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Utilizing Quizizz as Learning Media in Improving Student Reading Skills In Teaching And Learning Process

Romlah Ulfaika[1*], Untari Hasbiana[2], Shalsa Midina[3] Amiruddin Hadi Wibowo [4]

[1*23] Universitas Borneo Tarakan, Tarakan, Indonesia
[4*] Universitas Wijaya Kusuma Surabaya

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ABSTRACT

The purpose of this study was to determine the effectiveness of using the quizizz application as a learning media to improve student reading skills. This research used a quasi-experimental method and the population was all the students of class VIII at SMP Negeri 2 Tarakan. The sampling technique was carried out by the purposive sampling with a sample of 64 students. The instrument was prepared by looking at some indicators from syllabus and lesson plan (RPP) for data collection. This research instrument was test sheets which consisted of pretest and posttest. The result of this study showed that there was a significant difference between the experimental group and control group. It was proven by the result of the average score of student. The average result in pretest and posttest in experiment group were 45.63 and 68.28. Meanwhile, the average result in pretest and posttest in control group were 38.75 and 49.38. It showed that there was a significant difference from the use of the Quizizz application as a learning media. The result from the independent sample test showed that the t-test (3,938) was higher than t-table (1,670). In this study, the researcher found that there was a significant difference after using Quizizz as a learning media. Therefore, it can be concluded that the use of Quizizz as a learning media had proven to be effective for improving the student English reading skills in teaching and learning English.

INTRODUCTION

An educational innovation that uses, information technology in learning is online learning. Through the use of numerous technical mediums and an endless number of participants, online learning may be conducted. In the middle of the COVID-19 epidemic, online learning may help students study effectively and comfortably (Herliandry, Devi., 2020).

Online learning has both positive and negative effects on education, particularly for students. These negative effects include decreased motivation, lack of interest in learning due to the choice of less appealing learning applications, and a lack of technological literacy, which lowers student grades at school. The result of observations carried out at SMP Negeri 2 Tarakan, which were given to students and the results of interviews with related teachers, turned out that online learning was an unpopular learning method. There are several causes for this, including: First, new schools are launching online education in the midst of the epidemic, second, not all students have mobile phones, and third, picking less engaging programs. From the previous description, it can be inferred students who experience difficulties in learning English lack facilities owned by each student and the selection of less attractive applications.
In the era of information technology, learning applications are made to facilitate every job. Each application has a role, advantages, disadvantages, functions and goals, as well as the role of applications for learning. Learning applications have different features that make students interested in using these applications. Lots of learning applications used to do assignments. However, not all of these applications provide special features for material creation such as quizzes in the application. With this application the teacher can make material in the form of interactive quizzes, besides, this application also makes it very easy for creators to create material. Therefore, the researcher chose the Quizizz application for teachers in the learning and teaching process.

Quizizz is one of assessment applications which has an interesting feature. Quizizz is basically the same function and utility as any other assessment application. However, Quizizz has

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upgraded a new feature, namely presentation quiz. Quiz presentation is a new feature provided by Quizizz to make it easier for teachers, where teachers can create learning materials at the same time with the quiz application Quizizz, so that the teachers no longer need used other auxiliary applications such as PowerPoint to make learning material presentations, by used the Quizizz application teachers can deliver teaching materials, provide quizzes/questions and students can access them easily.

Reading skill is needed to obtain or understand the information in every aspect of life. According to Qorri'aina *et al* (2018), reading is interpreted as a result of the interaction between the perception of graphic symbols representing the reader's language, language and cognitive skills, and their knowledge of the world. The statement is supported by Laily (2014) Reading is a part or written communication. that is, written symbols or letters are converted into symbols of language sounds. Reading is a physical and mental activity that can develop into a habit. Based on the description above, reading is a process of recognizing information through writing in the form of symbols, numbers and letters. In other words, reading activities was got various information by increasing students' reading comprehension it can be useful in understanding information in writing (Riyanto, 2013).

Therefore, it's very important for students to develop reading skills. However, students often experience difficulties in reading activities. In line with the result of observation in SMPN 2 Tarakan which shows that students in SMPN 2 rarely read English texts. Students prefer English reading texts accompanied by pictures or animations. Students must learn how to use learning programs that the teacher has chosen for this online-based learning. SMPN 2 Tarakan have never tried using Quizizz as a learning media. This is also a challenge for teachers to strive for optimal learning even without face to face.

RESEARCH METHOD

The research design that used in this research is experimental research by using a quantitative approach. Experimental research was conducted when a researcher wants to determine the causal links between specific variables (Tanner,2018). Sugiyono (2013), states that some form of experimental design that used in research, namely: (1) Pre-Experimental, (2) True Experimental, (3) Factorial Experimental, (4) Quasi Experimental. The researcher used Quasi experimental design in this research.

TECHNIQUE OF DATA ANALYSIS

Descriptive statistics help to summarize described the characteristics of a data set, provide of the knowledge of how different the scores are, as well as insight into how one score compares to another (Cresswell, 2014). The researcher used descriptive statistical analysis to describe the condition or characteristic of the data obtained from measurement variable statistically. First, the results of student work are assessed using scoring guidelines made by researchers with the following formula:

$$score = \frac{number\ of\ correct\ answers}{score\ maximum} x100$$

The researcher then determined the data's mean and standard deviation.

Mean

Mean is the result obtained after adding up the data for all individuals, then divided by the number of individuals. The following is the formula for the mean.

$$\bar{x} = \frac{\sum x_i}{n}$$

Whereas:
$\bar{x}$: Mean
$\sum x_i$: Amount of each data
n : Number of Individuals

Standard Deviation

Standard deviation used to measure the spread of data values based on the average value of a data. The following is the formula for the standard deviation.

$$s = \sqrt{\frac{\sum x_i^2 - \frac{(\sum x_i)^2}{n}}{(n-1)}}$$

Whereas:

s : Standard Deviation
$\sum x_i$: Amount of each data
n : Number of Individuals

Inferential Statistic Analysis

Cresswell (2014) stated that the understanding terminologies and concepts like random sample, variable, sample, observation, random sample, population, parameters, statistics, and sample error is necessary for statistical inference. Inferential analysis is analyzing the data from a sample to draw conclusions about an unknown population. In this research, inferential statistical analysis consists of pre- requisite testing and hypothetic testing.

Pre-requisite testing

a. Normality Test

The normality test used by the researcher to determine whether the data have a normal distribution or not. When the data have been collected, the normality test is applying. The researcher used statistical computation by using SPSS for normality test. The hypotheses for normality test are formulate below:
Ho: the data are normally distributing
Ha: the data aren't normally distributing
While the criteria acceptance or rejection of normality test are:
Ho : is accepting if Sig (pvalue) ≥ α = 0.05
Ha : is accepting if Sig (pvalue) < α = 0.05.

b. Homogeneity Test

The intent of this test is to test whether the data that obtain from the sample are homogeneous or not. This research used statistical computation by using Statistical Package for Social Science (SPSS) for homogeneity of the test. The hypotheses for the homogeneity test were formulate as follows:

Ho: The variance of the data is homogenous
Ha: The variance of the data is not homogenous

While the criteria acceptance or rejection of homogeneity test are:

Ho: is accepting if Sig (pvalue) ≥ α = 0.05
Ha: is accepting if Sig (pvalue) < α = 0.05

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Hypothesis Testing

The hypothesis testing, if the significance value of the test was more than the level of significance, then accept the null hypothesis. If the significance value of the test less than pre-determined significance level, then researcher reject the null hypothesis. The researcher used parametric statistic if the data are normal and homogenous. Otherwise, if data aren't normal or homogenous, non-parametric statistic used.
To answer the research problem formulation, the researchers was described the Hypothesis (Ho) and the Alternative Hypothesis (Ha) as follows:
H_O = There is no significant difference after using Quizizz as a learning media on students' reading skill.
H_a = There is a significant difference after using Quizizz as a learning media on students' reading skill.

RESULTS AND DISCUSSION

In the process of obtaining data, researchers found findings based on the results of tests that had been given to sample, namely students' of class VIII-C and VIII-D which was carried out on July 18th - August 12th 2022, researcher obtained information that there were several problems related to language learning English at the junior high school level. One of them is the selection of applications that are less attractive at SMP Negeri 2 Tarakan, especially in class VIII. The lack of skill of English teachers in utilizing digital platforms causes the learning and teaching process to be less than optimal. In this chapter the researcher was discussed.

The Treatment on Student

This research was conducted at SMP Negeri 2 Tarakan in VIII-C as the treatment class and VIII-D as the control class. The total number of meetings conducted by researchers and samples was 6 meetings. At the first meeting, the researcher distributed pretest questions consisting of 10 multiple choice questions and 10 essay questions to students in VIII-C and VIII-D. At the second meeting, class VIII-C (experimental class) and VIII-D (control class) were given different treatment, where the researcher gave treatment-(quizizz) for class VIII-C, while class VIII-D was not given treatment (quizizz). During the treatment, the researcher took 4 meetings. After being given treatment, the researcher gave post test questions for both samples.

During the four meetings, the experimental and control groups received different treatment, where each meeting the experimental group was given Quizizz as a learning medium and the control group was not given Quizizz as a learning medium. however, the researcher provided the same material, namely recount text. From the first to the last meeting, the learning experiment class was carried out using Quizizz as a learning medium with recount text material. The researcher presented the material on Quizizz as a treatment for the Experiment group, while for the control group the learning was presented as usual without using Quizizz with the same material.

Hyphotesis Testing

Before to utilizing the t-test to assess the researcher's hypotheses, the data from the pretest and posttest were computed to determine the data's normality and homogeneity of variance 1. Normality of data.

The objective of the normality test was ascertain whether or not the data distribution followed a normal distribution. Normality test showed that sample were taken from the population that was

normally distributed or not. The researcher employed the Kolmogorov-Smirnov test, which was computed using SPSS 22.0, to determine whether the data were normal. In testing the hypothesis of normality, the data of pre test and post test score, researcher used Kolmogorov-Smirnov.

After the data was analyzed, it can be seen the significant value that indicates the normality. The criterion of the data that normally distributed was if the significant coefficient of Kolmogorov-Smirnov was > 0.05. it was summarized in table:

Table 1. Result of Normality test Varience

Group	Test	Sig	The Criterian	Decision	Result Of Normality Distributed
Experiment	Pre test	0,200	Sig>0.05	Ho is Accepted	Normal
	Post test	0,012	Sig>0.05	Ho is Accepted	Normal
Control	Pre test	0,034	Sig>0.05	Ho is Accepted	Normal
	Post test	0,200	Sig>0.05	Ho is Accepted	Normal

The experiment group pre-test and post-test sigs are 0.200 and 0.012, respectively, according to Table 4.1 above, whereas the control group's sigs are 0.034 and 0.200. Since both the pretest and post test scores for the experiment group and control group above the significance threshold of 0.05, it can be inferred from these results the data for both the pretest and posttest were regularly distributed. The data is typical since students receive scores for each of the five score classifications on the pretest and posttest.

The test of homogeneity the data of pretest and post test score, researcher used Levene Statistic formula by using SPSS 22.0 software with a significant level 0.05. the result of homogeneity test of pretest and posttest can be seen in table below:

Table 2. The Result of Homogeneity of Variance

Test	Levene Statistic	df1	df 2	Sig.	Decision	Result Of Homogeneity Distributed
Pre test	0,255	1	62	0,616	Ho is Accepted	Homogen
Post test	0,544	1	62	0,023	Ho is Accepted	Homogen

From the results of the variant homogeneity test in table 4.2 above, the researcher found significance of pretest and posttest were 0.255 and 0.544, the significance was greater than 0.05 so the data was homogeneous. Therefore, the pretest and posttest variances are the same.

Based on these results, the researcher concluded that the data is homogeneous. As it can be observed, the results of the pretest and posttest scores have same variance or homogenous, satisfying normality requirements of the data distribution, allowing testing of the variance analysis research hypothesis to proceed.

Test of Difference

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Pre-test and post test results for experiment and control classes were analyzed by using an independent t-test.

Table 3. 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
Reading Skill	Equal variances assumed	5,443	,023	3,938	62	,000	18,906	4,801	9,309	28,504
	Equal variances not assumed			3,938	55,528	,000	18,906	4,801	9,286	28,526

An independent sample t-test was used to assess the post-test findings from the experiment group and control group, which are displayed in table 4.3 above. There were two methods to respond to the research's hypothesis testing. The first method included comparing the sig (2-tailed) result to the level of significance (0.000< 0.05), while the second method involved comparing the t-test result to the t-table. The t-table in this case is 1,670 since the df in the t-test is 62. The t-test result from the table was 3,938. T-test result (3,938) was superior than table (1,690). As a result, the alternative hypothesis is accepted and the null hypothesis is rejected. It indicates that there has been a noticeable improvement in the reading abilities of pupils who have used Quizizz as a learning tool.

Based on the results above, it can be included there were significant differences in students reading skills before and after being taught by using the quizizz application as a learning media. In the research hypothesis, it has been written that there are two types of hypotheses used in this research, namely the null hypothesis (Ho) and the alternative hypothesis (Ha). Ho accepted if there was No. significant difference between the student result of the independent computations. T-test is used in research to find significant variations in student reading skill. If t-test score is lower than the t-table score, the null hypothesis (Ho) is accepted (Ho = t-test < t-table) it means that quizizz as learning media not give any distribution to student reading skill. The other hand, if t-test score is higher than t-table score, the alternative hypothesis (Ha) is accepted (Ha=t-test > t-table), it means that quizizz as learning media give any contribution to student reading skill.

After the data had been analyzed by using SPSS version 22.0 for windows, the researcher found that, there was significant differences before and after using Quizizz as a learning media on students' reading skills at eighth grade of SMP Negeri 2 Tarakan. It means (Ha) is accepted and (Ho) is rejected.

Based on the findings conducted by researchers at SMP Negeri 2 Tarakan there were several problems that occurred, one of which was the selection of applications that were less attractive, causing a lack of interest in student learning which had an impact on students' reading abilities at SMP NEGERI 2 Tarakan. In this case, to answer the above problems, the researcher chose the quizizz application as a learning medium in order to increase interest in learning, especially in

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students' reading skills. This was also supported by previous research conducted by Anggreani (2020), at SMP Kesatrian 1 Semarang, who stated that Quizizz was declared feasible to determine students' analytical abilities.

After finding a suitable media the researcher determines the research objectives. The purpose of this research was to determine whether there was a significant difference between the experimental group (treated class) and the control group (non-treated class) using Quizizz as a learning medium for students' English reading skills. The research samples were VIII C (Experimental Group) and VIII D (Control Group). There were 32 students for the experimental group and 32 students for the control group as samples in this research. Data analysis is pretest and posttest.

The research objective was to find out whether there was a significant difference between the experimental group (the class that was given treatment) and the control group (the class that was not given treatment) using Quizizz as a learning media on students' English reading skill. The sample was VIII C (Exprement Group) and VIII D (Control Group). There were 32 students for experiment group and 32 students for control group as a sample in this research. The analysis of data was pretest and posttest.

In answering the research objectives, the researcher gave a pretest to students to determine students' English reading skill. The pretest was carried out before the researcher gave treatment to students. The experimental group and the control group were given the same pretest to determine students' reading skill. after that, learning is carried out for four meetings according to the lesson plan and syllabus. The experimental class was taught using Quizizz as a learning media, while the control group wasn't taught using the Quizizz application. After giving treatment for four meetings in the experimental and control groups, the researcher gave the students a posttest to find out the effectiveness of Quizizz as a learning media.

From the results of the research, for the experimental group there was an average student score of 45.63 in the pretest and an average student score of 68.28 in the posttest, while for the control group there was an average student score of 38.75 in the pretest and for the control group there was the average value of students 49.38.

The results of testing the hypothesis using an independent sample test show that learning media using quizizz is quite effective in improving the reading skill of class VIII students of SMP Negeri 2 Tarakan. From the calculation of the independent sample test test, it can be seen that there is a significant difference between the pretest and posttest average scores.

CONCLUSION

In this research, the researcher found that there was a significant difference in the students' reading skill before and after the researcher gave the treatment. Based on the results, it can be concluded that the application of the quizizz application in improving students' reading skills. This is evidenced by the comparison of the average score results between the pretest and posttest, where the average score in the posttest is higher than the pretest. In addition, the result of the t-test comparison is 3.938. This means that the -t-test is higher than -t-table, namely at the degree of freedom (df) 62 and a significance level of 5% p=90%. So, the result of t-count is 3.938 > t-table 1.670. The calculation between the t-table and t-test values at p = 90% α = 5% is used in this research, which shows that the t-test is higher than the t-table value, Ha is accepted and Ho is rejected.

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REFERENCES

Anggreani, S. (2020). Application of the online quizizz evaluation tool with a stem approach to measure the analytical skills and digital literacy of junior high school students. Semarang.

Creswell, J. W. (2014). Research Design: Qualitative, Quantitative and Mixed Methods Approaches (4th ed.). Thousand Oaks, CA: Sage.

Herliandry, Devi., N. M. E. S. H. K. (2020). Pembelajaran Pada Masa Pandemi Covid-19. Jurnal Pendidikan Teknologi, 22(1), 65–69. https://doi.org/10. 21009/jtp.v22i1.15286.

Laily, I. F. (2014). Hubungan Kemampuan Membaca Pemahaman Dengan Kemampuan Memahami Soal Cerita Matematika Sekolah Dasar. Eduma : Mathematics Education Learning and Teaching, 3(1). https://doi.org/10.24235/eduma.v3i1.8.

Riyanto, A. (2013). Pengembangan Buku Pengayaan Keterampilan Membaca Bahasa Indonesia yang Bermuatan Nilai Kewirausahaan. Seloka: Jurnal Pendidikan Bahasa Dan Sastra Indonesia, 2(1). https://journal.unnes.ac.id/sju/index.php/seloka/article/download/1315/1277

Qorri'aina, A. & Setiawan, A. (2018). The Development of Internet-Based Economic Learning Media using Moodle Approach. *International Journal of Active Learning*, *3*(2), 100–109. http://journal.unnes.ac.id/nju/index.php/ijal

Sugiyono, S. (2013). Educational research methods (Quantitative, qualitative, and R & D approaches). Bandung, Indonesia: Alfabeta.

Tanner, K. (2018). Experimental research. In Research Methods: Information, Systems, and Contexts: Second Edition. https://doi.org/10.1016/B978-0-08-102220-7.00014-5.

Wolcott, Daniel & Duarte, Adam & Weckerly, Floyd. (2018). Statistical Inference. 10.1016/B978-0-12-409548-9.10592-X.