The effectiveness of spelling online game to improve students' vocabulary mastery at first-grade students of MTs Negeri 2 Manggarai Barat in the academic year 2022/2023

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ABSTRACT

The aims of this study are to find out the effectiveness of spelling online game to improve students' vocabulary mastery. This study was conducted at the first-grade students of MTs Negeri 2 Manggarai Barat. The subject of this study were 55 students that divided into two classes, 29 students of the control class and 26 of the experimental class. This study designs were quantitative with the pre-test and post-test as the instrument of research. Those tests were calculated and analyzed by using SPSS 16. The researcher found out the two results of this research. Firstly, the main scores of pre-tests and post-test were collected from twenty multiple choice questions and three essay questions, then, to analyzed the result, T-test was used. The finding of this study shows that teaching vocabulary using spelling online game was effective. It proved by the result that the researcher found, that t count (3976)> t table. (1674) and the sig(2-tailed) was 0.000< 0.05. It shows that the spelling online game was effective on improving students' vocabulary mastery of the First-Grade students of MTs Negeri 2 Manggarai Barat and the H0 (null hypothesis) was rejected. It is state that there was a significant difference between students' improvement in mastering vocabulary taught by using spelling online game

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1. Introduction

An English language learning begins with vocabulary mastery. Vocabulary mastery is required to express our ideas, feels and emotions and to understand what other people saying. Harmer expressed that the vocabulary holds the significant job as supplier of organs and flesh, while language structure makes up the skeleton of language (Heriyanto, 2015). Vocabulary is considered important in determining whether a person learns and / or acquires a second and/ or foreign language (Ghalebi et al., 2021; Sabri et al., 2019). Also, Nunan (1991) mentioned that the acquisition of adequate vocabulary is significant for the successful use of the second language being learned, because, without a comprehensive vocabulary, the learner will not be able to use the easy-to-understand communication structures and functions that the learner may have learned. Also, Bergström et al. (2021), mentioned that learners can express themselves in a more nuanced way when they have a lot of words. Thus, teachers' attention to the breadth of vocabulary acquisition refers to their view that communicative ability is the main learning goal.

There are so many ways to teach vocabulary, one of them is game. Sørensen & Meyer (2007) stated that game is considered to increase student learning motivation because they provide a more relaxed and enjoyable learning experience. The use of game in learning vocabulary must be suitable to the students, especially in learning vocabulary. The used game should not only for having fun but for educational purpose as well.

However, as cited in (Hibatullah, 2019), the one of the struggles found by the students is the incompetence to use of English precisely in communication in consequence of the lack of vocabulary. While mastering vocabulary, the students have a difficult time. It has an impact on their understanding of the meaning of words, how to spell and pronounce the words, and how they understand English text or make a sentence in English with the right interpretation. Also, the teaching technique that is old and monotone make the students get bored easily (Triningrum, 2019). Therefore, it will be challenging for the teacher to teach vocabulary. The teachers should consider the teaching technique that suitable and enjoyable with the students' needs.

In reality, as clarified by the English teacher at first-grade in MTs Negeri 2 Manggarai Barat that the first-grade students of MTs Negeri 2 Manggarai Barat had several problems in learning English such as feel unmotivated, lack of vocabulary they had even for the basic vocabularies, felt difficult to understand English text and do not know how to make English sentences, do not know how to pronounced and spell the words correctly. Also, the presumption that English is a difficult influenced the students at first-grade class in MTs Negeri 2 Manggarai Barat on learning English as lesson in their class. Moreover, the teacher added that, most of the teaching techniques they use are audiovisual and have been adapted to the material they will learn in class. It is also said that the use of game-based media in the classroom is still very minimal, especially the use of online games as a learning medium.

Based on the background above, the researcher decided to do the research entitled "The effectiveness of spelling online game to teach students' vocabulary mastery at first-grade students of MTs Negeri 2 Manggarai Barat in the academic year 2022/2023". The purposes of this research are to know whether the is a significant difference between the students who are learning vocabulary by using spelling online game and students who are not learning vocabulary by using spelling online game and to inform the effectiveness of spelling online game in teaching vocabulary at the first-grade students of MTs Negeri 2 Manggarai Barat. The researcher expects this study can be used as a source for the other researcher in the future.

1.1. Literature Review

It is unquestionably necessary for students to master the vocabulary in the language they have learned because vocabulary allows them to communicate their thoughts and feelings as well as those of others. The use of games in the teaching and learning process provides students and teachers with a fresh learning experience. It is thought that including games into the learning process will help enhance passion and motivation to study.

Many researchers integrate games into their learning systems. First, was from (Elimelech & Aram, 2020) "Using a digital spelling game for promoting alphabetic knowledge of preschoolers: The contribution of auditory and visual supports". Regression of the generalized estimating equality showed that the group with auditory and visual support and the group with auditory only support performed better on letter knowledge, phonological recognition, word spelling, and spelling than the unsupported and comparison groups. and performed well on the Post-test in the areas of decoding words. The unassisted group scored higher than the comparison group on letter knowledge alone.

The second was from (Ashraf et al., 2014), "The Impact of Online Games on Learning English Vocabulary by Iranian (Low-intermediate) EFL Learners". This study reports the utility of online games in vocabulary learning by Iranian EFL students. Participant, (24) low- intermediate level her EFL learners, was randomly assigned to experimental and control groups. The results of the analyzed data showed that the experimental group statistically significantly outperformed the control group on the post-test. Therefore, online games proved to be effective in learning English vocabulary for these students.

The last one was from (Umulaika, 2019), "The effectiveness of spelling bee game in teaching vocabulary at seventh grade students of SMPN 1 Saman in academic year 2018/2019". The purpose of this study was to investigate whether there were differences in vocabulary skills between students

taught in the Spelling Bee Game and her non-7th grade students in SMPN 1 Saman. The results of this study found that for her 7th grade students in his SMPN 1 Saman in the 2018/2019 school year, there was a prominent difference in vocabulary skills between students taught with the spelling bee game and those not taught with the spelling bee game.

2. Method

2.1. Research Design

Experimental research method strategy was used in this study. which featured experiment group and control group. The data on the effectiveness of spelling online games was analyzed using quantitative methodologies.

2.2. Population and Samples

Pupils from MTs Negeri 2 Manggarai Barat in the second semester participated in the study, which included students from first grade students of MTs Negeri 2 Manggarai Barat. For the goals of this research, pupils from classes VII B, VII C and VII D were selected as the samples of this research.

2.3. Data Collection Technique

Pre-test and post-test were used in this study. Pre-test was conducted by giving the test to both groups; they are experimental group and control group. The test forms that the researcher used in this study was multiple choice and essay. The aim of the test is to know the vocabulary of these two groups of students before the researchers gave the treatment. While post-test was performed on these groups after the treatment steps have been completed. The purpose of this post-test is definitely to know the test results and the effectiveness of using the spelling online game in the experimental group.

2.4. Research Instrument

Pre-tests and post-tests were utilized to collect data for this study's research aims. The test divided into the form of multiple-choice questions and essays on the pre-test and post- tests. The pre-tests were designed to identify the score of the students' English vocabulary have acquired in the first place, and post-tests was designed to find out the improvement of the students' vocabulary after the treatment.

2.5. Data Analysis Technique

The descriptive statistic and inferential statistic were used to analyses the data. The descriptive analysis is used to describe the implementation of spelling online game in teaching vocabulary mastery. In the analysis, the interpretation is based on the mean and the standard deviation (SD). There was frequency distribution in this analysis which focused to find out the criteria of the effects of the students' vocabulary mastery. The purpose of inferential analysis is to know if there is a positive and significant association between spelling online game and vocabulary mastery. To find out, the author applies three kinds of tests, namely: Normality Test, Homogeneity test and Test of hypothesis.

3. Findings and Discussion

3.1. Findings

The result of the vocabulary test (Pre-test and Post-test) of the students in control andexperimental class are shown in the table below:

Table 1. The result of mean score of control and experimental classes

Group Statistics

	Classes	N	Mean	Std. Deviation	Std. Error Mean
Post-test	Controlled Class	29	56.97	19.677	3.654
	Experimental Class	26	80.65	24.456	4.796

Based on the table above, the result of the data showed that the means score ofexperimental class (Who got treatment by using spelling online game) gained 80.65. While 56.97 for control class (who are not taught by using spelling online game). The score of students who taught by spelling online game was higher than the students who were nottaught by spelling online game.

Table 2. The result of t-test calculation

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
Post-test	Equal variances assumed	.480	.492	-3.976	53	.000	-23.688	5.958	-35.639	-11.738
	Equal variances not assumed			-3.929	48.004	.000	-23.688	6.029	-35.811	-11.565

From the Table 2 above, it showed that the t = 3.976 with the degree of freedom (df) =53. Besides, the researcher concluded that there was a significant different between the experimental class who gained mean score 80.65. while the control class's mean score was 56.97. Therefore, in order to know whether the spelling online game is effective on students' vocabulary mastery or not, the researcher compared the result either the t *count* and the t *table*. Then, the researcher found out that t *count* (3976)> t *table*. (1674) and the sig(2-tailed) was 0.000< 0.05. It shows that the spelling online game is effective on improving students' vocabulary mastery.

3.2. Discussion

As mentioned in the introduction above, spelling online games are online-based learning media that help students improve vocabulary mastery by spelling those vocabularies. This, of course helps the students remember the vocabulary they have learned, both from how to pronounce it to spell the word.

The spelling online game gives the impression of learning relaxed and fun. Also, a learning atmosphere that can arouse the enthusiasm of students in acquiring new English vocabularies. The kind of games that are fun, relaxing, motivating, confidence boosting will increase the students' interest (Yip & Kwan, 2006).

However, the results of data analysis obtained from the final tests (Post-test) of both classes (control class and experimental class) showed that teaching English by applying spelling online game was effective. The mean score obtained by the experimental class was 80.65 and 56.97 was the mean score obtained by the control class. The experimental class who taught by spelling online game got the higher score than the control class who was not taught by spelling online game. It means the treatments that the experimental class got was successful.

The result of the hypothesis was also accepted because the result of independent T-test of both groups in post-test was different. As the researcher written in the findings section above, the sig-tailed of both groups lower than 0.05 (5%). The result was 0.000 (0.000< 0.005, it showed that there was significant difference between the students who taught by using spelling online game and those who did not taught by using spelling online game. Based on the result, it can be concluded that the spelling online game is effective to improve students' vocabulary mastery of the first-grade students in MTs Negeri 2 Manggarai Barat.

4. Conclusion

The goal of this study was to see how effective the spelling online game to improve students' vocabulary mastery of the first-grade students in MTs Negeri 2 Manggarai Barat. There are three answers as the researcher conclusions that proved this research was success. First, before conducting the treatment, the students' score was lower than the score after they got the treatment. The mean

score of the pre-test of the experimental class was 58.19 and 53.21 was the mean score of control group. Second, the result of the statistical calculation showed that the difference between the mean score of post-tests in both groups were significant. The control group's mean score of post-tests was 56.97. while the experimental group's mean score was 80.65. Third, the use of spelling online game in learning vocabulary for the first-grade students of MTs Negeri Manggarai Barat is effective. It proved by the result of T-test that showed the gain of score pre-test and post-test from both groups is different. Also, the result of t-test was 3.976. It was higher than the t-table value that was 1674. Then, the researcher found out that t count (3976)> t table. (1674) and the sig(2-tailed) was 0.000<0.05. Therefore, there is significant different between students who taught by using spelling online game and those students who did not taught by using spelling online game among the first-grade students of MTs Negeri 2 Manggarai Barat.

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Declarations

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