ELT Echo : The Journal of English Language Teaching in Foreign Language Context

journal homepage: https://syekhnurjati.ac.id/jurnal/index.php/eltecho

QUIZIZZ PLATFORM AS THE REALIZATION OF ASYNCHRONOUS LEARNING TO IMPROVE STUDENTS' VOCABULARY MASTERY

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a b s t r a c t

The purpose of this research is to discover the significant difference of using Quizizz as an asynchronous learning to students in learning vocabulary mastery of Junior High School. The research was done using a quasi-experimental design, where two classes of pre-test and post-test design were applied as the research design. 32 students of VIII C and 32 students of VIII I in SMPN 1 Kayen in the academic year 2021/2022 were taken as the sample. The students were classified into two groups as experimental and control group. The acquired data was examined using a t-test.. The result of the research expressed that the t-test had a higher value than the t-table (t-value = 3.939 > t-table = 2.00, α = 0,05). Both groups' vocabulary mastery has improved, however there is a considerable difference between the two. The experimental class learning outcomes of the post-test score had an average of 88,44 while the average of control class is 78,9. Therefore, it can be concluded that the use of Quizizz platform as asynchronous learning can improve students' vocabulary mastery. Quizizz helps students expand their vocabulary while playing games.

INTRODUCTION

English is a compulsory foreign language for students to learn, since English is now an international language. Currently, everyone, particularly students is expected to be able to speak English in order to communicate effectively with people all over the world. Students are required to have several abilities throughout the process of learning English language, such as writing, reading, speaking, and listening both for verbal and nonverbal communication, all of which are related to one another. To achieve these abilities, there are many components that must be considered and one of them is vocabulary.

Vocabulary plays a big role in language learning. By knowing vocabulary we can understand what is the essence of the meaning of a person's words or writings. If someone lacks vocabulary in learning a new language, they may be unable to communicate effectively. Anyone who does not know the vocabulary of a new language would find it difficult to communicate. However, in reality students face a number of difficulties while learning English, one of which is vocabulary achievement.

Richards and Renandya (2002: 255) state that vocabulary is an important part of language comprehension because it represents as the framework as far as how students are able in speaking, listening, reading, and writing. Students may be hampered from taking advantage of language learning opportunities and reaching their full potential if they lack a broad

vocabulary as well as techniques for gaining new or different vocabulary, such as listening to or reading foreign language news, listening to the radio with native speakers, reading, and so on. Vocabulary learning is absolutely necessary in foreign language acquisition since its representations of new words are frequently emphasized, whether through books or even in classrooms (Alqahtani, 2015).

However, many people think that vocabulary is something that is difficult to learn, no exception for students who are learning English. If only in the conventional way, namely by memorizing word for word, students will find it difficult, even feel lazy because this method is less attractive and too monotonous. Consequently students will have difficulty continuing learning English to the next level, because they feel that English is a difficult subject to learn. With the increasingly rapid development of technology, educators are required to innovate in the world of education by taking advantage of existing technological advances, also by involving the use of techniques and media that can support student learning. Good and interesting teaching techniques or learning media can help students comprehend and master their learning. Likewise for learning English, if the class uses good techniques and media then it will be able to improve students' abilities.

Educators can take advantage of online-based media to create an attractive classroom atmosphere and indirectly make students technology literate. Technology-based learning is very beneficial for both teachers and students. In addition to creating interesting and innovative classes, learning using technology can also train students and even teachers to be able to use technology optimally and be used to face a future where technology may be increasingly developing. It's really essential to enhance effective knowledge acquisition and basic training participants in accordance with the globalization flow which has managed to bring the rest of the internet and messages technology-based industry 4.0 to Indonesia (Suharsono, 2020). Especially if we look at the current conditions that require us to do everything online, school is no exception. Therefore teachers and students are required to be able to master technology to deal with online learning situations and conditions.

Quizizz is a website that allows the user to create collaborative quiz games that can be used in classroom learning. Quizizz can be used as a game-based evaluation tool that can be done online which allows students to practice together with fun via a computer or smartphone. Suciningsih (2020), revealed that teachers and educators use Quizizz to assess how well their students are learning. This application is properly of being used as a learning application that encourages the 4.0 learning revolution due to its ease of use and quick evaluation system. Quizizz makes learning interesting, not boring and repetitive or uninteresting, creates new experiences, enjoyable, and encourages students to experiment.

Students would be challenged by Quizizz because there are direct scores and rankings that can be achieved by answering questions quickly and correctly. Quizizz is a lot of fun because it involves direct competition between the players and is interspersed with music to support the game going. Quizziz used to have a significant influence on the classroom learning process, with higher scores and increased collaboration among students in teamwork. This is very positive, and it is regarded as an alternative to the use of technology in the classroom (Zhao, 2019).

Quizizz can be used in class, but it can also be used to create homework. It allows students to play it whenever and wherever they want as long as the time limit is not exceeded. It is in accordance with the realization of asynchronous learning, that asynchronous refers to not occuring at the same time. Learners can undertake and finish learning activities by using Quizizz platform during any time within a specified time frame (Sari and Priatna, 2020). Asynchronous eliminates the constraints of space and time. Students from various time zones

and civilizations can now take part in the same program. In addition, Subarkah (2014) states that asynchronous learning allows students to learn independently while still communicating with lecturers or other students even if they are not present at the same time. In addition, he also states that the advantage of asynchronous learning is that students can determine their own learning needs and references to meet these needs.

To find out whether Quizizz has an effective impact on the development of students' vocabulary skills, this research is focused on knowing the significant differences between students who are taught using the Quizizz platform and students taught without using the Quizizz platform. As a result, the researcher identified several research problems; the first of which was to determine the extent to which students' vocabulary mastery was taught without the use of the Quizizz Platform, the second to determine the extent to which students' vocabulary mastery was taught using the Quizizz Platform, and the last to determine whether there was a significant difference in students' vocabulary mastery taught using and without the Quizizz Platform.

METHOD

This research belongs to quasi-experimental research design. Cohen (2007:57) states that there are two groups in quasi experimental research, they are experimental group and control group. The population of this reseach is eighth grade students of SMP N 1 Kayen - Pati in academic year 2021/2022. By using cluster random sampling, the samples of this research are VIII-C which consists of 32 students as the control group and VIII-I which consists of 32 students as the experimental group.

A test is used as the instrument to obtain the data. The test include pre-test, that conducted before students get the treatment, and post-test that conducted after giving pre-test and treatment. The students was given a post-test to determine the impact of the treatment that has been given before. The researcher administered a 20 item multiple choice test, with 4 possible answer in each question. The treatment was carried out after giving the pre-test. The researcher use Quizizz platform in experimental group to determine if there is any significant difference in students' vocabulary mastery taught using and without using Quizizz Platform.

Before being given to students, the instrument was first tested for validity and reliability. This is done with the aim of knowing whether the instrument is valid or not, because if an instrument is not valid then it cannot be used. Validity was a measurement that demonstrated the instrument's degree of correctness. A good test content validity is when each part of the data collection test is relevant to the goal and covers representative material. Validity test is done by calculating the correlation between the variables x and y. After the researcher obtained the r_{xy}, then compared the result by r_{table} with $\alpha = 5\%$, if $r_{xy} > r_{tabel}$, therefore the item test categorized as significant, it means that the item test was valid. Based on the validity calculation from the instrument, it can be said that the instrument was valid.

On the other hand, reliability demonstrated that an instrument was good enough to be trusted as a collection means. The reliability test is designed to ensure that the instrument we develop is capable of measuring and producing valid data. The result of the calculation compared with r_{table} with $\alpha = 5\%$, since $r_{11} > r_{table}$, then it can be said that the instrument is reliable.

After conducting the pre-test and post-test, the researcher takes the results from the projects of the students and categorizing the score. Then, the researcher analyzed the result used a t-test to answer the aims of this research whether there was a significant difference after the researcher implemented Quizizz in vocabulary learning. Before calculating the t-test,

the mean, standard deviation, and standard error of the pre-test and post-test from two classes must first be calculated.

FINDINGS AND DISCUSSION

In this part, discusses the instrument result gathered from 2 classess. This research aims to analyze the students' ability in vocabulary mastery to determine the significant difference before and after the students taught wit or without using Quizizz. The researcher obtained the students' score by distributing pre-test and post-test. To describe the data, the researcher used the criteria of a score of the students' test result, mean of the outcome, and percentage of the test. The researcher established the following criteria to determine whether the students' achievements were good or bad score.

Students were given a pre-test to measure their vocabulary competencies before they received treatment. This test conducted to determine their proficiency in learning vocabulary. The result of the pre-test of two classes were presented in table 1 below:

Table 1. Criteria of the Pre-test Score

No.	Score	Grade	Category	Frequency of Students (f)	
				Control	Experimental
1.	90 – 100	A	Excellent	2	4
2.	80 – 89	B	Good	6	7
3.	79 – 70	C	Adequate	10	13
4.	69 – 60	D	Poor	8	6
5.	Below 60	E	Fail	6	2

Based on the table above, the researcher can see that the students' ability in vocabulary mastery in both classes are still low. As shown in the table, the number of the students who in excellent criteria are only two students in control class, while the experimental are only four students. There are also quite a lot of students who are in the poor and fail categories. There eight students in poor category and six students in fail category from the control class. While the experimental class there were six students in poor criteria, and two students that was failed. The result of the test is calculated into a descriptive statistics, as follows:

Table 2. Descriptive Statistic of Pre-test

	Experimental	Control
Sum	2350	2210
Sample	32	32
Mean	73,44	69,06
Variance (s^2)	111,9960	171,6734
Standard deviation (s)	10,58	13,10

Standard error (s$_x$)	1,87	2,32

From the descriptive statistic of the data pre-test above, the descriptive analysis of the pre-test control group revealed that the students achieved a mean of 69,06 and a standard deviation of 13.10. The Mean score is 69.06, it indicates the average of 32 students got 69 scores. Based on criteria success of students' score, 69 are inadequate or poor score. While the experimental group's mean was 73.44, and the standard deviation is 10,58. It indicates the average of 32 students got 73 scores which is adequate or average score.

After distributing a pre-test to the students, then the researcher give a treatment. The researcher treated the students using Quizizz platform in the teaching-learning process. The use of Quizizz only given to the experimental class. The students had a good time when learning using Quizizz. They enjoy playing the game while also studying vocabulary found in it. The post-test was given after the treatment. The post-test was given to determine the students' vocabulary ability after they taught using Quizizz. The researcher wanted to know wether there is a significance difference between the two class before and after given the treatment. The result of the post-test of two classes are presented in table below:

Table 3. Criteria of the Post-test Score

No.	Score	Grade	Category	Frequency of Students (f)	
				Control	Experimental
1.	90 – 100	A	Excellent	9	19
2.	80 – 89	B	Good	9	10
3.	79 – 70	C	Adequate	9	3
4.	69 – 60	D	Poor	4	0
5.	Below 60	E	Fail	1	0

Based on the table, the researcher can see that the students' ability in vocabulary mastery in both classes are increasing. As shown in the table, the number of the students who in excellent criteria are increased from 2 to 9 students in control class, while the experimental class experienced a significant increase from the initial only 4 students, when the post test increased to 19. And there is only one student who got fail in control class, besides that, none of the students were classified as failed in the experimental class. The result of the test is calculated into a descriptive statistics, as follows:

Table 4. Descriptive Statistic of Post-test

	Experimental	Control
Sum	2830	2525
Sample	32	32
Mean	88,44	78,91

Variance (s^2)	66,8347	120,5393
Standard deviation (s)	8,18	10,98
Standard error (s_x)	1,45	1,94

From the descriptive statistic of the data post-test above, the descriptive analysis of the control group revealed that the students achieved a mean of 78.91 and a standard deviation of 10.98. The Mean score is 78.91, it indicates the average of 32 students got 79 scores. From the data, we know that the mean of the control class has increased from 69 to 79. Based on criteria success of students' score, 79 are adequate or average score. While the experimental group's mean was 88.44, and the standard deviation is 8,18. It indicates the average of 32 students got 88 scores which is include in good score. The experimental class experienced a significant increase from 73 to 88. Based on the explanation above, it is reasonable to say there is significant improvement in the experimental group's vocabulary mastery after getting treatment by using Quizizz platform.

A t-test formula was used to determine if there were a significant impact of using Quizizz platform to students in learning vocabulary mastery which was taught by Quizizz and who was taught without Quizizz. The researcher compared the post-test score from the control and experimental class by calculating the t-test to get the conclusion. The following is the formula:

$$t = \frac{X_1 - X_2}{s\sqrt{\dfrac{1}{n_1} + \dfrac{1}{n_2}}}$$

$$t = \frac{88,44 - 78,91}{9,6792\sqrt{\dfrac{1}{35} + \dfrac{1}{36}}}$$

$$= 3,939$$

Based on the calculated data, the results of the t-value are obtained 3.939, then the researcher compared the t-test to the t-table. It shows in the table significance that was obtained t-table was 2.00. Therefore, there was a significant difference between the control group and the experimental group because the t-test is higher than the t-table. The test stated that t-value = 3.939 > t-table = 2.00, $\alpha = 0,05$.

Figure 1. H_0 reception area

200
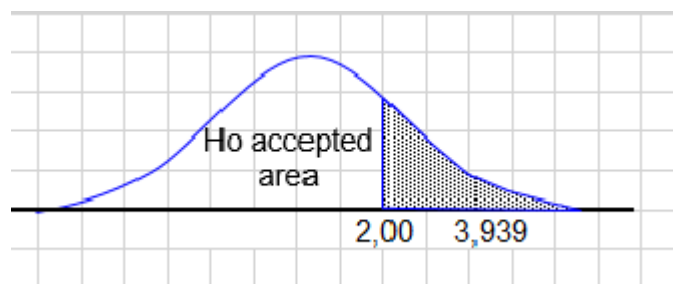
Because t-value is in the rejection region of H_0, furthermore it could be concluded that there was a considerable impact of students in learning vocabulary mastery who is taught with Quizizz and who is taught without Quizizz. So the positive hypothesis (Ha) says: "There is a significant difference of the students' vocabulary mastery who are taught by using Quizizz and who are taught without Quizizz in SMPN 1 Kayen in the academic year 2021/2022" is accepted.

Based on the teaching-learning process, the researcher found some students difficulties while learning vocabulary in eighth grades students of SMPN 1 Kayen. Most of students did not have a lot of vocabulary, hence they have to open their dictionaries first to know the meaning of the words. Then, some students have difficulty distinguishing between different types of word classes. They were confused about what a verb, adjective, noun, and other words are. Then the last, students still get confused about the grammatical tenses, there's only a few students that understand about tenses. When they are not encouraged by the teacher, many students are not very active in class. On average, they only pay attention when the teacher explains the material, therefore there is not a lot of positive feedback between students and teachers if it isn't initiated by the teacher first.

According to the students' problem above, the researcher has the solutions to improve their vocabulary ability, which is using quizizz in learning, thus the students do not only listen to learning, but they can be active by working on game-based questions from the quizizz platform.

Quizizz can be a useful tool for teaching vocabulary comprehension. In English, vocabulary is very essential. This could be the most effective technique for students to develop their English skills. During the learning activity, students will enjoy practicing and doing tasks. Quizizz makes learning interesting, not boring and repetitive, enjoyable, and encourage students to experiment. Of course, students would enjoy playing the game while also studying the vocabulary in it.

There are some differences between this research and some previous research, the first, according the previous research entitled "Quizizz Website as an Online Assessment for English Teaching and Learning: Students' Perspectives" conducted by Amalia (2020), the main objective of this article was to look into students' attitudes toward using Quizizz as an online evaluation method for English teaching and learning., particularly formative assessment. In this research, the researcher focus on obtaining the significant difference of using Quizizz as an asynchronous learning to students in learning vocabulary mastery of Junior High School.

The other previous research by Almanar, M. (2019) entitled "Reviewing Students' Vocabulary Mastery By Using Kahoot At Holmesglen Partnering With University of Muhammadiyah Tangerang." that the purpose was reviewing the students' vocabulary and also discusses the impact for both learners' involvement when using technology and their learning motivation and achievement. However in this research the researcher use the different free game-based learning platform which is Quizizz platform.

The last, based on the previous research that was written by Priyanti et al., (2019) entitled "Effect of Quizizz Towards the Eleventh-Grade English Students' Reading Comprehension in Mobile Learning Context", the purpose of this research was to look into the significant effect of Quizizz in the English studies especially in reading comprehension of eleventh grade students. The findings of that previous research reveals that the experimental group (M = 83.08, p value = 0.018) outperformed the control group (M = 80.77, p value = 0.018). The experimental group's mean point was higher than the control group's (83.08 > 80.77), and the p value was 0.018 or less than 0.05. On the other hand, in this research, the

researcher use Quizizz platform to obtain the significant differences on students' vocabulary mastery. The findings gained the score of experimental group was 88.44, while the control group was 78.90.

As states by Zhao (2019), Quizziz used to have a significant influence on the classroom learning process, with higher scores and increased collaboration among students in teamwork. This is very positive, and it is regarded as an alternative to the use of technology in the classroom. And from the research, it could be proven from the data analysis that there are significant differences in the vocabulary mastery of students who were taught without using Quizizz and those who were taught using the Quizizz platform, where the students' score taught with Quizizz was higher than students' score taught without using Quizizz platform.

According to Subarkah (2014), asynchronous learning allows students to learn independently while still communicating with lecturers or other students even if they are not present at the same time. In addition, he also states that the advantage of asynchronous learning is that students can determine their own learning needs and references to meet these needs. Asynchronous refers to not occurring at the same time. Students can choose from a variety of learning options, with educators presenting materials. Asynchronous training is popular in e-learning because learners could indeed obtain course materials during any time and from any location. Therefore students from various time zones and civilizations can now take part in the same program. It is in accordance with the use of Quizizz in learning process. Quizizz can be used in class, but it can also be used to create homework. It allows students to play it whenever and wherever they want as long as the time limit is not exceeded.

Students can accomplish exercises without having to finish them all at once, this is in accordance with online learning, which requires students to always stay online in order to pursue the learning. However, if they do not have an enough signal, the learning process would be severely disrupted. As a result, Quizizz can be utilized as an alternative technology that can support the teaching-learning process. Quizizz as the realization of asynchronous learning, can make it easier for students to access learning without being constrained by time and place, as long as it is still within a predetermined time frame.

From the data analysis, the researcher knows that the score of the mean post-test in the experimental group was higher than the score of the mean in control group. The difference score between the control and experimental class was 9.54. Then the result of the t-value was higher than t-table. T-value was 3,939 whereas t-table was 2.00. Because the t-value is 3.939 > t-table is 2.00, it can be concluded that there was significant difference of the students' vocabulary mastery who were taught by using Quizizz and who were taught without Quizizz. Therefore, Ha could be accepted and H_0 was rejected.

The researchers concluded that using Quizizz as a platform to teach students vocabulary was more effective than teaching without Quizizz. Students' ability in learning vocabulary taught with Quizizz exceeds students' ability in vocabulary taught without Quizizz. As a result, Quizizz was a great platform for teaching vocabulary because it may help students enhance their vocabulary knowledge. Moreover, Quizizz was an enjoyable platform to students in learning.

CONCLUSION

Based on the entire data set that was analyzed and discussed, it showed that the students' vocabulary mastery who taught without using Quizizz got a little improvement. It can be derived from the mean score of post-test, from 69.06 to 78.90 which was categorized as adequate or average score. Then, the students' vocabulary mastery who taught using Quizizz got significant improvement. It can be derived from the mean score of pot-test, from 73.44 to

88.44, which was categorized as good score. It can be concluded that there is a significant differences in students' vocabulary mastery who were taught without using Quizizz and using Quizizz platform. The result showed that the score of the t-value was higher than t-table (t-value = 3.939 > t-table = 2.00, α = 0.05.). H_0 (Null Hypothesis) was rejected, and Ha (Alternative Hypothesis) was accepted, so it can be said that Quizizz was effective to improve students' vocabulary mastery.

ACKNOWLEDGEMENTS

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