

## The Effect Of Quizizz On Students Reading Comprehension

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### Abstract

The aim of this research is to investigate the relationship between mobile-assisted language learning and vocabulary learning integrated with the *Quizizz* platform. The researcher opted to examine the major effect of employing Mobile-Assisted Language Learning (MALL) coupled with Quizizz on Reading Comprehension of Senior High School students at SMA Negeri 13 Bandar Lampung based on the preceding considerations. This research study used a quantitative approach. The conclusion is based on the presentation and description of the findings and discussions from the data analysis. There was an increase in students' scores on the pre-test and post-test. Online learning using Quizizz towards English students' reading comprehension at SMA Negeri 13 Bandar Lampung is quite effective when viewed from student learning outcomes. Student learning outcomes after lectures using Quizizz are higher than student learning outcomes before studying

**Keywords:** Mobile-Assisted Language Learning, Quizizz, Reading Comprehension

### Introduction

The speed of technological innovation is rapidly emerging as a trend in the 21<sup>st</sup> century. The wave of change is extremely noticed through the information that can be accessed every time and everywhere by many people all over the world. Unconsciously, the use of technology automatically changes the daily routine of the post-millennial generation in terms of lifestyle, social interaction, economics, and education (Sarica and Cavus 2009). Santosa (2017) argues that Gen Z becomes the digital user who lives in the world of digital stage. This means that Gen Z was born as a tech user. One of the noticeable characteristics of generation Z is the term social networking when everything is already on their hands through the web, internet, smartphones, laptops, freely available network, and digital media (Sigh and Dangmei 2016).

As a generation who could not live without the existence of technology, the learning process should be integrated into the use of technology itself. English as a worldwide language provides access and connection for every aspect of the human to have a good career in the future in the digital age. One cannot deny that Revolution 4.0 is happening because most people already use technology as a daily necessity. The existence of the technology itself should be incorporated into the learning process that aims to make students the knowledge to face the Fourth Industrial Revolution. However, the fact is most students especially in Indonesia are still struggling in mastering the English language as their foreign language. It is mainly caused by books and the teacher is only the primary source that supports students learning the English language. In line with the assumption of the teachers, the preliminary observation about the learning style of the students, it is found that the students are allowed to bring a mobile phone to the classroom. On the other hand, since the use of mobile technology is allowed in school, it brings a problem that most of the students do not use their mobile in the proper way. Therefore, the result of the report

from UNESCO notes that reading in the mobile era shares strategies for effective mobile usage in facilitating language learning where literacy including reading rates are low.

Reading as a major emphasis in the field of education becomes the core of all formal learning competencies. The success or failure of the students in reading skills resonates throughout the rest of their life in the future. Reading also enables students to acquire the information, knowledge, and skill that they need in life. The quality of reading skills has an important impact on the capacity of the English language. The more students have skills in reading, the more they will be opened up to a new world, increase their vocabulary, and language development, and become familiar with a variety of writing styles. In Indonesia, reading comprehension is stated in the regulation of the minister of education and culture (Permendikbud) No. 59 the Year 2014. It is also closely linked to the 2013 Curriculum that has been implemented in most Indonesian schools. The content in Permendikbud No. 59 the year 2014 presents three main aspects to be competent and capable of reading. The first is the comprehension of social function which refers to the function of the text in the social context or in real life. The second is the comprehension of the structure of the text which focuses on how the information contained in a written text is organized. The last is the comprehension of the language feature which is meant as the features of language that support meaning. Through advancements in technology, learning uses mobile apps to support learning activities. Mobile-Assisted Language Learning (MALL) is an emerging strategy to create a fresh perspective on language learning. Most teachers in several places already tried to integrate these changes and utilize Smartphones in their classes by using the MALL strategy (Kilicakaya and Krajka 2010). Generally, the key feature of the MALL strategy is the notion of mobility. This notion refers to the language learner's brand new learning experience where language learning, especially knowledge about vocabulary, can take place anywhere. This characteristic offers many benefits for language learners and it can be implemented at the Senior High School level (Sharples, et al. 2009).

The modern paradigm and educational trends are reinforced by the use of ICT. It creates a new approach and technique for engaging student activity into learning. Then, one of the trends to become the solution to this current situation is gamification. Gamification refers to the use of game-based mechanisms and game thinking to engage students, motivate action, and also promote learning. Gamification is the use of approach and element as game thinking which has a different context from the games. There are some software tools for gamification, such as *Kahoot!*, *Quizizz*, *FlipQuiz*, *Duolingo*, *Ribbon Hero*, *ClassDojo*, and many more. Those are suitable to see the automatic progress and result of the students in the learning process. Here, *Quizizz* as the focus of the current research will be one of the tools that will be employed.

Vygotsky's Zone of Proximal Development (ZPD) which has a closer relationship with the idea of scaffolding states that ZPD guides the students to represent the skill level outside the students' comfort and mastery. However, scaffolding refers to the instructional support in learning such as quizzes, games, instructions, and tutoring, that facilitate learning within the student's ZPD. Regarding that case, a quiz can be the one that can scaffold the process of language learning in the classroom since the quiz and game can be the instructional support (Vygotsky 1962). *Quizizz* as a digital platform to assist the students' mastery of reading is a fun multiplayer classroom activity that allows all students to practice reading skills together by using their mobile phones like a tablet, Ipad, or even Smartphone (Mei, Ju and Adam 2018). Numerous research related to Mobile-Assisted Language Learning (MALL) has been conducted to support this current research. The first is international research using *Quizizz.com* to enhance pre-intermediate students'

vocabulary knowledge by Icin and Orta (2018). The aim of this research is to investigate the relationship between mobile-assisted language learning and vocabulary learning integrated with the *Quizizz* platform. The researcher opted to examine the major effect of employing Mobile-Assisted Language Learning (MALL) coupled with Quizizz on Reading Comprehension of Senior High School students at SMA Negeri 13 Bandar Lampung based on the preceding considerations. Since vocabulary has become an important part of reading, the purpose of this study is to see how Quizizz affects reading comprehension in students at SMA Negeri 13 Bandar Lampung.

### Method

This research study used a quantitative approach. A quantitative approach is one in which the investigatory primarily used a postpositive claim for developing knowledge (i.e., cause and effect thinking, reduction to specific variables and hypotheses and questions, use of measurement and observation, and the test of theories) and employs strategies of inquiry such as experiment and survey and collect data on a predetermined instrument that yield statistics data. (Creswell, 2003). According to (Ary, 2010), quantitative research is an inquiry employing operational definitions to generate numeric data to answer predetermined. It is using a quantitative approach because quantitative is the data of all numbers using statistical data. The researcher used a pre-experimental design. The design of this study is experimental design because the researcher wants to measure the use of the quizizz application in improving reading ability. According to Arikunto, an experimental study is a study that aims to know if there is or is not an effect of the variable studied. In line with this Donald Ary says that experimental design refers to the conceptual framework within which the experiment is conducted. The most important criterion is that the design be appropriate for testing the particular hypothesis of the study.

#### One Group Pre-Test and Post-Test

Pre-Test	Treatment	Post- Test
O1	X	O2

Where:

O1 = pre-test

O2 = post-test

X = treatment using Quizizz game

The experiment model is through three steps:

- Provide a pretest for measuring the dependent variable (initial reading comprehension skill) before treatment is performed.
- Giving treatment to the research subject class by applying the game application method.
- Provide a posttest to measure the dependent variable after treatment is done.

There was one kind of instrument used in this research, namely a test. The test consisted of pre-test and post-test. The pre-test was administered before the treatment to get data on the student's prior knowledge, while the post-test was given after the last treatment to get data

on the impact of the Quizizz application. (Ary, 2010). Researchers build the question itself. The advantage of tests made by researchers is that they can be tailored to specific content.

### 1. Assessment Method

In assessment methods, the researcher used inter-rater. researcher as rater 1 and rater 2 as a teacher. For the assessment of student test results, researchers used a scoring rubric that has been predetermined.

### Data Collection Procedures

Data collection techniques used in this study are the initial and final tests. The data collection steps were done as follows:

#### 1. Initial test (pretest)

The initial test is done before treatment, a pretest is done to know the ability possessed by students before applying the play method.

#### 2. Treatment

In this case, the researcher applies the application method of the quizizz game application in English class.

#### 3. The final test (posttest)

After treatment, the next action is the posttest to know the effect of using the quizizz application method.

### Data Analysis Procedures

#### 1. Distribution of the pre-test to the sample

In this part, the researcher gave the students a number of tests. The purpose of this session is to find out the student's reading comprehension skills before applying Quizizz application.

#### 2. Treatment by applying quizizz application to the class.

After giving the pre-test, the writer did the treatment for the students by using the Quizizz application. The treatment was done for the fourth meeting which took 90 minutes each meeting. The Quizizz application in the class is as follows:

1). The researcher invites the students into the computer lab. And show reading text on the LCD about the Quizizz application.

2). The researcher distributed the reading material which was a quizizz application. Each student got a complete text.

3). The researcher asked the students to the structure generically and read the reading material in the correct composition or correct form.

- 4). Each students read the reading text (narrative and descriptive text)
  - 5). The researcher read the true composition of the reading material to the students so they can correct their false in the reading material.
  - 6). The Students answer the question and underline words that are considered difficulties.
3. Distributing post-test to the sample

After doing the treatment, the writer gave the students a number of tests, namely post-test to know the students reading comprehension skills after applying the quizzz application.

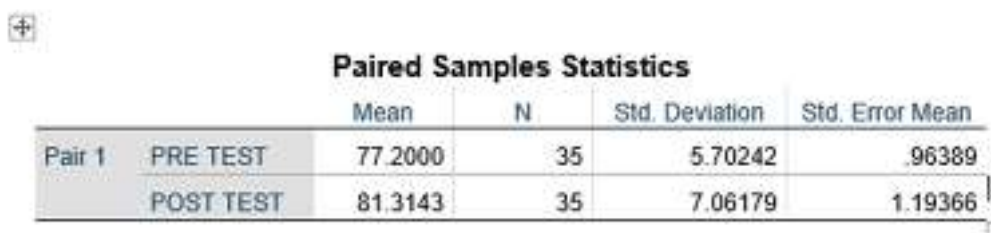
4. The data was collected by using inferential statistics. A percentage score is also used to know the student's skill in reading comprehension.

a. Researcher analyzes the data in several ways, namely:

1. Researcher collects test results.
2. The researcher gives scores for the students according to the criteria
3. Researcher organizes into tables.

### Findings and Discussion

After conducting research on 35 students by comparing the Pre-test and Post-test scores, the SPSS output results will be interpreted as follows:



The image shows a screenshot of an SPSS output table titled "Paired Samples Statistics". The table has five columns: "Pair 1", "Mean", "N", "Std. Deviation", and "Std. Error Mean". There are two rows of data for "Pair 1": "PRE TEST" and "POST TEST".

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	PRE TEST	77.2000	35	5.70242	.96389
	POST TEST	81.3143	35	7.06179	1.19366

In this output, we are shown a summary of the descriptive statistical results of the two samples studied, namely the Pre-Test and Post-Test scores. For the Pre-Test value, the average learning outcome or Mean is 77.2000. Meanwhile, for the Post Test value, the average value of learning outcomes is 81.3143. The number of respondents or students used as research samples was 35 students. For the value of Std. The deviation (standard deviation) in the Pre-Test is 5.70242. Last is the Std value. The mean error for the Pre-Test is .96389 and for Post Test is 1.19366.

Because the average value of learning outcomes in the Pre-Test is 77.200 < Post-Test 81.3143, it means that descriptively there is a difference in the average learning outcomes between the Pre-Test and Post-Test results. Furthermore, to prove whether the

difference is really real (significant) or not, then we need to interpret the results of the paired sample t test contained in the "Paired Sample Test" output table.

Pair 1	N	Correlation	Sig.
PRE TEST & POST TEST	35	-.147	.400

The output above shows the results of the correlation test or the relationship between the two data or the relationship between the two data or the relationship between Pre-test variable and the Post Test variable. Based on the output above, it is known that the correlation coefficient value is -0.147 with a significance value (Sig) of 0.400 > probability 0.05, so it can be said that there is no relationship between the Pre-Test variable and the Post Test variable.

Pair 1	PRE TEST - POST TEST	Paired Differences			95% Confidence Interval of the Difference
		Mean	Std. Deviation	Std. Error Mean	Lower
		4.11429	9.70679	1.64075	7.44909

Pair 1	PRE TEST - POST TEST	Paired Differences			95% Confidence Interval of the Difference	Sig. (2-tailed)
		Upper	t	df	Upper	
		-7.7989	-2.508	34	.017	

This third output is the most important, because in the third part of this, we will find answers to the research we are doing, namely regarding the effect of Quizizz towards English students' reading comprehension at SMA Negeri 13 Bandar Lampung. However, before we discuss the interpretation of the numbers contained in the "Paired Samples Test" output table above, we first need to know the formulation of the research hypothesis on the decision-making guidelines in the paired sample t test.

### Research Hypothesis Formulation

H<sub>0</sub> = there is no average difference between pretest and posttest learning outcomes, which means that there is no effectiveness of online learning using Quizizz in improving students' reading comprehension at SMA Negeri 13 Bandar Lampung.

H<sub>a</sub> = there is an average difference between the pretest and posttest learning outcomes, which means that there is an effectiveness of online learning using Quizizz in improving students' reading comprehension at SMA Negeri 13 Bandar Lampung.

According to Singgih Santoso (2014: 264), the decision-making guidelines in the paired sample t-test test based on the significant value (Sig.) of the SPSS output results, are as follows.

1. If the value of Sig. (2-tailed)  $< 0.05$ , then  $H_0$  is rejected and  $H_1$  is accepted.
2. On the other hand, if the value of Sig. (2-tailed)  $> 0.05$ , then  $H_0$  is accepted and  $H_1$  is rejected.

Based on the "Paired Sample T-test" output table above, Sig's value is known. (2-tailed) is  $0.17 > 0.05$ , then  $H_0$  is rejected and  $H_a$  is accepted. So it can be concluded that there is an average difference between pretest and post-test learning outcomes, which means that there is an effect of Quizizz on English students' reading comprehension at SMAN 13 Bandar Lampung.

The output table "Paired Sample T-test" above also contains information about the value of the "Mean Paired Difference" which is  $-77989$ . This value indicates the difference between the average pretest learning outcomes and the post-test average learning outcomes or  $77.2000 - 81.3143 = -41.143$  and the difference is between  $-7.44869$  to  $-77989$  (95% Confidence Interval of the Difference Lower and Upper). Based on the test results, it can be concluded that there was an increase in student learning outcomes before and after being given the treatment of learning using Quizizz in improving students' reading comprehension at SMA Negeri 13 Bandar Lampung". So, learning using this has an effect on student learning outcomes.

### **Conclusion**

This chapter presents the conclusion of the research. The conclusion is based on the presentation and description of the findings and discussions from the data analysis. The aim of this research was to use the Quizizz application in improving their frustration level reading ability based on a few texts, referring to the comparison test between the pre-test and post-test of the pre-experimental class. There was an increase in students' scores on the pre-test and post-test. Online learning using Quizizz towards English students' reading comprehension at SMA Negeri 13 Bandar Lampung is quite effective when viewed from student learning outcomes. Student learning outcomes after lectures using Quizizz are higher than student learning outcomes before studying. Suggestions that can be contributed are that other researchers who are interested in conducting similar research can apply to learn and compare with other online media with the lack of learning through this Quizizz media. After giving treatment that is in the form of using Quizizz application in the material of reading text. Students have many changes to reading and try to find out the words they did not know.

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