



Article History:

Submitted:

10-10-2023

Accepted:

22-01-2024

Published:

03-02-2024

PRONUNCIATION PRACTICE EXPERIMENT USING ENGLISH LANGUAGE SPEECH ASSISTANT (ELSA) APPLICATION AS A LEARNING MEDIA

Nadya Hidayah ¹, Muhamad Sofian Hadi ² & Nurul Islah ³

¹ Muhammadiyah University of Jakarta

² Muhammadiyah University of Jakarta

³ Al-Azhar University of Cairo

Email: nadyahidayah125@gmail.com¹, hadisofianmuhamad@gmail.com²,
nurulislah0103@gmail.com²

URL: <https://ejournal.stkipjb.ac.id/index.php/jeel/article/view/3319>

DOI: <https://doi.org/10.32682/jeell.v10i2.3319>

Abstract

This article aims to demonstrate how the ELSA application can help students pronounce words correctly. The researcher used the quantitative method using a pre-experimental design. The pre-experimental design was used to provide an answer to this problem. In collecting the data, the researcher used pre-tests and post-tests. In this study, there is only one experimental group which is grade 8.5 at public junior high school 13 Jakarta which consists of 36 students. The experimental group took a pre-test to measure their ability in English pronunciation before starting the treatment. T-test is used to assess whether there is a significant difference between the scores of one group before and after the treatment. Based on the results of the student pre-test and post-tests, the pre-test had an average score of 68.78 and the post-test had an average score of 80.08. In analyzing the data, the researcher used the SPSS 25 version, which shows that the T-Test value was higher than T-Table ($15.770 > 2.030$). It proved that the null hypothesis (H_0) was rejected, and the alternative hypothesis (H_1) was accepted. It can be concluded that the ELSA application is an effective learning media for improving students' pronunciation ability.

Keywords: Pronunciation, The ELSA application, Learning Media

Abstrak

Tujuan artikel ini adalah untuk membuktikan efektivitas aplikasi ELSA dalam meningkatkan kemampuan pengucapan siswa. Peneliti menggunakan metode kuantitatif dengan menggunakan desain pra-eksperimental. Desain pra-eksperimental digunakan untuk memberikan jawaban terhadap masalah ini. Dalam pengumpulan data, peneliti menggunakan pre-test dan post-test. Dalam penelitian ini hanya terdapat satu kelompok eksperimen yaitu kelas 8.5 SMP Negeri 13 Jakarta yang berjumlah 36 siswa. Kelompok eksperimen melakukan pre-test untuk mengukur kemampuan mereka dalam pengucapan bahasa Inggris sebelum memulai perlakuan. Uji-t digunakan untuk menilai ada tidaknya perbedaan yang signifikan antara skor satu kelompok sebelum dan sesudah perlakuan. Berdasarkan hasil pre-test dan post-test siswa diperoleh nilai rata-rata pre-test sebesar 68,78 dan post-test diperoleh nilai rata-rata sebesar 80,08. Dalam menganalisis data, peneliti menggunakan versi SPSS 25 yang menunjukkan nilai T-Test lebih tinggi dibandingkan T-Tabel ($15,770 > 2,030$). Hal ini membuktikan hipotesis nol (H_0) ditolak, hipotesis alternatif (H_1) diterima. Dapat disimpulkan bahwa aplikasi ELSA merupakan media pembelajaran yang efektif untuk meningkatkan kemampuan pengucapan siswa

Kata Kunci: Pengucapan, Aplikasi ELSA, Media Pembelajaran

Introduction

The development of the modern era has been significantly influenced by language, especially the English language as people worldwide often use it. Lasut et al., (2022) explain English is widely used to interact with people across the world. English is a universal language that is used for communication everywhere around the world. Besides being used for interacting with others, it can be used as a weapon to join international business partners, diplomacy, and establish international relations which commonly use English as a must-used language. Additionally, English provides access to all English-language media content information. For example, English movies, animated shows, and other media are available in English. Most universities and other higher education students use English as their major language instruction.

In Indonesia, English is used as a second or foreign language, which must be taught in all educational learning. Every education level requires students to take English subjects. It is hoped that students will be familiar with English as an important language. To achieve the learning objective, an appropriate approach can be used to develop an interesting atmosphere to study English in the classroom. According to Robert et al., (2014), it is important to implement an open discussion, reflection, and engagement strategy to create an interesting environment. To make the learning language objective happen, the students also need to master four English skills. They are listening, speaking, reading, and

writing. Each of these abilities is necessary in order to establish the foundations for a successful learning process. Speaking has become increasingly important for daily communication especially when involving second or foreign languages. One of the four skills that students should master is oral communication, and teachers play an important role in facilitating it. For basic things that the student needs to do when learning English is to learn and memorize the vocabulary, try to practice writing it without any errors, listen to examples of how to pronounce the word, and most importantly, pronounce it correctly. These are the steps for effectively learning a language, especially English, in order for communication to be understood, students are expected to have proper pronunciation.

Pronunciation is one of the many difficulties of learning English as a foreign language (EFL). The obstacle for most students is proper pronunciation, which is necessary for effective oral communication (Berry, 2021). Therefore, in order to do that, students must practice and improve pronunciation to ensure good communication and language learning, as bad pronunciation can pose significant challenges.

For learning a foreign language, mastering oral skills is important because it evaluates the entire process and enables fluent conversation in the target language. The previous statement supposes that speaking ability appears to be a good way to measure the student's ability in English. For students who want to master their speaking ability, pronouncing words correctly is an important requirement. Ericsson et al., (2018) analyze for speech production and word recognition, pronunciation is necessary because learning spoken forms can be difficult for speakers of second languages since words may be pronounced differently in separate speech than in continuous speech. Thus, misunderstanding the pronunciation of English when it is spoken at a normal pace while listening to the information is one of the challenges many English language learners face. The common issues that many EFL learners faced in learning English are lack of confidence and afraid to make a mistake.

Besides, teaching-learning languages in a classroom, pronunciation instruction should be provided. Some English classes start to cover the components of pronunciation such as sound, emphasis, rhythm, and intonation. Keiler (2018) states teachers' practical roles when instructing for the 21st Century Learning place an intense value on learning and innovation skills, such as creativity, critical analysis, problem-solving, collaboration, and communication. It includes assisting students in hearing and producing sounds, giving comments and corrections, selecting priorities, creating exercises, and evaluating students' progress. The need for pronunciation in the classroom is important due to the focus on students' pronunciation problems that can affect effective communication.

In addition to that, this research covers Information and communication technology (ICT). It is about the availability of websites, applications, tools for learning languages online, and other things. The ICT in Education project intends

to support teachers' use of technology and modify their roles in the classroom with an emphasis on genuine and digital learning (Johnson et al., 2014). The use of technology-based tools for learning pronunciation, like software and applications, enables students to self-train and study for as long as they want. The use of apps for studying inside and outside of the classroom can reduce learning anxiety. because they don't need a peer or teacher who can shape how they learn.

English has different ways of pronouncing words; we often come across multiple words that sound the same, as well as words with identical spellings but different pronunciations. This is important to remember because different pronunciations might have different meanings. Mastering accurate pronunciation of vowels and consonants is a crucial aspect of learning English pronunciation. According to Rinaepi et al., (2022) The key components that need to be studied are Word Stress (The emphasis on the word's sound), Sentence Stress (The emphasis on sounds within a sentence), Circle (Connection to the word), and intonation (Tone variation in speech). Thus, the researcher identifies the problem of students not receiving enough emphasis on pronunciation learning, leading to in incorrect pronunciation. They offer a simple and entertaining way to get more proficient at pronouncing words correctly. The purpose of the smartphone software Elsa Speak is to serve as a virtual assist and make studying easy and enjoyable.

Research Methods

This research employed quantitative method using a pre-experimental design. The quantitative method was used to examine the relationships between variables to test objective theories and to ensure numerical data can be examined using statistical techniques (Creswell 2018). These variables can be measured using instruments. The researcher was used pre-test and post-test as pre-experimental designs. Pre-test and post-test are viewed as the designs and compared to a static group as a sort of pre-experiment. This study used pre-experimental design by using 'one-group pre-test and post-test' method and used one class. In this study, each student got pre-test, treatment and post-test.

The researcher used a class of eighth-grade junior high school students at SMPN 13 Jakarta, which is located in Kebayoran Baru–South Jakarta on the first semester of 2023/2024. Eighth-grade class was used as the research sample, especially in eight five (8.5) class. All of the students took part in the research from the beginning to the end. In order to complete this study, the researcher applied purposive sampling. There were 36 students in the class—21 female and 15 males—and it was conducted in one classroom. This class was selected as an experimental group project.

In collecting the data, the researcher used pre-test and Post-Test. The pre-test was conducted to measure the students' pronunciation ability before doing an action in treatment. The researcher asked students to pronounce 20 words in

English one by one. The purpose of this pre-test enables the researcher to determine the students' level of pronunciation. Treatment is used to start in conducting experiment on students. The researcher introduced the ELSA application to improve students' pronunciation ability. To help students with their pronunciation, the researcher explained them how to use the ELSA application. And in the Post-test is carried out after the treatment is held. In order to evaluate their pronunciation of the researcher's provided words, students completed a retest in this post-test. In this session, scores are calculated based on how well they pronounce each word correctly.

Table 1 Pronunciation Practice Words

No	Pre-Test	Post-Test
1	Nice	Classmates
2	Wish	Friends
3	Happy	People
4	Place	Atmosphere
5	Home	Home
6	Group	Test
7	Class	Study
8	Study	Happy
9	Test	Unique
10	School	Chemistry
11	Classmate	Nice
12	Party	Wish
13	People	Party
14	Friends	Acquire
15	Chemistry	Group
16	Atmosphere	Biscuit
17	Acquire	Class
18	Doubt	Place
19	Unique	Doubt
20	Biscuit	School

The data can be obtained by using the classroom's pre-test and post-test scores, which will be calculated using the T-test one-group formula.

Results and Discussion

Results

In collecting the data, the researcher used pre-test and post-test as an instrument to collect data. A pre-test and post-test were given to assess the fluency and correctness of the student's speech before and after treatment. The researcher gave each student 20 words to practice pronouncing in order to get the pre-test data. Each word is calculated based on the following scoring criteria to evaluate how effectively a student can pronounce words. The pre-test results

indicated the student's level of capability in pronouncing English words correctly before using the ELSA program as a learning tool to enhance students' pronunciation abilities. These are the score based on each word that the students pronounce:

Table 2. Pronunciation Score

Aspect	Score	Description
Pronunciation	5	Easy to understand with a native speaker accent
	4	Easy to understand even without a native speaker's accent
	3	Having difficulty in pronouncing words which might cause mishearing for the listener
	2	It is difficult to understand a spoken word because there are pronunciation problems and are often asked to repeat it.
	1	Having serious pronunciation errors makes it difficult to understand what is being spoken.

Source: Data Processed by the Researchers, 2023

Before receiving a treatment, which was the use of ELSA application to improve their pronunciation ability, the result showed that the pre-test score indicated how well the students pronounce a word. The performance of students divided into 5 categories. These were the following categories of students' performance: Excellent, Good, Enough, Poor, and very poor.

The performance of the pronunciation ability of students can be categorized as follow:

Table 3. Criteria of Students' Score

No	Qualification	Range of Score
1	Excellent	81-100
2	Good	61-80
3	Enough	41-60
4	Poor	21-40
5	Very Poor	0-20

Based on the pre-test scores, the researcher can categorize the students using the table above in the following ways.

a. Pre-Test result

Table 4. The Experimental Class Students' Pre-Test Result

Score	Total Students	Relative %	Criteria
0-20	0	0%	Very Poor
21-40	0	0%	Poor
41-60	7	19.4%	Enough
61-80	29	80.6%	Good
81-100	0	0%	Excellent
Total	36	100%	

From the table above, Pre-Test score showed that there were not students who received excellent, poor and very poor categories. With 80.6% of the total number of students falling into this category, the majority of students are found to have good categories and 7 students (19.4%) found to have enough categories.

Diagram 1. The Result of the Pre-Test Chart

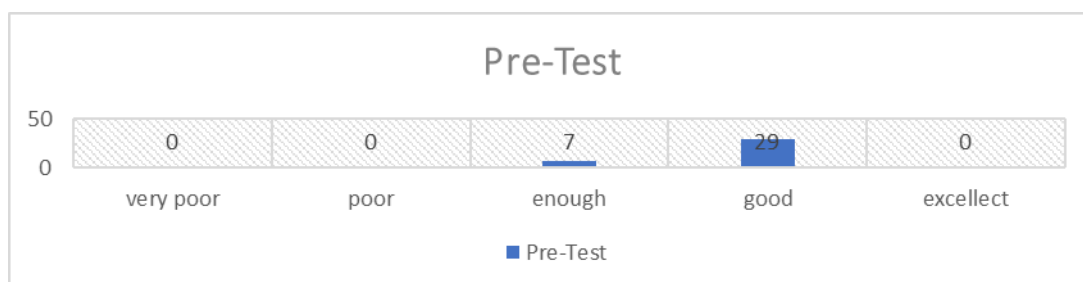


Diagram 1. proved that most students had good category pronunciation for all 20 words. Even though, there were still 7 students left with enough category. None of them got very poor, poor and excellent criteria in the pre-test.

After given the test in the form of pronouncing 20 words one by one, the researcher applied the treatment using ELSA application as a learning media to improve pronunciation ability of the students.

Table 5. The Experiment Class Students' Post-Test

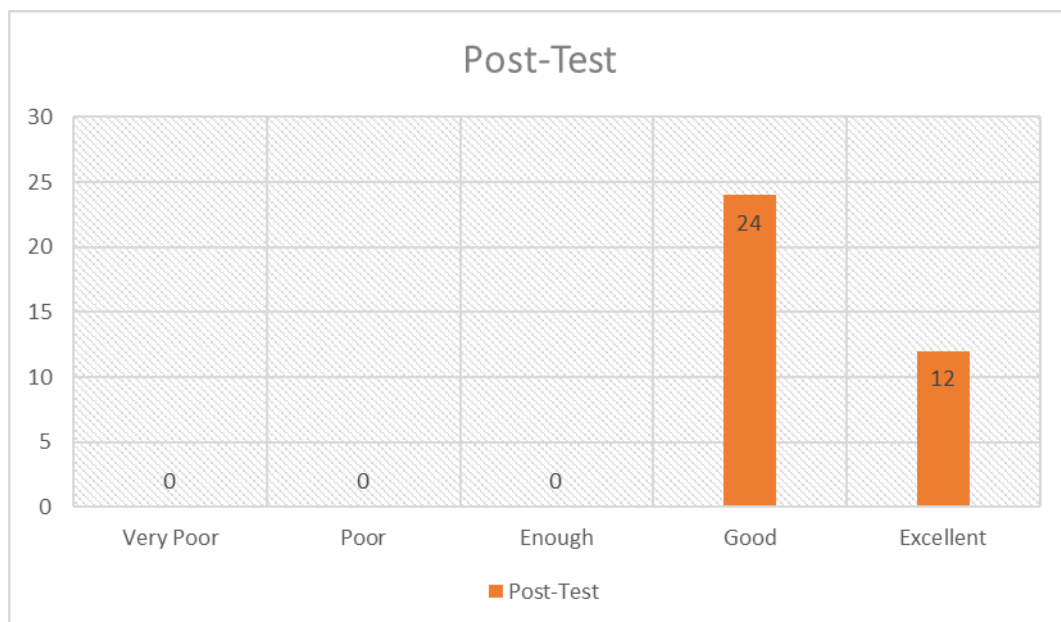
Score Interval	Total Students	Relative %	Categories
0-20	0	0%	Very Poor
21-40	0	0%	Poor
41-60	0	0%	Enough
61-80	24	66.7%	Good

81-100	12	33.3%	Excellent
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Based on the results above, it can be inferred that 24 students (66.7%) received scores 61-80, 12 students (33.3%) received scores 81-100, 0 students (0%) received scores 0-20, 0 students (0%) received scores 21-40, 0 students (0%) received scores 41-60.

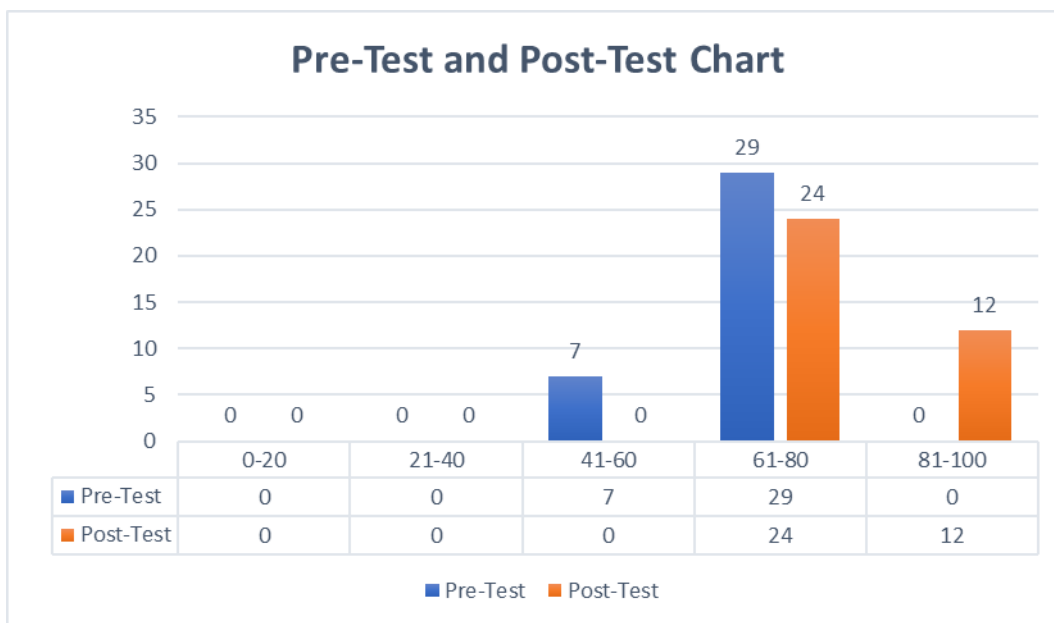
It is shown the result above that post-test score is changed after receiving the treatment. as in the table 4.6 which can be seen in the table above, there was no student who received a grade very poor, poor and enough. Besides, most of the students are received good criteria (66.7%) and there were 12 students who got excellent criteria (33.3%).

Diagram 2. The Result of the Post-Test Chart



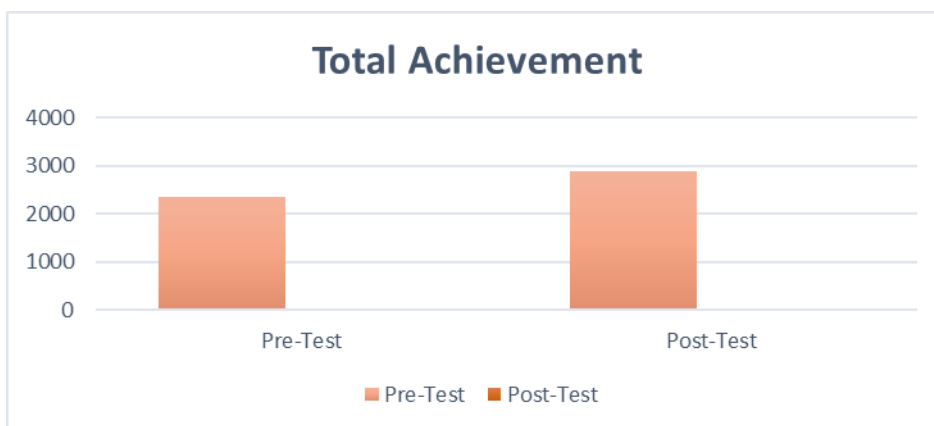
Diagrams 1 and 2 show that there is a clear difference in the test results of students before and after using the ELSA application as a learning media. Diagram 2 is shown that the majority of students who achieved good criteria can pronounce words well and without any errors, but without the accent of a native speaker. And for those students who received the excellent category can pronounce words clearly and accurately using a native speaker's accent.

Diagram 3. Result Score of Pre-Test and Post-Test



According to diagram 3., where 2368 is the total score gained on the pre-test and 2883 is the total score gained on the post-test, there are clearly seen improvements in performance between the two tests. The sum points that students received from their both tests bring the total 515. The post-test result is higher than the pre-test score.

Diagram 4. The Total Achievement of the Students' Test



The data from the students' pre- and post-tests are analyzed in the following part below:

a. Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	pretest	66.28	36	7.905	1.318
	posttest	80.08	36	5.146	.858

Figure 3.1 Paired Samples Statistics

Based on the table above, the paired-sample's statistics, the mean score in the pre-test was 66.28 and the mean score in the post-test was 80.08, where N was the total number of samples 36. The pre-test standard deviation was 7.905, and the treatment's post-test implementation standard deviation was 5.146. Therefore, the pre- and post-test standard error means were 1.318 and 0.858.

b. Paired Samples Correlations

		N	Correlation	Significance	
				One-Sided p	Two-Sided p
Pair 1	pretest & posttest	36	.754	<,001	<,001

Figure 3.2 Paired Sample Correlations

There is a significant correlation between utilizing the ELSA application and not using it in the test. Based on the analysis above, it can be seen from the significance score (0.001) < α (0.05). it can be concluded, the table of a paired sample correlation above, which shows a high correlation between samples, proved this was the case. The numerical value of pre-test and post-test correlation was (0.754) and numerical significance was (0.001).

c. Paired Samples Test

		Paired Differences					Significance			
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	One-Sided p	Two-Sided p
					Lower	Upper				
Pair 1	pretest - posttest	-13.806	5.253	.875	-15.583	-12.028	-15.770	35	<,001	<,001

Figure 3.3 Paired Samples Test

The result of T-test analysis is shown in the table 4.9. The mean differences between pre-test and post-test was (-13.606), standard deviation was (5.253) and the standard error mean was (0.875). The lower differences (-15.583) and the upper differences (-12.028) with a degree of freedom (df) = 35 (36-1) and significance of two tailed was (0.001). the T-test value was 15.770,

while T-table value was 2.030, indicating that the T-test value was higher (15.770 > 2.030). For that reason, it can be concluded that the result of the hypothesis alternative (H1) was accepted while the null hypothesis (H0) was rejected.

From the explanation above, it can be described that there was a significance difference in the results before and after the treatment. Therefore, the use of ELSA application as a learning media approach has significant impact on the improvement of students' pronunciation. This application can help students to improve their pronunciation abilities.

Discussion

Based on table 3.2 and 3.5, the total sample of this research included 36 students. Before and after implementing the use ELSA application, the researcher conducted a test. The researcher used a statistical test with a paired sample T-test presented by SPSS 25.00 version to prove that the use of ELSA application as a learning media is an effective approach to improve students' pronunciation ability. As a result, T-test is used to compare the hypotheses of two samples. This study aims to prove whether or not students in the experimental class who use the ELSA application for learning purposes may improve their pronunciation before and after treatment.

Tables 3.2 and 3.5 showed that a total of 36 students were included in the research sample. The researcher conducted a test both before and after the use of the ELSA application. The use of the ELSA application as a tool for learning is an effective approach to help students improve their pronunciation, as proven by the statistical test with a paired sample T-test that was provided by SPSS 28.00 version. Thus, the T-test is used to compare the hypotheses between two samples. The purpose of this study is to prove whether or not using experimental class students who use the ELSA application for learning may enhance their pronunciation both before and after treatment.

Conclusion

The conclusions of the study on the implementation of Elsa to help students in 8th grade SMPN 13 Jakarta improve their pronunciation learning accomplishment in the academic year 2023–2024 are as follow:

1. The Elsa application provides appropriate theories and simple-to-follow instruction for effectively helping the 8th grade students of SMPN 13 Jakarta.
2. The Elsa application provides a learning tool that can improve students' motivation and attitude because of its user-friendly design and fun features on smartphones.
3. The Elsa application shows to be effective in helping 8th grade SMPN 13 Jakarta students improve their pronunciation, as proven by an average score of 68.78 on the pre-test and 80.08 on the post-test. And t-test value is higher than t-table (15.770 > 2.030).

References

- Berry, D. M. (2021). Level up your pronunciation: Impact of a mobile game. *Mextesol Journal*, 45(1), 1–12.
- Creswell, J. W., & Creswell, J. D. (2018). Mixed Methods Procedures. In *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*.
- Ericsson, K. A., Hoffman, R. R., Kozbelt, A., & Williams, A. M. (2018). *The Cambridge Handbook of Expertise and Expert Performance* (A. Kozbelt, K. A. Ericsson, & R. R. Hoffman (eds.); 2nd editio). Cambridge University Press. <https://doi.org/10.1017/9781316480748>
- Johnson, L., Adams, B., Estrada, V., & Freeman, A. (2014). Horizon Report: 2014 K-12 Edition. In *Horizon Report*. <https://doi.org/ISBN 978-0-9914828-5-6>
- Keiler, L. S. (2018). Teachers' roles and identities in student-centered classrooms. *International Journal of STEM Education*, 5(1). <https://doi.org/10.1186/s40594-018-0131-6>
- Lasut, F., Liando, N. V. F., & Rombepajung, P. (2022). *STUDENTS' PERCEPTION ON THE USE OF VLOG AS LEARNING MEDIA FOR EF SPEAKING SKILL*. 11(1), 1–14.
- Rinaepi, Rosa, H., & Azi, R. N. (2022). *THE EFFECTIVENESS OF ELSA SPEAK APPLICATION TO IMPROVE*. 3(1), 28–33.
- Ziegenfuss, R., Odhiambo, E., & Keyes, C. (2014). How Can We Help Students Who Are English Language Learners Succeed?. *Current Issues in Middle Level Education*, 19(1), 58–62.