

(Research Articles)

The Effect Of English Language Speech Assistant (Elsa) To The Students' Ability In Pronouncing English Verbs Of The Tenth Grade Sma Negeri 2 Pematang Siantar

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Abstract: Pronunciation skills are fundamental in English language learning, especially in the correct articulation of regular past tense verbs. However, students often experience difficulties in accurately pronouncing such verbs due to the differences between English spelling and pronunciation. To address this issue, this study investigated the effect of the English Language Speech Assistant (ELSA) application on the pronunciation ability of tenth-grade students at SMA Negeri 2 Pematang Siantar. This research utilized a quantitative approach with a quasi-experimental design, involving 64 students divided equally into an experimental group (X-3) and a control group (X-9) selected through purposive sampling. The experimental group received instruction using the ELSA Speak application, while the control group was taught using conventional teaching methods. Data were collected through pre-tests and post-tests, then analysed using an independent sample t-test. The mean pre-test scores for the experimental and control groups were 50.34 and 50.21, respectively, while the mean post-test scores were 82.56 and 67.37. The t-test analysis revealed a significance value (2-tailed) of 0.000, which was lower than the significance level of 0.05 ($0.000 < 0.05$). Additionally, the computed t-value exceeded the t-table value ($t_{\text{observed}} > t_{\text{table}}$ at $df=62$ and $\alpha=0.05$), leading to the acceptance of the alternative hypothesis (H_a) and the rejection of the null hypothesis (H_0). This indicates that there is a significant difference between students taught using the ELSA Speak application and those taught using conventional methods. Based on the research findings, it can be concluded that the ELSA Speak application significantly improves students' pronunciation abilities in pronouncing English regular past tense verbs.

Keywords: ELSA Speak Application, Pronunciation Ability, Regular Verbs, Quasi-Experimental Research

1. Introduction

Language is a way for humans to communicate and convey messages to others. language is often understood as a communication system used by humans to convey thoughts, ideas, feelings, and information to others. according to sardjunani (2020, p.12), language is a tool to express ideas, feelings and desires of a person towards the person they are communicating or interacting with. Language has various forms, both spoken and written, and consists of symbols, such as words, sentences, and other signs that have certain meanings. In more depth, the meaning of language involves two main aspects: Contextual Meaning (Pragmatic): Language has a meaning that depends on its context. For example, the sentence or word can have different the meanings depending on the situation or condition of the context in which the word is used. Semantic Meaning: This refers to the meaning contained in the word or phrase itself, which is regulated by language rules, such as the meaning in the dictionary. In communicating, precise and clear language will make easier for the other person to understand the essence of what is being conveyed. Aspects of language need to be considered so that the information conveyed can be understood and understood for its purpose. Clarity of language is the key to effective communication. "Clarity of language is closely related to the correct way of delivery, so that the

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message conveyed is not only understood literally but also in the context intended by the speaker (Jalaludin, 2020, p.18).

In this research, the language aspect is focused on the accuracy of language in pronouncing words clearly and precisely so that it focuses on two language aspects, including the student's pronunciation. Although speaking and reading involve different processes (oral vs. written), both have deep similarities in terms of language comprehension, vocabulary use, information processing, and the influence of context. Both also rely heavily on cognitive abilities to process and convey ideas. Therefore, speaking and reading skills are interrelated and mutually reinforce each other in the communication process. Pronunciation can indeed be considered a factor that connects the aspects of speaking and reading, although it is more directly related to speaking. Based on the researcher's observation and experienced while conducting teaching practice (PPL) in SMA Negeri 2 Pematang Siantar, many students got problems and difficulties in pronunciation. The first problem is the students difficult to understand how to pronounce properly. For example, the words for example the word *"bathed"* (/beɪðd/) is pronounced *"bated"* (/beɪtd/). the word *"pleasured"* (/ˈpleʒəd/) is pronounced as *"pleserd"* (/ˈpleʒərd/). the word *"washed"* (/wɒʃt/), is pronounced as *"wassed"* (/wɒset/). and the word *"soothed"* (/suːðd/) is pronounced as *"sooted"* (/suːted/). The second problem is that the students are less in practice in using English in daily conversation, although the students have rich vocabulary. The third student's problem is students felt embarrassed to pronounce it where they did not have self-confidence and afraid of being wrong.

The problem of pronunciation in students is possibly caused by the lack of the use media that students learn English without supports by the media. Therefore, their learning process that train how to pronounce students efficiently becomes less efficient. The appropriate tools pr media to help them and students in the pronunciation learning process including practicing pronunciation of words in English is the ELSA (English Language Speech Assistant) media. Along with the development of technological advances in today's era, the presence of mobile phones to students helps students to find innovations and ideas for assignments or activities during the learning process. Cheng & Tsai (2020) stated that technology, including the use of smartphones, has enabled more flexible and student-based learning.

To overcome the problem above, the application of Elsa Speak can be the media to improve students 'pronunciation in general. Previous studies have extensively explored the effectiveness of ELSA Speak in improving general pronunciation skills. However, there is a lack of research focusing specifically on its impact on pronouncing English verbs, which are often challenging due to their regular pronunciation patterns. ELSA Speak (English Language Speech Assistant) is an English learning app specifically designed to help learners improve their English pronunciation. Using advanced speech recognition technology, ELSA allows users to practice pronouncing English words, phrases, and sentences in an interactive way and receive immediate, accurate feedback. The app can analyze the user's pronunciation, provide an accuracy score, and provide suggestions for correcting pronunciation errors. ELSA offers personalized training based on individual abilities and provides a variety of exercises to improve specific elements of pronunciation, likes intonation, rhythm, and word stress. Khan et al., (2022, p.31) explained that ELSA Speak has the validity to be an effective media in improving students' error in English pronunciation, especially in the context of second language learning. Based on their observations, ELSA uses in-depth phonetic analysis to help students understand the differences between their pronunciation and more natural and correct pronunciation, and focuses on pronunciation that is more natural and easier for native speakers to understand. ELSA is to help users, moreover English as a second language learners, to pronounce the English in a way that is more natural and easier for native speakers to understand. The application can be accessed via smartphone, allowing users to practice anytime and anywhere.

Based on the phenomena above, the researcher is interest to do research entitled " The Effect of English Language Speak Assistant (Elsa) Application to the Students' Ability in Pronouncing English Verbs of The Tenth Grade SMA Negeri 2 Pematang Siantar.

2. Literature Review

Pronunciation

Pronunciation refers to the way a person pronounce words or sounds in a language correctly and clearly, so that they can be understood by the listener. Pronunciation is the way a person pronounces words in a language using the correct and clear voice. This includes various aspects, such as articulation, stress, intonation, and pronunciation of vowels and consonants correctly. According to Ur (1996, p.33), the aims of pronunciation learning is for students to be able to pronounce words like the accent of a native speaker. In addition, Fraser (1999, p. 24) stated that pronunciation is a crucial part of teaching English. However, Fraser also revealed that the aspect of teaching pronunciation often gets less attention from teachers. There are two elements of pronunciation, namely segmental and suprasegmental features. The sound can be significantly affected by speech features. In this research, when learning English well, first is learning the kinds of the feature of pronunciation

A. Segmental feature

Vowel, consonant, cluster, and diphthong sounds are examples of a segmental feature system. The distinctions between the roles of utterances and their production methods serve as the basis for the classification.

1) Vowel

Vowels are produced by the voiced air traveling through various mouth shapes; these variations are brought about by the tongue and lips being in varied positions (O'Connor, 1980, p. 58). Vowels come in two varieties: diphthongs and pure vowels (Wahyukti, 2008:35). Long and short vowels make up a pure vowel, which is expressed by a single letter (Wahyukti, 2008). A colon or a length mark composed of two dots designates a long vowel (Wahyukti, 2008, p. 24). In English, the five long vowels are:

1. /i:/ = meet
2. /a:/ = tart
3. /u:/ = true
4. /ɔ:/ = all
5. /ɜ:/ = burn

There're six short vowels in English:

1. /ɪ/ = Hit
2. /ə/ = about
3. /ɒ/ = stop
4. /ʌ/ = enough
5. /ʊ/ = push

2) Consonants

Consonants are sounds that are not vowels (Ramelan, 1985:151). When two articulators create blockages to the air leaving the oral cavity, consonants are formed (Wahyukti, 2008:35). According to O'Connor (1980, p. 9), a consonant is significant in a word for two reasons. The initial

consonant helps make English easier to understand. The second is easier to explain and comprehend since consonants are often produced by a clear interference of the vocal organ with the air stream.

a) Supra segmental feature

The style of words or sentences is an example of a suprasegmental property. Stress, pitch, intonation, and other characteristics that are constantly present throughout speech production are referred to be supra segmental qualities (Wahyukti, 2008). Stress According to Kenworthy in Gilakjani (2012), stress is a crucial component of English word identity. It is the level of force or loudness with which a syllable is uttered to explain its importance. Three types of stress may be distinguished: main or high stress, secondary or medium stress, and mild or no stress (Wahyukti, 2008, p. 29). In English, emphasis is crucial because it may distinguish between meaning and purpose.

Intonation

The transition of a voice from high to low pitch is known as intonation. Ramelan (1985:152) defines intonation as the change in pitch between a speech's many syllables. Intonation can be produced in a statement by a succession of conflicting pitch levels.

1) Syllable

A syllable is a single beat or a group of sounds in a word. For instance, you can clap your hand three times when you say "December" and once when you say "May." "May" is a single syllable. Three syllables make up the word December (Ramelan, 1985, p. 43). In larger linguistic units, rhythm is produced by the patterns of stressed and unstressed word syllables.

Verb

Verbs are a class of words that express actions, deeds, processes, or states carried out or experienced by the subject in a sentence. Verbs function as predicates that connect the subject with objects or other information, thus forming a complete meaning in a sentence. Chaer (2014, p. 24) in his book "General Linguistics" explains that verbs are words that express an activity or deed carried out by the subject, and can indicate the state or process that occurs in the subject. Thus, verbs have a central role in sentence structure, because without verbs, sentences cannot convey the meaning of the action or state that occurs.

Irregular Verbs

Verbs that do not produce the past tense or past participle according to the standard pattern are considered irregular verbs. These verbs have unpredictable form changes by simply adding -ed. Each irregular verb has a different past tense and past participle form and must be memorized because they do not follow a consistent pattern. These irregular verbs have their origins in older English verb forms, from Old English and even further back into Germanic languages. English in the past had many more irregular verb forms that developed over time and underwent phonetic changes.

Examples:

Go → Went → Gone

Eat → Ate → Eaten

Take → Took → Taken

These irregular verbs often have unique vowel or consonant changes that do not follow general rules. They tend to come from older languages and may reflect phonetic changes that have occurred over centuries of the language's history.

Regular Verbs

Regular verbs are verbs that follow a certain pattern when changing into the past tense or past participle (the form used in passive sentences or perfect tense). Generally, to build the past tense or past participle of a regular verb, simply add -ed to the basic word. These regular verbs come from the formation of verbs in English (and other languages) that follow a consistent and predictable pattern of change.

kata kerja beraturan (regular verbs) in English, which follows the pattern of change by adding -ed to the past tense and past participle.

Example:

1. Accept – Accepted – Accepted
2. Agree – Agreed – Agreed
3. Arrive – Arrived – Arrived
4. Ask – Asked – Asked
5. Bake – Baked – Baked

ELSA Speak (English Language Speech Assistant)

ELSA Speak (English Language Speech Assistant) is an application for learning English that was created especially to assist users in becoming more proficient speakers and pronouncing words correctly. This application uses artificial intelligence (AI) technology to analyze user pronunciation and provide instant feedback on pronunciation errors, intonation, and fluency. ELSA Speaking is designed with an attractive and easy-to-use interface, making the learning process more fun and less boring. This application uses a gamification approach to make the learning experience more interesting, which in turn motivates users to continue practicing (Krishna & Latha, 2019, p. 44).

3. Research Methodology

Research Design

A quantitative approach was taken in this study. In order to test hypotheses and provide answers to research questions, a quantitative research design is a sort of research approach that entails gathering and evaluating numerical data. Quantitative methods are research approaches that use numerical data and statistical analysis to test hypotheses, identify patterns, and draw conclusions. Bryman (2016) defines quantitative methods as research approaches that emphasize the measurement of variables and data analysis using statistical techniques. This method aims to produce generalizations that can be applied to a wider population.

In this research, quasi-experimental quantitative method is used to measure the effect of certain interventions on the dependent variable. Because

they use a method to compare groups, quasi-experimental studies perform better than pre-experimental ones. A quasi-experiment, according to Napitupulu S. et al. (2019, p. 44–45), is a comparison of two groups: an experimental group and a control group. (Page 158 of Creswell, J. W., & Creswell, J. D., 2023) "Quasi-experimental designs involve comparing two or more groups (e.g., an experimental and a control group) that receive different treatments, but without random assignment of participants to groups".

Research Variable

In this research, there are two variables, they are:

- Independent variable is Elsa Speak Application (X)
- Dependent Variables is students 'English Pronunciation in English verb (Y)

Subject Research

The subject of this research taken by purposive sampling where X-3 as the experimental class and X-9 as the control class, students grade X in SMA Negeri 2 Pematang Siantar.

Research Instrument

Instrument of this research used in this research is a **non-test instrument** which is an **oral test** designed to measure students' ability to pronounce English regular verbs in the past tense. The oral test requires students to pronounce a set of selected regular verbs (past tense), with a particular focus on the accuracy of consonant and vowel sounds in their pronunciation. In this research, the students will be asked to pronounce regular past tense verbs using the ELSA application, and the recordings were used to evaluate their pronunciation skills. However, there were some obstacles encountered during the data collection process. Some students who do not have adequate mobile phones (smartphones) to use the ELSA application or record their voices, will be used an alternative by lending additional devices or using school-owned devices such as computer labs to ensure that all students could participate in the recording activities. Thus, all students in the experimental group were still able to contribute the data needed for this research

Procedure of Data Collection

a. Pre-Test

The pre-test was given to the experimental class and control class at the beginning of the meeting. The purpose of the pre-test is to ascertain the students' starting proficiency with the subject matter and to compare the experimental and control groups. By giving a pre-test, the teacher would get an idea of how many students already have initial knowledge of the material that was given. The pre-test was read and pronounced 30 words of English regular verb orally, which will be corrected in the end of the lesson.

b. Treatment

- Treatment in Experimental class
In this class, the students X-3 got the treatment using the ELSA speak to help their pronunciation
- Treatment in Control Class
In this class, the students X-3 got the treatment using the conventional method without using the media ELSA speak

c. Post Test

After the treatment was conducted, the final test will be done by giving the last test to the class experimental class and the control class

Technique of Data Analysis

The pre-test and post-test data were used to analyze ELSA Speak's effectiveness in improving students' pronunciation. The data were calculated using

IBM SPSS V 24 for Windows. The data will be analysis by IBM SPSS V24 to analysis the Normality test, Homogeneity Test and Hypothesis (Independent sample T Test).

Data Analysis And Research Findings

The normality test may be used to determine if the data is in a normal distribution and to determine whether the sample is typical of the population. The Kolmogorov-Smirnov method was applied in this work to verify normality. Check for normality with the presumption that the data is usually distributed if H_0 is accepted and H_1 is refused. The data is normally distributed if the computed normality value surpasses the significance threshold 0.05. The outcomes of the pre-test normality test for the experimental and control groups' respective experimental and control classes are as follows:

- 1) Normality test
 - a. Normality of Pre-test

Table 4.4 Normality Test of Pre-test

Tests of Normality							
	Kelas	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
uji normalitas pretest	Pretest Experimen X3	.095	32	.200 [*]	.980	32	.811
	Posttest Control	.084	32	.200 [*]	.976	32	.689

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Based on the test results above, the experimental class's pre-test results of $0.200 > 0.05$ and the control class's pre-test results of $0.200 > 0.05$ were significant according to the Kolmogorov-Smirnov test. According to the criteria used to make decisions in the Kolmogorov-Smirnov test, both have significant values above the significance threshold of 0.05. H_0 is thus accepted, but H_1 is rejected. The pre-test results for the experimental and control groups can be inferred to have a normal distribution.

- b. Normality of Post-test

Table 4.5 Normality Test of Post-test

Tests of Normality							
	Kelas	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Hasil Normalitas Posttest	Posttest Experiment X3	.092	32	.200 [*]	.971	32	.522
	Posttest Control X9	.138	32	.124	.969	32	.461

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

The aforementioned findings demonstrate that the post-test results in the experimental class have a significance value of $0.200 > 0.05$ for the Kolmogorov-Smirnov test. The significance value for the control class, on the other hand, is $0.124 > 0.05$. According to the test decision-making criteria, H_0 passed the Kolmogorov-Smirnov test whereas H_1 was rejected. As a result,

the post-test and the data gathered from the experimental and control groups are regularly distributed.

2) Homogeneity Test

Homogeneity test in research is a statistical test used to test the equality of variance (data diversity) between sample groups, as one of the basic assumptions in parametric analysis. This test is important to ensure that the differences in results between groups are truly caused by the treatment or intervention being studied, not because of the inequality of data variance. One of the preparatory tests that must demonstrate if two or more sample data groups originate from a population with the same variance is the homogeneity test. The data variance between groups is homogenous, according to the LEVENE homogeneity test findings, which indicate that the data produced is larger than 0.05. As a result, parametric analysis's homogeneity assumption is satisfied.

d. Homogeneity of pre-test

Table 4.6 Homogeneity test of Pre-test

Test of Homogeneity of Variance		Levene Statistic	df1	df2	Sig.
Pretest Hasil belajar siswa	Based on Mean	1.391	1	62	.243
	Based on Median	1.358	1	62	.248
	Based on Median and with adjusted df	1.358	1	57.141	.249
	Based on trimmed mean	1.364	1	62	.247

Based on the table above, the significance value in the based on mean section is 0.243. Where $0.243 > 0.05$, H1 is rejected, and H0 is accepted. This means that the data from the pre-test results of the experimental and control classes fulfill the assumption of homogeneity.

a. Homogeneity of Post-Test

Table 4.7 Homogeneity test of Post-Test

Test of Homogeneity of Variance		Levene Statistic	df1	df2	Sig.
Posttest hasil belajar siswa	Based on Mean	.273	1	62	.603
	Based on Median	.261	1	62	.611
	Based on Median and with adjusted df	.261	1	61.091	.611
	Based on trimmed mean	.272	1	62	.604

Based on the table above, the significance value in the based on mean section is 0.603. Where $0.603 > 0.05$, H1 is rejected, and H0 is accepted. This means that the data from the pre-test results of the experimental and control classes fulfill the assumption of homogeneity.

3) Independent Sample T-Test

a. Independent Sample T-test of Pre-Test

Table 4.8 Independent sample T-Test of Pre Test

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Hasil Independent sample T Test Pre Test	Equal variances assumed	1.391	.243	.064	62	.950	.125	1.968	-3.808	4.058
	Equal variances not assumed			.064	58.139	.950	.125	1.968	-3.813	4.063

The significant value (2-tailed) in the preceding table is 0.950, which is $0.950 > 0.05$. As a result, H1 was rejected, while H0 is accepted. This demonstrates that there is no significant difference between the experimental class and control class scores if the two sample classes have the same starting proficiency in student pronunciation abilities ($H_0: \mu_1 = \mu_2$). Thus, that first ability can be asserted. Thus, the experimental class can make advantage of ELSA Speak learning. Specifically, the control classes that use traditional learning are X-3 and X-9.

b. Independent Sample T-test of Post-Test

Table 4.9 Independent sample T-Test of Post Test

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Independent Sample T Test Posttest	Equal variances assumed	.273	.603	9.437	62	.000	15.188	1.609	11.970	18.405
	Equal variances not assumed			9.437	61.542	.000	15.188	1.609	11.970	18.405

This is shown by the significance (2-tailed) of $0.000 < 0.05$, which is based on the preceding table. The result is 0.000, where $0.000 < 0.05$ indicates that H0 is rejected and H1 $\mu_1 \neq \mu_2$, indicating that ELSA Speak distinguishes the experimental class from a control class using conventional learning. This leads to the conclusion that X-3 students at SMA N 2 Pematang Siantar can enhance their pronunciation by learning with ELSA Speak.

4.3 Research Findings

Based on the data analysis, the researcher has made several key findings that address the research problem as follows:

- 1) The effect of using English Language Speech Assistant (ELSA) to the students' ability in pronouncing English verbs to the students grade tenth at SMA Negeri 2 Pematang Siantar can be summarized in figure 4.1 and 4.2.

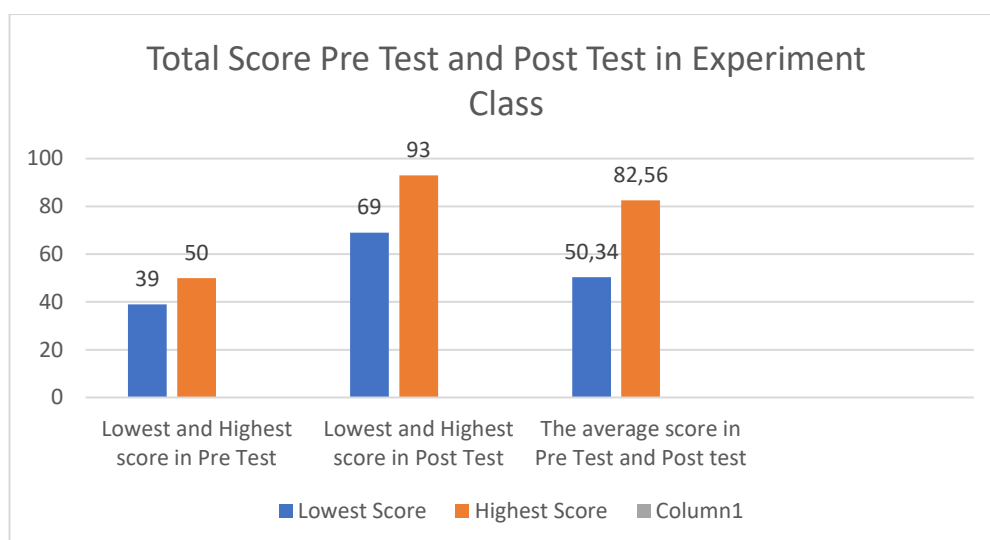


Figure 4.1. Scores in Experimental Class

The information in the chart gives a vivid and convincing picture of development both before and after therapy. According to Figure 4.1, a range of scores were recorded during the pre-test phase, with the highest being 50 and the lowest being 39. Nevertheless, the post-test period saw a notable shift. While the best score skyrocketed to an astounding 93, the lowest score rose to 69. On the pre-test, the average score was a low 50.34, but on the post-test, it rose sharply to 82.56. Next, total the data provided by the charts for the control class from figure 4.2.

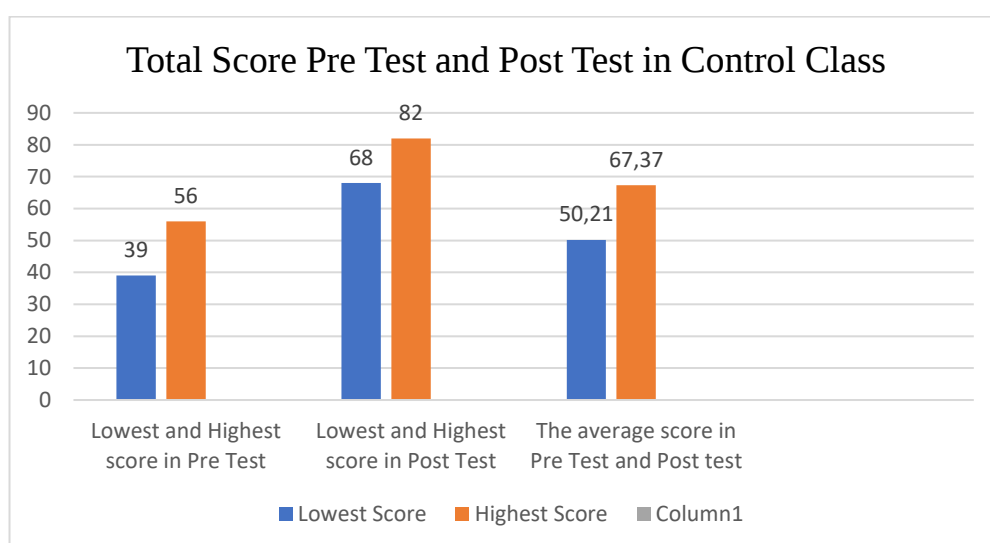


Figure 4.2. Scores in Control Class

The information in the chart gives a vivid and convincing picture of development both before and after therapy. According to Figure 4.2, a range of scores were recorded during the pre-test phase, with the highest being 56 and the lowest being 39. Nevertheless, the post-test period saw a notable shift. While the best score skyrocketed to an astounding 82, the lowest score rose to 68. On the pre-test, the average score was a low 50.21, but on the post-test, it rose sharply to 67.37.

- 2) The significant difference in the pronunciation ability of regular English verbs between tenth grade, students taught using ELSA application (Experiment) and Those taught using conventional method (Control) at SMA Negeri 2 Pematang Siantar.

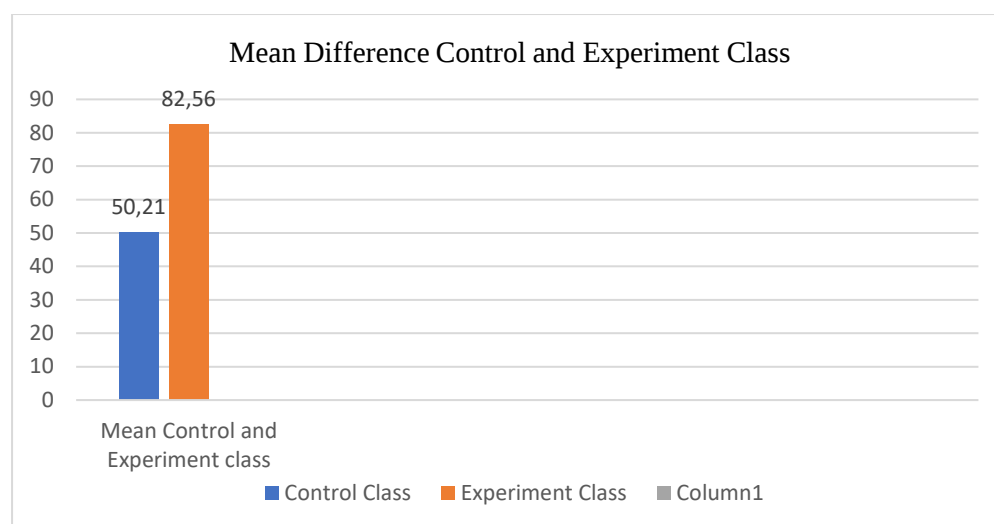


Figure 4.3. Mean Difference Control and Experiment Class

Based on figure 4.3 above, namely the average score of the control and experimental classes, there is a significant difference where the class that was given the treatment to learn using the ELSA application (experimental class) got a higher score (82.56) compared to the class that used the conventional method (50.21). The results of the T-test were tested based on the values above using IBM SPSS V 24. The final result (Post test) in experiment and control class obtained with 0.000, where $0.000 < 0.05$ suggests that H_0 is rejected and $H_1 \mu_1 \neq \mu_2$, which means there is a difference between the experimental class using ELSA Speak and can improve a control class using conventional learning. Based on this, it can be concluded that learning using ELSA Speak can improve the pronunciation of X-3 students at SMA N 2 Pematang Siantar

4. Discussion

The researcher discovered a number of results that addressed the research topic after carrying out the study, evaluating the data, and verifying the hypotheses. The primary goals of this study were to assess the tenth-grade students at SMA Negeri 2 Pematang Siantar's proficiency in pronouncing English verbs using the English Language Speech Assistant (ELSA). In data collection, this study used audio recording techniques (oral test), which aims to record and analyze students' pronunciation objectively. The data collection stage was carried out in three main stages: pre-test, treatment, and post-test. but the class that received treatment learned using ELSA only in the experimental class.

After the pre- and post-tests, the normality and homogeneity tests were calculated using IBM SPSS V.24. The experimental class's normality test pre-test results were $0.200 > 0.05$, the control class's pre-test results were $0.200 > 0.05$, and the experimental class's post-test results were $0.200 > 0.05$. The normality test findings for the control group were $0.124 > 0.05$. This study is also homogeneous, according to the homogeneity test, which shows the pre-test and post-test data. is 0.243 in the section of the pre-test mean. H_0 is accepted and H_1 is rejected when the descriptive result is $0.243 > 0.05$. For the posttest of the homogeneity test, the mean section is 0.603. H_0 is approved while H_1 is denied when $0.603 > 0.05$. The hypothesis test using the Paired Sample T-test then revealed the outcome of the descriptive analysis. Sig was found in both the experimental and control classes. It can be concluded that H_1 is accepted and H_0 is rejected when the 2-tailed value is $0.000 < 0.05$. Therefore, it can be said that SMA N 2 Pematang Siantar grade 10 students' pronunciation abilities are successfully improved by utilizing ELSA Speak media.

However, several limitations should be noted. The research focused exclusively on segmental features (vowel and consonant sounds) in regular verbs, leaving suprasegmental aspects (stress, intonation) unexplored. Additionally, the relatively short treatment period (two weeks) may not reflect long-term retention. Future research could investigate ELSA Speak's effectiveness with irregular verbs, examine its impact on speaking fluency, or explore its use in different educational

contexts. Despite these limitations, the study provides compelling evidence that technology-enhanced pronunciation instruction, particularly through applications like ELSA Speak, can significantly improve students' ability to pronounce English regular verbs. This finding is especially relevant for EFL contexts like Indonesia, where traditional pronunciation instruction often receives limited attention. The results suggest that thoughtfully implemented mobile learning technologies can help address persistent challenges in English pronunciation teaching learning and longer study durations for more comprehensive results.

Therefore, it is clear from the results of this empirical study and the support of other previous research organizations that ELSA speak application media is a useful tool for teaching pronunciation to students. the features of recognizing and modifying English pronunciation. In this way, the application can determine the diagnosis of user errors and specific guidelines for correcting these errors. The pronunciation training feature allows users to practice speaking English according to native speakers. These properties include illustrated images such as automatic evaluation, instructions for opening the mouth shape, and tongue compression. Meanwhile, ELSA accompanies users to speak English, sounding like native speakers and thus increasing user confidence.

5. Conclusion

The usage of the ELSA Speak (English Language Speech Assistant) program significantly and favorably improves students' ability to pronounce normal past tense verbs in English, according to the results and discussion in the preceding chapter. When compared to the control group, which received instruction using traditional techniques, the experimental group's post-test statistical findings demonstrated a noticeable improvement. The fact that the experimental class post-test average (82.56) was greater than the control class average (67.37) suggests that ELSA Speak enhances students' pronunciation accuracy as a digital pronunciation learning tool. the significance (2-tailed) obtained is 0.000, where $0.000 < 0.05$ suggests that H_0 is rejected, which means there is a difference between the experimental class using ELSA Speak and can improve a control class using conventional learning. Based on this, it can be concluded that learning using ELSA Speak can improve the pronunciation of X-3 students at SMA N 2 Pematang Siantar. However, it is important to acknowledge that while ELSA Speak is effective for improving pronunciation, especially in segmental aspects, it does not comprehensively cover all elements of speaking such as grammar, fluency, or discourse-level features. Therefore, this application can provide immediate feedback regarding pronunciation errors and allows students to learn independently more interestingly and interactively compared to conventional methods.

Suggestion

a. For Teachers: Teachers are encouraged to adopt ELSA Speak as a supplementary tool in teaching English pronunciation. Its use in the classroom can enhance conventional methods, especially in addressing individual students' pronunciation problems. Teachers should also guide students in how to use the application effectively and ensure that pronunciation is integrated with other speaking components in language instruction.

b. For Future Researchers: Future research could expand on this research by exploring the effectiveness of ELSA Speak in other linguistic areas such as intonation, stress, rhythm, and irregular verbs. It is also recommended to conduct studies involving different educational levels, such as university students or adult learners, to assess the broader applicability of the application.

Additionally, mixed-method research that includes qualitative analysis (e.g., interviews or classroom observations) may offer deeper insights into user experiences and attitudes toward the app.

REFERENCES

- Adillah, A. (2022). Improving students' pronunciation through Elsa Speak application of madrasah Aliyah of Darul Istiqomah Cilallang boarding school [bachelor's thesis]. Institut Agama Islam Negeri Palopo.
- Alwi, H. (2020). *Bahasa dan komunikasi: Teori dan praktik*. PT Gramedia Pustaka Utama.
- Baker, A. (2006). *Ship or sheep? An intermediate pronunciation course* (3rd ed.). Cambridge University Press.
- Berman, R., & Patel, S. (2020). *The psychology of language learning: Motivation and feedback*. Routledge.
- Brown, H. D. (2004). *Language assessment: Principles and classroom practices*. Pearson Education.
- Brown, H. D. (2007). *Teaching by principles: An interactive approach to language pedagogy* (3rd ed.). Pearson Education.
- Burns, A. (2003). *Clear speech: Pronunciation and listening comprehension in North American English*. Cambridge University Press.
- Bryman, A. (2016). *Social research methods* (5th ed.). Oxford University Press.
- Celce-Murcia, M., Brinton, D. M., & Goodwin, J. M. (2010). *Teaching pronunciation: A course book and reference guide* (2nd ed.). Cambridge University Press.
- Chaer, A. (2014). *Linguistik umum*. Rineka Cipta.
- Cheng, K. H., & Tsai, C. C. (2020). The role of technology in language learning: A review of current trends. *Journal of Educational Technology & Society*, 23(2), 1–15. <https://doi.org/10.2307/26915445>
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approach* (4th ed.). Sage Publications.
- Creswell, J. W., & Creswell, J. D. (2023). *Research design: Qualitative, quantitative, and mixed methods approach* (5th ed.). Sage Publications.
- Crystal, D. (1995). *The Cambridge encyclopedia of the English language*. Cambridge University Press.
- Fisher, R. A. (1990). *Statistical methods, experimental design, and scientific inference* (3rd ed.). Oxford University Press.
- Fraser, H. (1999). Pronunciation teaching: A review of approaches and methods. *TESOL Quarterly*, 33(1), 1–22. <https://doi.org/10.2307/3588179>
- Gilakjani, A. P. (2012). The significance of pronunciation in English language teaching. *English Language Teaching*, 5(4), 96–107. <https://doi.org/10.5539/elt.v5n4p96>
- Harmer, J. (2007). *The practice of English language teaching* (4th ed.). Pearson Longman.
- Harmer, J. (2020). *The practice of English language teaching* (5th ed.). Pearson Education.
- Hedge, T. (2020). *Teaching and learning in the language classroom*. Oxford University Press.
- Hoeriyah, S. (2024). The effectiveness of Elsa Speak toward students' pronunciation in the eleventh grade of SMK N 2 Purwokerto. Universitas Islam Negeri Saifuddiin Zuhri Purwokerto. Thesis
- Howell, D. C. (2012). *Statistical methods for psychology* (8th ed.). Cengage Learning.
- Jalaludin, M. (2020). *Komunikasi efektif: Teori dan praktik*. Prenadamedia Group.

- Jayanti, R. (2023). The effectiveness of Elsa Speak application to improve students' pronunciation ability at SMP Negeri 1 Tandukkalua. Universitas Sulawesi Barat. Thesis
- Jensen, E. (2022). *Brain-based learning: The new paradigm of teaching*. Corwin Press.
- Kenworthy, J. (1987). *Teaching English pronunciation*. Longman.
- Krishna, S., & Latha, R. (2019). The impact of AI-based language learning applications on pronunciation skills. *Journal of Educational Technology*, 12(3), 45–60. <https://doi.org/10.1016/j.jet.2019.03.002>
- Lesmana, A. (2022). *Using Elsa Speak application to improve students' speaking skill at UPT SPF SMP Negeri 17 Makassar*. Universitas Bosowa
- Lusianti, S. (2023). The effectiveness of online media in improving students' English pronunciation skills. *Journal of Language Teaching and Research*, 14(2), 123–134. <https://doi.org/10.17507/jltr.1402.01>
- Napitupulu, S., Napitupulu F.D & Krisno. (2019). *Research Methodology in Linguistics and Education*. Academic Press. Yogyakarta
- Narasimhan, R., & Naidu, S. (2020). Artificial intelligence in language learning: A review of current trends and future directions. *International Journal of Artificial Intelligence in Education*, 30(1), 1–20. <https://doi.org/10.1007/s40593-019-00189-9>
- Nation, I. S. P., & Newton, J. (2023). *Teaching ESL/EFL listening and speaking*. Routledge.
- O'Connor, J. D. (1980). *Better English pronunciation*. Cambridge University Press.
- Ramelan. (1985). *English phonetics*. IKIP Semarang Press.
- Roach, P. (2009). *English phonetics and phonology: A practical course* (4th ed.). Cambridge University Press.
- Sardjunani, N. (2020). *Bahasa sebagai alat komunikasi*. PT Gramedia Pustaka Utama. Thesis
- Sato, M., & Ballinger, S. (2022). *Peer interaction and second language learning: Pedagogical potential and research agenda*. John Benjamins Publishing Company.
- Sholeha, W. (2024). The influence of Elsa Speak application towards students' English pronunciation mastery. Universitas Negeri Raden Intan Lampung
- Sugiyono. (2016). *Metode penelitian kuantitatif, kualitatif, dan R&D*. Alfabeta.
- Ur, P. (1996). *A course in language teaching: Practice and theory*. Cambridge University Press.
- Ur, P. (2012). *A course in English language teaching* (2nd ed.). Cambridge University Press.
- Wahyukti, L. (2008). *English phonology*. Pustaka Pelajar.
- Yates, L. (2014). Pronunciation in language learning: A review of research and practice. *Language Teaching*, 47(1), 1–20. <https://doi.org/10.1017/S0261444813000296>