Tayal, D. K., & Vij, S. (2019). An analysis of the role of artificial intelligence in education and teaching. In *Advances in Intelligent Systems and Computing* (Vol. 707). Springer Singapore. [https://doi.org/10.1007/978-981-10-8639-7\\_42](https://doi.org/10.1007/978-981-10-8639-7_42)
- Nazarova, & Umurova. (2021). Self-Confidence and Its Importance in Learning Languages. *Geographica Pannonica*, 26(3), 1–4.
- Ngu, D. T., Huong, D. T., Ngoc Huy, D. T., Thanh, P. T., & Döngül, E. S. (2021). Language teaching application to English students at master's grade levels on history and macroeconomic-banking management courses in universities and colleges. *Journal of Language and Linguistic Studies*, 17(3), 1457–1468. <https://doi.org/10.52462/jlls.105>
- Nurdiyanto. (1998). *Penilaian Pembelajaran Sastra Berbasis Kompetensi*.
- Nyandra, M., Kartiko, B. H., Susanto, P. C., Supriyati, A., & Suryasa, W. (2018). Education and training improve quality of life and decrease depression score in elderly population. *Eurasian Journal of Analytical Chemistry*, 13(2), 371–377. <https://doi.org/10.2139/ssrn.3394858>
- Oradee, T. (2012). Developing Speaking Skills Using Three Communicative Activities (Discussion, Problem-Solving, and Role-Playing). *International Journal of Social Science and Humanity*, 2(6), 533–535. <https://doi.org/10.7763/ijssh.2012.v2.164>
- Panagiotis, A., & Krystalli, P. (2021). Mobile Assisted Language Learning (MALL): Trends from 2010 to 2020 Using Text Analysis Techniques. *European Journal of Education*, 4(1), 13. <https://doi.org/10.26417/461iaw87u>
- Pendidikan, K., Kebudayaan, D. A. N., Jenderal, D., Dasar, P., Menengah, D. A. N., Pembinaan, D., & Menengah, S. (2017). *P A N D U A N*.
- Pinontoan, K. A., Pelenkahu, N., & Muntuuntu, M. C. (2022). Using English Language Speech Assistant (ELSA) Speak Application to Improve Students' of SMP Katolik ST. Johannis Laikit Pronunciation Ability. *JoTELL Journal of Teaching English, Linguistics, and Literature*, 1(11), 1227–1237.
- Ramezanali, N. (2017). *Short and long-term vocabulary learning and retention through multimedia glossing: A mixed methods research*.
- Samad, I. S., & Aminullah, A. (2019). Applying ELSA Speak Software in the Pronunciation Class: Students' Perception. *Edumaspul - Jurnal Pendidikan*, 3(1), 56–63. <https://doi.org/10.33487/edumaspul.v3i1.85>
- Schmitt, N. (2008). Review article: Instructed second language vocabulary learning. In *Language Teaching Research*. 12(3). <https://doi.org/10.1177/1362168808089921>
- Vasbieva, D. G., Klimova, I. I., Agibalova, E. L., Karzhanova, N. V., & Bírová, J. (2016). Enhancement of students' vocabulary learning through a blended learning approach. *Mathematics Education*, 11(5), 1195–1203.
- Yin, G., Luo, J., Wang, X., & Yuan, B. (2010). Utilizing text-to-speech to assist bilingual teaching. *2nd International Workshop on Education Technology and Computer Science, ETCS 2010*, 1, 594–597. <https://doi.org/10.1109/ETCS.2010.254>
- Zarei, A. A., & Mahmoodzadeh, P. (2014). The Effect of multimedia glosses on L2 reading comprehension and vocabulary production. *Journal of English Language and Literature*, 1(1), 01–07. <https://doi.org/10.17722/jell.v1i1.1>