

OPTIMIZING DISCORD APPLICATION TO THE STUDENTS' VOCABULARY ENHANCEMENT IN SYNCHRONOUS LEARNING

Fikri Abdu Rahman¹, Erwin Akib², Junaid³
^{1,2,3}Universitas Muhammadiyah Makassar, Indonesia

Article Info	Abstract
<p>Received: February 12, 2020 Revised: May 27 17, 2020 Accepted: June 1, 2020 Published: June 25, 2020</p> <p>Keywords: Vocabulary Enhancement, Discord Application, Synchronous Learning</p>	<p>This research focused in optimizing the Discord application to enhance students' vocabulary in synchronous learning. The method used in this research was pre-experimental research method with one group pre-test and post-test design, and the data were collected by giving pre-test and post-test. The sample of this research was class VII A of SMP Negeri 5 Mandai. The sample consisted with 27 students. The population of this research was the first-grade students of SMP Negeri 5 Mandai which consisted of 297 students in the academic year of 2021/2022. The sample was taken by purposive sampling technique to select the sample. The technique used for obtaining data was vocabulary test. The research findings showed that the mean score of the students in vocabulary was proved by post-test 72,77 was higher than the mean score of pre-tests 64,07. Furthermore, by the result of the hypothesis t-test value was 11,126 which mean higher than t-table 2,056. It means that H1 was accepted and H0 was rejected. Based on the findings that there was significance difference between the result of pre-test and post-test. Eventually, optimizing Discord application to the students' vocabulary enhancement in synchronous learning was excellent to applied to the further research.</p>

This is an open access article under the CC BY-SA license.



How to cite: Rahman, F. A., Akib, E., & Junaid. (2020). Optimizing Discord Application to The students' Vocabulary Enhancement In Synchronous Learning. *Journal of Computer Interaction in Education*, 3(1), 1-10. <https://doi.org/10.56983/jcie.v3i1.263>

INTRODUCTION

The usage of the Discord application to help learning in class is a fresh innovation, especially in the 4.0 era. In line with the emerge of technology, the challenge of teaching is becoming more difficult. Discord allows students to participate in the entire learning process, from receiving to processing.

The substance of synchronous learning was developed based on the concept, there are advantages and there are few disadvantages in synchronous learning (Narayana, 2016, p. 140). Some people think that synchronous learning is good to be carried out, and some people said

that synchronous is ineffective to run. Therefore, the researcher is inspired to optimize and combine effective application as a media.

In this case, optimizing the method was regarded as necessary. To aid in the teaching process, as well as to enhance learning, and experience. By utilizing the synchronous approach in the Discord application, the study's objective was to improve students' vocabulary to keep students interested, sustain intrinsic motivation, and achieve deeper conceptual coverage and peer interaction.

However, based on the review and expectations of the researcher. Research like this tends to be difficult to apply in Junior High School. Some of the problems were internet connection issue, new approaches, and one of the crucial problems of this research was the limitations of students in utilizing technological advances in learning.

This is also in line with the results of (Panggabean, 2021, p. 39) research entitled "Application of Online Learning Media by Utilizing Discord Applications in integrated students subject During the Covid-19 Pandemic at class VIII-2 SMP Negeri 2" showed that the result of cycle I has not been as expected because some students experienced a slow internet connection because of using the video conference feature. Consequently, students were used chat conference more often than video conference.

To answer the problems above, actually, the feature of using video conferencing in interacting with students was not the main attraction of Discord. It is assumed students feel more comfortable because it was unnecessary to use video conference except for attendance. Interaction can be done on information that was carried out properly by the state of (Dabbagh, N. and Ritland. B. B., 2005) The objective of online learning, an open and distributed learning system that employs pedagogical tools, is to explain how the development of the learning process and knowledge through meaningful "activity and engagement" (educational aids). The internet and network-based technologies enable online learning.

LITERATURE REVIEW

First, from (Schwartz, 2021) by the title "Using Discord to Facilitate Student Engagement" This study explore that Discord is a messaging tool that gained popularity in video gaming communities because its versatility and ease of use. By including a synchronous Discord component in remote course, students were be able to talk with each other in real time and asynchronously, as they were be able to leave messages for each other to respond to

the terms in foreign languages are written italic (*italic*). The text should be divided into sections, each with a separate heading consecutively. The section/subsection headings should be typed on a separate line.

The second, in a study done by (Endang Wahyuningsih and Baidi, 2021) under the title “Scrutinizing the potential use of Discord application as a digital platform amidst emergency remote learning.” Results showed that there was potential in digital elementary school environment to apply however it was challenging to carry out in elementary school. The method used in this research was qualitative data analysis, with data analysis using field interviews, field observation, and field documentation.

The third, research from (Muhammad Lukman Arifianto and Iqbal Fathi Izzudin, 2021) by the title “Students’ acceptance of Discord as an Alternative Online Learning Media” In this research, they used a qualitative data to obtain data. Based on the observation it was found that, according to the responses given for P1, the majority of participants had never utilized Discord. Contrary to others, some people have heard of this program but have never used it. As a result, it seemed that few pupils were familiar with the messaging tool Discord.

METHODS

This study used a pre-experimental design with a quantitative approach. The research applied a pre-experiment approach in order to boost students' success in vocabulary enhancement after being taught via the Discord application. This study used a pre-test and post-test design to determine the outcome of treatment.

The participants in this research were students at first grade of SMP Negeri 5 Mandai in the academic year of 2021/2022. Purposive sampling was used in this research. Where there were nine classes in class VII, those were VII A, VII B until VII I. This research took class VII A. According to the teacher, class VII A was more appropriate for applied the Discord application than the other classes.

Instrument

The instrument of this research was vocabulary test. The researcher applied this instrument in pre-test and post-test section. The purpose of the pre-test was to determine prior knowledge of students’ vocabulary enhancement and it was carried out at the first meeting.

While, post-test aims designed to discover the improvement of the students' vocabulary enhancement through Discord application and it was conducted at the last meeting.

Data Analysis

The researcher asked the teacher of the class for permission. As a sample of this research, the researcher came to the class and gave a pre-test then introduced Discord application. The researcher used Discord application as a media after in the next meeting after completing the pre-test. At the first meeting the researcher explained about the material that would be given which is 'asking and giving information'. The researcher explained about the material to be given, in this material there were words that included in nouns, adjectives, & verbs until the treatment was finished. At the final meeting, the researcher administered a post-test to the students.

RESULT AND DISCUSSION

The data were collected through vocabulary test which asking students to choose the correct answer by multiple choice between nouns, adjectives, verbs. The pre-test was administered prior to treatment, and the post-test was applied after the treatment.

1. Optimizing Discord Application to The Students' Vocabulary

The description of the result of the data analysis was conducted in the research finding. The description of the result data analysis about optimizing discord application to the students' vocabulary enhancement, where data was collected from 27 students using multiple choice. The test was given by the researcher in the form of pre-test and post-test.

This research consisted with 6 meetings which were attended by 27 students. Pre-test and post-test material on vocabulary noun, adjective, verb. Based on the table the number of students were 27 students. The total score of pre-tests is 1730 and post-test is 1965. The mean of pre-test is 64,07 and the mean of post-test is 72,77.

Table 1. Classification and frequency of students' pre-test score

No	Categories	Pre-test		Post-test	
		Freq	%	Freq	%
1.	Excellent	0	0%	3	11,1%
2.	Very good	2	7,4%	4	11,1%

3.	Good	2	7,4%	3	11,1%
4.	Fairly Good	9	33,3%	8	29,6%
5.	Fair	7	25,9%	6	22,2%
6.	Poor	5	18,5%	3	11,1%
7.	Very poor	2	7,4%	0	0%
Total		27	100%	27	100%

Table 2. Pre-test and Post-test in SMP Negeri 5 Mandai using SPSS

Paired Samples Statistics				
	Mean	N	Std. Deviation	Std. Error Mean
PRE TEST	64.0741	27	14.80885	2.84996
POST TEST	72.7778	27	13.39728	2.57831

This output shows the summary results of descriptive statistics from both samples or pre-test and post-test data that obtained at the first grade of the students at SMPN 5 Mandai in the pre-test with 85 as the highest and 30 as the lowest score, the mean obtained is 64,07 with a standard deviation of 14,81. While the maximum post-test score obtained 95 as the highest and 45 as the lowest, which means, the mean obtained is 72,77 with a standard deviation of 13,39.

2. The Difficulties in Applying Discord Application to The Students' Vocabulary Enhancement in Synchronous Learning

Implementation of learning at SMP Negeri 5 Mandai, at the time of researcher collected data in the field which is carried out online (in a network) by utilizing the discord application in the learning process for 6 meetings by bringing 'asking and giving information' material in the form of picture guessing quizzes and videos which include nouns, adjectives, verbs. Following data research by optimizing discord applications in online learning:

Table 3. The difficulties in optimizing discord application

No	Class	Media	Researcher's difficulties in optimizing Discord Application
1.	Class VII A	Discord Application	<ol style="list-style-type: none"> 1. Not all students have gadgets 2. Researcher has difficulty conveying material to students. 3. Students find it difficult to understand and need repetition during the learning process. 4. Students find it difficult to know multimedia in the form of image & video because they have gadgets that have small screens 5. Researcher sometimes has problems with the network during the learning process 6. The usage of data interne

Based on the results of observation made by researcher in 6 meetings in optimizing discord application to the students' vocabulary, there were 6 main problems found, including: **First**, there were 2-3 students who had not used gadgets thus, these students could not take the pre-test and had to use other people's/school facilities. **Second**, in presenting the material, researchers have difficulty finding teaching material and impacted the material presented is limited. **Third**, during the learning process in the Discord application, students were still not used to it and it is difficult to find answers because the audio produced depends on the students' own network, thus, researcher usually repeat to read the material that has not been understood. **Fourth**, by using pictures and videos as student teaching materials, there were some students who complained because the pictures shown too small, thus, the researcher used other options. **Fifth**, this difficulty is sometimes experienced by researcher, where researcher are several times faced with a suddenly bad network, so that the learning process takes more time. **Sixth**, because this learning running online, the longer researcher teaches the longer class is run the more quotas are used, therefore, some students sometimes leave in the middle of learning.

3. The Analysis of Data Using SPSS

a. Normality Test

Table 4. Normality Test

	Tests of Normality					
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
PRE-TEST	.155	27	.097	.940	27	.122
POST-TEST	.158	27	.080	.961	27	.391

a. Lilliefors Significance Correction

The significance of the data in the table of the Kolmogorov-Smirnov pre-test was 0.097 and the post-test was 0.080, as can be seen from the table above. This indicates that the pre-test data is normally distributed because the significance score is higher than $= 0.05$.

b. Homogeneity Test

Table 5. Test Homogeneity Test

Test of Homogeneity of Variance			
Levene Statistic	df1	df2	Sig.
0,110	1	52	.742

Using SPSS homogeneity calculations, data analysis produced a p-value of 0.742. Conditions that must be met in order for the data to come from a homogeneous population, namely $t\text{-value} > 0.05$. Because the $p\text{-value} = 0.742 > 0.05$, the results of these calculations indicate that the population variance is derived from the same population (homogeneous).

c. Test of Hypothesis

Table 6. Result of Hypothesis

Result of Comparison	Hypothesis	
	H0	H1
$t_{test} > t_{table}$	2.056	11.126

The total t -test value of the research was 11.126, with 26 degree of freedom (df) and a significance threshold of 0.05, resulting in a t -table value of 2.056, indicating that the t -test value was greater than the t -table (11.126 > 2.056).

DISCUSSION

When comparing the t -value and t -table, it can be seen that the df value is 26 and the = 0.05 based on the "Paired Samples Test" SPSS. The researcher calculated the t -table value in the distribution of the t -table statistics using this value as a fundamental reference. Find the t -table, which is 2,056. As a result, the option to apply the basic for decision-making above can be rejected since the t value is 11,126 > 2,056. As a result, H1 is approved and H0 is refused. Therefore, it can be denied that there was a mean score difference between the Pre-Test and Post-Test, indicating that optimizing Discord's application to first-grade kids at SMP Negeri 5 is vocabulary augmentation was working as intended.

Findings in (Maria Alexandrovna Odinokaya, Elena Alexandrovna Krylova, Anna Vladimirovna Rubtsova and, 2021) under the title "Using the Discord Application to Facilitate EFL Vocabulary Acquisition" found that there was a statistically significant difference in the vocabulary post-test results for the students in the control and experimental groups. This indicates that utilizing the Discord app greatly increased the experimental group's students' vocabulary knowledge. The results also corroborate earlier research describing the Discord app as a good tool for building a positive remote communication environment.

Based on the previous relevant studies have been conducted, it can be concluded that optimizing discord application to the students there was vocabulary enhancement to the

student of class VII A at SMP Negeri 5 Mandai, after treatment with using Discord Application. From the pre-test and post-test, there was an advanced. Additionally, all subjects can use this program, however it relies on the students' grades. It means that implementing the Discord application had a positive impact.

CONCLUSION

The primary goal of this research was to ascertain if the English test that the seventh-grade of students at SMP Negeri 5 Mandai developed was valid. The researcher concluded that optimizing Discord application was to enhance students' vocabulary in synchronous learning in the seventh grade of SMP Negeri 5 Mandai has made test that are related to enhancing vocabulary before and after giving treatment. The instrument used in this research were pre-test and post-test, as evidenced by the mean score of vocabulary before and after giving treatment of 64,07 to 72,77. It signifies that there was an enhancement before and after the treatment. As it happens, the result from Paired Sample Test data analysis the t-value is 11,126 is higher than the t-table 2,056 which means the H1 is accepted and H0 is rejected.

Based on the indicator of the difficulties, the researcher also found the difficulties in optimizing Discord application. This issue is brought on by various factors, some of them are came from the capability of students, the researcher, the Discord application, and the network. These difficulties eventually lead to hurdles inside the allocated time.

REFERENCE

- Dabbagh, N. and Ritland. B. B. (2005). *Online Learning, Concepts, Strategies And Application*. Ohio: Pearson.
- Endang Wahyuningsih and Baidi. (2021). Scrutinizing the potential use of Discord application as a digital. *Journal of Educational Management and Instruction*, 9-18.
- Maria Alexandrovna Odinkaya, Elena Alexandrovna Krylova, Anna Vladimirovna Rubtsova and. (2021). Using the Discord Application to Facilitate EFL Vocabulary. *Education Science*.
- Muhammad Lukman Arifianto, Iqbal Fathi Izzudin. (2015). Students' Acceptance of Discord as an Alternative Online. *International Journal of Emerging Technologies in Learning*.
- Narayana, I. W. (2016). Analisis Terhadap Hasil Penggunaan Metode Pembelajaran Synchronous dan Asynchronous. Semnasteknomedia Online. *Jurnal Universitas Amikom Yogyakarta*, 4(1), 139-144.

Panggabean, F. (2021). Penerapan Media Pembelajaran Daring Dengan Memanfaatkan Aplikasi Discord Pada Mata Pelajaran IPA Terpadu Selama Pandemi Covid-19 Di Kelas VIII-2 SMP Negeri 2. *School Education Journal*, 35-41.

Schwartz, D. (2021). Using Discord to Facilitate Student Engagement. *UNLV Best Teaching Expo*.