The Effectiveness of Using Quizizz as a Tool in Developing Student's Reading Comprehension

Nurul Fatwa[1] , Ernita Daulay[2]

[1,2]Universitas Islam Negeri Sumatera Utara, Indonesia

[1]nfatwa356@gmail.com

Abstract

The objective of this study is to determine if Quizizz is a useful tool for developing student's reading comprehension for higher education. The present study employs a quantitative research methodology to examine the proposed research issue. The sample size for the 2020 academic year consisted of 30 students majoring in English education, selected using purposive random sampling by the researchers. The data collection methods in this research consist of 2, Questionnaire or survey used to collect Pretest and Posttest data regarding students' perceptions and the students' reading comprehension ability test. Data analysis to test the research hypothesis uses the statistical technique of paired sample t-test The paired sample t-test indicated a substantial improvement in students' reading comprehension after the researchers administered treatment, with a p-value of $0.000 < 0.05$. The results demonstrate that the use of Quizizz as a teaching tool in the classroom has an important beneficial effect on students' reading comprehension skills.

Keywords: *Reading comprehension, Quizizz, Tool, Students, Application.*

Introduction

Currently, education is considered to play a very significant role in human existence. This is due to the fact that education is considered to be the primary and primary basis. When it comes to their lives, people have a natural propensity to want to better the quality of every element of their life. Several subfields of science and technology were developed in order to contribute to an improvement in the standard of living. Particularly in the field of English education, the relationship between education and technology is one that is mutually helpful among both parties. The purpose of educational technology is to enhance the teaching and learning experience between teachers and students, as well as to maximize the effectiveness of the acquisition of knowledge. Writing skills, reading skills, listening skills, and speaking skills are the abilities that are required for learning English. There are various aspects that are important for learning English, and these aspects complement the skills that are required for learning English itself. The teaching and learning process in English language learning is greatly aided by all of these skills, particularly reading skills, which are closely tied to one another and play a vital role in assisting the process.

(Emeliya Sukma Dara Damanik et al., 2020) Reading is the key to developing an intelligent and insightful person. Reading can develop oneself to face society's demands as an intellectual person. Reading is a way of observing messages arranged in written form to get the important meaning of what is written. When we read, we use our eyes to organize words and we think carefully to turn them into written text that conveys something to us. Reading can also be done silently (in our minds) or resoundingly (with the aim that other people can hear it. Bárdos (2000) claims that readers can benefit from devoting more time to reading in order to acquire translation and recognize translations based on the various words and signs in text. Improving one's reading comprehension involves not only translating the book's meaning into one's own

language, but also rephrasing the material so that listeners may easily understand it. Improving one's reading comprehension is a crucial skill for language learners. The ability to comprehend what one is reading is necessary for obtaining information from reading materials, which is connected to the criteria that were described. Reading is a process that involves an individual engaging in visual thinking, psycholinguistic processing, and metacognitive abilities in addition to reading written text.

A teacher may employ a variety of strategies when instructing students in reading, including the use of media, activities, and various methods to pique their interest. Teachers employ strategies as a means to accomplish a portion or the entirety of their pedagogical objectives (Jeremy Harmer, 2017). Numerous challenges manifest during the course of reading instruction and acquisition. Students become disinterested in lengthy reading instruction materials, leading to difficulties in retaining the material. Consequently, students' enthusiasm for learning wanes. Students continue to struggle with identifying the text's main idea and substance. To address the aforementioned challenges, educators may employ a variety of instructional materials to aid students in developing a comprehensive reading skill set. Reading instruction is the basic way of teaching someone how to read. This method involves extracting information from a book in order to establish the primary concept, factual information, and vocabulary. It is the responsibility of the instructor to encourage students' creative thinking, give them with ideas, and encourage them to think freely in order to facilitate the students' learning process. During the process of teaching reading, a teacher may employ a variety of strategies, such as employing a variety of approaches, media, and activities, in order to keep the students interested. Instructional strategies are actions that teachers take in order to put some or all of their instructional approaches into practice (Jeremy Harmer, 2017).

From the observation results conducted by the researcher at one of the Senior High School, among the students, there seems to be a lack of interest in reading books or other written materials, which can lead to a low ability to comprehend and interpret texts. Students experience difficulties in critically analyzing texts, understanding themes, purposes, and messages conveyed by the authors, as well as weak grammar skills hindering their ability to construct clear and correct sentences

The Quizizz application is one of the many forms of educational media that may be applied to enhance one's ability to comprehend what is read. There has been evidence that the use of Quizizz as a teaching tool in educational institutions has been successful in increasing the level of reading motivation among students and improving their overall academic performance. A number of earlier studies are utilized in this investigation. The first is conducted by (Zhang & Crawford, 2023) . According to the findings of this study, a group of students in China discovered that Quizizz improved students' motivation and affective outcomes, which resulted in more student involvement and higher accuracy in evaluations. In this particular study, the researchers utilized the Quizizz platform as a Gamification Formative Assessment (GFA) on students who were learning English as a Foreign Language (EFL). Based on the findings of this study, the utilization of the Quizizz platform for the purpose of gamified formative assessment had a beneficial effect on the levels of motivation, internalization, engagement, and language competency among English as a Foreign Language (EFL) learners. According to the findings of the study, the use of Quizizz led to an increase in their motivation and affective outcomes, which in turn led to an improvement in the accuracy of their assessments and an increase in their participation. Additionally, in comparison to traditional formative assessments, gamified assessments that are administered using Quizizz have been shown to improve the levels of motivation and the internalization of motivation among students at a higher rate. The platform offers a competitive atmosphere that stimulates student participation and attention, which

ultimately results in an increase in motivation from an emotional point of view. In general, our findings indicate that Quizizz, which is an example of gamified formative assessment, has the potential to improve the language internalization and proficiency of English as a Foreign Language (EFL) learners. For the objective of presenting new findings from earlier research that are more precise in nature, the purpose of this study is to present new findings about the utilization of Quizizz as a teaching tool to boost students' reading comprehension. The study by (Wahyuni & Styaningsih, 2023) It was discovered that Quizizz is an efficient source of media for teaching narrative text. It has also been recommended that teachers can use Quizizz as a learning media in order to pique the interest of their pupils for learning. It is important for educators to be creative and original when it comes to the use of learning material to assist students in learning English. When it comes to teaching reading and encouraging students to learn English, the Quizizz application is one of the most effective forms of electronic media that teachers may employ. The second study was conducted by (John Pahamzah et al., 2020) in senior high school of Banten. According to Khusniyah & Hakim (Siti Rahmatul Fitriyah, 2021), Quizizz is a multiplayer application that can be accessed via website or app by both teachers and students. Quizizz allows students to compete and can make them more active during learning, as well as motivate them to participate in quizzes, thus enabling them to achieve high quiz results (Asna, 2020).

As a result of the findings of the study, students are able to concentrate and make the most of their mobile phones as a fun learning media when they use Quizizz as a learning media. This is because the use of Quizizz can make students passionate about participating in learning activities. Through the application of the notion of maximum learning, students will improve their ability to comprehend what they read in English. Because of this, it will lead to better learning results for pupils in school. Despite the fact that there are numerous instructional methods that teachers employ in order to cultivate students' capabilities in reading comprehension, such as the utilization of a variety of educational technology media that is currently supporting every learning process, there are still many more methods. Quizizz is also an educational technology media that may help and improve the quality in improving the teaching and learning process, particularly in the area of reading comprehension. However, there are not many studies that employ Quizizz as Mobile Assisted Language Learning (MALL). Quizizz is also a mobile application that can be used to learn languages. For this reason, researchers decided to conduct this study in order to assess whether or not the use of Quizizz as a tool for increasing students' reading comprehension is successful. According to the findings of the studies that came before, the Quizizz application has the potential to aid students in interpreting narrative texts and employing appropriate learning practices for higher education. Consequently, the objective of this research is to ascertain whether or not Quizizz is an effective instrument for enhancing the reading comprehension skills of students participating in higher education. Accordingly, this research intended to answer the following questions: Is Quizizz as web-based learning media effective to developing student's reading comprehension for higher school?

Method

The current investigation makes use of a quantitative research methodology in order to investigate the predetermined research problem. (C.R. Kothari, 2004) A phenomenon that can be represented in terms of quantity is suitable for quantitative research, which is based on the measurement of quantity or amount and is useful to studying such phenomena. Experiments are carried out by researchers in order to evaluate the impact that changing one variable has on other variables while also taking into account consequences from the outside world. Both the

Quizizz Application and the assessed behavior of reading comprehension abilities are considered to be independent variables. The dependent variable is assumed to be the behavior of reading comprehension skills. A research design that was experimental was utilized by the researcher. According to (Chien, 2019) In the realm of science, the experimental technique is the approach that is utilized to produce results that are characterized by precision, accuracy, and reliability. It is possible to draw parallels between this and the practice of observing inside a regulated setting. The way it functions is based on the principles of individual variables and the causes that cause them. In this area of research, causal connections are investigated. When it comes to responding to requests, this technique is both methodical and sensible. The researcher is seeking to evaluate a fresh idea in this particular instance. Because of this, there is an increase to the corpus of information that already exists. To determine whether or not Quizizz is effective in improving students' reading comprehension skills, this study utilized a pre-experimental technique to evaluate the effectiveness of the program. It has been stated by Kumar Bhayyalal Dubey and Kothari (n.d.) that pre-experimental designs do not have control mechanisms that can reduce the impact of independent variables on the results of the experiment. The precise pre-experimental design that was utilized in this study was the One-Group Pre-test Post-test Design.

The data collection methods in this research consist of 2, namely Questionnaire or survey used to collect Pretest and Posttest data regarding students' perceptions, from before being given treatment and after being given treatment and the students' reading comprehension ability test. Data analysis to test the research hypothesis uses the statistical technique of paired sample t-test with SPSS 19 program.

The research was conducted at a university that is situated in the city of Medan. A total of three sessions were held throughout the course of the investigation, which began on February 8th and continued until March 20th, 2023. The selection of this university was based on the fact that students who were pursuing a degree in English education at the institution had utilized the Quizizz application on several times as an instructional tool during the course of their participation in the teaching and learning experience. All of the students who were enrolled in the school throughout the 2020 academic year were included in the study. The sample size for the academic year 2020 consisted of thirty students who were majoring in English education. These students were chosen by the researchers through the use of purposive random sampling.

Results

Mean Score of Pre-test and Post-test

According to the findings of the research, the use of Quizizz has a substantial impact on the reading comprehension proficiency of English education majors when they are reading descriptive texts. The findings of the pre-test and the post-test are presented in Table 3, which may be found below:

Table 1. Mean Score of Pre-test and Post-test

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	pre test	45.50	30	17.925	3.273
	post test	60.27	30	19.594	3.577

Based on the data presented in Table 3, It is clear that the mean score of students' reading comprehension performance on the pre-test was 45.50, but on the post-test, it increased to 60.27. This is evidenced by the fact that 60.27 is the higher score. As a result of the incorporation of the Quizizz application as an additional aid during the learning process, this

suggests that there has been a significant improvement in the average score. After that, the researchers utilized the paired sample t-test in order to ascertain whether or not there was a statistically significant difference between the pre-test and post-test scores of students' reading comprehension after the implementation of the Quizizz Application for the purpose of teaching students to read descriptive texts.

Paired Samples T-test

The following table presents the results obtained from the t-test analysis.

Table 2. Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pre-test - post test	-14.767	2.487	.454	-15.695	-13.838	-32.522	29	.000

According to table 4 of the t test (Paired Sample T-test), the value of the Sig (2-tailed) statistic is 0.000, which is less than the threshold of 0.05. Following the completion of treatment, the results indicate that the Quizizz app resulted in a considerable improvement in the reading comprehension of the students. Reportedly, the utilization of Quizizz has resulted in an improvement in the reading comprehension of students.

Aspects of assessing students' reading comprehension abilities

Table 5 presents a comparative analysis of the percentages of pre-test results obtained through a questionnaire and post-test results obtained through Quizizz following the administration of a treatment.

Table 3. Aspects of assessing students' reading comprehension abilities:

Indicators	Percentage of Correct Answer	
	Pre-Test	Post-Test
Main idea	43,66%	56,34%
Vocabulary, phrases	43,93%	56,07%
Inferences	43,51%	56,49%
Grammatical features	41,18%	58,82%
Detail information (scanning)	35,19%	64,81%
Supporting ideas	44,44%	55,56%

The table above displays the following information: **a).** The primary concept, which was demonstrated by the results of the pre-test, revealed that the proportion of students who gave responses that were accurate amounted to 43.66 percent of the total student population. Comparatively, the results of the post-test indicated a correct response rate of 56.34 percent, which indicates a significant improvement in comparison to the results of the pre-test tests. **b).** In terms of vocabulary and phrases, the percentage of students who provided replies that were accurate reached 43.93% of the total student population. Subsequently, in the post-test, the percentage of students who submitted accurate responses amounted to 56.07%, which indicates a significant improvement in the outcomes of the post-test. **c).** The percentage of students who provided replies that were accurate accounted for 41.18 percent of the total student population, is an inference (implied details). The outcomes of the post-test, on the other hand, demonstrated an increase in comparison to the pre-test that came before it, with the percentage of students who provided accurate responses reaching to 56.49 percent of the total

student population. **d).** Grammatical characteristics: the proportion of students who gave correct responses accounted for 41.18 percent of the total student population. On the other hand, the results of the post-test suggested an increase in comparison to the pre-test that came before it. This was demonstrated by the fact that 58.82% of the students who supplied valid responses made up the proportion of those students **e).** A thorough examination of the pre-test results reveals that 35.19 percent of the total population was successful. This information was obtained by scanning the data that were clearly provided. Following that, the findings of the post-test revealed that 64.81 percent of the students had supplied responses that were accurate to the questions raised. **f).** In conclusion, the findings give evidence to support the hypothesis that 44.44 percent of students gave correct responses on the pre-test. Following that, the results of the post-test showed that the percentage of students who gave correct answers amounted to 55.56 percent of the whole student population.

Discussion

In order to examine the potential impact that using the Quizizz application could have on the reading comprehension abilities of pupils, the purpose of this study is to do this evaluation. Researchers used a variety of methods to evaluate the level of reading comprehension exhibited by students in this study. These methods included evaluating students' grasp of primary ideas and themes, vocabulary, expressions, idioms, and phrases in context, conclusions, grammatical elements, stated details, unstated details, and supporting concepts. An improvement was found in each and every reading comprehension indicator that was tested, as demonstrated by the results of the pre-test and the post-test. In addition, the employment of Quizizz had a considerable impact on the reading comprehension abilities of seventh grade students, which resulted in a distinguishable improvement from satisfactory to excellent.

In addition, the students enhanced their average score on the post-test, which went from 45.50 to 60.27. According to the results of the paired sample t-test, the use of the Quizizz app resulted in an improvement in the students' reading comprehension. The score is less than 0.05, with a value of 0.000 due to the fact that the Sig value is based on two-tailed statistics. After receiving treatment with Quizizz, the youngsters reported a considerable improvement in their reading comprehension. Using the Quizizz app, students have the opportunity to improve their reading comprehension and learn how to read descriptive language more successfully. The utilization of Quizizz in the classroom has a significant impact on the students' capacity to comprehend the material that they read. It was found that the students' results improved after receiving treatment with Quizizz, which is consistent with past comments. once that, all of the indicators that were utilized to evaluate the students' reading comprehension skills on this exam showed an improvement once the treatment was administered. Quizizz has been shown to have a beneficial effect on the development of reading comprehension skills. Taking everything into consideration, Quizizz does, in fact, considerably boost pupils' reading comprehension.

The purpose of this research is to explore the impact that using Quizizz as a teaching tool has on the extent to which students' reading comprehension skills are improved. Then, it was determined that the Quizizz application was a pioneering instructional technique, serving as a valuable instrument for supporting the enhancement of students' reading comprehension skills. This was a significant finding. Consequently, the results of this study align with prior research as they demonstrate notable disparities between students who received reading comprehension instruction in class using Quizizz as a tool and those who were taught using Google Forms. Quizizz demonstrates superior efficacy as a pedagogical tool for instructing reading comprehension in comparison to Google Form, particularly in the context of teaching

descriptive text. Students exhibited a preference for using Quizizz as a tool for enhancing their comprehension skills. Students had a heightened level of engagement, enthusiasm, and willingness to participate in reading comprehension training as a result of their positive response to the questions presented by researchers on Quizizz.

However, students' enthusiasm for using Google Forms for studying reading comprehension remains insufficient due to the absence of captivating elements that capture their attention. The disparity in the utilization of Google Form and Quizizz as instructional aids leads to a greater tendency among students to engage in reading comprehension through the Quizizz application. This is demonstrated by the observed improvement in student learning scores between the pre-test and post-test. Google Form is a more popular instructional aid than Quizizz. In the end, this turns out to be a crucial factor that plays a role in encouraging students to develop their ability to comprehend what they read. Quizizz is an application that serves as a great tool for improving students' reading comprehension abilities. It also serves to successfully facilitate the teaching and learning process between teachers and students. The results of this study demonstrate that students are able to effectively manage their time while utilizing Quizizz as a tool for reading teaching. They are required to dedicate time to engaged in reading books, identifying subjects, or providing specific details. These activities enhance their ability to manage time effectively. Quizizz offers immediate feedback, enabling students to immediately adapt their learning tactics.

The research findings demonstrate a significant improvement in reading comprehension following the use of Quizizz, with all indicators upgrading from "satisfactory" to "excellent." The average post-test score also substantially increased, from 45.50 to 60.27. Paired sample t-test results confirm Quizizz's superior effectiveness over Google Forms in enhancing students' reading comprehension skills. Integrating Quizizz into teaching can boost student engagement and motivation through its interactive features. Educator training in Quizizz utilization is crucial to maximize its benefits in improving students' reading comprehension. In conclusion, Quizizz has the potential to revolutionize reading instruction and create a more engaging and effective learning environment.

Conclusion

During the course of the academic year 2020 at a university in Medan, the purpose of this study is to explore the potential for an improvement in students' comprehension of descriptive text as a result of the usage of Quizizz. The findings of the t-test indicate that the scores of the students who received therapy were higher than their baseline scores. This is consistent with the findings of the test. This is confirmed by the fact that the average score increased from 45.50 to 60.27, which is in line with the findings and analysis that were reported in the chapter that came before this one. As an additional point of interest, the findings of both the pre-test and the post-test revealed improvements in all aspects of reading comprehension. After the researchers delivered therapy to the students, the results of the paired sample t-test indicated a significant improvement in the students' reading comprehension. The p-value for this test was 0.000, which is less than the significance level of 0.05. These findings offer empirical evidence for the notion that the utilization of Quizizz as a teaching tool in the classroom has a significant and beneficial impact on the reading comprehension abilities of students. Therefore, it is recommended that the researchers stated above examine the application of Quizizz in the context of a number of additional skills. This study confirms the contribution of using Quizizz as a teaching tool to enhance students' comprehension of descriptive texts. With significant improvements observed in all aspects of reading comprehension, the study provides empirical

evidence of Quizizz's effectiveness in facilitating learning outcomes. It is recommended that educators consider integrating Quizizz into their teaching practices to strengthen students' comprehension skills, not only in descriptive texts but also in various other subjects. Furthermore, further research is suggested to explore the application of Quizizz in developing additional skills beyond reading comprehension.

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