

## ESCALATING STUDENTS' SPEAKING PROFICIENCY THROUGH ELSA DIGITAL APP

Rosita Patmasari<sup>1</sup>, Zaitun<sup>2</sup>

*<sup>1,2</sup> English Teacher Education, Faculty of Educational Sciences, Muhammadiyah  
University of Jakarta, Jakarta, Indonesia*

[ochifatma86@gmail.com](mailto:ochifatma86@gmail.com)

### ABSTRACT

*This research aimed to measure whether or not students' speaking proficiency strengthen after they were taught this skill by using ELSA speak app and to find out if this improvement affected by the utilization of ELSA speak app. This was a quantitative study applying pre-experimental research design with one group of pre and post-tests. A number of 36 students registered in the 8<sup>th</sup> grade of SMPN 34 Jakarta chosen through cluster sampling, participated as the sample of the study. Two speaking tests conducted before and after the experiment were used as the tools in collecting the data. The data were then analyzed by using quantitative computation and statistics of paired-sample test. The results of the analysis data answer the two research questions as follows: 1) students' speaking proficiency improved after they studied speaking by using ELSA speak app in which their speaking performance in the post-test was better than in the pre-test, acknowledged by the average score gained in these two tests (89.77 in the post-test and 82.05 in the pre-test). 2) Students' speaking achievement affected by the utilization of ELSA speak app proven by the results of paired sample-test in which the p-valued (2-sided) score (0.0161) was lower than the significance value ( $\alpha=0.05$ ). These findings confirmed that ELSA speak app was effective in escalating students' speaking proficiency.*

**Keywords:** *digital application; ELSA speak app; speaking proficiency; speaking skill*

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## **Introduction**

It is undebatable that learning a language is proven by the proficiency of the learners on using the language (Glover, 2011). However, the issues on how to teach speaking effectively is still considered challenging due to the spontaneous nature of this skill and the application of conventional teaching method that focuses on memorization and students' passive role (Shabani, 2013). For Indonesian students, this opinion is in line with what Baidawi (2016) said that teaching speaking to Indonesian English learners encounters challenges since some of the students find difficulties to express abstract ideas, hence, they are not able to actively engage during the speaking class.

According to Marhamah, et.al. (2022), in order to stimulate and motivate students in speaking class, the utilization of appropriate teaching media is needed. "Media can also make teaching and learning activities more creative, innovative and interesting" (Dari & Styati, 2023, p. 243). Many studies suggested the use of instructional media which fits current century so that it will be up-to-date, moreover for secondary school students who are in the teen-aged phase. In this internet era, bringing technological media into English classrooms, especially in speaking classroom would change the atmosphere of the class. As Kuning (2019) asserted that through the use of technology, the students will get the space to fully involve in self-directed actions, interactions and subject-discussion with relax mind rather than a burden to do the tasks. A survey study of Sidiq (2016) found that 80.6% of teachers perceived the utilization of IT based learning media positively improved the learning quality.

There are various numbers of technological-based teaching and learning media, such as YouTube videos, vlog, Cake application, digital story-telling, word wall, Instagram, Google assistant, and others, and one of them is ELSA speak digital app. ELSA stands for English Language Speech Assistant. It is an app that can be used to help the users improve their pronunciation and vocabulary since this app has special features to detect its users' pronunciation errors up to 95% accuracy.

Besides, more than 60 topics and 1.200 lessons are available in this app for the users to practice how to pronounce words, phrases, and sentences correctly. Additionally, an interactive dictionary and artificial intelligence (AI) are also provided by this app to assist the users find the words they are looking for and recognize perfect English pronunciation through voice.

Nguyen, et.al., (2021) who explored several speaking applications including ELSA claimed this app as one of the most highly effective popular speaking applications after analyzing the responses from a total of 400 students as respondents to 20 statements in the questionnaire and 10 questions of a semi-structured interview. Due to its features that focus mainly on pronunciation, thus, many studies were conducted by Indonesian scholars to measure the effectiveness of this app to help pronunciation of the students (Akhmad & Munawir, 2022; Rinaepi, et.al., 2022; Martom, et.al., 2022; Anggraini, 2022). However, the investigation of ELSA speak- app effectiveness on Indonesian students' speaking improvement was still scarce. Therefore, this research aimed to fill this discrepancy by formulating two research questions as follows: 1) Does students' speaking proficiency improve after they are taught by using ELSA speak app? 2) Does ELSA speak app affect students' speaking proficiency improvement?"

Referring to problems' formulation aforementioned above, this study had the purpose of proving whether or not students' oral language ability improved after they studied speaking skill by using ELSA speak app. Having read the literatures that explained the importance of speaking skill in language learning and how teaching and learning media affects the successful of this speaking skill learning process, the researchers believed that the results of this study would give positive contributions to TEFL, especially to speaking theories and the discussion of technological-based teaching and learning media.

## Method

This research applied quantitative method with pre-experimental design. A total of 36 students of grade 8 of SMPN 254 Jakarta participated as the sample of this study. These students were comprised into one class and this class was selected from out of 6 classes through cluster sampling. Creswell and Creswell (2018) explained that in cluster sampling, the researcher puts the population into groups and these groups are called 'cluster'. The researchers conducted the research in even semester of 2023/2024 academic year for around 6 months.

In collecting the data, speaking pre and post-tests were administered before and after the experiment. The data analysis was taken to answer the two research questions through quantitative computation. There were two stages of analysis taken, i.e., first, by comparing the average of speaking tests' score obtained by the students in the pre-test and post-test, and, second, by using statistical analysis of paired-sample test in order to determine the effect of ELSA speak app on students' speaking proficiency improvement. For this second step, this one group pre-test and post-test study was guided the following hypotheses:

H<sub>0</sub>: ELSA speak app is effective to improve students' speaking proficiency

H<sub>1</sub>: ELSA speak app is not effective to improve students' speaking proficiency

The formula of paired-sample used was adopted from Stone (n.d.) as below:

$$t = \frac{\bar{x}_d}{s_d/\sqrt{n_d}},$$

In which,

$\bar{x}_d$  is mean difference score of the sample,  $s_d$  is standard deviation of the difference score,  $n_d$  is the difference scores of the sample (in this study, the difference scores measured were students' speaking achievement in the pretest and posttest).

Findings

In reference to the research problems above, the findings of the analysis data revealed the following results:

1) *Students' speaking achievement after being taught by using ELSA speak app*

The calculation of students' pre-test and post-test achievement showed that in the pre-test, the highest score gained by the students was 88, the lowest one was 76, with the average score of 82.05. Meanwhile, in the post-test, the highest score reached by the students was 98, the lowest one was 85, and the average score was 89.77. These results confirmed that the students performed better in the post-test than in the pre-test or after they were taught speaking by using ELSA speak app.

2) *The influence of ELSA speak app on students' speaking proficiency improvement*

The following Table 1 presents the statistical analysis of paired-sample test:

Table 1. Paired-sample test

		Paired Differences				
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference	
					Lower	Upper
Pair 1	PRE - POST	-7.94444	1.91154	.31859	-8.59122	-7.29767

From the results of data analysis above, mean score gained was 7.94, standard deviation was 1.91, the standard error mean was .318, with the lower score of -8.59, and the upper score was -7.29. In the significant level of 0.05, the correlations analysis of Kolmogorov-Smirnov resulted the data as presented in Table 2 below:

Table 2 One Sample Kolmogorov-Smirnov Test

		Unstandardized Residual	
N		36	
Normal Parameters <sup>a,b</sup>	Mean	.0000000	
	Std. Deviation	1.77104206	
Most Extreme Differences	Absolute	.126	
	Positive	.087	
	Negative	-.126	
Test Statistic		.126	
Asymp. Sig. (2-tailed) <sup>c</sup>		.161	
Monte Carlo Sig. (2-tailed) <sup>d</sup>	Sig.	.158	
	99% Confidence Interval	Lower Bound	.148
		Upper Bound	.167

The p-value (2-tailed) was  $0.0161 < \alpha (0.05)$  or the significance score is lower than  $\alpha (0.05)$ . Thus, these results confirmed that there was a significant different achievement gained by the students before and after they studied speaking by using digital ELSA speak app.

### Discussion

Among the four skills of English, speaking is one of the most important skills used as the indicator the succeed of the learners in mastering the language. However, most of Indonesian learners, as well as junior high school students found speaking as the most challenging ability. Therefore, teaching and learning speaking should be supported by the utilization of appropriate, effective and interesting media.

In this current era, suitable media that can be used by the teacher are the ones related to technology. Technology serves the users with various types of digital-based media. In the context of teaching and learning speaking, one of the most popular digital-based media is ELSA speak application. This app has several features which mainly focus on facilitating, providing, and helping its users, i.e., English learners, to improve their pronunciation as part of speaking activities.

In this research work, the researchers tried to scrutinize how effective this app to escalate students' speaking proficiency. The primary data used in this quantitative study were the results of students' speaking pre-test and post-test. There were two research questions guided the researchers in analyzing the data, namely: 1) Does students' speaking proficiency improve after they are taught speaking by using ELSA speak app? and 2) Does ELSA speak app affect the improvement of students' speaking proficiency improvement? A quantitative and statistical analysis were used to answer those two research questions.

### ***Students' speaking proficiency in the post-test outperformed their pre-test***

As it was reported in the findings section above, the average score hit by the students in the post-test was higher than that in the pre-test. In the average, the students gained 89.77 for their speaking in the post-test, while the average score in the pre-test was 82.05. These results indicated that speaking achievement obtained by the students escalated up to 7.72 points from pre-test to post-test. This improvement answered the first research question that students' speaking proficiency improved after they studied speaking by using ELSA speak app. This finding was in line with what Irsan, et.al., (2023) found in their research in which they claimed that ELSA speak app increased students' speaking skill. This was proven by the result of the mean score of students' speaking post-test (74.0) was higher than that of the pre-test (52.7).

### ***ELSA speak app affects the difference gained by the students in pre-test and post-test***

In order to confirm whether or not the differences of students' speaking achievement in the two tests affected by ELSA speak app, a statistical analysis of paired-sample test was applied. The computation of paired sample test showed that p-value (2-tailed) was lower than significance level of 0.05 ( $0.0161 < \alpha (0.05)$ ). According to Jim (2021), in paired-sample test, null hypothesis is rejected when p-value is less than significance level (for example, 0.05) in which the sample gives

strong sufficient evidence to summarize that the mean paired difference does not equal to zero in the population.

Based on this explanation, the statistical analysis of paired- sample test rejected  $H_0$  and accepted  $H_1$ . In other words, students' speaking proficiency improvement was affected by ELSA speak app.

### **Conclusion**

This research was aimed to investigate the effectiveness of ELSA speak app in improving students' speaking proficiency. There were two research questions answered after the data analysis of quantitative statistical calculation. First, students' speaking achievement improved after speaking teaching and learning activities used the digital media of ELSA speak app. This was proven by the average score gained by the students in the post-test was higher than that in the pre-test. Second, ELSA speak app was effective to improve students' speaking proficiency. This claim was supported by the results of statistical analysis of paired-sample test where p-value (2-tailed) was lower than significance level of 0.05 ( $0.0161 < \alpha$  (0.05)). Referring to the theories of paired-sample test, this result explained that there was significant difference the students achieved in the tests before and after the experiment. This difference was affected by the utilization of ELSA speak app. Thus, this research rejected  $H_0$  hypothesis and accepted  $H_1$  hypothesis.

In accordance with the results of this study, the researchers suggested that English teachers, especially those who teach speaking should be creative in utilizing and or choosing the most appropriate teaching and learning media. School students, specifically the ones in high school are in the phase of actively engage with technology. Thus, providing them with digital-based app in the classroom would obviously boost their learning motivation so that the objective of the learning would be achieved in optimum.

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