

THE IMPACT OF USING ELSA APPLICATION TO IMPROVE STUDENTS' PRONUNCIATION PRACTICE

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Abstract: Pronunciation is essential for students to speak clearly and accurately. However, achieving correct pronunciation is a major challenge for many students, who find it difficult to pronounce words correctly. The aim of this study was to identify the impact of using ELSA application toward students' pronunciation practice. This study used a quantitative method with a descriptive approach and using survey to collect data, from the active students of Universitas Muhammadiyah Mataram. The primary data collection for this study was conducted by distributing questionnaires to 62 respondents. The questionnaire contains items that are validated and reliable, ensuring that each item accurately reflects the dimension it measures. The validity test showed that the calculated r value for each question item was greater than the r table and the reliability test showed that the Cronbach's alpha value was 0.954 for the use of the ELSA application and 0.976 for the improvement of pronunciation practice. The findings from this study corroborate the strong internal consistency of the study instrument. The study utilized a descriptive approach to describe the data distribution of both variables, by showing a mean score of 124.60 on the use of the ELSA application that the majority of respondents actively utilized the ELSA application. Conversely, the improvement of pronunciation practice showed a mean score of 79.55 that substantial improvement in pronunciation practice.

Keywords: *ELSA application; pronunciation; pronunciation practice; student pronunciation.*

INTRODUCTION

Pronunciation is important for effective communication when speaking English (Mulyani and Sartika, 2019), as pronunciation is the production of sounds to convey meaning (Rahmania & Mandasari, 2021). This is also true for grammar, word choice and meaning. Effective communication in the classroom is not only about good pronunciation and enunciation, but also about clarity of enunciation (Salim et al., 2020). In addition to academic excellence in grammar and vocabulary, intergroup communication is required (Nasim et al., 2022). Grammar and vocabulary are important components of effective communication, but they are useless if the speaker cannot pronounce the target language correctly (Shehata, 2024). Pronunciation is recognised as an important part of language as it is becoming increasingly important in education to equip students with the necessary communication skills. Second language (Vural & Azizoglu, 2022). If the pronunciation is clear and correct, the listener's

opinion would be retained, but wrong pronunciation or wrong language would cause confusion and misunderstanding. People who like to speak have many benefits, including increasing the number of listeners and increasing self-confidence (Judijanto et al., 2024). The best pronunciation can be done by the speaker Clear and concise, easier to understand. Pronunciation is very important when speaking English. Good pronunciation allows speakers and listeners to improve the quality of their communication (Simaremare et al., 2023).

Taking into account the importance of pronunciation, however, in reality, pronunciation is not an easy task for many college students, including those from Indonesia. One of the most challenging aspects of learning English is pronunciation. A sentence's meaning can be altered by mispronouncing words (Andini & Zaitun, 2023). Students occasionally commit blunders in pronouncing English. The inaccuracy is due to variances in letters and sounds (Ahmad, 2019).

Indonesian students can pronounce things inaccurately since they are not natural English speakers. The difference in sound structures between native and foreign languages is one of the leading reasons of pronunciation problems among Indonesian pupils. Certain English sounds are missing from the Indonesian sound system, making it difficult for pupils to distinguish and learn how to create them (Sulistiyorini & Wibowo, 2021). Due to Indonesian students' English pronunciation is influenced by their ethnic origins, resulting in incorrect or misunderstanding (Putra & Sujarwati, 2023). Furthermore, the pronunciation difficulty stems from factors outside of the students' control, such as a non-conductive environment that encourages students to practice pronunciation, a lack of learning media that helps with pronunciation, and the teacher's inability to explain pronunciation thoroughly (Mardiah et al., 2014)

To diminish students' pronunciation difficulties, This study used learning methods that focused on digital platforms and technology, such as the E Speak application. ELSA is English Language Speech Assistant (Simanjuntak & Sipayung, 2023). The application gives users immediate feedback on their pronunciation by utilizing artificial intelligence (AI) and speech recognition technology (Gusrianto & Iswahyuni, 2024). Elsa speaking application-based technology, including accent reduction software, has been used in pronunciation tasks. It has excellent sound quality and enables students to study how articulatory processes generate sounds. Because of its positive effects, this type of software has been used to improve university students' pronunciation skills (Hafizhah et al., 2023). Through brief, app-based lessons ELSA a language platform driven by artificial intelligence (AI), assists non-native English speakers in improving their voice and pronunciation. With the use of voice recognition and artificial intelligence (AI), this software can improve users' English word pronunciation (Khalizah & Damanik, 2024). By recognizing mispronounced words and providing guidance on how to pronounce them correctly, Elsa Speak can assist us in honing our English speaking abilities. Anywhere and at any time, we can practice our English language skills (Akhmad & Munawir, 2022).

Current study differs from previous studies to some extent because most of them were done at junior high by Mulyani & Sartika, (2019) and senior high school levels by (Andini & Zaitun, 2023). time a study was being undertaken to use YouTube videos to enhance pronunciation skills.

By providing students with the opportunity to hear the proper pronunciation in videos featuring native speakers, the fluency component of pronunciation would gradually improve (Andini & Zaitun, 2023). In addition, Hafizhah et al., (2023) stated through a qualitative survey method to see how students' perceptions of the ELSA application how to pronounce words in English with the real-time feedback feature of the ELSA application, whether it helps students understand phonetic transcription and improve pronunciation accuracy. Therefore, this research identify a technology-based learning model using the ELSA application toward students pronunciation practice. As stated by Hasma et al., (2022) What sets ELSA apart from other programs that only teach grammar and vocabulary is ELSA users can work on their pronunciation with the help of speech recognition technologies. More than 95% of user pronunciation problems may be reliably detected by ELSA with this method. Additionally, users can receive advanced feedback to fix mispronounced words. The aim of this study is to identify the impact of using the ELSA app to increase students pronunciation practice first-semester students of the English study program at universitas Muhammdiyah Mataram.

METHOD

This study is a quantitative descriptive study using an online survey (Bahasoan et al., 2020). Quantitative descriptive research shows the improvement of students' pronunciation performance with the use of ELSA application. The sample of this study was active students in the first semester of English studies at Universitas Muhammadiyah Mataram. Data collection in this study was carried out by distributing questionnaires online to 62 students. This allows to identify students' level of acceptance when using the ELSA program and improve students' pronunciation practice. This strategy can improve the reliability and validity of the data collected, as the questionnaire is structured and systematic when collecting data. Data was collected by completing a questionnaire that was sent to all respondents in the Google form on the link. The collected data was analyzed for clarity. This study used a likert scale questionnaire and questions regarding the use of the ELSA program to improve students' pronunciation performance. Each question was validated by comparing the calculated r value with the table r , and the reliability was assessed using Cronbach's alpha. This question covers many topics, including the importance of pronunciation, difficulties in

practicing pronunciation and the use of the ELSA speaking application. This tool has great power and reliability, which allows it to provide reliable data for future research.

In addition, this study used descriptive statistical analysis to evaluate the data. To ensure the validity and consistency of the device, and to represent the entire data set. The validity test is carried out by comparing the *r* value with the *r* table to ensure that the questionnaire instrument can accurately measure the variables under study. The next stage is a reliability test using Cronbach's alpha which shows how much reliability the Cronbach's alpha value has on the variables. Use the ELSA program and variables. Encourage students to practice pronunciation. Data for both variables were described using descriptive statistical analysis, which included statistical parameters such as mean, standard deviation,

minimum value and maximum value. This data analysis allows for a thorough assessment of improvement using original and verified data.

RESULTS AND DISCUSSION

This section would discuss the research findings on the use of Elsa app to improve students' pronunciation practice. The variable (*x*) in this study is the use of Elsa application, while the variable (*y*) is the improvement of students' pronunciation practice from 62 respondents. The results of the data analysis were conducted to identify the variable (*x*) with the variable (*y*) in using the ELSA program. These scores were calculated automatically and systematically when students responded to the questionnaire questions, which used a Likert scale with five responses: (1)strongly disagree, (2)disagree, (3)moderately, (4)agree, and (5)strongly agree.

Table 1. *Validity test (X)*

Items (X)	R Table	R Count
1. Can the use of artificial intelligence technology improve students' pronunciation difficulties?	0.250	0.632
2. Does the ELSA App is an English Speech Assistant help with pronunciation practice?	0.250	0.660
3. Does the ELSA App utilize artificial intelligence (AI) and speech recognition technology to help students?	0.250	0.506
4. Does it assist users in perfecting their English pronunciation?	0.250	0.659
5. Does the ELSA App have a feature that analyzes each pronunciation?	0.250	0.727
6. Does the ELSA speak app identify errors and provide guidance for correction?	0.250	0.698
7. Are students able to benefit from the capabilities of the elsa sepak app?	0.250	0.569
8. Does the ELSA speak app demonstrate proper pronunciation by offering immediate feedback on student performance?	0.250	0.630
9. Does the ELSA speak app have excellent sound quality when in use?	0.250	0.641
10. Does the ELSA speak app facilitate understanding of the articulation process that produces sounds?	0.250	0.622
11. Has the efficacy of this software led to its adoption by university students to improve their pronunciation skills?	0.250	0.705
12. Does the ELSA speak app use short app-based lessons to assist non-native English speakers in improving their sounds and pronunciation?	0.250	0.621
13. Does the ELSA speak app identify mispronounced words and provide guidance on the correct pronunciation?	0.250	0.686
14. Does the ELSA speak app help users to perfect their English skills?	0.250	0.696
15. Does the software offer the flexibility of practicing anytime and anywhere?	0.250	0.708
16. Does the ELSA speak app contribute to the continuous improvement of English language skills?	0.250	0.703
17. Does achieving a high score on ELSA make you more confident in public speaking?	0.250	0.671
18. How often do you recommend ELSA to friends who want to improve their pronunciation?	0.250	0.667
19. Does ELSA help you set more specific learning targets in pronunciation?	0.250	0.723
20. Do you feel that using this app is an efficient and effective way of learning?	0.250	0.317
21. Are you satisfied with the ease of navigation in the ELSA app?	0.250	0.707
22. Does the real-time feedback feature in ELSA meet your expectations?	0.250	0.708
23. How satisfied are you with the game-based training features in ELSA?	0.250	0.705
24. Do you feel this app can be used easily anytime and anywhere?	0.250	0.715

25. How likely are you to continue using ELSA after this study is over?	0.250	0.560
26. Do you feel that the AI technology in ELSA makes learning pronunciation more interesting?	0.250	0.785
27. Does the speech recognition feature in ELSA help improve your pronunciation accuracy?	0.250	0.570
28. Does ELSA provide more flexible pronunciation learning opportunities than conventional methods?	0.250	0.624
29. Do you find technology-based applications like ELSA relevant to your learning needs?	0.250	0.638
30. Do you feel the AI technology in ELSA is reliable in providing pronunciation evaluation?	0.250	0.704
Valid		

Table 1 illustrates that all the question items in variable x have an r-count greater than the *r* table of 0.250, which means all the items are valid. For example, the question “Can the use of artificial intelligence technology improve students' pronunciation difficulties?” has an r-count of 0.632, while the question “Does the ELSA App is

an English speech assistant help with pronunciation practice?” has an r count of 0.660. This shows that the values of 0.632 and 0.660 > 0.250. It can be concluded that the instrument is very effective to measure the use of the ELSA application on students' pronunciation practice.

Table 2. *Validity test (Y)*

Items (Y)	R Table	R Count
1. Is the ability to pronounce language correctly essential for effective communication in English?	0.250	0.796
2. Can Pronunciation be defined as the production of sounds used to convey meaning?	0.250	0.874
3. Can effective communication in the classroom be understood when pronunciation and word production are good?	0.250	0.665
4. Does coherent communication between interlocutors require proper pronunciation?	0.250	0.817
5. Are grammar and vocabulary useless if the speaker cannot pronounce the target language correctly?	0.250	0.857
6. Is pronunciation important in second language acquisition?	0.250	0.833
7. Is mispronounced or lacking in correct intonation, it can cause confusion and misunderstanding?	0.250	0.766
8. Do those who have proficiency in pronunciation benefit from various advantages, including the ability to garner admiration from the audience?	0.250	0.806
9. Does Proficient pronunciation allow speakers to articulate thoughts with clarity and precision?	0.250	0.836
10. Does adequate pronunciation facilitate improved quality of communication for both speaker and listener?	0.250	0.856
11. Is pronunciation not an easy task for many university students?	0.250	0.833
12. Is pronunciation one of the most challenging aspects of learning English?	0.250	0.777
13. Do students sometimes make mistakes in pronouncing English?	0.250	0.896
14. Are pronunciation inaccuracies caused by letter and sound variations?	0.250	0.866
15. Can Indonesian Students pronounce things inaccurately because they are not natural English speakers?	0.250	0.875
16. Is . The difference in sound structure between native and foreign languages is one of the main causes of pronunciation problems among Indonesian students?	0.250	0.850
17. Are the errors that occur in students' pronunciation because they are influenced by their ethical expectations?	0.250	0.844
18. Do pronunciation difficulties come from a non-conductive environment?	0.250	0.823
19. Is there a lack of learning media that helps pronunciation?	0.250	0.805
20. Do students underutilize artificial intelligence technology, making it difficult to improve pronunciation?	0.250	0.849
Valid		

Table 2 just like the first table states that all question items in this variable (y) are valid. it can be seen from the *r* table of all the results are greater than *r* count with a value of 0.250, such as the question on variable y “*Can Pronunciation be defined as the production of sounds used to convey meaning?*” this question has an *r* count of 0.874, and the question “*Is the ability to pronounce language correctly important for effective communication in English?*” has an *r* count of 0.796 with valid results because 0.874 and 0.795 > 0.250. From the reliability test analysis, it shows that all questions are valid and able to represent the aspect of improving students' pronunciation

practice in using the ELSA application that is being measured. These results show that the *r* calculated on each question item is greater than the *r* table, which explains that the instrument used can accurately measure the connected features. Judging from the accurate validity and reliability of the variables. It can be concluded that this questionnaire was very accurately used in the study to identify whether English major students can feel the influence of the ELSA application. Valid results can be trusted that the validity test is obtained from accurate data. Therefore, this validity test provides accurate data for further analysis.

Table 3. *Reliability test*

Variable	R	Cronbach Alpha	Evidence
X	0.954	0.60	Reliable
Y	0.976	0.60	Reliable

Table 3 also illustrates the Cronbach Alpha value to assess the reliability of the instrument, and has a result of 0.954 for variable (x) and a result of 0.976 for variable (y). The values of the x and y variable results are higher than the minimum limit of 0.60. This instrument proves that the internal consistency is very good. It can be concluded that repeated measurements with the same equipment

would get consistent results. For example, in the variable (x) question stating “*Does the ELSA application identify errors and provide guidance for correction?*” and the question “*Does the ELSA application facilitate understanding of the articulation process that produces sound?*” showed consistent reliability.

Table 4. *Statistic descriptive analysis*

Variable	N	Minimum	Maximum	Mean	Std. Daviation	Evidence
X	62	99	149	124.60	12.996	valid
Y	62	60	100	79.55	111.483	valid

Table 4 illustrates the descriptive analysis which shows the data distribution for variable (x) has a minimum value of 99, maximum value of 149, mean of 124.60 and standard deviation of 12.996. This shows that the majority of respondents gave positive responses to the ELSA application to improve students' pronunciation practice. The mean value of variable (y) is 79.55. this states that the majority of students rated this application as very easy to use with a standard deviation of 11.483. The smallest value recorded was 60, while the maximum value was 100. This finding shows that the majority of students felt an improvement in using the ELSA application, both in terms of usage experience and pronunciation practice development. The distribution of the data shows the regularity of the application users' responses, as evidenced by the relatively low standard deviation. The findings confirm the idea that the ELSA application greatly improved students pronunciation practice.

The results of the study, the majority of respondents agreed that the ability to pronounce English correctly is a very important component in effective communication. This finding is in line with Mulyani and Sartika, (2019) statement, which emphasizes that proper pronunciation is the basis of communication in English. In addition, respondents stated that pronunciation includes not only sound production but also the ability to convey meaning clearly, as stated by Rahmania & Mandasari, (2021). However, English pronunciation remains a big challenge for most Indonesian students. Based on research results, this difficulty is mainly caused by a less supportive learning environment, including the lack of access to pronunciation-focused learning media as well as the lack of detailed explanations from teachers (Mardiah et al., 2014). In addition, students' ethnic background also affects their accent and intonation, which often leads to errors in pronunciation. This kind of problem requires

innovative learning strategies to overcome difficulties in pronunciation (Putra & Sujarwati, 2023).

Based on the findings, most of the respondents agreed that the ability to pronounce English correctly is an important part of effective communication. This finding is in line with Mulyani and Sartika, (2019), who stated that correct pronunciation is the foundation of communication in English. Furthermore, the respondents stated that pronunciation is not only about producing sounds, but also the ability to convey meaning clearly, such as in speaking. By Rahmaniah & Mandasari, (2021). However, English pronunciation is still a major challenge for most Indonesian learners. Research suggests that most of these problems are caused by a less supportive learning environment, including lack of access to pronunciation-focused learning platforms and lack of explanation from teachers.

CONCLUSION

The researchers were able to conclude that the students performed better in the pronunciation task after using the ELSA application. This is evident from the statistical calculations. Based on the descriptive statistics, the students benefited greatly from using the ELSA application, both in terms of experience and pronunciation improvement. Due to the small standard deviation, the distribution of the data shows similar responses. Users of the app would find that the ELSA app makes it easy for students to practice more words and phrases. Learning this material is easy because the programme is not only easy to use in the classroom, but can also be used outside the classroom, so the ELSA application would not bore students when practising pronunciation. Their attention would be focused on this movement because they would get something new by using this application, because before they only learned from teachers or lecturers, now they are happier because they are using artificial intelligence technology such as the Elsa application. The functions of the Elsa application are very easy to understand, without having to do any extra work, and reduce pronunciation errors as the application corrects them. However, English pronunciation is still a major challenge for most Indonesian learners. Research suggests that most of these problems are caused by a less supportive learning environment, including lack of access to pronunciation-focused learning platforms and lack of explanation from teachers

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