


THE EFFECT OF ELSA SPEAK ON PRONOUNCIATION OF ENGLISH SPEAKING AT VOCATIONAL HIGH SCHOOL

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ARTICLE INFO	ABSTRACT
<p>Article history: Received: December 14, 2024 Revised: December 17, 2024 Accepted: December 24, 2024 Published: December 31, 2024</p> <p>Keywords: ELSA Speak, Application, Pronunciation</p>	<p>Based on the observations made by the researcher, it appears that certain students continue to experience challenges in pronouncing specific words. The aim of this research is to investigate the impact of the ELSA Speak Application on enhancing students' pronunciation skills. The research design employed was pre-experimental, utilizing a quantitative approach. The researcher implemented cluster sampling, selecting one class comprising 13 students as the sample group. A pronunciation test served as the data collection technique. The researcher conducted a pretest prior to the treatment involving the ELSA Speak Application and subsequently administered a posttest following the treatment. Data collection was executed through this testing method. To analyze the data, the researcher employed the paired sample t-test formula using SPSS 21. The analysis revealed a significant effect of the ELSA Speak Application on improving students' pronunciation. The results of the paired sample t-test, which revealed an average pre-test score of 43.31 and a post-test score of 85.23, with a significance value of 0.000 (< 0.05), demonstrating a significant increase in scores. Furthermore, the correlation analysis indicated a moderately strong relationship ($r = 0.651$) between the pre-test and post-test scores, confirming that this study indicates that the ELSA Speak application is effective in enhancing the English pronunciation abilities of vocational high school students.</p> <p><i>This is an open access article under the CC BY-SA license.</i></p> 
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INTRODUCTION

English is a global language widely used across various countries, making its learning essential (Niah & Pahmi, 2019). Proficiency in English is crucial in work environments, social interactions, and business activities, where communication clarity is paramount. The three key aspects of English learning—phonetics, grammar, and vocabulary—help ensure effective communication (Taqy, 2021). Phonetics, in particular, focuses on the production and perception of speech sounds, playing a vital role in accurate pronunciation. Mispronunciations can alter meanings, leading to miscommunication (Maslakhatin &

Lianawati, 2017). These challenges are especially significant for learners whose native languages differ in sound systems, such as Indonesian, where English sounds like /s/, /z/, and /ʃ/ are uncommon, causing pronunciation errors like "helep" for "help" (Muhammad Azizul H., 2016). Moreover, traditional teaching methods often prioritize grammar and writing over pronunciation, leaving students less equipped to develop speaking and listening skills effectively (Maria Ramasari, 2017).

Technological advancements provide innovative solutions to address these challenges. Applications like ELSA Speak, powered by artificial intelligence, enable learners to improve their pronunciation independently. This app offers features such as phoneme practice, syllable stress exercises, intonation training, and instant feedback using speech recognition technology (Zakiyyah et al., 2022). By visualizing mouth movements for specific sounds and providing accurate feedback, ELSA Speak helps users refine their pronunciation. It is accessible on various devices, allowing learners to practice consistently and enjoyably, bridging gaps in traditional education and motivating students to enhance their English-speaking skills (Taqq, 2021; Zakiyyah et al., 2022).

Speaking

Speaking is a fundamental tool for communication, enabling individuals to convey messages, express ideas, and interact with others effectively (Lwin, 2008). It is closely tied to verbal and linguistic intelligence, which form the foundation of speaking ability. According to (Tarigan, 2015: 16) reveals that speaking activities have the main purpose of communicating. To convey thoughts effectively, the speaker must understand the meaning of something to be communicated. speaker must also be able to evaluate the effect of his communication on the listener and must know the principles underlying all speech situations, both public and private. Speaking is also an interactive and collaborative process that integrates listening and meaning negotiation to achieve communication goals (Brown, 2004). It is considered a productive skill requiring active use of language to produce coherent, meaningful messages (Cameron, 2001). Mastering speaking skills is particularly challenging for foreign language learners due to the complexities of sentence structure, pronunciation, and fluency (Chastain, 2004). To develop speaking proficiency, consistent practice, self-confidence, and real-life communication opportunities are essential (Abd El Fattah Torkey, 2006). Ultimately, speaking is a vital skill that enables individuals to participate in social activities and convey ideas effectively, reflecting its central role in language learning and communication.

Pronunciation

To develop effective communicative pronunciation, students must understand how sounds are produced and the roles of accent and intonation in speech. Teachers play a crucial role by explaining pronunciation concepts and providing examples, enabling students to practice and listen to the language effectively (Muhammad Zulfikar, 2018). Pronunciation is the science of articulating English vocabulary correctly, making it a key component of language learning. As Botley (2017) notes, pronunciation significantly impacts the meaning of

utterances, and errors can disrupt communication or even lead to conversational breakdowns. Thus, accurate pronunciation ensures mutual understanding between speakers and listeners, enhancing the message's clarity and effectiveness.

Pronunciation involves several critical aspects, including sound production, rhythm, stress, and intonation. According to Penny Ur (1996), these elements define the phonemes of a language, characterize the rhythm and stress of speech, and affect the tone, which can alter meanings or implications. Challenges in pronunciation often stem from differences between a learner's native language and English. For example, certain English sounds may not exist in a learner's mother tongue, leading to substitution with familiar sounds. Additionally, learners might transfer stress or intonation patterns from their native language, which can result in miscommunication. Targeted practice and awareness are essential to overcome these obstacles. Mastery of pronunciation improves communication and boosts learners' confidence and helps them engage more effectively in social interactions, making it a vital skill in language acquisition (Miftahur Rohman, 2016; Penny Ur, 1996).

The foundational element of mastering English pronunciation lies in comprehending its distinct sounds, specifically the vowel and consonant sounds. These components are crucial for effective spoken English instruction. English comprises 24 consonants and 23 vowels, including diphthongs, which sets it apart from the Indonesian language. Among the numerous sounds present, several are absent in Indonesian, creating a contrastive phonetic landscape. Notable examples include the dental fricatives /θ/ and /ð/, the palato-alveolar fricatives /ʃ/ and /ʒ/, as well as the palato-alveolar affricates /tʃ/ and /dʒ/. Conversely, certain sounds are lacking, such as the front vowel /æ/, and the diphthongs /Iə/, /eə/, /ʊə/, and /əʊ/ (Muhammad Zulfikar, 2018).

It is important for students to focus less on whether they are native English speakers and more on ensuring their clarity of communication. To enhance pronunciation and speaking skills, several effective techniques can be employed. Firstly, regularly listening to English broadcasts, such as BBC World News or VOA, as well as English music programs, allows students to emulate native speakers and improve their pronunciation. Secondly, familiarizing themselves with a phonetic alphabet, such as the International Phonetic Alphabet, enables learners to accurately pronounce new words through transcription found in reputable dictionaries. Thirdly, understanding spelling patterns—such as the various pronunciations of "ough" in "enough" and "though"—aids in grasping word pronunciation. In conclusion, the various speaking aspects derived from the research by Muhammad Zulfikar (2018), including maximizing speaking practice through interactive methods like think-pair-share techniques, significantly enhance our speaking abilities while also providing opportunities to practice challenging sounds.

Classifications of English Sounds

Consonants are calmly classified into the basic forms of the following three descriptions:

1. The place where optimal contraction occurs is called articulation or point of articulation.

2. How the articulation blocks air is called an articulation or a type of articulation.
3. Vocal cord function. This means whether or not the vibration of the strings follows the blockage of air above the throat (Asdar Muhamad, 2013).

a. Consonant Sounds

Table 1.1: Dental fricatives /θ/ and /ð/

three /θri:/	month /m^nθ/	thrill /θrɪl/	earth /ɜ:θ/
path /pɑ:θ/	myth /mɪθ/	death /deθ/	thief /θi:f/
those /ðəʊz/	mother /m^ðə(r)/	brother /'brðə(r)/	
there /ðeə(r)/	leather /leðə(r)/	breathe /bri:ð/	

Source: (Andi Tenri Ampa, 2008:30)

Table 1.2: Palato-alveolar Fricatives /ʃ/ and /ʒ/

she /ʃi:/	trash /træʃ/	nation /'næʃn/	should /ʃʊd/
shop /ʃɒp/	finish /fɪnɪʃ/	British /brɪtɪʃ/	English /ɪŋɡlɪʃ/
usual /'ju:ʒuəl/	measure /'meʒə(r)/	garage /'gærɑ:ʒ/	
closure /'kləʊʒə(r)/	treasure /'treʒə(r)/	beige /beɪʒ/	

Source: (Andi Tenri Ampa, 2008:32)

Table 1.3: Palato-alveolar Affricate /tʃ/ and /dʒ/

child /tʃaɪld/	branch /brɑ:ntʃ/	lecture /'lektʃə(r)/
Search /sɜ:tʃ/	catch /kætʃ/	rich /rɪtʃ/
cheek /tʃi:k/		
job /dʒɒb/	edge /eɪdʒ/	age /eɪdʒ/
biology /baɪ'ɒlɒdʒi/		
geology /dʒi'ɒlɒdʒi/	joke /dʒɒk/	surgeon /'sɜ:ʒən/

Source: (Andi Tenri Ampa, 2008:33)

b. Vowels and Diphtongs

Table 1.4: Diphtongs /æ/

bad /bæd/	man /mæn/	cat /kæt/	bag /bæg/
knack /næk/	sad /sæd/	stand /stænd/	tank /tæŋk/

Source: (Andi Tenri Ampa, 2008:33)

Table 1.5: Diphtong /ɪə/

year /jɪə(r)/	clear /kɪlə(r)/	tear /tɪə(r)/	dear /dɪə(r)/
idea /aɪdɪə/	near /nɪə(r)/	fear /fɪə(r)/	here /hɪə(r)/
mere /mɪə(r)/	beard /bɪəd/	beer /bɪə(r)/	hear /hɪə(r)/

Source: (Andi Tenri Ampa, 2008:33)

Table 1.6: Diphtong /eə/

pair /peə(r)/	bear /beə(r)/	air /eə(r)/	pear /peə(r)/
chair /tʃeə(r)/	fair /feə(r)/	hair /heə(r)/	care /keə(r)/
scare /skeə(r)/	air /eə(r)/	rare /reə(r)/	tear /teə(r)/

Source: (Andi Tenri Ampa, 2008:34)

Table 1.7: Diphthong /uə/

Pure /pj <u>uə</u> (r)/	cure /k <u>juə</u> (r)/	obituary /ə'bit <u>uəri</u> /
tour /t <u>uə</u> (r)/	furious /f <u>juər</u> iəs/	mature /mə't <u>uə</u> (r)/
sure / <u>juə</u> (r)/	poor /p <u>uə</u> (r)/	assure /ə'j <u>uə</u> (r)/

Source: (Andi Tenri Ampa, 2008:34)

Table 1.8: Diphthong /əʊ/

go /g <u>əʊ</u> /	spoke /sp <u>əʊ</u> k/	so /s <u>əʊ</u> /	know /n <u>əʊ</u> /
tone /t <u>əʊ</u> n/	bone /b <u>əʊ</u> n/	boat /b <u>əʊ</u> t/	phone /f <u>əʊ</u> n/
row /r <u>əʊ</u> /	coat /k <u>əʊ</u> t/	home /h <u>əʊ</u> m/	load /l <u>əʊ</u> d/

Source: (Andi Tenri Ampa, 2008:35)

The Ways of Producing English Sounds

To generalize all sounds for language, they can be classified into groups. Sounds are primarily categorized into two types – consonants and vowels. Indonesian has 22 consonants and 11 vowels and diphthongs while English has 24 consonants and 23 vowels and diphthongs. What this means is that English is not available in some voices in Indonesian. Because there is no Indonesian language, the Indonesian students have difficulties more to pronounce these strange sounds. That's why you have to study. By pronouncing these sounds, students are challenged to perfect their pronunciation, especially for sounds that are not familiar to them. The categories of sounds are:

1. Consonant Sounds

Consonants are articulated through either a narrow or complete closure of the vocal tract. This results in the airflow being either blocked or restricted, generating noise as the air passes through the constriction (Kurniati, 2022).

a. Dental Fricatives /θ/ and /ð/.

The sounds /θ/ and /ð/ are articulated using the tip or blade of the tongue against the upper incisors and lower teeth. In producing these sounds, the tongue's tip or edge is positioned close to the upper and lower front teeth, creating a constriction that necessitates mouth breathing. The distinction between /θ/ and /ð/ lies in vocal cord vibration; /θ/ is a voiceless consonant, whereas /ð/ is voiced.

b. Palato-Alveolar Fricatives /ʃ/ and /ʒ/.

The sounds /ʃ/ and /ʒ/ are generated by the tongue's surface positioned behind the alveolar ridge. These sounds occur when the tip of the tongue and the back of the alveoli come together, forcing air through the mouth. The difference between /ʃ/ and /ʒ/ is also based on vibration; /ʃ/ is voiceless, while /ʒ/ is voiced.

c. Palato-Alveolar Affricates /tʃ/ and /dʒ/.

The sounds /tʃ/ and /dʒ/ are produced similarly at the tip of the tongue and the back of the alveoli, but in this case, the tongue makes contact with the back of the alveoli, creating a brief closure before the air is released. The key

difference is that /tʃ/ is voiceless, while /dʒ/ is voiced (Metrick, 2017).

2. English Words

According to Crystal, a vowel is a vocal sound that is pronounced without a certain complete closure or contraction, resulting in an audible fricative. The air comes out evenly from the middle of the tongue. (Wiley, 2008) Then the vowels, according to Jackson, are sounds caused by various closures or obstructions in the outflow of air through the mouth. (Jackson, 1980). There are three dimensions that we should know to describe English vowels:

- a. Height of tongue or mouth opening. Bound closed (/ɪ/, /i:/, /ʊ/, /u:/), semi-closed, semi-open or half (/e/, /ɜ:/, /ɜ:/, /ə/), open (/ɜ:/, /o/, /ɑ:/, /ʌ/). The area of the mouth with the highest part of the tongue or the general part of the mouth where vowels are pronounced. Related to front (/i:/, /ɪ/, /e/, /æ/), middle (/ə/, /ɜ:/, /ʌ/) and back (/u:/, /ʊ/, /ɔ:/, /o/, /ɑ:/).
- b. Lip shape. It is related to rounded (/u:/, /ʊ/, /ɜ:/, /o/) and spread (/i:/, /ɪ/, /e/, /æ/, /ɑ:/, /ɜ:/, /ə/, /ʌ/).

Vowels and diphthongs.

Vowel sounds contain diphthongs that have unique properties. Kelly argued that a diphthong is a combination of two vowels and involves a transition from one vowel to another (like /eɪ/, as in rain). The first sound of each phoneme is longer and stronger than in English. (Kelly, 2001). An intentional transition (or movement of the tongue, lips and jaw) occurs from one voice position to another.

1. Vowel /æ/.

The /æ/ sound is produced in the front of the mouth between semi-open and \open. After making this sound, the mouth opens slightly like /e/.

2. Diphthong /Iə/.

The diphthong /Iə/ begins with the sound /i:/, which occurs at the front of the mouth, and continues to the sound /ə/, which occurs at the front of the mouth. This diphthong is obtained from a high vowel to a middle tone.

3. Diphthong /eə/

The diphthong /eə/ begins with the sound /e/, which occurs in the front of the mouth, and continues with the sound /ə/, which occurs in the middle of the mouth. This diphthong is obtained from a lower vowel to a middle vowel.

4. Diphthong /ʊə/

The diphthong /ʊə/ starts with the sound /ʊ/, so it creates \uuu behind, so the sound /ə/ moves to the middle. This diphthong is obtained with high or middle vowels.

5. Diphthong /əʊ/

The diphthong /əʊ//əʊ/ begins with the sound /ə/, which occurs in the middle of the mouth\ and continues until the sound /ʊ/, which sounds in the back of the mouth. This diphthong occurs in middle and high vowels (Ba'dulu, 2004).

ELSA Speak Application

ELSA Speak is an innovative English Pronunciation application launched by Vu Van in 2015 to support users who want to be able to confidently speak English (Taқы, 2021). Based out of San Francisco, it was also featured on the Morning Post South China list of the most promising tech firms in Southeast Asia. Using artificial intelligence (AI) and speech recognition tech, the app identifies pronunciation errors with 95% accuracy. It teaches you the right pronunciation of English words, phrases, and sentences with more than 1,200 lessons and 60+ projects. It also has an interactive dictionary to help users pronounce certain words or phrases. Vu Van pointed out one of the barriers towards becoming fluent and confident in English is the way that we pronounce the words (Lengkanawat, 2016). The ELSA Speak Application is easy with simple steps that you can download in Playstore or Appstore. Menus like "Exploration" and "Themes" on the home screen of the app provide several speaking topics (Belinda Lesmana, 2022) Personalized learning plans, instant feedback on pronunciation, practice with everyday phrases, and tools to prepare for exams such as TOEFL, IELTS, and TOEIC are just a few of the main features. In fact, we know that 27 hours of speaking with ELSA Speak is the same as having a whole semester in an American university curriculum! It also help learners can refine pronunciation, reduce accents, and build confidence in multilingual contexts (Belinda Lesmana, 2022).

Based on the observations of previous researchers, which obstacles most students encounter when learning English, the author is interested in investigating the effectiveness of the ELSA Speak application as a mobile learning tool for students to practice pronunciation.

RESEARCH METHOD

This study used an experimental design to explore the impact of the ELSA Speak application on students' pronunciation skills, aiming to establish cause-and-effect relationships (Norris et al., 2012). The research utilized a one-group pre-test and post-test approach, where students' pronunciation skills were measured before (X1) and after (X2) using the application. The treatment (O) involved targeted sessions with ELSA Speak to assess its effectiveness in improving pronunciation. The population for this research comprised 200 students from Sritanjung Vocational High School (Creswell, 2012).

The research used the cluster sampling. (Sugiyono, 2013) states that cluster sampling is area sampling technique that is used to choose the sample if the object or source of the research are wide. The sample in this research is the XI Fashion class which consisted 13 students. So, the researcher chooses XI Fashion Class as a sample of this research.

Students' pronunciation was evaluated using a word list before and after the intervention. The pre-test established baseline skills, while the post-test assessed improvements following the ELSA Speak treatment (Effendy, 2016). This test provided a comprehensive assessment of the students' pronunciation progress. Data collection involved several steps. Initially, a single class of 13 students was selected as the research sample. Students were given a pre-test to evaluate their existing pronunciation skills using words from the ELSA Speak application. The treatment phase spanned four meetings. During the first meeting, observations and the pre-test were conducted. The second meeting focused on teaching

diphthongs, while the third meeting provided hands-on training with ELSA Speak (levels 1-2). In the final meeting, a post-test was administered to measure any improvements in pronunciation skills. Data analysis centered on assessing the changes in students' pronunciation mastery. By comparing the pre-test and post-test results, the study evaluated the effectiveness of ELSA Speak in enhancing pronunciation. This approach highlighted the application's potential as a valuable tool in teaching English pronunciation:

Table 1. The Measurement of Pronunciation

Category	Range	Assessment Criteria
Excellent	86-100	The student's got 26 to 30 correct answers
Good	71-85	The student's got 22 to 25 correct answers
Average	56-70	The student's got 16 to 21 correct answers
Poor	< 55	The student's got 1 to 15 correct answers

Language test results are typically reported as numerical scores, providing a quantitative measure of English proficiency. These scores are classified into specific criteria to aid in their interpretation and practical use by test users. By categorizing student performance, the classification ensures a clear understanding of their achievement levels and areas requiring improvement.

Table 2. The Classification Score for the Test

No	Score	The Ability Scale	Classification
1	86-100	4	Excellent
2	71-85	3	Good
3	56-70	2	Average
4	< 55	1	Poor

The fellow has calculated their pronunciation test score classifying their correct answers. This is calculated across all items in the one-minute test, with score being the percentage of correct pronunciations. The results of the pronunciation mastery test were analyzed using SPSS 21 edition to compute the percentage and mean pre-test and post-test scores. To determine the effect of the ELSA Speak application on the improvement of abbreviation, the tests were applied to tests, which are used to compare the means between 2 samples taken from 1 group, which is the paired sample t-test, so the difference of tests before and after between the test samples can be obtained. The significance F-value ($\alpha = 0.05$) shows that a partial influence was suspected, meaning that using the ELSA Speak app is proven effective in listening mastery. On the other hand, significance value of $\alpha > 0.05$ would mean no significant effect, allowing one to conclude that the application effectively improves pronunciation master.

RESULT AND DISCUSSION

This study aimed to evaluate the effectiveness of the ELSA Speak application in improving the pronunciation skills of vocational high school students at SMK Sritanjung. To

ensure the validity of the findings, three statistical tests were conducted: normality test, correlation test, and paired sample t-test. Each test played a significant role in addressing the research hypotheses and objectives.

Normality Test

The normality test was conducted as an initial step to confirm that the pre-test and post-test data followed a normal distribution before further statistical analysis. The Shapiro-Wilk test was employed due to the sample size of 13 students, which is below the threshold of 50 respondents.

TABLE 3 PRE-TEST NORMALITY TEST RESULT

Uji Normality		
Statistic	df	P Value
0,902	13	0,145

TABLE 4 POST-TEST NORMALITY TEST RESULT

Uji Normality		
Statistik	df	P Value
0,931	13	0,354

Source: Processed Data, 2024

The pre-test p-value was determined to be 0.145, while the post-test p-value was recorded at 0.354, as illustrated below. Both values exceeded the significance threshold of 0.05, suggesting that the data adhered to a normal distribution. Consequently, the data met the prerequisites for conducting parametric statistical analysis, specifically the paired sample t-test, to compare the mean scores of the pre-test and post-test.

This phase of normality assessment was crucial for substantiating the statistical analysis. The p-values exceeding 0.05 indicate a normal distribution of the data, implying that the differences observed between the pre-test and post-test can be attributed directly to the intervention involving the ELSA Speak application. Additionally, this reduces the potential for bias associated with non-normal data distribution, thereby enhancing the reliability and validity of the study's results.

Correlation Test

To further support the validity of the findings, a correlation test was performed to examine the relationship between the pre-test and post-test scores. The correlation coefficient of 0.651 indicated a moderately strong relationship between the two variables. This suggests that students with higher initial pre-test scores were more likely to exhibit significant improvements in the post-test.

Table 5 Correlation Test Result

Test	Mean	N	Std. Deviation	P Value
Pretest	43.31	13	29.333	0.000
Posttest	85.23	13	10.896	

Source: Processed Data, 2024

Furthermore, the p-value of 0.016 (< 0.05) confirmed that this relationship was not due to chance but rather reflected the genuine effects of the intervention.

The results of the correlation test provide evidence that the improvements observed in the post-test scores were closely associated with the use of the ELSA Speak application. This moderately strong relationship reinforces the argument that the application played a pivotal role in enhancing students' pronunciation skills. Additionally, the findings align with the one-group pre-test and post-test research design, where score differences reflect the effects of the intervention.

Paired Sample T-Test

The paired sample t-test was conducted to evaluate the mean scores of the pre-test in comparison to the post-test, aiming to ascertain the significance of any observed differences. The analysis revealed that the mean score of the post-test was significantly higher than that of the pre-test, thereby demonstrating a notable improvement in the students' pronunciation skills following the utilization of the ELSA Speak application. This finding was substantiated by a p-value of 0.000 (< 0.05), which indicates a strong statistical significance of the observed difference, affirming that the enhancements were not due to chance but rather a direct result of the intervention.

TABLE 6 PAIRED SAMPLE STATISTIC

Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 Pretest	43.31	13	29.333	8.135
Posttest	85.23	13	10.895	3.022

TABLE 1 PAIRED SAMPLE CORRELATIONS

Paired Samples Correlations

	N	Correlation	Sig.
Pair 1 Pretest & Posttest	13	.651	.016

TABLE 7 PAIRED SAMPLE TEST

		Paired Differences				t	df	Sig. (2-tailed)	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower				Upper
Pair 1	Pretest - Posttest	-41.923	23.733	6.582	-56.265	-27.582	-6.369	12	.000

Source: Processed Data, 2024

The results of the paired sample t-test provide strong empirical evidence that the use of the ELSA Speak application significantly enhanced students' pronunciation skills. In the context of this study, these findings support the research hypothesis and address the research objective of evaluating the effectiveness of application-based technology in English language learning. Features of the ELSA Speak application, such as phoneme training, syllable stress, and real-time feedback, were proven to positively impact students' learning outcomes.

The findings of this study indicate that the ELSA Speak application serves as a practical solution for enhancing the pronunciation skills of vocational high school students, particularly in addressing the challenges of globalization that demand active English proficiency. The improvement in average scores from 43.31 in the pre-test to 85.23 in the post-test provides strong evidence that this application delivers an effective learning experience. Features such as phoneme training, intonation practice, syllable stress, and real-time feedback enable students to independently correct their pronunciation errors. By using ELSA Speak, students not only improve their pronunciation but also build confidence in communication. This skill is crucial, especially for job interviews, presentations, or direct interactions with external parties in professional contexts.

Furthermore, the correlation test results, which indicate a strong relationship between pre-test and post-test scores ($r = 0.651$), suggest that the application provides targeted impact. Students with higher initial proficiency benefited more, demonstrating that the application effectively enhances individual potential according to their competence level. This highlights the opportunity for teachers to utilize ELSA Speak as a technological aid to support classroom learning as well as independent practice outside formal learning hours.

ELSA Speak also offers added value in terms of learning efficiency. Compared to conventional methods such as in-class repetition or direct correction from teachers, this application provides personalized real-time feedback that is not constrained by time or location. Students can use it anytime as needed, making learning more flexible. Over the long term, this learning model aligns with the principles of blended learning, which combines face-to-face methods with technology to achieve optimal outcomes. Given the statistically significant results, the implementation of ELSA Speak can be recommended as part of English learning strategies in vocational schools. Schools can integrate this application into the curriculum, either as a complement to core lessons or as an additional practice tool. Furthermore, collaboration with the application developers can be pursued to tailor ELSA

Speak features to the specific needs of vocational students, such as pronunciation of technical or professional terms.

CONCLUSION

The findings of this study indicate that the ELSA Speak application is effective in enhancing the English pronunciation abilities of vocational high school students. This conclusion is supported by the results of the paired sample t-test, which revealed an average pre-test score of 43.31 and a post-test score of 85.23, with a significance value of 0.000 (< 0.05), demonstrating a significant increase in scores. Furthermore, the correlation analysis indicated a moderately strong relationship ($r = 0.651$) between the pre-test and post-test scores, confirming that the observed improvements were not coincidental but rather a direct outcome of the intervention implemented through the application.

Consequently, the results of the hypothesis testing lead to the acceptance of the null hypothesis (H0) and the rejection of the alternative hypothesis (H1). This reinforces the assertion that the ELSA Speak application serves as an effective tool for enhancing students' pronunciation skills. Its features, including phoneme training, intonation practice, syllable stress, and real-time feedback, will enable students to improve their pronunciation abilities independently.

In summary, the results of this study highlight that the use of technology can play a significant role in gesturing toward the optimal quality of English language learning. Using ELSA Speak helps vocational high school students prepare for the challenges when communicating internationally while improving their competitiveness in the labor market. This emphasizes the need to use technology in education to help make a learning environment that is more accessible and responsive to the needs of the times.

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