The Effectiveness of Using Quizizz to Improve the Students’ Vocabulary

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Abstract
This study aims to determine the effectiveness of using Quizizz application to improve the students’ vocabulary. The method used was quantitative with a pre-experimental research design with a sample of 30 students of class VII C. In obtaining data, the researcher used pretest and posttest as instruments. The results of the data analysis showed that by using the Quizizz application, students’ vocabulary mastery increased. This is demonstrated by the fact that the t-test value is less than P (0.001 < 0.05), meaning that H0 in this research is rejected and H1 is accepted. Thus, it was determined that using the Quizizz app to improve vocabulary mastery was effective for class VII C students at SMP Negeri 1 Campalagian.

Keywords: Vocabulary, Effectiveness, Quizizz.

1. Introduction
One of the key components of learning English is vocabulary. Mastering vocabulary gives big influence on every skill when young students learn English. In fact, many young students do not know many vocabularies. So, they have difficulties in speaking and writing. Given the significance of acquiring English vocabulary, teachers should select a method of instruction that is ideal for incorporating vocabulary instruction into the process learning. Teacher needs various learning medium that will be able to help young students learning English vocabulary. Depdikbud (1992:92) confirms that using medium in the learning process can generate and motivation in students, reduce or avoid the occurrence of verbalism, generate regular reasoning systematically, foster understanding, and develop values in students. In addition, the use of learning medium is very important because it can be saved time. The aforementioned justifications lead to the conclusion that to increase student motivation in studying, the learning environment is crucial. Numerous learning tools are available for offline and online use. Nowadays, students spend more time on their phones. Therefore, the researcher chooses online learning medium that can be accessed using phones, tablets or computers. One of the learning media that can be used is Quizizz application. According to Wibawa et al. (2019) the finest alternate learning to old is Quizizz, which is available on mobile devices using applications, as well as on computers through a browser. An interactive quiz app with more success is called Quizizz at boosting student interest in learning because it replaces the traditional quiz method, which only uses paper and pens, with questions created online by teachers, allowing students to carry out such learning using the Quizizz application on their phones. Students are more engaged, focused, and committed to putting it into implemented, hence, this may have an effect on how teaching and learning are conducted, making it more student-centered (Ma’arifatulloh, 2020).
Several previous studies have demonstrated the significant value and effectiveness of using Quizizz game in the process of learning.

The first study that is connect to this one by Wulandari, (2020). This study intends to examine how Quizizz is used to improve students’ vocabulary. The researcher employed classroom action research in this study. Tests, questionnaires, and interviews were used as the instruments of this study. The result of this study suggested that Quizizz might raise students' vocabulary mastery. The similarity of this research with previous study is using Quizizz application to improve student’s vocabulary and the difference is the research design.

The second research related to this study by Maria Dimitrij, et.al (2021) The purpose of this study is to increase students' vocabulary using the Quizizz app. Two cycles of study were conducted. Each cycle consisted of four phases. Planning, doing, acting, and reflecting were among them. The outcome revealed that the students’ vocabulary is improving. The similarity of this research with previous study is using Quizizz application to improve student’s vocabulary and the difference is the research instrument.

According to the studies mentioned above, using Quizizz application as a learning tool has a big impact. However, the information gap that use of the Quizizz application for junior high school students and the use of Quizizz to increase students' active vocabulary. As a result, to fill the gap depending on the background that the researcher would like to conduct research about “The Effectiveness of Using Quizizz Application to Improve Students’ Active Vocabulary for Junior High School Student”.

2. Literature Review

2.1. Vocabulary

The fundamental component that must be acquired before acquiring English abilities is vocabulary. A vocabulary list contains words together with their definitions, and it is utilized to communicate our thoughts and feelings in a language. There are various vocabulary definitions provided by some people. According to Hatch and Brown (1995: 1) A vocabulary is a list or collection of terms for a given language or a list or set of words that speakers of that language may use. According Hornby (2006: 1645) vocabulary is the collection of all the words in a language that a person knows or uses.

According to the definition given above the conclusion is the entirety of a language's vocabulary consists of all the terms that speakers of that language regularly use to communicate with one another.

There are various elements that students should acquire when acquiring vocabulary. According to Lado as cited in Mardianawati (2012: 11) the vocabulary components include word classifications, word usage, meaning, spelling, and pronunciation.

a. Meaning
   Students who are learning a foreign language should be familiar with its definition. It will be simpler for students to utilize the term in writing or spoken communication if they understand its definition.

b. Spelling
   Because it makes reading activities easier, spelling is important while learning vocabulary. It might strengthen the relationship between letters and sounds.

c. Pronunciation
   The method to say words or letters is through pronunciation. Learning pronunciation is challenging.

d. Word Classes
   Word Classes are groups of words like prepositions, verbs, adverbs, adjectives, and nouns. Word class is a crucial component of semantic analysis.

e. Word Use
   Term use is the employment of a term, phrase, or concept in a language. Word use might entail grammar as well, making it a
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complex topic for examination. Spelling and meaning are two vocabulary components that will be taught to the students in this study.

According to Hatch & Brown (2001: 370) two categories can be used to classify vocabulary. Both active and passive vocabularies are used.

a. Active vocabulary contains words that children can pronounce properly, comprehend, and use as contractions in their writing and speech.

b. Passive vocabulary contains terms that are understandable to students when used in context but cannot accurately create.

2. 2. Learning Medium

In order to convey the message from the learning resource to the learning source to the massage recipients, in this case the students, the learning medium is employed in the form of teaching aids. (Suryani, 2012: 136).

The term "learning medium" refers to any instruments and resources, including written, printed, and audio-visual materials and equipment, that may be utilized in the process teaching and learning to help teachers communicate with students and get them to contribute information or materials. In order for the existence of such medium to be effective, the teacher should take note of each medium's qualities and capabilities by choosing a medium that is suited for the circumstances and needs in the classroom. The Quizizz application, a learning tool that the researcher will create, will be used by teachers to communicate information about adjustment entries content to students and is anticipated to assist them meet their learning objectives.

2. 3. Quizizz Application

A learning platform called Quizizz Application offers a number of features to enhance the fun, interaction, and engagement in the classroom. Application With the use of their smartphones, tablets, and laptops, all students may practice together with the help of the entertaining online evaluation tool Quizizz.

According to Zhao (2019) “Quizizz is a game-based educational tool that makes in-class lessons interesting and enjoyable while bringing multiplayer activities to schools.” Quizizz is one of the e-learning websites. It is used by teachers to construct the well-liked online tests of today. (Basuki & Hidayati, 2019). In the multiplayer game Quizizz, players answer questions created by teachers. The students may keep track of their development as they frequently finish the online tests. (Rahayu & Purnawarman, 2019).

Based on the opinion above, Quizizz may be characterized as an engaging, game-based educational tool that can be used as to grab students' attention and encourage them to engage in the learning process, use a learning medium or evaluation tool. Teacher can use the interesting features of Quizizz application to facilitate the process teaching and learning, such as the ability to create interactive quizzes with more than four answer choices, the teacher can also change the question's parameters and add an image media to the question's backdrop.

3. Research Methodology

This study's design research was pre-experimental research. This research employed one group pre-test and post-test design. According to Ary, Jacobs, Sorensen and Razavieh (2010), Giving a pre-test, giving the participants the experimental treatment, and then giving a post-test are the three phases that typically make up a one-group pre-test-post-test design. The researcher focused on conducting this research in one class. Therefore, the researcher decided to use a single group pre- and post-test design. The design research is shown:

<table>
<thead>
<tr>
<th>Pre-test</th>
<th>Treatment</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>O1</td>
<td>X</td>
<td>O2</td>
</tr>
</tbody>
</table>

Where:

O1: Pre-test of experimental group
X: Treatment
O2: Post-test of experimental group
(Gay, et.al, 2012)

To collect the sample, the researcher used a cluster random sampling strategy. Cluster random sampling is very useful when the population is widely scattered. In this study, one class serves as the sample of the seventh-grade students. The researcher chose VIIC class. From that class the researcher chose 30 students for being the sample of this research.

4. Findings

The research results are summarized in this section. As mentioned in the preceding chapter, the research question given in this research is: Is the use of Quizizz application effective in improving vocabulary of the seventh-grade students of SMP Negeri 1 Campalagian? This research aims to determine whether using Quizizz application effective for improve students’ vocabulary. This research used Quizizz application to teach vocabulary over the course of four meetings from 3 February to 23 February 2023 at SMP Negeri 1 Campalagian. One class, class VIIC, was chosen by the researcher as the sample. In this research, the pre-test was administered initially, followed by the administration of the treatment. Finally, in the last session or meeting, the researcher conducted a post-test to evaluate the students’ improvement in vocabulary mastery. This sequential approach allowed the researcher to assess the impact of the treatment by comparing the students' performance before and after receiving the intervention. The post-test served as a measurement tool to gauge the extent of improvement in the students’ vocabulary skills following the treatment.

The results showed that Quizizz application was successful in enhancing students’ vocabulary in terms of meaning, word use and pronunciation after using Quizizz application as a treatment.

a. The Frequency and Percentage of Pre-test and Post-test Scores

<table>
<thead>
<tr>
<th>No</th>
<th>Class</th>
<th>Range</th>
<th>Pre-test</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>F</td>
<td>P</td>
</tr>
<tr>
<td>1</td>
<td>Excellent</td>
<td>81-100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>Good</td>
<td>66-80</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>Enough</td>
<td>56-65</td>
<td>8</td>
<td>27</td>
</tr>
<tr>
<td>4</td>
<td>Poor</td>
<td>41-55</td>
<td>19</td>
<td>63</td>
</tr>
<tr>
<td>5</td>
<td>Very poor</td>
<td>&lt;40</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

| Total | 30 | 100% | 33 | 100% |

The data table above indicates that the students' vocabulary mastery has improved, as seen from the percentage of excellent, good, enough and poor which is higher that the percentage of pre-test. Table 1 shows that before being given treatment, in the pretest, there is no student scored “excellent”, 3 students scored “good”, 8 students scored “enough” and 19 students get a “poor” score. In contrast, when therapy is complete, 29 kids had "excellent" scores on the posttest, and one student received a "good" score.

b. Mean score and standard deviation of Pre-test and Post-test
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Table 2. The result of mean and standard deviation scores pretest and post-test

<table>
<thead>
<tr>
<th>Test</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>55.13</td>
<td>8.2851</td>
</tr>
<tr>
<td>Post-test</td>
<td>84.77</td>
<td>4.7939</td>
</tr>
</tbody>
</table>

It showed that result from pre-test and post-test. It indicated that there was significant difference between the mean score pre-test that is 55.13 (Poor) while the post-test is 84.77 (Excellent).

c. The Improvement of Percentage

\[
\% = \frac{X2 - X1}{X1} \times 100
\]

\[
\% = \frac{87.44 - 55.13}{55.13} \times 100
\]

\[
\% = 58.61\% 
\]

The percentage increase in student scores from pre-test to post-test is shown in the computation results above. The results showed that students' vocabulary comprehension increased by up to 58.61%. This growth can be considered fairly good because the Quizizz application allows students' vocabulary to be expanded in a variety of methods or via the usage of various media. In conclusion, the use of Quizizz Application was very beneficial for improving students' vocabulary mastery, therefore this application is one of the recommended applications for teachers to use while teaching vocabulary.

d. Hypothesis Testing

In order to determine the significant difference between students' vocabulary in the pre-test and post-test, the researcher employed a t-test. The t-test is a statistical analysis that assesses the significance of differences between two groups or conditions. After analyzing the data using the t-test, the results provide an answer to the researcher's question regarding the effectiveness of the Quizizz application in this study. The t-test helps to determine if there is a statistically significant improvement in the students' vocabulary skills after the intervention with Quizizz. Unfortunately, the recapitulation of the data was not provided in your question. To assess the effectiveness of the Quizizz application, it would be necessary to review the specific data and results obtained from the t-test analysis.

Tabel 3. Hypothesis Testing

Table 3 shows the answer to research. Can be seen from Sig. (2-tailed) significant 0.001 < 0.05, that is, there is the significant difference in the condition of students before and after being given treatment. In Table 4.2 it can be seen that the post-test mean is 84.77 which is greater than the pre-test mean, which is 55.13. Because the mean post-test is bigger, it can be said that the use of Quizizz application to
improve students’ vocabulary is effective. This means that the research is effective.

Based explanation above means H0 is rejected and H1 is accepted. So, it can be concluded that the Quizizz application is effective to improve students’ vocabulary mastery.

5. Discussions

The researcher explains that many methods were used to determine the vocabulary of the students in this section as she examines the interpretation of the pre-test and post-test results. Pre-tests and post-tests were just two of the tests used to gather data. Before receiving treatment, students underwent a pre-test to gauge their level of vocabulary. After receiving treatment, students underwent a post-test to gauge if they had made any progress.

The first 30 students took a pre-test. Before the pre-test, the researcher went over the test guidelines. The pre-test’s goal was to ascertain the students’ baseline proficiency in the language. In this research, there were 30 questions on the pre-test, including 10 about meaning, 10 about word use and 10 about pronunciation. There are questions with multiple choices, fill-in-the-blanks and matching items.

The second meeting the researcher gave a material about “Profession” focused on meaning aspect, word use aspect and pronunciation aspect. Researcher provide treatment by utilizing feature in the Quizizz application including multiple choices and fill-in-the-blank.

The last treatment, the researcher gave a material about “Animal” focused on meaning aspect, word use aspect and pronunciation aspect. Researcher provide treatment by utilizing feature in the Quizizz application including multiple choices and fill-in-the-blank.

The post-test column can be used to explain why 29 students are in the excellent category after receiving treatment, 1 student is in the good category after receiving treatment, 0 students are in the enough categories after receiving treatment, 0 students are in the poor category after receiving treatment, and 0 students are in the very poor category.

The educational usage of the Quizizz app, especially to improve the level of students’ vocabulary mastery is very effective. This can be seen from the results of increasing student scores before and after the use of Quizizz application. As described in the previous section the improvement was 58.61%. This progress may be viewed as a success in the use of various techniques for teaching and learning. There are several reasons why Quizizz application can enhances students’ vocabulary, here are some of them:

a. Easy to access

Quizizz application allows students to learn independently and at their own pace. In learning theory, this approach is known as self-paced learning. In the context of vocabulary, students can access Quizizz anytime and anywhere, making it flexible and easily accessible. Student can go through vocabulary exercises according to their needs and revisit challenging quizzes to enhance understanding and memorization of new words.
b. Interesting
Quizizz application is designed as an interactive game-based learning platform. The theory behind this approach is that incorporating game elements into the learning process can enhance motivation and student’s engagement. In the context of vocabulary, the use of games and challenges in Quizizz application makes learning vocabulary more enjoyable and engaging for students, thus motivating them to participate and improve their vocabulary.

c. Point and ranking system
Quizizz application offers a competitive feature where students can complete with classmate or other students in real-time. The theory supporting this approach is achievement motivation theory, which states that competition can enhance motivation and effort in learning. In the context of vocabulary, competition with classmates can provide an extra incentive for students to expand their vocabulary and achieve higher scores.

Several earlier studies investigated the use of Quizizz to help students strengthen their command of vocabulary. According to Dewi et al., (2020) by using the Quizizz program to administer quizzes, the students are encouraged to continue learning the topic. Due to an engaging classroom environment that helps students concentrate on the subject, it increases the students’ enthusiasm in learning.

According to Pavita and Nirmala (2021) in their research revealed that the outcome demonstrates that the students’ command of language is advancing. When comparing the pre-test and post-test, the mean score rises noticeably, from 64 to 85. Following utilizing the Quizizz program in the learning process, student scores rose by 21%. The same thing was also expressed by Upik (2020) the result of research show that Quizizz could help students become more mastery. It was demonstrated by the rising average scores on each exam. Starting from the pre-cycle, the average of students' score was 69.6 and after the pre-test cycle, in the first cycle, students' average scores were 72.4, while in the second cycle, they were 92.5. According to the findings of the two researchers, Quizizz usage has significantly increased, although using different types of research, namely pre-experimental and CAR.

The results of their research showed the success rate of using the Quizizz Application in improving students' vocabulary mastery. They also mention the advantages and disadvantages of using Quizizz. The use of Quizizz really helps students to increase their attention and motivation to learn and helps them to remember vocabulary. The students also perceived that Quizizz provided them free and easy access. However, there are also some drawbacks to using the Quizizz Application, including, the access of Quizizz depends on the internet connection and the students could not skip certain questions to answer the easier question while doing the Quizizz.

Therefore, Quizizz may enhance learning outcomes and students' comprehension of the subject matter, its usage as a tool for learning evaluation activities is deemed successful. The study's findings indicated that using the Quizizz app to help children enhance their vocabulary is helpful. Students responded well to the use of Quizizz in teaching and acquiring vocabulary in addition to raising their scores. In addition, Quizizz is reportedly effective for teachers and students since it is simple to use and available whenever and anywhere.

6. Conclusion
It may be inferred from the findings and discussion above that the Quizizz program works well to increase students' vocabulary in terms of meaning, word use and pronunciation at SMP Negeri 1 Campalagian. The post-test score of 84.77 is higher than the pre-test score of 55.13, and there is a statistically significant difference due to the value of Sig (2-tailed) < P or (0.001 < 0.05) means is H0 is rejected and H1 is accepted.
References


