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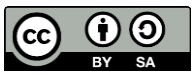

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The Effectiveness of Suno AI (Artificial Intelligence) Based English Song to Improve Student's Vocabulary

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Abstract

This study investigates the effectiveness of Suno AI, an artificial intelligence-based English song learning tool, in improving vocabulary acquisition among eighth-grade students at SMPN 1 Tahunan. The background of this study stems from challenges students face when learning vocabulary through conventional methods. The purpose of this study is to find out whether Suno AI can significantly improve students' vocabulary acquisition compared to traditional methods and to describe how it impacts student engagement and motivation. A quasi-experimental design was used, involving 34 students in the experimental group, while the control group received traditional instruction. Suno AI is a digital platform that combines artificial intelligence with musicology to create engaging, song-based learning materials. Pre-test and post-test data were analyzed using the Shapiro-Wilk test for normality, Levene's test for homogeneity, and an independent samples t-test. The results showed a significant improvement in the experimental group ($p = 0.00 < 0.05$), indicating that AI-powered tools can enhance vocabulary acquisition, engagement, and retention. This study highlights the potential of AI in language education and contributes to the development of more interactive and effective vocabulary learning strategies. Observations and interview note also revealed increased student motivation and participation when using Suno AI.

Keywords: *vocabulary mastery, artificial intelligence, Suno AI; English learning, and educational technology*

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Introduction

English plays a crucial role in education as a global language used for communication and knowledge dissemination, particularly in the era of digital transformation(Atasheva, 2024; Saddina, 2021) In Indonesia, English is an integral part of the educational curriculum, focusing on four core skills: reading, listening, writing, and speaking. Despite its significance, English language teaching (ELT) continues to face various challenges, including limited teaching resources, monotonous instructional methods, and low student motivation(Mardhiyah, 2023). Among these challenges, vocabulary acquisition remains a major obstacle for students, as mastering vocabulary is essential for developing overall language proficiency(Nurammida et al., 2024).

Vocabulary learning is a fundamental component of English proficiency, influencing students' abilities to read, write, listen, and speak effectively(Haque, n.d, 2024). However, students often struggle with vocabulary acquisition due to difficulties in understanding word meanings, retaining new words, and applying them in appropriate contexts(Lumbanraja, 2024). Traditional vocabulary learning methods, such as rote memorization and textbook exercises, often fail to engage students and lead to ineffective retention (Fauziningrum et al., 2023). Therefore, there is an urgent need for innovative approaches to vocabulary learning that enhance student engagement and comprehension.

With the advancement of digital technology in education, artificial intelligence (AI) has emerged as a potential solution to these challenges (Aditama et al., 2022; Jamaliyah & Wulandari, 2022). AI-powered learning tools can provide interactive and personalized learning experiences, making vocabulary acquisition more effective and enjoyable (Coccia, 2021). One such AI-based tool is Suno AI, an application that integrates artificial intelligence with musicology to facilitate language learning through songs (Pokhrel, 2024; Pratomo, 2024).

Suno AI leverages AI-generated music and lyrics to enhance vocabulary retention, pronunciation, and comprehension, providing an engaging alternative to traditional learning methods (Hijriyah et al., 2025). Studies have shown that AI-assisted learning, including Suno AI, significantly improves students' vocabulary mastery, motivation, and listening skills compared to conventional approaches (Nezhyva et al., 2025). Despite the growing integration of AI in language education, limited research has specifically explored the impact of Suno AI on vocabulary acquisition among junior high school students. Most existing studies on AI in ELT focus on general language skills or writing enhancement through tools like Grammarly and ChatGPT (Pasaribu & Sibagariang, 2025). In this study, in addition to using tests as research results, this study also used observation notes and interview notes as research instruments in collecting data.

Observation notes and interview notes are fundamental qualitative data collection methods used to gain in-depth understanding of human behavior, experiences, and interactions within natural settings. Observation notes allow researchers to record behaviors, environmental contexts, and interactions in real time, offering a holistic view of the phenomena under study. These notes often include descriptive and reflective content, which support the interpretation of patterns and emerging themes(Bingham, 2023). In educational research, observation notes help capture the nuances of classroom dynamics, teaching methods, and student responses that may not be easily articulated in formal interviews.

Interview notes serve as a complementary data source in collecting information related to immediate impressions, emotional reactions, and contextual insights during or after the interview. These notes allow the researcher to document implied or non-verbal information, significant pauses, and follow-up reflections that enrich the depth of the interview data. The integration of interview notes into the analysis process strengthens the data and increases credibility, especially in case studies and narrative inquiries(Creswell & Poth, 2016). Together, these notes play an important role in ensuring a comprehensive and trustworthy understanding in a complex qualitative setting.

The gap in research regarding Suno AI's effectiveness in vocabulary mastery, particularly in an Indonesian educational context, highlights the need for further investigation. The objectives of the research are 1) to find out whether the use of Suno AI significantly enhance students' vocabulary acquisition compared to traditional learning methods and 2) to describe how Suno AI impact student engagement and motivation in vocabulary learning.

Method

This study employed a quantitative approach using a quasi-experimental design to determine the effectiveness of Suno AI, a song-based artificial intelligence tool, in enhancing students' vocabulary acquisition, supported by qualitative data from observation and interviews (Jhonson, 2019). in improving the vocabulary mastery of eighth-grade students at SMPN 1 Tahunan. A quasi-experimental design was chosen over other research methods because it allows for the comparison between an experimental class and a control class while maintaining the practicality of conducting research in a real classroom setting(Siedlecki, 2020).

Unlike true experimental designs that require random assignment, a quasi-experimental approach is more feasible in educational research, where students are already grouped into classes. This design enables researchers to assess the effectiveness of Suno AI by comparing vocabulary mastery improvements between students who receive AI-based instruction and those who follow traditional learning methods.

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A purposive sampling technique was employed to select participants based on specific criteria. As suggested by(Nyimbili & Nyimbili, 2024). Purposive sampling ensures that the selected sample aligns with the study's objectives. The sample consisted of 34 students from class VIII G, chosen from a total population of 272 eighth-grade students. The selection was based on students' vocabulary proficiency levels, with class VIII G identified as having middle-to-low vocabulary scores. This criterion was established through an initial assessment and teacher recommendations, ensuring that the participants represented students who would benefit most from vocabulary intervention using AI.

Research instruments:

Test

In this study, researchers used a multiple-choice test of 20 questions that had been validated, in order to obtain results between the pre-test and post-test to measure the difference between the experimental class and the control class.

Observation Note

During the research process, the researcher conducted classroom observations in every learning session involving the use of Suno AI in the experimental class. The observations focused on student engagement, participation, and responses toward the AI-assisted vocabulary learning activities. Notes were taken to document student behavior, interaction with the learning materials, and their enthusiasm throughout the sessions. This qualitative data supported the analysis of students' learning experiences beyond test results.

Interview Note

In this study, the researcher also conducted interviews in the form of guided questions and answers with students from the experimental class who used Suno AI for vocabulary learning.

Pre-test and Post Test Implementation

The research instrument used in this study was a vocabulary test consisting of 20 multiple-choice questions, which was validated for content validity(Aithal & Aithal, 2020). The test was designed to measure students' vocabulary mastery before and after the treatment. The pre-test was conducted before implementing Suno AI, and the post-test was administered after the intervention to evaluate improvements in vocabulary skills. The test questions were developed based on the curriculum standards and Bloom's Taxonomy, ensuring they assessed different levels of vocabulary comprehension, including word meanings, form, grammar, and Verb.

The 20 questions used as pre-test and post-test questions consist of several types of questions the distribution is as follows:

form (15%)
grammar (50%)
Verb (Use) (15%)
word of meaning (20%)

The experimental class underwent a six-session treatment using Suno AI, while the control class continued with traditional vocabulary learning methods. The implementation of Suno AI followed a structured procedure:

1. Session 1 (Introduction SUNO AI)
2. Session 2 (Vocabulary Practice)
3. Session 3 (Speaking and Pronunciation)
4. Session 4 (Grammar Focus)
5. Session 5 (Application and Review)
6. Session 6 (Post-Test Assessment)

Throughout the six sessions, Suno AI's interactive features helped maintain student engagement, making vocabulary learning more enjoyable and effective. Before conducting the study, ethical approval and research permissions were obtained. The researcher secured approval from Mr. Mahaj Khairunnas, S.Pd., the eighth-grade English teacher, and Drs. Mochammad Sodiq, the principal of SMPN 1 Tahunan. Both school authorities acknowledged the study's objectives and granted permission for classroom implementation. Parental consent was also obtained to ensure students' participation in the study aligned with ethical research guidelines.

For data analysis, inferential statistical methods were used, specifically the T-test, to test the research hypothesis and determine statistical significance. The analysis was conducted using SPSS version 27, following the approach outlined by (Fiandini et al., 2024). The T-test results helped assess whether the vocabulary mastery of students in the experimental class improved significantly compared to those in the control class.

Results

The data used in this study were obtained from the results of the pre-test, post-test, and observation note during learning session of students in class VIII of SMPN 1 Tahunan. Especially the sample of this study, namely class VIII G. The pre-test data of this study were collected when the learning treatment using Suno AI media to teach students had not yet been implemented. After the learning treatment using Suno AI media to teach students in class was implemented. Including providing learning materials, post-test data were collected.

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Before starting the treatment, an initial test was conducted to determine the extent of students' knowledge in learning vocabulary. This test was followed by 68 students. With a different initial test schedule due to the different schedules for the two classes. namely on January 22, 2025 and on January 31, 2025

Pre-Test

The Importance of Normality and Homogeneity Tests in Independent Sample T-Test before performing an independent sample t-test, it is essential to ensure that the assumptions of normality and homogeneity of variances are met. The normality test is important because the t-test is a parametric test that assumes the data in each group are normally distributed. If this assumption is violated, especially in small samples, the results of the t-test may not be reliable or valid (Ghasemi & Zahediasl, 2012).

Equally important is the homogeneity of variances, which refers to the assumption that both groups have similar or equal variances. This is tested using Levene's Test. If variances are significantly different (i.e., the assumption is violated), it can affect the accuracy of the test results, particularly the calculation of the standard error and confidence intervals. If this assumption is not met, researchers may need to adjust the t-test by using the "equal variances not assumed" option or consider using a non-parametric alternative such as the Mann-Whitney U test (Field, 2024).

Therefore, testing for normality and homogeneity helps ensure that the t-test produces accurate, valid, and generalizable results. The Shapiro-Wilk test was used with SPSS 27 to conduct the normality test. When using the Shapiro-Wilk test, it is taken into account that the number of samples used is less than 50. If the significance value is more than 0.05, the Shapiro-Wilk test results are considered normal. according to a research conducted by (Hidayaty et al., 2022) that research uses the normality test to be said to be normal if sig. more than 0.05 like the results of this study which states that sig. 0.052> 0.05, it can be declared normal and it can be stated that the experimental class and control class are normal and can be continued with the next test.

Beside that according to a research conducted by (Sequeira & Borges, 2024) that in his research states that the shapirowilk test is a statistical test used to assess whether certain data samples follow a normal distribution, this test is very useful if the sample size is small to medium. If the sig. value resulting from this test is less than 0.05 then the null hypothesis is rejected, this indicates that the data does not follow a normal distribution.

Table 1. Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Experiment	**.138**	**34**	**.102**	**.942**	**34**	**.068**
Control	**.173**	**34**	**.012**	**.947**	**34**	**.098**

a. Lilliefors Significance Correction

Based on the Shapiro-Wilk normality test using SPSS 27, the significance values for the experimental class (0.068) and the control class (0.098) are both above 0.05. This indicates that the data are normally distributed, meeting the assumption for parametric tests such as the independent samples t-test. Shapiro-Wilk test results are considered normal. according to a research conducted by (Hidayaty et al., 2022) that research uses the normality test to be said to be normal if sig. more than 0.05 like the results of this study which states that sig. 0.052> 0.05 (Vb et al., 2024).

It can be declared normal and it can be stated that the experimental class and control class are normal and can be continued with the next test. Beside that according to a research conducted by (Sequeira & Borges, 2024) that in his research states that the shapirowilk test is a statistical test used to assess whether certain data samples follow a normal distribution, this test is very useful if the sample size is small to medium. If the sig. value resulting from this test is less than 0.05 then the null hypothesis is rejected, this indicates that the data does not follow a normal distribution.

Table 2. Descriptive Statistics

	N	Range	Minimum	Maximum	Sum	Mean	Std. Deviation	Variance
Experiment	34	40	15	55	1010	29.71	10.867	118.093
Control	34	35	15	50	1080	31.76	8.338	69.519
Valid N (listwise)	34							

The experimental group showed greater score variability (mean = 29.71; SD = 10.87) compared to the control group (mean = 31.76; SD = 8.34). The higher variance in the experimental group confirms a wider spread in vocabulary scores, while the control group showed more consistent performance.

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Table 3. Group Statistics

	Class	N	Mean	Std. Deviation	Std. Error Mean
Vocabulary Skill	Experiment	34	29.71	10.867	1.864
	Control	34	31.76	8.338	1.430

Based on the group statistics, the experimental class (N = 34) had an average vocabulary skill score of 29.71 with a standard deviation of 10.867, while the control class (N = 34) had a slightly higher average score of 31.76 with a standard deviation of 8.338. This indicates that, on average, the control group outperformed the experimental group in vocabulary skills. However, the relatively large standard deviations suggest a wide spread of scores within both groups. The standard error of the mean is 1.864 for the experimental group and 1.430 for the control group, reflecting the variability of the sample means. To determine whether this observed difference in means is statistically significant, further inferential analysis, such as an independent samples t-test, is required.

Table 4. Tests of Homogeneity of Variances

		Levene Statistic	**df1**	**df2**	**Sig.**
Vocabulary Skill	**Based on Mean**	**2.353**	**1**	**66**	**.130**
	Based on Median	**2.456**	**1**	**66**	**.122**
	Based on Median and with adjusted df	**2.456**	**1**	**64.938**	**.122**
	Based on trimmed mean	**2.622**	**1**	**66**	**.110**

Levene's Test showed a significance value of 0.130 (> 0.05), indicating that the data are homogeneous. This meets the assumption for using the independent samples t-test. Similar findings were supported by (Dewi et al., 2024; Jamal, 2025) state that a sig. value above 0.05 confirms equal variances and allows parametric testing.

Table 5. 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
Vocabulary skill	Equal variances assumed	2.353	.130	-.876	66	.384	-2.059	2.349	-6.749	2.631
	Equal variances not assumed			-.876	61.854	.384	-2.059	2.349	-6.755	2.637

The Independent Samples T-Test showed a Sig. (2-tailed) value of 0.384 (> 0.05), indicating no significant difference between the group means. The t-value is -0.876, and the confidence interval includes zero, supporting this result. Levene's Test (Sig. = 0.130) confirms equal variances. Therefore, the difference in mean scores is not statistically significant and may be due to chance.

Post-Test

Post-test After getting treatment, a post-test was carried out to determine students' Knowledge for acquiring the vocabulary. The test was taken by 68 students from two classes. The post-test was conducted on 19th february 2025 and on 20 february 2025

Table 6. Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Experiment	.145	34	.067	.946	34	.093
Control	.191	34	.003	.943	34	.073

a. Lilliefors Significance Correction

The Shapiro-Wilk test showed significance values of 0.093 (experimental) and 0.073 (control), both above 0.05, indicating that the data are normally distributed. This meets the normality assumption required for parametric tests like

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the Independent Samples T-Test.

Table 7. Descriptive Statistics

	N	Range	Minimum	Maximum	Sum	Mean	Std. Deviation	Variance
Experiment	34	40	35	75	1785	52.50	10.958	120.076
Control	34	40	20	60	1265	37.21	8.456	71.502
Valid N (listwise)	34							

Descriptive statistics show that the experimental group (M = 52.50, SD = 10.96) outperformed the control group (M = 37.21, SD = 8.46) in vocabulary scores. While both groups had the same score range (40 points), the experimental group had higher average performance, suggesting the effectiveness of the intervention.

Table 8. Group Statistics

		N	Mean	Std. Deviation	Std. Error Mean
Vocabulary Skill	Experiment	34	52.50	10.958	1.879
	Control	34	37.21	8.456	1.450

Group Statistics show that the experimental group (M = 52.50, SD = 10.96) outperformed the control group (M = 37.21, SD = 8.46) in vocabulary skills. The 15.29-point mean difference suggests that the experimental method had a positive impact, proving more effective than the conventional approach.

Table 9. Tests of Homogeneity of Variances

		Levene Statistic	**df1**	**df2**	**Sig.**
Vocabulary Skill	**Based on Mean**	**2.422**	**1**	**66**	**.124**
	Based on Median	**2.921**	**1**	**66**	**.092**
	Based on Median and with adjusted df	**2.921**	**1**	**65.882**	**.092**
	Based on trimmed mean	**2.511**	**1**	**66**	**.118**

Levene's Test showed a significance value of 0.124 (> 0.05), indicating equal variances between the experimental and control groups. Additional values based

on the median and trimmed mean also support this. Therefore, the homogeneity assumption is met, and the data are suitable for the Independent Samples T-Test.

Table 10. 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
Vocabulary Skill	Equal variances assumed	2.422	.124	6.443	66	.000	15.294	2.374	10.555	20.033
	Equal variances not assumed			6.443	62.013	.000	15.294	2.374	10.549	20.039

Hypothesis testing

The Independent Sample T-test technique was used for hypothesis testing in this study. The sig value of the Independent sample T-test (2. Tailed) must be less than 0.05

The following decisions should be made using the significant values of SPSS 27.

H1: if the sig value. (2. Tailed) < 0.05 then Suno AI media is effective on influencing the dependent variable. vocabulary mastery in class VIII students of junior high school in jepara.

H0: if the value of Sig. (2-tailed) > 0.05 then Suno AI media is not effective on vocabulary mastery of 8th grade students of SMPN 1 Tahunan.

The Independent Samples T-Test shows a significant difference between the groups.

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Sig. (2-tailed) = 0.000 (< 0.05),

Findings from the Pre-Test

The baseline data showed that both groups were equivalent before the intervention, with normally distributed scores (p > 0.05), equal variances (p > 0.05), and sig 2-tailed (p = 0.384) > 0,05

Findings from the Post-Test

The post-test results that normal data distribution (p > 0.05), equal variances (p > 0.05), and sig 2-tailed (p = 0,000) < 0,05

Observation Note

Observation notes are an important qualitative data collection tool used in educational research to obtain real-time data related to behavior, interactions, and contextual factors in a learning environment. They allow researchers to document or record the learning progress experienced in the classroom, providing rich descriptive explanatory insights that cannot be obtained through quantitative methods(Gaballo, n.d, 2019). Past research emphasizes for current research the importance of structured and systematic observation as a means to evaluate teaching effectiveness, student engagement, and implementation of instructional interventions(Creswell & Creswell, 2017).

Class: Experimental (Using SUNO AI) 8G
Date: January 22-17 February 2025
Time: 08.20-10.00 WIB and 11.00-12.20 WIB
Learning session: Vocabulary learning using English songs via SUNO AI
Research focus: to describe how Suno AI impact student engagement and motivation in vocabulary learning.

Observation notes:

1. General Classroom Environment

- How was the overall atmosphere of the class?
- Were students showing interest and enthusiasm at the beginning of the lesson?

Notes:

At the first and second meetings, the class atmosphere was a bit awkward and confused because students still hadn't learned anything related to artificial intelligence. but after the third to fifth meetings, students were able to adapt to using artificial intelligence based on digital platforms.

However, from the first to the fifth meeting, students always showed their high level of enthusiasm, starting with frequently asking questions related to the use of SUNO, how to make songs, other functions of SUNO and so on.

2. Student Engagement

- Were students actively using Suno AI?
- Were they focused on the task or easily distracted?

- Did they ask questions or show curiosity?

Notes:

34 students were actively involved in using SUNO AI, although 14 of them still tend to be passive and need help in using SUNO AI.

In the first and second meetings, students' focus was still easily distracted because there were pauses in the use of SUNO AI by friends who had just learned to use SUNO AI.

During learning using SUNO AI, students show curiosity by often asking questions related to the benefits of SUNO AI in other learning, whether it can be used for learning in other subjects and how to create songs according to their own wishes and musical styles.

3. Motivation Indicators

- Did students appear motivated to complete the vocabulary tasks?
- Were they expressing enjoyment or frustration?
- Any verbal or non-verbal signs of excitement (e.g., smiling, laughter, eagerness)?

Notes:

Of the 34 students in the experimental class (8G), only 20 students were motivated to complete the vocabulary exercises seriously, and for the other 14 students were motivated but still passive in completing the vocabulary exercises and still needed guidance.

During learning using SUNO AI, students always show happy expressions, because in SUNO AI learning, it can be combined with various motor games, so that it can hone students' motor skills.

There are signs that show students feel happy, smiling, laughing and excited, for example students who were initially passive and always silent in learning, become energetic in the sense that they often convey what they want to convey, often express opinions when learning using SUNO AI.

4. Collaboration and Participation

- Did students work together or discuss with peers while using Suno AI?
- Did they volunteer to share answers or ideas?

Notes:

During learning using SUNO AI, researchers create two schemes, namely working with peers in groups and discussing with peers to create songs using SUNO AI, as well as determining the songs that want to be made to become learning materials together, in SUNO AI learning researchers also provide opportunities for students to discuss before making songs that will be used as learning materials.

During learning using SUNO AI, students often volunteer their ideas regarding the genre of songs that will be used in making songs using SUNO AI as learning material, in addition, other students voluntarily provide the correct

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answers, if there are students who are not correct in answering questions asked by researchers randomly.

5. Teacher's Role and Interaction

- How did the teacher facilitate the use of Suno AI?
- Did the teacher provide support or clarification when needed?

Notes:

During learning using SUNO AI, teachers facilitate and provide full support related to this research, both allowing the use of student resources (class) fully and freely, in addition all the equipment needed in this learning research using SUNO AI is provided by teachers and staff of SMPN 1 Tahunan.

During the research process, the teacher always provided support and opinions and even clarification when needed, for example when choosing a class to conduct research, the teacher gave full rights to the researcher to conduct research on any day, and in any classroom. However, the teacher also gave directions for this research to run smoothly, namely by choosing class 8G as the experimental class, because class 8G has a lower vocabulary level than the other 8 classes. In addition, the teacher also assisted the researcher in clarifying as well as validating and inputting in making pre-test and post-test questions for grade 8 students, besides that, the teacher also helped the researcher in determining learning materials that were in accordance with the time and conditions, so that the researcher could assist the teacher in teaching in class 8G while conducting research in class 8G.

without hampering the process of delivering material at the school, so in conducting research, researchers also help teachers deliver material so that students get the same material as other classes, so they are not left behind. It can be concluded that teachers fully support and assist researchers whenever and wherever they are at school and while in the research area.

6. Notable Behaviors / Quotes

- Any interesting student comments or moments?
- Anything that stood out during the session?

Notes:

During the research process using SUNO AI, there were many interesting moments from students, namely students for the first time learning to use laptops, as well as using projectors, it seems that before the researchers came, students only got a conventional / traditional learning process only by reading books from school, without utilizing school facilities, such as projectors even so, in SMPN 1 Tahunan there are special subjects that discuss computers, but what happened was the opposite, students in the experimental class seemed to be the first time directly applying the knowledge gained in special computer subjects to classroom learning,

in class and using laptop media, projectors and artificial intelligence, namely SUNO AI.

Therefore, out of 34 students in the experimental class, only 20 students could follow well and actively in the learning process using SUNO AI, and the remaining 14 students could follow but needed more intense guidance than other students. However, all 34 students agreed that the learning process using SUNO AI could increase motivation, and make students happy in learning.

During the learning process using SUNO AI, there is the most stood out, namely when students who are often silent and rarely express ideas change into students who are active in expressing their opinions regardless of whether they are right or wrong, besides that, another most stood out is that students are still a bit awkward in operating a laptop to create a command in using SUNO AI, especially in the way students type, they are still not used to it and often make mistakes in writing when typing.

Interview Note

Interview notes are an important qualitative data collection tool that provides rich and detailed insights into participants' perspectives, experiences, and opinions. Interview notes allow the researcher to elicit implied or non-verbal information, contextual information, and reflective observations that may not be apparent in audio recordings or transcripts alone. In recent educational research, interview notes have become increasingly valuable in and increase confidence in findings, especially when exploring student experiences and pedagogical effectiveness(Creswell & Poth, 2016).

Subject Interview: VMR

Date: February 17, 2025

Time: 12.10 PM

Location: classroom 8G, SMPN 1 Tahunan

Interviewer: Tri Akhsanul Amal (Researcher)

Question 1:

what do you feel and get after learning using SUNO AI?

Student's Answer:

"I feel happy in using SUNO AI, but I still feel that I can't understand SUNO AI and apply vocabulary well, even so I am interested in learning SUNO AI artificial intelligence"

Question 2:

What are anything difficult about using Suno AI?

Student's Answer:

"At first, yes. I didn't know how to use the computer well. But after the third meeting,

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I understood how to make the songs with the AI, but I still can't how to pronounce it."

Note: Students can adapt to using SUNO AI even though it takes a long time and he still have difficulty pronouncing the lyrics.

Question 3:

Do you feel more motivated to learn English using this method?

Student's Answer:

"Yes, because it's not boring. I can sing and learn at the same time. Even though sometimes I can't understand the meaning of the lyrics."

Note:

The student expressed increased motivation and enjoyment, showing that the AI-based learning tool had a positive emotional impact even though sometimes he can't understand the meaning.

Interview Note

Subject Interview: AC
Date: February 17, 2025
Time: 12.15 PM
Location: classroom 8G, SMPN 1 Tahunan
Interviewer: Tri Akhsanul Amal (Researcher)

Question 1:

What do you think about learning vocabulary using Suno AI?

Student's Answer:

"I think it is fun and different from the usual class. I like the songs and I can remember the words easily. It makes me want to learn more English."

Note:

The student responded enthusiastically and smiled throughout the interview. He appeared confident and eager to talk about the learning experience.

Question 2:

Was there anything difficult about using Suno AI?

Student's Answer:

"At first, yes. I didn't know how to use the computer well. But after the second meeting, I understood how to make the songs with the AI. It became easier."

Note:

The student acknowledged the initial challenge but emphasized improvement over time, showing adaptability.

Question 3:

Do you feel more motivated to learn English using this method?

Student's Answer:

"Yes, because it's not boring. I can sing and learn at the same time. I feel proud when I understand the meaning of the lyrics."

Note:

The student expressed increased motivation and enjoyment, showing that the AI-based learning tool had a positive emotional impact.

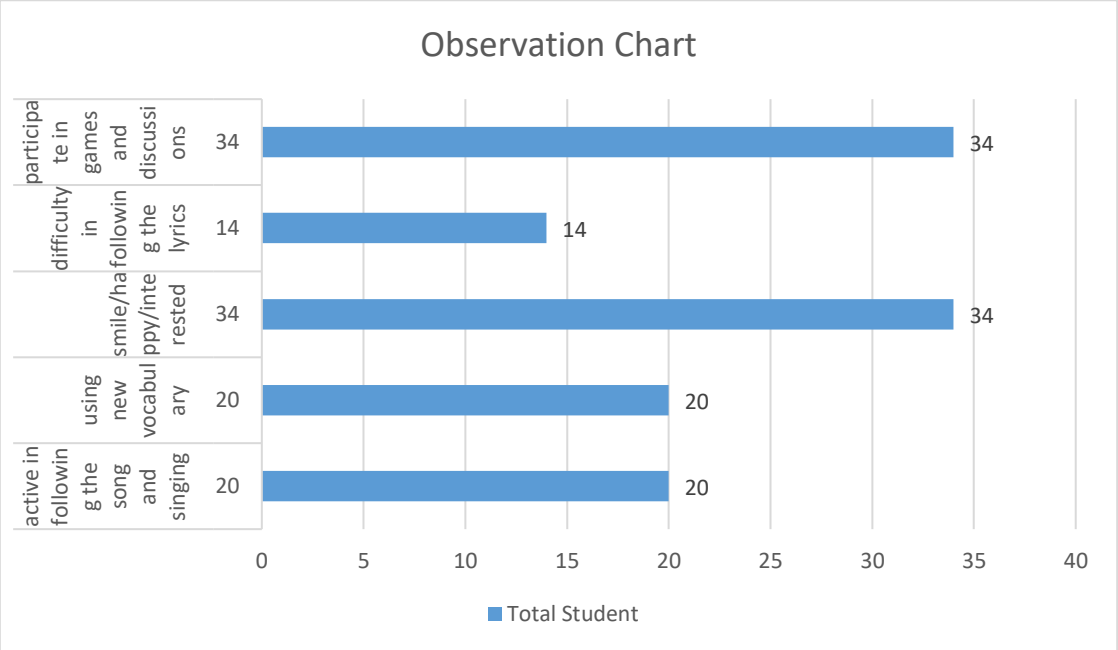

Table 11. Observation Chart

Discussion

The findings from this study indicate that Suno AI significantly contributes to language learning by offering students a novel way to engage with spoken English through artificial intelligence-generated music. The results of the post-test, conducted after the implementation of the treatment using Suno AI, demonstrate a significant improvement in the vocabulary mastery of students in the experimental group compared to those in the control group. The normality assumption was met, as evidenced by the Shapiro-Wilk test with significance values of 0.093 (experimental) and 0.073 (control), both exceeding the 0.05 threshold.

This allowed for the use of parametric statistical tests. Descriptive statistics further showed a noticeable difference in performance, with the experimental group achieving a mean score of 52.50 (SD = 10.96), while the control group obtained a mean score of 37.21 (SD = 8.46). This 15.29-point difference suggests that the integration of Suno AI contributed positively to vocabulary learning

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outcomes. Moreover, the homogeneity of variances was confirmed by Levene's Test (Sig. = 0.124), indicating that the variances between the two groups were equal, thus meeting another assumption for the Independent Samples T-Test.

The t-test results yielded a t-value of 6.443 with a significance level of 0.000 ($p < 0.05$), indicating a statistically significant difference between the groups. These findings support the hypothesis that the use of AI-generated songs through Suno AI has a meaningful effect on students' vocabulary acquisition. Therefore, H1 is accepted, and H0 is rejected. The implementation of vocabulary learning using Suno AI media was carried out in six sessions. In the first session, the researcher introduced Suno AI tool, explaining how AI-generated songs can support vocabulary retention.

Students listened to a sample song created with Suno AI containing target vocabulary and were asked to guess the meanings of the words in the lyrics. The second session focused on active listening, where students identified new vocabulary from the songs, discussed their meanings, and gues meaning word as practice to reinforce learning. In the third session, students worked in groups to create songs using Suno AI and practiced pronunciation by singing their creations, followed by researcher feedback and small group discussions using the new vocabulary.

The fourth session allowed students to independently make songs in groups based on a given theme, and then participate in a "talking stick" game, identifying tense types from the lyrics. In the fifth session, students applied new vocabulary from the song by reading and writing a sentence as a writing task and read as a short speaking vocabulary pronunciation exercise and creating their own songs independently using Suno AI, with researchers providing reviews and reinforcement of previous materials. Finally, in the sixth session, a post-test was conducted to assess vocabulary improvement, followed by a reflection session where students shared their experiences with Suno AI and reviewed the post-test results and observation. The result of observation

General Classroom Environment:

In the first and second meetings, the classroom atmosphere was slightly awkward and confused, as students were unfamiliar with artificial intelligence. However, from the third to fifth meetings, students adapted well to using AI-based digital platforms. Throughout all sessions, students consistently showed high enthusiasm by actively asking questions about SUNO, how to create songs, and its

various functions.

Student Engagement:

A total of 34 students participated in using SUNO AI, although 14 of them remained passive and needed assistance. In the early meetings, some students were easily distracted, especially due to delays caused by others who were still learning to use the platform. Despite this, students showed strong curiosity and asked many questions about the broader use of SUNO AI in other subjects and how to personalize song creation.

Motivation Indicators:

Of the 34 students in class 8G, 20 were highly motivated to complete the vocabulary tasks, while 14 showed interest but needed guidance. Students generally expressed joy during the learning process, especially because SUNO AI was integrated with motor games that enhanced their physical engagement. Non-verbal signs of excitement, such as smiling, laughter, and increased participation, were frequently observed.

Collaboration and Participation:

Students were encouraged to work in groups and discuss their ideas before creating songs with SUNO AI. They actively collaborated, chose genres together, and volunteered ideas. Many also offered correct answers to help peers when needed, showing strong peer support and participation.

Teacher's Role and Interaction:

The teacher fully supported the use of SUNO AI in the classroom, providing necessary resources and allowing flexible scheduling. The teacher also helped the researcher with class selection, test preparation, and material alignment to ensure students in class 8G received the same lessons as other classes. This strong support allowed the research to run smoothly without disrupting the school's curriculum.

Notable Behaviors and Quotes:

A standout moment was seeing students use laptops and projectors for the first time in actual learning, despite having a computer subject at school. Students who were previously quiet became more expressive and confident. However, some still struggled with typing and using laptops efficiently. Nevertheless, all 34 students agreed that using SUNO AI made learning more enjoyable and motivating. Beside that the result of interview state that Both students, VMR and AC, expressed positive experiences with using Suno AI for learning English vocabulary.

Despite initial challenges with computer use and pronunciation, they found the AI-based approach engaging and enjoyable. VMR appreciated the learning

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method but struggled with understanding vocabulary application and lyrics meaning, while AC found it easier over time and felt motivated, especially when she understood the lyrics. Both students reported increased motivation and a sense of pride in their progress.

The result from observation state that 34 student's happy, enjoy and interested learning by using SUNO AI, although there are 14 students who are still a little difficult in learning and using SUNO AI both in procedures and learning to use SUNO AI, even so all students in the experimental class feel happy and interested in learning using SUNO AI. The data interpretation shows that the results of the post-test, conducted after the implementation of the treatment using Suno AI, demonstrate a significant improvement in the vocabulary mastery of students in the experimental group compared to those in the control group.

The normality assumption was met, as evidenced by the Shapiro-Wilk test with significance values of 0.093 (experimental) and 0.073 (control), both exceeding the 0.05 threshold. This allowed for the use of parametric statistical tests. Descriptive statistics further showed a noticeable difference in performance, with the experimental group achieving a mean score of 52.50 (SD = 10.96), while the control group obtained a mean score of 37.21 (SD = 8.46). This 15.29-point difference suggests that the integration of Suno AI contributed positively to vocabulary learning outcomes.

Moreover, the homogeneity of variances was confirmed by Levene's Test (Sig. = 0.124), indicating that the variances between the two groups were equal, thus meeting another assumption for the Independent Samples T-Test. The t-test results yielded a t-value of 6.443 with a significance level of 0.000 ($p < 0.05$), indicating a statistically significant difference between the groups. These findings support the hypothesis that the use of AI-generated songs through Suno AI has a meaningful effect on students' vocabulary acquisition. Therefore, H1 is accepted, and H0 is rejected.

This suggests that innovative learning methods involving artificial intelligence can enhance student engagement and vocabulary retention more effectively than traditional approaches. The results align with previous studies that highlight the positive impact of multimedia and technology-based interventions in language learning. Students found the tool engaging, motivating, and helpful in improving their listening, pronunciation, and vocabulary acquisition. These findings reflect the growing role of AI in transforming traditional language learning paradigms, shifting from rote memorization and static resources to more

interactive, personalized, and dynamic experiences(Zawacki-Richter et al., 2019).

In the context of language and technology learning, Suno AI's ability to produce contextually relevant songs based on prompts allows learners to connect linguistic input with musical output, reinforcing memory retention and emotional engagement. This aligns with the dual coding theory, which posits that information processed through both auditory and visual channels enhances comprehension and recall(Mayer, 2022).

Furthermore, this study resonates with recent literature on AI in language education, which emphasizes that intelligent systems can scaffold learners' progress by offering adaptive feedback and customized content (Holmes et al., 2019). However, several limitations are evident in this study. The small sample size and qualitative nature limit the generalizability of the findings. There was also a lack of a control group, making it difficult to isolate the specific effects of Suno AI from other variables in students' language development.

Additionally, while students reported subjective improvement, objective measures of language proficiency were not rigorously assessed, highlighting a gap for future research. From a pedagogical perspective, teachers can implement Suno AI in the classroom by integrating it into speaking or listening activities, such as having students write prompts to generate songs and then analyze the lyrics for grammar, vocabulary, or pronunciation practice.

Teachers might also use it as a creative project tool, encouraging learners to produce content collaboratively, thereby fostering communicative competence and learner autonomy (Liu et al., 2023).In conclusion, although Suno AI shows promising potential in enhancing the language learning experience, further research with robust methodology is needed to substantiate its long-term impact and effectiveness in other English language skills that have not been studied by

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researchers, such as focusing on English writing skills.

Visual Representation

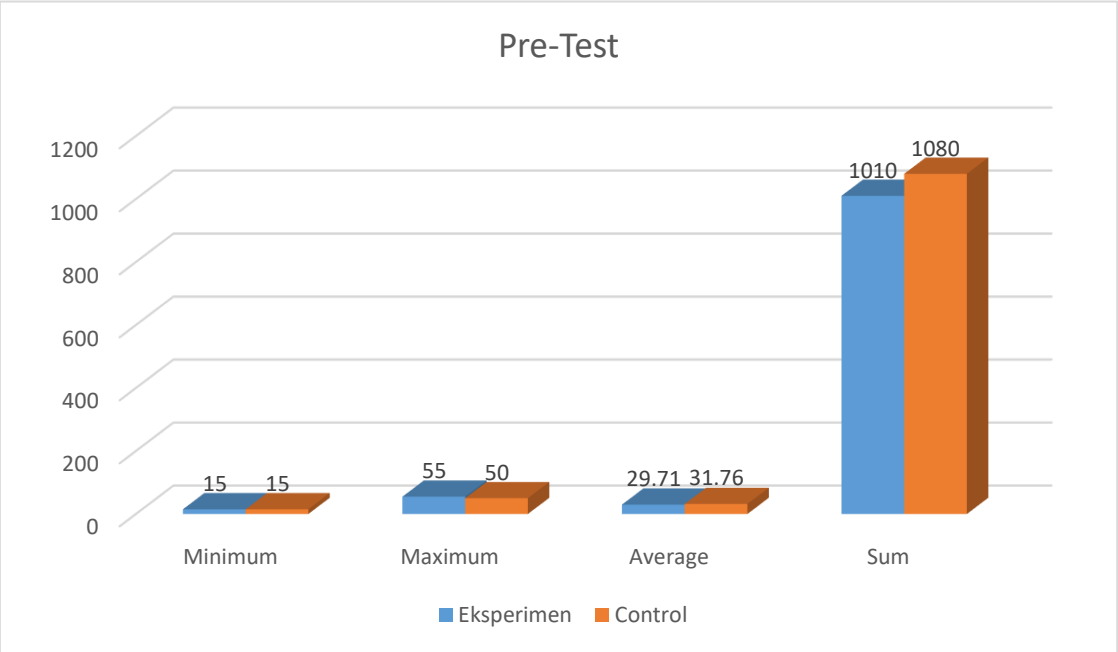

Table 12. Pre-test

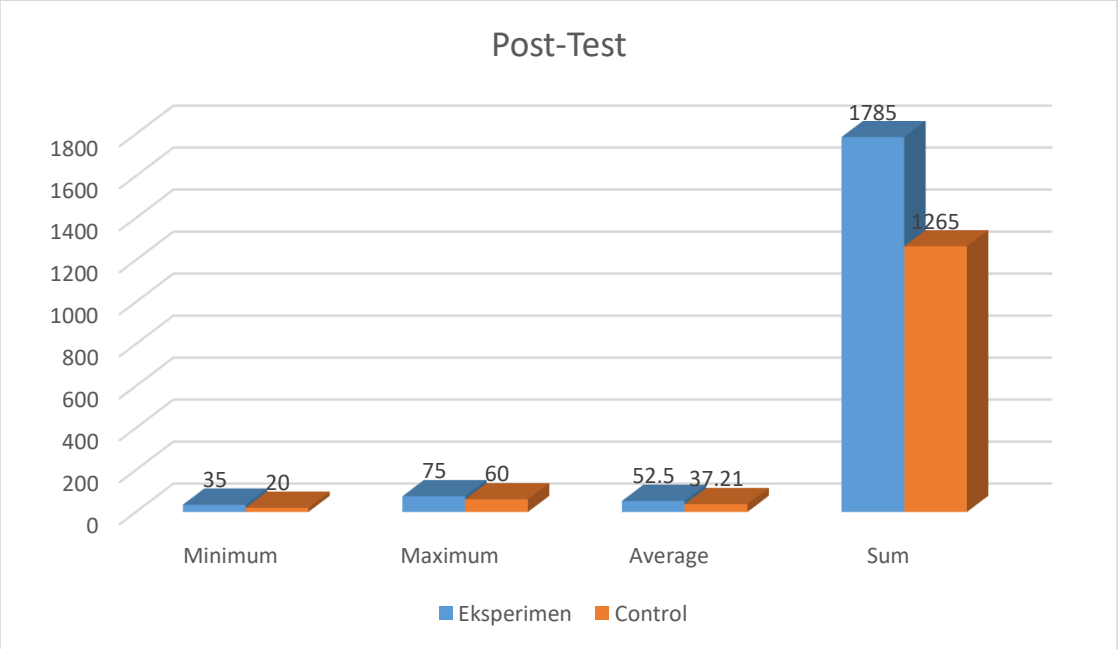

Table 13. Post-test

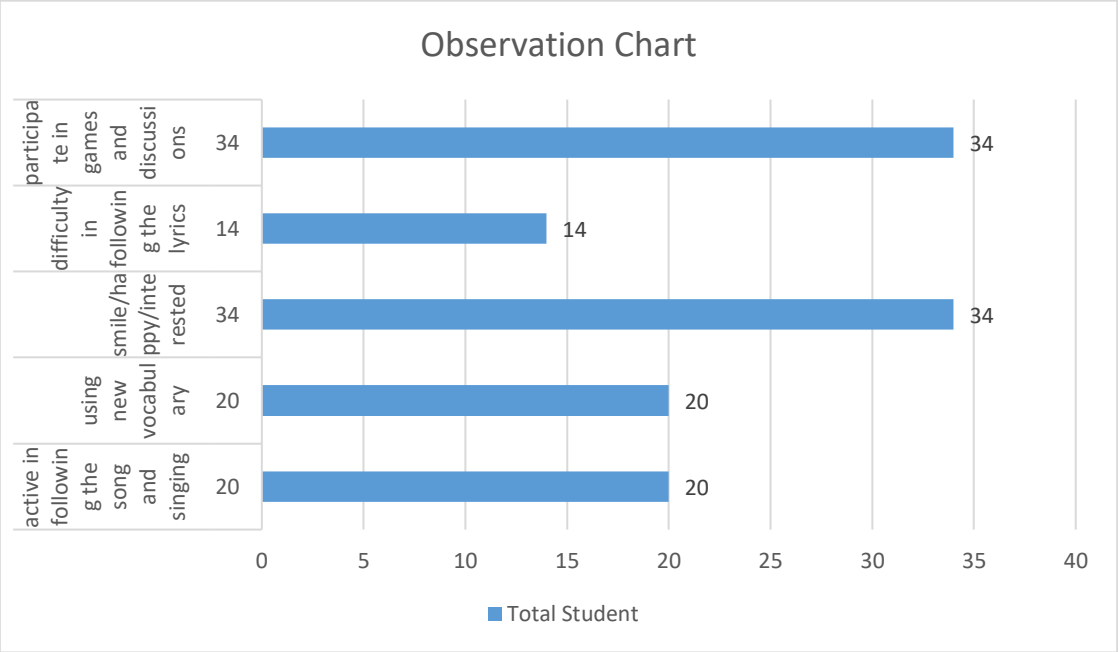

Table 14. Observation Chart

Conclusion

The results of this study demonstrate that the implementation of Suno AI media significantly improved the vocabulary mastery of eighth-grade students at SMPN 1 Tahunan. The learning process was carried out through six structured sessions involving AI-generated songs, vocabulary identification, pronunciation practice, creative group activities, and independent applications of vocabulary in speaking and writing. Statistical tests, including the Shapiro-Wilk normality test, Levene's homogeneity test, and Independent Samples T-Test, confirmed that the data met the assumptions for parametric analysis and showed a significant difference in vocabulary scores between the experimental and control groups (Sig. 2-tailed = 0.000 < 0.05).

These findings suggest that Suno AI is an effective and engaging tool for vocabulary learning. Based on the observation notes, it can be concluded that the use of Suno AI in the experimental class significantly enhanced student engagement, motivation, and classroom interaction during vocabulary learning sessions. Although some students initially experienced confusion and passivity due to unfamiliarity with AI technology, most adapted quickly and demonstrated high enthusiasm, curiosity, and collaborative behavior throughout the sessions.

Students frequently asked questions, smiled, laughed, and actively participated in group tasks, while even previously passive learners began expressing their ideas more confidently. The integration of music and interactive features through Suno AI created a more enjoyable and dynamic learning environment, making vocabulary learning both effective and emotionally engaging for the students.

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Beside that the result of interview state that both students, VMR and AC, expressed positive experiences with using Suno AI for learning English vocabulary. Despite initial challenges with computer use and pronunciation, they found the AI-based approach engaging and enjoyable. Velix appreciated the learning method but struggled with understanding vocabulary application and lyrics meaning, while Aulia found it easier over time and felt motivated, especially when she understood the lyrics. Both students reported increased motivation and a sense of pride in their progress. Future researchers are encouraged to further explore AI-based media especially SUNO AI in various educational settings and English language skills, especially in writing skills, potentially adapting the implementation procedures to different contexts or technologies and with different subject levels.

References

Aditama, M. G., Amelia, R., Pravitasari, H., Education, E. L., Muhammadiyah, U., Batang, K., & Education, E. L. (2022). Implementation of Character Education in English. 10(3), 367–370.

Annisa, N., Syam, A. T., & Masruddin, M. (2022). Teaching vocabulary through the Round Robin Brainstorming Technique. English Education Journal, 13(1), 46-55.

Aithal, A., & Aithal, P. S. (2020). Development and validation of survey questionnaire & experimental data—a systematic review-based statistical approach. International Journal of Management, Technology, and Social Sciences (IJMTS), 5(2), 233–251.

Atasheva, G. (2024). The Importance of the English Language in the Formation of Cross-Cultural Relations. American Journal of Philological Sciences, 4(2), 58–62. https://doi.org/10.37547/ajps/volume04issue02-11

Bingham, A. J. (2023). From Data Management to Actionable Findings: A Five-Phase Process of Qualitative Data Analysis. International Journal of Qualitative Methods, 22, 1–11. https://doi.org/10.1177/16094069231183620

Coccia, M. (2021). Technological innovation. Innovations, 11, I12.

Creswell, J. W., & Creswell, J. D. (2017). Research design: qualitative, quantitative, and mixed methods approaches. Sage Publications.

Creswell, J. W., & Poth, C. N. (2016). Qualitative inquiry and research design: Choosing among five approaches. Sage Publications.

Dewi, S. S., Muhammad, A., Taufan, I., Muhamad, A., Akbar, I., Nurannisa, A., Damayanti, W., & Wahyuni, N. (2024). Enhancing Students' Logical Thinking through Ethnomathematics-Based Augmented Reality of Bola Soba Character Facades. 5(3), 520–528. https://doi.org/10.46843/jiecr.v5i3.1033

Fauziningrum, E., Sari, M. N., Rahmani, S. F., Riztya, R., Syafruni, S., & Purba, P. M.

(2023). Strategies used by English teachers in teaching vocabulary. Journal on Education, 6(1), 674–679.

Fiandini, M., Nandiyanto, A. B. D., Al Husaeni, D. F., Al Husaeni, D. N., & Mushiban, M. (2024). How to Calculate Statistics for Significant Difference Test Using SPSS: Understanding Students' Comprehension of the Concept of Steam Engines as Power Plants. Indonesian Journal of Science and Technology, 9(1), 45–108. https://doi.org/10.17509/ijost.v9i1.64035

Field, A. (2024). Discovering statistics using IBM SPSS statistics. Sage Publications Limited.

Gaballo, V. (n.d.). Digital Language Teaching and Learning: A Case Study.

Ghasemi, A., & Zahediasl, S. (2012). Normality tests for statistical analysis: A guide for non-statisticians. International Journal of Endocrinology and Metabolism, 10(2), 486–489. https://doi.org/10.5812/ijem.3505

Haque, A. (n.d.). Teaching Vocabulary in a Digital Era: A Study on Tools and Techniques for Engaging English Learners.

Hidayaty, A., Qurbaniah, M., & Setiadi, A. E. (2022). The Influence of Wordwall on Students' Interests and Learning Outcomes. Jurnal Penelitian Ilmu Pendidikan, 15(2), 145–155. https://doi.org/10.21831/jpipfip.v15i2.51691

Holmes, W., Bialik, M., & Fadel, C. (2019). Artificial intelligence in education: promises and implications for teaching and learning. Center for Curriculum Redesign.

Husnaini, H. (2025). Navigating challenges and strategies in implementing The Independent Curriculum: A multi-site case study of English language instruction in junior and senior high schools in Palopo. Linguistics Initiative, 5(1), 178-190.

Iksan, M., Husnaini, H., & Masruddin, M. (2022). Implementation of weekly English Program with fun learning method for Pesantren students. Ethical Lingua: Journal of Language Teaching and Literature, 9(2), 872-879.

Jamal, S. A. (2025). Statistical data analysis for tourism in Poland in the R programming environment. http://arxiv.org/abs/2502.10100

Jamaliyah, R., & Wulandari, N. F. (2022). Implementasi Video Pembelajaran Berbasis E-Learning Untuk Meningkatkan Minat Belajar Matematika Siswa Kelas XI MAN Purworejo. Jurnal Equation: Teori Dan Penelitian Pendidikan Matematika, 5(1), 41. https://doi.org/10.29300/equation.v5i1.5727

Jhonson, R. and C. (2019). Columbus State University College of Education. 10, 1–12.https://www.collegefactual.com/colleges/columbus-state-university/student-life/diversity/

Kesuma, C. (2025). How Effective Is SUNO. AI in Enhancing Arabic Listening Skills? An Evaluation of AI-Based Personalized Learning. International Journal of Information and Education…. Retrieved from https://www. ijiet. org/vol15/IJIET-V15N2-2251. pdf.

ISSN 2338-4778 (Print)
ISSN 2548-4192 (Online)

Langi, N. T. (2024). Using Picture of Luwu Culture Activity For Teaching Vocabulary. English Language Teaching Methodology, 4(3), 482-488.

Liu, C., Hou, J., Tu, Y.-F., Wang, Y., & Hwang, G.-J. (2023). Incorporating a reflective thinking-promoting mechanism into artificial intelligence-supported English writing environments. Interactive Learning Environments, 31(9), 5614–5632.

Lumbanraja, L. M. (2024). ANALYZING STUDENT'S DIFFICULTIES IN MASTERING VOCABULARY AT SMP PANGERAN ANTASARI. ELT (English Language Teaching Prima Journal), 6(1), 224–235.

Mardhiyah, R. (2023). The Effectiveness of the Spinning Wheel Game Towards Students' Speaking Skill. 4778(1), 1–80. https://doi.org/10.24256/ideas.

Mayer, R. (2022). The future of multimedia learning. J. Appl. Instr. Des., 10(423.10349).

Masruddin, Hartina, S., Arifin, M. A., & Langaji, A. (2024). Flipped learning: facilitating student engagement through repeated instruction and direct feedback. Cogent Education, 11(1), 2412500.

Madehang, M., Masruddin, M., & Iksan, M. (2024). Reflecting on the Implementation of Online English Learning in Islamic Higher Education: Lecturers' and Students' Perspectives. International Journal of Asian Education, 5(3), 183-197.

Nezhyva, L. L., Palamar, S. P., Semenii, N. O., & Semerikov, S. O. (2025). AI tools for sustainable primary teacher education: literary-artistic content generation. 134–148.

Nurammida, N., Nizarrahmadi, N., & Yolanda, A. (2024). The Effectiveness of the Wordwall Game as Media to Teach Students English Vocabulary Mastery in Eighth Grade. Jurnal Jendela Pendidikan, 4(03), 283–292.

Nyimbili, F., & Nyimbili, L. (2024). Types of Purposive Sampling Techniques with Their Examples and Application in Qualitative Research Studies. British Journal of Multidisciplinary and Advanced Studies, 5(1), 90–99. https://doi.org/10.37745/bjmas.2022.0419

Pasaribu, A. N., & Sibagariang, R. O. (2025). EFL STUDENTS' PERCEPTION OF ETHICAL CONCERNS ON USING CHATGPT IN ACADEMIC WRITING. 13(1), 39–46.

Pokhrel, S. (2024). No Title TitleΕΛΕΝΗ. In Αγαη (Vol. 15, Issue 1).

Pratomo, E. R. (2024). AI-ENHANCED STORYTELLING: INTEGRATING VISUAL, TEXTUAL , AND AUDITORY ELEMENTS THROUGH MULTIMODALITY. 17(2), 173–182.

Saddina, A. R. (2021). The Importance of Literacy and Benefits of Mastering English. International Journal of Indonesian Education and Teaching, 1(1), 128–136.

Sequeira, C. A., & Borges, E. M. (2024). Enhancing Statistical Education in Chemistry and STEAM Using JAMOVI. Part 2. Comparing Dependent Groups and Principal Component Analysis (PCA). Journal of Chemical Education.

https://doi.org/10.1021/acs.jchemed.4c00342

Siedlecki, S. L. (2020). Quasi-experimental research designs. Clinical Nurse Specialist, 34(5), 198–202.

Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education—where are the educators? International Journal of Educational Technology in Higher Education, 16(1). https://doi.org/10.1186/s41239-019-0171-0