

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 aim of this study is to find out the effectiveness of the use of spelling online game to improve students' vocabulary mastery. This study was conducted among the first-grade students of MTs Negeri 2 Manggarai Barat. The total number of the respondents involved were 55 students who were divided into two groups i.e. 29 students of the control group and 26 of the experimental group. As for the research design, this study applied quantitative design taking pre-test and post-test as the research instruments. The pre-tests and post-test were in the form of twenty multiple choice questions and three essay questions. These tests were then calculated and analyzed by using SPSS 16 applying T-test calculation. The finding of this study showed that teaching vocabulary using spelling online game was effective. It's proved by the result that the t counted was $(3976) > t$ table (1674) and the sig(2-tailed) was $0.000 < 0.05$. It showed that the spelling online game was effective in improving students' vocabulary mastery of the first-grade students of MTs Negeri 2 Manggarai Barat and the H_0 (null hypothesis) was rejected. In other words, this summarizes that there was a significant difference between students' improvement in mastering vocabulary taught by using spelling online game.

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1. Introduction

English language learning in Indonesia begins with vocabulary mastery. Vocabulary mastery is required to help express our ideas, feelings and emotions and to understand what other people say. Experts state that vocabulary holds an important role as provider of organs and flesh, while language structure makes up the skeleton of language (Heriyanto, 2015; Sari et al., 2019). Ghalebi et al., (2021) stated that vocabulary is considered important in determining whether a person learns and acquires a second or foreign language. Furthermore, 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, learners will not be able to use the easy-to-understand communication structures and functions that learners may have learned.

In the case of the process of mastering vocabulary where the position of the students is being non-native or NNS (Non-Native Speakers), it requires extra effort, especially in mastering English vocabulary. Hibatullah (2019) described that one of the challenges faced by EFL students is the incompetence of the use of English especially in the communication process due to the lack of

vocabulary. Moreover, while mastering vocabulary, the students often have a difficult time. And this has an impact on how they understand the meanings of words, how to spell and pronounce the words, and how they understand English text or make sentences in English with the right interpretation.

In view of the importance of vocabulary, it's suggested that when teaching the students new vocabulary, it is better to familiarize the new vocabulary and how to pronounce them accurately as much and earlier as possible. Underlying this, in the context of Indonesia, English has been decided to be the compulsory subject from junior high school level. As for the context of English in junior high school level, the junior high school students' ability to absorb new vocabulary is extremely good, yet they easily forget them as well. Therefore, it will be challenging for the teachers when teaching them vocabulary. Furthermore, when talking about the problems when learning vocabulary, the general problem appeared so far, students get bored easily when the teacher teaches vocabulary with the old and monotone technique. This implies that teachers should consider teaching techniques they apply.

As for the context of MTs Negeri 2 Manggarai Barat, in reality, as clarified by the English teacher of the first-grade in MTs Negeri 2 Manggarai Barat, the first-grade students of MTs Negeri 2 Manggarai Barat had several problems in learning English. Among the problems are feeling unmotivated, lacking vocabulary even for the basic vocabularies, and feeling difficult to understand English text. They also had difficulties in knowing how to make English sentences, knowing how to pronounce and spell the words correctly. Also, the students' presumption that English is difficult had been circulated among the students of first-grade class in MTs Negeri 2 Manggarai Barat on learning English lessons early in their classes. Meanwhile, the problem related to the teacher, the teacher mentioned that most of the teaching techniques they used were a little conventional with a little touch of audiovisual adapted to the material they used in the classes. She added that the use of game-based media in the classroom was still very minimal, especially the use of online games as a learning medium. This fact that the teachers rarely used games as learning media is quite disheartening, because in reality, nowadays the use of games as a learning medium has recently become increasingly popular among teachers. Games are considered to increase student learning motivation because they provide a more relaxed and enjoyable learning experience.

Based on this situation, this research started. This phenomenon has motivated the researchers to research the use of game, especially the spelling online game. Doing so, the researchers hoped that the use of spelling online game could overcome some of the problems experienced by the first-grade students of MTs Negeri 2 Manggarai Barat mentioned earlier, and this spelling online game could help the students to spell English vocabulary correctly and pronounce the words correctly and therefore improve their mastery of English vocabulary. Therefore, this research was conducted to find out whether the spelling online games are effective or not for mastering English vocabulary for the first-grade students of MTs Negeri 2 Manggarai Barat entitled: "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". The purpose of this research was to inform the effectiveness of a spelling online game in teaching vocabulary to the first-grade students of MTs Negeri 2 Manggarai Barat.

2. 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, the research of Elimelech & Aram (2020) which was entitled "Using a digital spelling game for promoting alphabetic knowledge of preschoolers: The contribution of auditory and visual supports". The results of this research summarized that the 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. Meanwhile, the unassisted group scored higher than the comparison group on letter knowledge alone.

The second research was from Ashraf et al., (2014) entitled “The Impact of Online Games on Learning English Vocabulary by Iranian (Low-intermediate) EFL Learners”. This study researched the utility of online games in vocabulary learning by Iranian EFL students. One participant, (24) with low- intermediate level of 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 research one was Umulaika’s (2019) which was entitled “The effectiveness of spelling bee game in teaching vocabulary to 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 who were not taught with the spelling bee game.

3. Method

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 were analyzed using a quantitative method. As for the population and sample, the population included second semester of the first grade students of MTs Negeri 2 Manggarai Barat, while sample was specifically focused on students of class VII B, VII C and VII D. Pre-test and post-test were used as the data collection method of the study. Pre-test was conducted by giving the test to both groups; they were experimental and control groups. The test forms used in this study were multiple choice and essay. The aim of the test was to know the vocabulary of the two groups before the researchers gave the treatment, while a post-test was performed after the treatment. The purpose of this post-test was definitely to know the test results and the effectiveness of using the spelling online game in the experimental group.

As for the research instruments, pre-tests and post-tests were utilized with multiple-choice questions and essay types. The pre-test was designed to identify the score of the students before the treatment and post-test was used to find out the improvement of the students’ vocabulary after the treatment. The descriptive statistic and inferential statistic were used to analyze the data. The descriptive statistical analysis was used to describe the implementation of spelling online game in teaching vocabulary mastery targeting on the scores of the mean and the standard deviation (SD). As for the inferential statistics, it utilized t -test whose purpose is to know if there is a positive and significant association between spelling online game and vocabulary mastery. To find out, the author applied three kinds of tests, namely: Normality Test, Homogeneity test and Test of hypothesis.

4. Findings and Discussion

4.1. Findings

The result of the vocabulary test (Pre-test and Post-test) of the students in control and experimental 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 table 1, the result of the data showed that the mean score of the experimental group (who got treatment by using spelling online game) gained 80.65 and 56.97 for control group (who were not taught by using spelling online game). This indicates that the score of students who were taught by using a spelling online game was higher than the students who were not taught using a 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

As for the calculation of t-test, it's done in order to know whether the spelling online game is effective on students' vocabulary mastery or not. Doing this, the researcher compared the result of the t count and the t table. The result of the t-test calculation was displayed through Table 2. Referring to Table 2, it showed that the score of the t-test calculation was 3.976 with the degree of freedom (df) =53. Furthermore, comparing between t table and t count, it's found out that t count (3976) > t table (1674) and the sig(2-tailed) was 0.000 < 0.05. This shows that the spelling online game is effective in improving students' vocabulary mastery.

4.2. Discussion

As mentioned in the introduction, spelling online games are online-based learning media that help students improve vocabulary mastery by spelling the vocabulary. This is believed to help the students remember the vocabulary they have learned, both from how to pronounce and how to spell the word. The spelling online game gives the students the impression of learning being relaxed and fun. Furthermore, this enjoyable learning atmosphere can arouse the enthusiasm of students in acquiring new English vocabulary. It's as stated and agreed that the kind of games that are fun, relaxing, motivating, and confidence boosting will increase the students' interest (Yip & Kwan, 2006).

As for the context of the research results, the results of data analysis obtained from the final tests (Post-test) of both groups (control group and experimental group) showed that teaching English by applying a 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 taught by a spelling online game got a higher score than the control class who were not taught by a spelling online game. This means that the treatment that the experimental class got was successfully improving their vocabulary mastery.

The result of the hypothesis testing was also accepted because the result of independent T-test of both groups in post-test was different. As the researcher explained in the findings section, the sig-tailed of both groups was lower than 0.05 (5%). The result was 0.000 ($0.000 < 0.005$), which showed that there was a significant difference between the students who were taught by using a spelling online game and those who were not taught by using a 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.

5. 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 points revealed through this research. 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 and control groups were 58.19 and 53.21 respectively. Second, after the treatment was given, the result of the statistical calculation showed that the difference between the mean score of post-tests in both groups was significant which was 56.97 for the control group and 80.65 for the experimental group. Third, the use of a spelling online game in learning vocabulary for the first-grade students of MTs Negeri Manggarai Barat was effective. It's proved that the result of the t-test achieved by both groups was different. Specifically, the result of the t-test was 3.976, which was higher than the t-table value 1674. It's found out that $t \text{ count } (3976) > t \text{ table } (1674)$ and the sig(2-tailed) was $0.000 < 0.05$. Therefore, there is a significant difference between students who were taught by using a spelling online game and those students who were not taught by using a spelling online game among the first-grade students of MTs Negeri 2 Manggarai Barat.

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