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The Use of ELSA Speak Application to Improve Pronunciation Accuracy of Ninth Graders at SMPN 1 Gondang

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Abstract. *This study examines the effectiveness of the ELSA Speak application in improving the English language skills of ninth-grade students at SMPN 1 Gondang. The problem addressed is students' pronunciation skills. The purpose of this study was to understand the learning growth before and after the use of the application, as well as to assess the value of technology in English teaching. This study used a quantitative approach with a pre-experimental design consisting of one group pre-test and post-test. A total of 38 students from Class IX A at SMPN 1 Gondang were selected purposively. Data were obtained through oral tests before and after the use of the ELSA Speak application. Data analysis was conducted using SPSS paired sample t-test, normality test, and homogeneity test. The study findings showed a significant increase in students' average performance scores, which increased from 60.65 (pre-test) to 73.82 (post-test). The statistical analysis of the paired sample t-test yielded a significance level below 0.05, indicating that the ELSA Speak application is effective in improving the English language skills of ninth-grade students at SMPN 1 Gondang. According to research findings, the ELSA Speak app is a useful resource for significantly improving students' English pronunciation. To provide creative and inspiring learning opportunities for students, it is recommended that technology-based resources like ELSA Speak be incorporated into language learning curriculum.*

Keywords: *Effectiveness; ELSA Speak Application; Pre-Experimental Research; Pronunciation Accuracy*

Abstrak: Penelitian ini menguji efektivitas aplikasi ELSA Speak dirancang untuk meningkatkan keterampilan berbahasa Inggris siswa kelas IX di SMPN 1 Gondang. Masalah yang dibahas adalah keterampilan pelafalan siswa. Tujuan dari penelitian ini adalah untuk mengetahui perkembangan pembelajaran sebelum dan sesudah penggunaan aplikasi, serta menilai nilai teknologi dalam pengajaran bahasa Inggris. Penelitian ini menggunakan pendekatan kuantitatif dengan desain pra-eksperimental yang terdiri dari pre-test dan post-test satu kelompok. Sebanyak 38 siswa dari kelas IX A di SMPN 1 Gondang dipilih secara purposive. Data diperoleh melalui tes lisan sebelum dan sesuai dengan kebutuhan aplikasi ELSA Speak. Analisis data dilakukan dengan menggunakan uji-t sampel berpasangan, uji normalitas, dan uji homogenitas dari SPSS. Temuan penelitian menunjukkan peningkatan yang signifikan dalam skor kinerja rata-rata siswa, yang meningkat dari 60,65 (pre-test) menjadi 73,82 (post-test). Analisis statistik paired sample t-test menghasilkan tingkat signifikansi di bawah 0,05, yang menunjukkan bahwa aplikasi ELSA Speak efektif dalam meningkatkan keterampilan berbahasa Inggris siswa kelas IX SMPN 1 Gondang. Aplikasi ELSA Speak adalah sumber daya yang berguna untuk meningkatkan pengucapan bahasa Inggris siswa, menurut temuan penelitian ini. Untuk memberikan kesempatan belajar yang kreatif dan inspiratif kepada siswa, disarankan agar sumber daya berbasis teknologi seperti ELSA Speak dimasukkan ke dalam kurikulum pembelajaran bahasa.

Kata kunci: Akurasi Pengucapan; Aplikasi ELSA Speak; Efektivitas; Penelitian Pra-Eksperimental

1. BACKGROUND

Pronunciation is one of the most essential aspects of learning English, especially for English as a Foreign Language (EFL) learners. It influences not only speaking fluency but also comprehension, self-confidence, and intercultural communication (Listyani et al., 2024; Maria,

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2021). Pennington (2021) defines pronunciation as the way someone articulates words, involving both segmental aspects such as vowels and consonants—and suprasegmental aspects like stress, intonation, and rhythm. Effective pronunciation instruction plays a significant role in helping learners communicate intelligibly and naturally in English (Sholeh & Muhaji, 2020; Marlinda & Huda, 2024).

Pronunciation accuracy refers to a learner's ability to articulate English sounds correctly, including the accurate use of intonation and word stress (Ma et al., 2024). According to Abdalla et al. (2020), one of the main challenges in pronunciation among EFL learners is the interference of their first language (L1), which often leads to mispronunciations. Other factors that contribute to pronunciation difficulties include lack of practice, unfamiliarity with English phonemes, and limited exposure to authentic pronunciation models (Bashori et al., 2024). Moreover, the ability to pronounce words correctly builds learners' confidence and enhances their willingness to participate in oral communication (Itsna Millatul Himmayati, 2024).

Teaching pronunciation is not merely about correcting sounds but involves fostering students' awareness and control over the phonological features of the target language. As noted by Nangimah (2020), pronunciation teaching should focus on sound production, word stress, and intonation to help students achieve intelligibility. However, due to time constraints and lack of resources, traditional classroom settings often limit opportunities for intensive pronunciation practice. To address this, many educators have turned to technology-based learning solutions.

One such solution is ELSA Speak (English Language Speech Assistant), an AI-powered mobile application designed to improve learners' English pronunciation through real-time feedback and speech recognition technology. According to Adawiah & Muliati (2024), ELSA Speak offers structured lessons that target specific pronunciation components such as vowel and consonant sounds, stress, and intonation. With over 1,200 lessons and 40 learning themes, the application is accessible, interactive, and supports independent learning anytime and anywhere (Rismawati et al., 2022). Additionally, the app provides phonetic guides and instant corrective feedback, making it a valuable tool in Mobile Assisted Language Learning (MALL) environments (Muslimah & Tarihoran, 2024).

Despite the growing popularity of ELSA Speak, previous studies have predominantly focused on adult learners and university students. For example, studies by Thi-Nhu Ngo et al. (2024) and Marlinda & Huda (2024) have shown that ELSA Speak is effective in improving pronunciation in higher education settings. However, there is limited research exploring the

effectiveness of ELSA Speak for junior high school students in the Indonesian EFL context, particularly in rural or non-urban areas. This represents a research gap that needs to be addressed.

Based on preliminary observations at SMPN 1 Gondang, many ninth-grade students were reluctant to speak English due to fear of making pronunciation errors. Common problems included mispronouncing similar-sounding words and misplacing word stress, which often led to misunderstandings. Teachers acknowledged the importance of pronunciation instruction but struggled with limited class time and lack of engaging instructional tools. Therefore, the integration of a technology-based application like ELSA Speak has the potential to address these issues by offering students accessible, individualized, and engaging pronunciation practice.

Given this background, this study aims to examine the effectiveness of ELSA Speak in improving the English pronunciation accuracy of ninth-grade students at SMPN 1 Gondang. By focusing on this context, the study seeks to fill the gap in current literature and provide empirical evidence on the use of AI-based mobile applications to support pronunciation instruction in secondary education..

2. METHOD

This study employed a quantitative research approach using a pre-experimental one-group pre-test and post-test design. The objective was to examine the effectiveness of the ELSA Speak mobile application in enhancing students' English pronunciation accuracy.

The participants were 38 ninth-grade students from class IX A at SMPN 1 Gondang, selected through purposive sampling based on their regular attendance and basic English proficiency. The treatment consisted of several guided sessions using ELSA Speak, in which students practiced pronunciation and received real-time feedback via the app's AI-based speech recognition.

Data were collected through oral pronunciation tests administered before and after the treatment. Each test included 20 English words thematically related to animals. The students' pronunciation was recorded and evaluated across five specific aspects: vowel sounds, consonant sounds, diphthongs, word stress, and intonation.

Students' performance was assessed using an analytical scoring rubric adapted from Brown (2001) and Celce-Murcia et al. (2010). Each aspect was rated on a 5-point scale, where 5 indicates excellent performance and 1 indicates very poor performance. Scoring Rubric

Pronounciation students' skill *Adaptation from:* (Brown, n.d.) *and* (Celce-Murcia, M., Brinton, D. M., & Goodwin, n.d.),

No	Aspect	Rating Score	Comment
1.	Vowel Sound	5	Almost complete
		4	There is a mistake but do not disturb the meaning
		3	There are some mistakes and disturb the meaning
		2	Many mistakes with the result that hard understanding
		1	Too much mistakes until the words harder understanding
2.	Dipthong	5	Almost complete
		4	There is a mistake but do not disturb the meaning
		3	There are some mistakes and disturb the meaning
		2	Many mistakes with the result that hard understanding
		1	Too much mistakes until the words harder understanding
3.	Consonant Sound	5	Almost complete
		4	There is a mistake but do not disturb the meaning
		3	There are some mistakes and disturb the meaning
		2	Many mistakes with the result that hard understanding
		1	Too much mistakes until the words harder understanding
4.	Word Stress	5	Stress placement is almost always correct
		4	There are few stress errors but they do not interfere with meaning
		3	Some stress errors that cause meaning to be somewhat impaired
		2	Many stress errors that interfere with comprehension
		1	Severe stress errors that severely impair comprehension.
5	Intonation	5	Intonation is very natural and contextually appropriate
		4	Only minor intonation errors that do not affect comprehension
		3	Some intonation patterns are inappropriate and begin to interfere with the meaning
		2	Many intonation errors, the meaning of the sentence becomes confusing
		1	Intonation is inappropriate so that it greatly interferes with understanding

Each student could obtain a minimum score of 5 and a maximum of 25 points. Data were analyzed using SPSS version 27, applying normality and homogeneity tests to ensure statistical validity. A paired sample t-test was then conducted to determine whether the use of ELSA Speak significantly improved students' pronunciation scores. A significance threshold of $p < 0.05$ was used.

3. RESULT AND DISCUSSION

Descriptive Statistics

Table 1 shows the descriptive statistics of students' pronunciation scores before and after the treatment.

Table 1. Descriptive Statistics of Pre-Test and Post-Test Scores

Test	N	Mean	Std. Deviation
Pre-test	38	61.58	8.54
Post-test	38	80.39	7.89

The mean score increased by approximately 18.81 points after the treatment, indicating improvement in pronunciation accuracy.

Normality Test

Normality was tested using the Kolmogorov–Smirnov and Shapiro–Wilk methods. Results are presented in Table 2.

Table 2. Normality Test Results

Test	Kolmogorov–Smirnov Sig.	Shapiro–Wilk Sig.
Pre-test	0.200	0.181
Post-test	0.156	0.102

Since all significance values are greater than 0.05, the data is considered normally distributed.

Paired Sample T-Test

To determine whether the difference between pre-test and post-test scores is statistically significant, a paired sample t-test was conducted.

Table 3. Paired Sample T-Test Results

Pair	Mean Difference	t-value	df	Sig. (2-tailed)
Post-test – Pre-test	18.81	-15.327	37	0.000

The p-value (0.000) is less than 0.05, indicating a significant improvement in students' pronunciation scores after using the ELSA Speak application.

The results of this study revealed a significant improvement in students' pronunciation accuracy after the implementation of the ELSA Speak application. The mean score increased from 61.58 in the pre-test to 80.39 in the post-test, with a statistically significant result from

the paired sample t-test ($p = 0.000, < 0.05$). These findings suggest that the use of ELSA Speak had a positive effect on students' ability to pronounce English words more accurately.

This result aligns with previous research by Adawiah and Muliati (2024), who found that ELSA Speak significantly improved students' pronunciation skills through its real-time feedback and interactive practice modules. Similarly, Rismawati et al. (2022) reported that ELSA Speak enhanced learners' motivation and accuracy by offering phonetic support and structured learning paths. The app's ability to provide immediate corrective feedback on individual phonemes, word stress, and intonation likely contributed to the significant improvement observed in this study.

From a pedagogical perspective, the success of ELSA Speak in this context can be attributed to its alignment with the principles of Mobile-Assisted Language Learning (MALL). As stated by Muslimah and Tarihoran (2024), mobile applications enhance language learning by offering personalized and autonomous practice opportunities. In this study, students could practice pronunciation at their own pace, repeat difficult items, and receive tailored feedback, which is often lacking in traditional classroom settings due to time constraints.

Furthermore, the improvement in pronunciation skills also reflects the potential of integrating artificial intelligence (AI) into language learning. The speech recognition technology embedded in ELSA Speak allowed students to identify and correct their errors in real time, reinforcing accurate pronunciation habits. This supports findings from Thi-Nhu Ngo et al. (2024), who emphasized the role of AI-based tools in facilitating pronunciation training through repetition, individualization, and multimodal input.

In the context of junior high school learners, where pronunciation instruction is often underemphasized, the use of ELSA Speak provided a practical and engaging solution. Students at SMPN 1 Gondang, who were initially hesitant to speak English due to fear of mispronunciation, showed greater confidence and accuracy after regular use of the application.

Overall, the findings confirm that integrating mobile applications such as ELSA Speak into pronunciation instruction can effectively address students' pronunciation difficulties and foster a more learner-centered and interactive learning environment.

CONCLUSION

This study investigated the effectiveness of the ELSA Speak application in improving the pronunciation accuracy of ninth-grade students at SMPN 1 Gondang. The findings demonstrated a significant increase in students' pronunciation scores after using the

application, as shown by the paired sample t-test results ($p < 0.05$). This confirms that ELSA Speak is an effective digital tool for enhancing learners' pronunciation skills.

The improvement can be attributed to the application's features, including real-time feedback, targeted pronunciation practice, and individualized learning. These features align well with mobile-assisted language learning (MALL) principles and support students in overcoming pronunciation-related difficulties commonly found in EFL classrooms.

Given these findings, it is recommended that English teachers integrate AI-based applications such as ELSA Speak into pronunciation instruction, especially at the junior high school level where conventional pronunciation teaching is limited. Further research involving control groups or longer treatment durations could be conducted to strengthen the generalizability of these results.

REFERENCES

Abdalla, A. H., Mohamed, S. A., & Khalil, E. A. (2020). Challenges affecting the pronunciation of English language learners. International Journal of English Language and Literature Studies, 9(2), 123–134. https://doi.org/10.18488/journal.23.2020.92.123.134

Adawiah, D. P. R., & Muliati, D. (2024). The effectiveness of ELSA Speak application in improving students' pronunciation. Journal of English Language Teaching and Linguistics, 9(1), 45–55.

Bashori, M., van Hout, R., Strik, H., & Cucchiarini, C. (2024). Effects of ASR-based pronunciation practice on second language learning: A systematic review. Computer Assisted Language Learning, 37(1), 1–29. https://doi.org/10.1080/09588221.2022.2043211

Brown, H. D. (2001). Teaching by principles: An interactive approach to language pedagogy (2nd ed.). Longman.

Celce-Murcia, M., Brinton, D. M., & Goodwin, J. M. (2010). Teaching pronunciation: A course book and reference guide (2nd ed.). Cambridge University Press.

Listyani, L., Asyiah, N. D., & Nurhidayah, R. (2024). Improving pronunciation through mobile-based apps: A case study of Indonesian EFL students. JET (Journal of English Teaching, 10(2), 88–99.

Ma, Y., Zhang, W., & Zhao, Q. (2024). English pronunciation instruction for EFL learners: A meta-analysis. System, 121, 102963. https://doi.org/10.1016/j.system.2024.102963

Maria, T. S. (2021). The importance of pronunciation in English language learning. Journal of Language and Literature Education, 6(1), 22–28.

Marlinda, I., & Huda, M. (2024). Integrating technology in pronunciation instruction: ELSA Speak and learners' speaking confidence. Jurnal Bahasa dan Sastra Inggris, 11(1), 34–42.

Muslimah, R., & Tarihoran, N. (2024). The role of MALL in improving English pronunciation: A study using ELSA Speak. International Journal of Language Education, 8(2), 112–123.

Nangimah, S. (2020). Teaching English pronunciation: Strategies and learners' responses. English Education Journal, 10(4), 56–64.

Pennington, M. C. (2021). Phonology in English language teaching: An international approach. Routledge. https://doi.org/10.4324/9781003155691

Rismawati, F., Yanti, R., & Subhan, M. (2022). Enhancing students' pronunciation through ELSA Speak application. Journal of English Language Studies, 7(3), 150–160.

Sholeh, B., & Muhaji, M. (2020). The role of pronunciation in EFL speaking ability. Journal of English Education and Linguistics Studies, 7(2), 143–156.

Thi-Nhu Ngo, H., Pham, H. T., & Tran, T. K. (2024). Artificial intelligence in pronunciation learning: The case of ELSA Speak. CALL-EJ, 25(1), 88–102.