The Effect of English Language Speech Assistant (ELSA) Speak Application on Students' Pronunciation Mastery at The Tenth Grade of SMAN 15 Pandeglang in Academic Year 2022/2023

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Abstrak

Penelitian ini bertujuan untuk mengetahui apakah terdapat pengaruh penggunaan aplikasi ELSA-Speak dalam pengucapan bahasa Inggris pada siswa kelas X di SMAN 15 Pandeglang. Penelitian ini menggunakan pendekatan penelitian kuantitatif dan metode eksperimen semu dengan desain pre-test dan post-test. Penelitian ini melibatkan triangulasi metode pengumpulan data yang mencakup pre-test, perlakuan, dan post-test. Data diperoleh dari dua kelas, yaitu kelas eksperimen dan kelas kontrol. Kelas eksperimen untuk penelitian ini adalah X.1 dan kelas kontrol adalah X.2. Setiap kelas memiliki 30 siswa, dengan total sampel sebanyak 60 siswa. Nilai rata-rata kelas eksperimen dalam pre-test adalah 51,33, sedangkan nilai rata-rata kelas kontrol dalam pre-test adalah 44,00. Sedangkan hasil post-test, nilai rata-rata kelas eksperimen adalah 67,20, sedangkan nilai rata-rata kelas kontrol adalah 59,20. Hasil yang diperoleh dari uji hipotesis adalah 0,00 < 0,05, yang berarti terdapat pengaruh signifikan dari penggunaan aplikasi ELSA-Speak terhadap penguasaan pengucapan bahasa Inggris siswa kelas X di SMAN 15 Pandeglang.

Kata kunci: *Aplikasi ELSA-Speak, pengucapan bahasa Inggris, pendekatan penelitian kuantitatif.*

Abstract

This Research Paper aims to find out whether there is any effect English pronunciation using the ELSA-Speak application in class X students at SMAN 15 Pandeglang. This research used quantitative research approach and quasi-experimental method with pre-test and post-test design. This research used triangulation of data collection methods involving pre-test, treatment and post-test. Data were obtained from two classes, namely the experimental class and the control class. The experimental class for this research was X.1 and the control class was X.2 Each class had 30 students, with a total sample of 60 students. The average value of the experimental class in the pre-test was 51.33, while the average value of the control class in the pre-test was 44.00. While the post-test results, the average value of the experimental class was 67.20, while the average value of the control class was 59.20. The result obtained from the hypothesis test is 0.00 <0.05 which means that there is a significant effect of using ELSA-Speak application on the mastery of English pronunciation of class X students at SMAN 15 Pandeglang.

Keywords : *ELSA-Speak Application, English pronunciation, quantitative research approach*

INTRODUCTION

Since English is the most widely spoken language, it must rank as the most significant. English is widely utilised as either a first or second language in a wide range of nations due to its widespread use. The advancement of science and technology is crucial to the economic

and political stability of many nations, and English is the key to unlocking this potential. English is very important to learn because English is a connecting language that will be used for communication between people from different countries.

Many businesses and professions in Indonesia seek candidates with native-level English proficiency because of the importance of the international language. Since the government of Indonesia recognises English's significance, it has mandated that all students, from kindergarten through college, take English as a required course. Teaching English at the secondary school level will be unique; pupils require rigorous instruction that is yet engaging.

According to (Dewi Kurniawati, 2015) There are four facets to mastering the English language: auditory, lingual, visual, and textual. The four skills are supported by various elements, namely structure, vocabulary, pronunciation, and spelling. Pronunciation is a way of pronouncing or reciting a vocabulary in English clearly and accurately.

At the high school level, English is a subject that needs to be taken seriously because soon they will enter the world of higher education which will not be separated from English courses, even English is a subject that will be tested in the national final exam at the high school level. Based on observation at SMAN 15 Pandeglang, the researcher found that this school has several classes, such as class X which is divided into 7 classes namely X1-X7, also class XI which has been divided into XI IPA1-IPA3 and XI IPS1-IPS3, and class XII which has been divided also became XII IPA1-IPA3 and XII IPS1-IPS5.

Based on the results of these observations, the researcher found several problems occurred. There problem, is the students' motivations are relatively low. This problem could be proven from the spirit of their learning which tend to be lazy. This problem is in line with what the English teacher said:

Most likely the problem is in last year's teaching during the covid-19 period where students did online classes in their learning, most of the online learning was not conducive, so for this year's learning motivation students are still lacking, and students are still lazy to learn. (Mrs. Rodiyah)

From the statement of Mrs. Rodiyah as an English teacher of SMAN 15 Pandeglang, the researcher concluded that students' motivations are relatively low. The researcher concluded that students' motivations are relatively low, this happened because of online learning that took place during covid-19, students are comfortable and used to researching at home without having to go to school.

The next problem is the students' pronunciations are relatively low. Because Students get difficult to pronounce English, they are unable to know how to pronounce English properly and correctly. Based on the students' speaking score, it shows that their score is relatively low. The average score is under the criteria minimum score. (English Teachers).

The English Language Speech Assistant (ELSA) app was developed by Vu Van in 2015 based on (AI) in San Francisco, USA. This app can improve and perfect your English pronunciation by using artificial intelligence (AI) and speech recognition technology. When compared to other programmes that merely teach vocabulary and grammar, ELSA stands out. Users of ELSA may benefit from voice recognition technology to improve their English pronunciation. With this method, ELSA can identify incorrect pronunciations in over 95% of cases. Users may also get additional feedback to help them fix their pronunciation mistakes. ELSA stands apart from other English-learning applications in part because of this.

Students may better absorb their teacher's instruction on proper English pronunciation with the help of the ELSA app. Students will immediately get the results of their pronunciation, if the pronunciation is still not good, then the value that comes out is also unsatisfactory, then the students will improve their pronunciation again so that it becomes good and correct. Besides being accessible by any device, ELSA is also a free application. As an ELSA application, it is quite interesting to be used by high school students because it will make the class more interactive and livelier.

METHOD

The researcher used a quantitative methodology, which included the collecting of numerical data to examine the impact of the methods employed. In this method, the researcher specifically used a quasi-experimental design with two independent variables. This research separated its sample into two groups: an experimental group and a control group.

Methodology This section details the researcher's approach to the research, including the time and location where the research was done. The research was conducted at SMAN 15 Pandeglang, the researcher chose this school is one of the reasons. The first, the researcher found some problems related to this research, and the second, this school has more than two classrooms and this school allows its students to bring and use cell phones. This research started from February to September, this will be explained by the following table.

In this research, the population of this study were students of class X SMAN 15 Pandeglang in the academic year 2022/2023. this research was conducted on August 1 until August 22.

A result of the researcher's intention to investigate and offer findings. Students enrolled at SMAN 15 Pandeglang at th tenth grade in academic year 2022–2023 school year are the subjects of this analysis. Class X students are divided into 7 classes.

As a result, the researcher selects the necessary sample as well as those who are likely to have the required information and considers X.2 as the experimental class taught using ELSA (English Language Speech Assistant) speak application and X.1 as the control class taught using U-dictionary application. Both groups had the same teacher, had the same level of English, but they were taught at different times. They consisted of 99 students.

To assess whether or not there is a significant difference between the average data findings before and after treatment, the t-test is used as part of a descriptive and inferential quantitative analytic strategy in this research. Data analysis entails activities like categorising information according to variables and respondent types, tabulating information according to variables for all respondents, presenting information for each variable under research, performing calculations to answer problem formulations, and performing calculations to test hypotheses. The normalcy test is one such test that must be performed before any analysis can take place in scientific inquiry. In this research, SPSS 25 for Windows was used to analyse the data.

RESULT AND DISCUSSION

This research uses a two-part pronunciation exam, a pre-test and a post-test, as its instrument. Before receiving therapy, pupils were given a pre-test by the researcher. The purpose of this is to evaluate students' pronunciation skills before any remediation is offered. Four sessions of therapy were administered after the pre-test was given to the pupils. Researcher in the experimental group utilised the ELSA-Speak application as a pronunciation learning medium, whereas those in the control group used the U-Dictionary programme. Finally, once pupils have been given therapy, researcher administer a post-test to gauge their progress. The goal is to evaluate the effect of the intervention on the students' pronunciation.

There was a total of 60 participants in the research, that the minimum and maximum pre- and post-test scores for the experimental group were 40 and 60, respectively, that the maximum pre- and post-test scores for the experimental group were 60 and 76, and that the mean pre- and post-test scores for the experimental group were 51 and 76, respectively.

The control group's minimum pre-test score was 40, and their maximum was 52; their mean pre-test score was 45, and their mean post-test score was 59.20; their standard deviation pre-test score was 4, and their standard deviation post-test score was 68.

Analysis of the Data

In this research, the t-test was utilised to examine hypotheses. The normality test and homogeneity test are two examples of pre-analysis tests that must be performed before the analysis may proceed.

The result of the normality test could be seen on the table below.

Table 1 Tests of Normality

	Class	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	Df	Sig.	Statistic	df	Sig.
Students learning outcome	Pre-test Experiment	.150	30	.082	.922	30	.030
	Post-test Experiment	.166	30	.034	.905	30	.011
	Pre-test Control	.157	30	.012	.856	30	.001
	Post-test Control	.180	30	.015	.888	30	.004

Based on the table above showed that pre-test experiment sig 0.082 > 0.05 the data is normally distributed, post-test experiment sig 0.034 > 0.05 the data is normally distributed, pre-test control sig 0.012 > 0.05 the data is normally distributed, and the last is post-test control sig 0.015 > 0.05 the data is normally distributed.

So, the researcher concludes based on the data above that all of data is normally distributed.

This research employed the SPSS 25 for Windows programme to conduct a statistical test (T-test) on paired data (pre- and post-tests for the experimental group, and the same for the control group).

The t-test result could be seen in the table below.

Table 2. Paired Samples Test

		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper	T	df	Sig. (2-tailed)
Pair 1	Pre-test Experiment - Post-test Experiment	-15.867	4.516	.825	-17.533	-14.180	-19.243	29	.000
Pair 2	Pre-test Control - Post-test Control	-13.867	4.167	.761	-15.423	-12.311	-18.228	29	.000

The statistical hypothesis is as follows

Ha: There is a significant effect of ELSA-Speak application on the mastery of pronunciation of tenth grade students of SMAN 15 Pandeglang

H0: There is no significant effect of ELSA-Speak application on the mastery of pronunciation of tenth grade students of SMAN 15 Pandeglang.

Based on the SPSS output above, it states that the null hypothesis is rejected and the alternative hypothesis is accepted, because the sig value (2-tailed) is 0.00 <0.05. That is, there is a significant effect of ELSA-Speak application on students' pronunciation.

DISCUSSION

The purpose of this research was to evaluate the efficacy of ELSA-Speak as a learning tool for improving students' pronunciation in the tenth grade at SMAN 15 Pandeglang. Prior to this research, the researcher piloted the instrument at another institution using the same class. Only a single rule was put to the test. After the trial of the instrument was completed, the researcher performed validity and reliability tests. Each set of tested instructions was found to be valid in turn.

The data is declared reliable if the Alpha value> r table = reliable, while the Alpha value < r table = not reliable, the reliability test results are 0.569> 0.444 so that the instrument is reliable. Instruments that have and post-test in experimental and control classes.

After the instrument assessment, the researcher administered a pre-test to both groups of students in order to get a sense of where they were at before receiving treatment.

In this era, all students are familiar with smartphones so the researcher thought that smartphones could help students in learning.

After administering the intervention to two groups of students, the researcher administered a post-test to gauge the effectiveness of the intervention on the students' pronunciation of English words. The data were analysed using SPSS 25. In this research, the t-test was utilised to examine hypotheses. The normalcy test and homogeneity test are pre-requisite analyses that must be performed before the analysis may proceed.

Students in class X SMAN 15 Pandeglang acquired an average pre-test score of 51.33, which was significantly higher than the average pre-test score of 45.33 achieved by students in class X 2, who served as the research's control group. The range of pre-test scores was wider in the experimental group, with the highest score being 60 and the lowest being 40, compared to the range of pre-test scores being 52 and 40 in the control group. This indicates that the experimental group had a more favourable distribution of pre-test results compared to the control group.

Researcher should check for normality and homogeneity of their data before conducting a hypothesis test. The Kolmogorov-Smirnov test was used to determine whether or not the data were normally distributed in this research; if the significance value of sig > 0.05, the data were considered to be normally distributed. This research's homogeneity test, a Levane test implemented in SPSS 25 for programme windows, followed the following criteria: a sig value more than 0.05 indicates that the data are homogeneous, whereas a value of sig less than 0.05 indicates that they are not.

The results indicated that the data is normally distributed when the sig for the pre-test experiment was $0.082 > 0.05$, when the sig for the post-test experiment was $0.034 > 0.05$, when the sig for the pre-test control was $0.012 > 0.05$, and when the sig for the post-test control was $0.015 > 0.05$. The researcher conducted a homogeneity test by comparing the two groups' pre- and post-test scores; the test found no significant difference between the experimental and control groups' pre-test scores (sig > 0.05), indicating that the results are consistent. The results from both the pre- and post-tests show homogeneity, as shown in the table above, with the post-test homogeneity score between the experimental and control classes being sig > 0.05.

The investigation concluded with a statistical examination of the data known as the hypothesis test (or t test). This research employed the SPSS 25 for Windows programme to conduct a statistical test (T-test) on paired data (pre- and post-tests for the experimental group, and the same for the control group). Ho is approved if and only if the two-tailed significance level (sig (2-tailed)) is less than 0.05; otherwise, Ho is rejected and Ha is accepted.

Based on the t-test results, the researcher obtained a value of $0.00 < 0.05$ so that the alternative hypothesis (Ha) "there is a significant effect of ELSA-Speak application on students' pronunciation" is accepted. On the other hand, the null hypothesis (Ho) "there is no significant effect of ELSA-Speak application on students' pronunciation" is rejected.

CONCLUSION

This study demonstrates that students' performance was subpar in both subjects before the intervention. However, after the incorporation of the ELSA Speak application, there was a significant improvement in the performance of students in the experimental class. This indicates that ELSA Speak effectively enhances students' proficiency in articulating English words. While not all students achieved perfect pronunciation skills, students' interest in ELSA Speak and active participation in the learning process also contributed to their progress.

The recommendations from this study encompass educators, who are advised to consider the use of ELSA Speak in their teaching methods and explore materials and teaching strategies aligned with their educational objectives.
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REFERENCES

Aswaty, P., & Indari, A. (2022). the Effect of Using Elsa (English Language Speech Assistant) Speak Application on Students' Speaking Ability for the Eleventh Grade of Mas Darul Al Muhajirin in the Academic Year 2021/2022. *Serunai : Jurnal Ilmiah Ilmu Pendidikan*, *8*(1), 18–23. https://doi.org/10.37755/sjip.v8i1.616

Becker, & E. (2019). *Figure 1 . The skills-based start-up page. Pronunciation in Second Language Learning and Teaching 10 434. 2018*(September 2018), 434–438.

Dewi Kurniawati. (2015). Studi Tentang Faktor-Faktor Penyebab Kesulitan Belajar Menyimak Bahasa Inggris Pada Mahasiswa Semester III PBI IAIN Raden Intan Lampung Tahun Pelajaran. *PBI IAIN Raden Intan*, *8*(1), 22.

Gilakjani Pourhosein Abbas. (2016). English Pronunciation Instruction: A Literature Review. *International Journal of Research in English Education*, *1 No. 1*(1), 1–6.

marzcyik. (2005). Essentials of Research Design and Methodology. In *International Journal of Geography and Geology* (Vol. 6, Issue 3). https://doi.org/10.18488/journal.10/2017.6.3/10.3.48.57

Muamar. (2022). *improving pronunciation using ELSA speak* (Vol. 2, Issue 8.5.2017).

Yates, L., & Zielinski, B. (2009). *Give it a go: Teaching pronunciation to adults*.