The Effect of Board Game on Students' Vocabulary and Grammar Mastery in Senior High School

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Abstract

In the research aimed to find out students' vocabulary and grammar who are taught by using Board Game Technique and students' vocabulary and grammar who are taught without using Board Games. In this research used quasi-experimental design research, the researcher took two of 2 classes as the sample, the experimental class with 20 students in it, and the control class with 20 students as well. The research method was pre-test and post-test of the experimental research. The data collection technique was pre-test and post-test score result. The data were analyzed by using compare means paired sample T-test by comparing the result of pre-test and post-test design, and t-test to know the significant effect in students' English vocabulary mastery after using Board Game. The result showed there was a significant different between pretest and posttest mean. Ho was rejected because significance level was < 0.05. Therefore, there was a significant effect of using board game towards students' vocabulary mastery of the research. The research of data analysis showed that there was a positive effect of using Board Games on students' vocabulary and grammar. In which in vocabulary, the t-obtained had a higher value than the t-table either at 5% or 1% significance levels (1,68595 < 4,174> 2,42857). Therefore, Ho is rejected and Ha is accepted; or there is a significant difference in using Board Games on student's vocabulary and grammar ability of tenth grade students. The result of grammar, the condition of the experimental class was getting better. The students were more active in English learning process. In summing up it may be stated that using Board Game can effects the students" grammar mastery and students learning activities at the tenth grader of SMA Kristen Immanuel Medan.

Keywords: *Board Game, Grammar, Vocabulary,*

Introduction

The world in the 21st century has changed in every aspect of life. The world 5.0

generation industrial revolution era has started by increasing network connectivity, communication interaction, and technological development. In fact, in this age of technology, language education, such as learning English, is essential. Because English allows anyone to reach the entire world, many people study it and practice four important skills: listening, speaking, reading, and writing. English is the first foreign language and sets it as a compulsory subject in junior high school, senior high school, and also at university as local content. All students from their very early education will be introduced to English.

Therefore, language learning is directed to improve the learner's ability to communicate, whether orally or written. The most basic and necessary language elements are vocabulary, pronunciation, simple grammar, and simple conversation. Having a good vocabulary can make it easier to understand the meaning of the word and mastering vocabulary is the key to language learning, the students will be easier to master the language skill well. On the other hand, the students who have less vocabulary will get difficulty understanding the text, speaking English, and writing their idea. Furthermore, they neither understand what others saying nor make sentences to transfer their messages to other people. The importance of vocabulary is larger than other aspects because when people learn about a new language, they usually think about mastering vocabulary. It means that whenever people use a language, automatically they have to use the word

Frank states if students want to learn a new language, they have to be mastered and acquired some vocabulary, which is one of the English components (Sulastri, 2018:16). Vocabulary is the basic language aspect that must be mastered before mastering English skills. It is a term that refers to a list or group of words for a specific language or a list or group of words that speakers of each language may use (Hatch & Brown, 1995:1). Vocabulary is useful for building sentences and speaking clearly and fluently. Vocabulary as one of the knowledge areas plays a crucial role for learners in acquiring a language.

In learning English, language skills and language aspects cannot be separated. Language aspects can complete the language skills. To learn English the students should be able to use appropriate basic structural patterns and master grammar and vocabulary. Grammar is an important aspect of forming words and building English sentences. Grammar is a model (systemic description) of the linguistic abilities of native speakers of a language that enables them to speak. Explanation, grammar is the most important aspect to communicate with other people, because grammar can show our meaning in communication so that other people can understand our message. Grammar includes phonological (sound), morphology (word composition), and syntax (sentence composition). Because grammar is important in communication, students should master it. In fact, learning grammar is not easy for students. Most of the students find difficulties in learning grammar. Grammar is central to the teaching and learning of language which also becomes one of the more difficult aspects of language to teach as well as to learn well.

Oral communication through language is carried out through two human abilities namely speaking and listening. In speaking, people put ideas into words talking about perceptions, feelings, and intentions they want other people to grasp, in listening, they turn words into ideas, trying to reconstruct the perceptions, feeling, and intentions they were to grasp. Philosophers, orators, and linguists said that both of these activities can go on well

because of the study of language, its grammar, and its function. Brown (1994:348) says that without that 4 grammar, the organizational constraints impose on our communicative attempts, or language would simply be chaos. These statements indicate that in learning English, the elements of language play important role in improving the four language skills.

The problem of the vocabulary and grammar must be solved because it can be the difficulties for the students to continue the next level or grade. One of the teaching strategies that can make the students motivated to learn English is using a technique or media. Recently, not only in the Kindergarten, fun and effective learning is hoped can be applied in English learning process for Junior High School and Senior High School.

Based on the problem above, the researcher wants to apply a technique or approach that can make the learning process feels fun. The technique used is the use a game in class. A game is an activity with rules, a goal, and an element of fun (Hadfield, 1984) (Wulandari, 2021). As a result, it is possible to conclude that a game is something that is played with various rules and has a system of winners and losers.

There are benefits to introducing game play into lessons. When students study in the form of a game, such as being active in class, they can readily comprehend teachings or content. Students have a sense of solidarity and compete to be winners in a healthy manner. One of the games that can give effect of the students' vocabulary and grammar mastery is Board Game.

According to El Shamy (2001, p. 53) Board Game is an excellent means of practicing and refining participant knowledge of concepts and principles. It also works very well for practicing the application of models that have been covered in the training. The game board is artistic, clever, involving the card decks used in the game that presents case studies that require participants to solve problems and make decisions. It means board game can be defined as something (technique) that is used to attract students to follow the teaching and learning process because board game can make the students focus more on learning, because they do not feel that they are forced to learn.

The researcher chooses Board Game as a technique that wants to apply in learning English because there are several benefits that are students can improve their vocabulary mastery and can try to remember each vocabulary quickly when play that game. Students also learn how to properly pronounce words. Because this game is performed in groups, students' confidence can be increased. The researcher expects that by using Board Game, the students can memorize new vocabulary easily, and confident in do grammar.

The researcher uses this game because this game is a kind of competition the students are allowed in collaboration with their friends or individual, so the students have motivation to do feat their/his/her friend with collaboration in a pair or individual. So, it can motivate the students to be more interested in teaching and learning process in the classroom. Based on the explanation above, the researcher decides to conduct a research entitled "The Effect of Board Game into Students' Vocabulary and Grammar Mastery on Grade Tenth in SMA Kristen Immanuel Medan".

Method

The design of this research was used the experimental quantitative approach. According to Ary et al (2010), quantitative method uses objective measurement and statistics analysis of numeric data to understand and explain phenomena. Quantitative research methods are one type of research whose specifications are systematic, planned and clearly structured from the beginning to the design of the research. In this research, the researcher will use writing test, speaking test and questionnaire in order to get the data. The population of this research will be the students of Senior High School Of SMA Kristen Immanuel Medan at the tenth class. The tenth class consists of 2 classes. They are X-IA1, X-IA1. The total of students or population is 40 students. The sample of this research will be chosen 2 class randomly from the population, they are X-IA1 as the controlled class and X-IA2 as the experimental class the total of the sample is 40 students. Data collection of this research comprise of quantitative data. Quantitative data can be seen from the result of multiple choices test. It is because those instruments are used to collect more information about the implementation of Board Game into students' vocabulary and grammar mastery in learning English. Then, it can be seen from teaching and learning process and how the problems that faced by the students can be solved. While, quantitative data can be seen from the test. In this case, the result of evaluation test was as the consideration in the quantitative data. The quantitative data elaborate about the result of vocabulary and grammar mastery. The data will collect from score of pre-test and post-test. After doing the teaching vocabulary and grammar by using Board Game, the data will be analyzed by the formula as follows: Scoring the correct students, Find out the mean score, Find out Standard Deviation, Find out Standard Error Mean, and T-test.

Findings and Discussion
Findings

This research is conduct by applying experimental quantitative research. This research contains two groups: a control group and an experimental group. The experimental group received treatment, but the control group did not. In other words, Board Game technique were used to teach students in the experimental class. The control students were taught without the use of Board Game technique.

The population in this research was the grade tenth of SMA Kristen Immanuel Medan. The sample was taken by using random sampling, namely class X-IA1 as experimental class and X-IA2 as control class. Each class consisted of 20 students. The instrument used to collect the data was a multiple choices test.

The data were collected by administering pre-test which was a multiple choices test to measure the students' ability before doing the treatment. After doing the treatment, the data were collected by administering the post-test, which was also a multiple choices test. The data were the students' score which were needed for hypothesis testing.

Table 1. The Score of Pre-Test and Post-Test in Vocabulary by the Students of Experimental Class

No.	INITIAL NAME	PRE-TEST	POST-TEST

1	AA	40	80
2	AK	50	100
3	AS	40	80
4	CS	70	100
5	DS	60	100
6	EH	60	100
7	GS	50	80
8	HA	60	80
9	IS	50	100
10	IT	60	80
11	JN	70	100
12	JR	60	100
13	JS	50	100
14	KN	40	80
15	KS	50	80
16	ML	40	80
17	MS	40	80
18	SH	80	100
19	SM	50	100
20	RS	40	70
TOTAL		$\sum = 1060$	$\sum = 1790$
MEAN		$\overline{X} = 53$	$\overline{X} = 89.5$

Table 4.2 The Score of Pre- Test and Post-Test in Grammar by the Students of Experimental Class

No.	INITIAL NAME	PRE-TEST	POST-TEST
1	AA	40	80
2	AK	40	85
3	AS	50	90
4	CS	60	100
5	DS	40	80
6	EH	50	95
7	GS	45	80
8	HA	60	90
9	IS	60	100
10	IT	60	100
11	JN	40	90
12	JR	55	80
13	JS	30	60
14	KN	40	80
15	KS	65	95
16	ML	70	90
17	MS	80	80
18	SH	30	60
19	SM	60	90
20	RS	70	100
TOTAL		$\sum = 1045$	$\sum = 1725$
MEAN		$\bar{X} = 52.25$	$\bar{X} = 86.25$

Based on the results in Tables 1 and 2, the experimental class of vocabulary had the highest pretest score of 80 and the lowest score of 40. The experimental class of vocabulary had the highest post test score of 100 and the lowest score of 70. The overall pretest score of vocabulary for the experimental class was 1060 with a mean 53. And the total post-test score for the experimental group was 1790 with a mean of 89.5. The experimental class of grammar had the highest pretest score of 80 and the lowest 30. The experimental class of grammar had the highest post test score of 100 and the lowest score of 60. The overall pretest score of grammar for the experimental class was 1045 with mean 52.25. And the total post-test score for the experimental group was 1725 with a mean of 86.25.

Table 4.3 The Score of Pre-Test and Post-Test in Vocabulary by the Students of Control Class

No.	INITIAL NAME	PRE-TEST	POST-TEST
1	AC	40	60
2	AP	50	80
3	BH	60	60
4	CS	50	70
5	FR	40	60
6	HS	20	60
7	IS	70	80
8	IT	50	70
9	JM	60	80
10	JM	40	80
11	KT	60	70
12	LS	70	80
13	MS	70	80
14	NR	60	60
15	NT	80	100
16	RA	20	60
17	RH	20	60
18	RS	70	80
19	RV	20	40
20	TM	40	80
	TOTAL	$\sum = 1100$	$\sum = 1410$
	MEAN	$\bar{X} = 49.5$	$\bar{X} = 70.5$

Table 4.4 The Score of Pre-Test and Post-Test in Grammar by the Students of Control Class

No.	INITIAL NAME	PRE-TEST	POST-TEST
1	AC	35	60
2	AP	40	65
3	BH	50	60
4	CS	60	80
5	FR	45	65
6	HS	70	75
7	IS	65	65
8	IT	75	80
9	JM	25	45
10	JM	55	70

11	KT	45	75
12	LS	85	90
13	MS	70	95
14	NR	65	75
15	NT	70	85
16	RA	70	80
17	RH	65	75
18	RS	60	70
19	RV	75	80
20	TM	50	70
	TOTAL	**$\sum = 1175$**	**$\sum = 1460$**
	MEAN	**$\bar{X} = 58.75$**	**$\bar{X} = 73$**

Based on the results in Tables 4.3 and 4.4, the control class of vocabulary had the highest pretest score of 80 and the lowest score of 20. The control class of vocabulary had the highest post test score of 100 and the lowest score of 40. The overall pretest score of vocabulary for the control class was 1100 with a mean 49.5. And the total post-test score for the control group was 1410 with a mean of 70.5. The control class of grammar had the highest pretest score of 75 and the lowest 25. The control class of grammar had the highest post test score of 95 and the lowest score of 45. The overall pretest score of grammar for the control class was 1175 with mean 58.75. And the total post-test score for the control group was 1460 with a mean of 73.

The result of the test in experimental class was higher vocabulary and grammar than the control class. This was because students in the experimental class were taught how to answer the verb discussion. By applying the techniques of Board Game. This could explain that the experimental class scores on the pre-test may be lower than the post-test. Therefore, students' scores on the post-test were higher than on the pre-test in vocabulary and grammar.

But on the other hand, there was no any treatment given to the control class, so that they had some difficulties in understanding the questions. This was because the students in control class were not taught how to change the verb. They were only asked to read the whole questions and if they found the difficult meaning during answer the questions, they asked it to the teacher.

The difference in results implies that following treatment, the experimental group had a superior understanding than the control group. It can be demonstrated that Board Game has an influence on students' success in vocabulary and grammar.

As stated before, the objective of this research is to find out whether or not using of Board Game significantly affects the students' achievement in vocabulary and grammar, with the research data and result findings of the calculation below:

1). N_a and N_b = 20

N is the number of students. There are 20 students in Experimental Class and 20 students

in Control Class. The researcher will include the score of the data in this research findings, they are :

a) Pre-test Score Vocabulary and Grammar in Experimental Class: The lowest score Vocabulary of pre-test was 40, and the highest score was 80. From the data, it shows that students still have low ability in Vocabulary. The lowest score Grammar of pre-test was 30, and the highest score 80. From the data, it shows that students still have low ability in Grammar.

b) Post-test Score Vocabulary and Grammar in Experimental Class: When the treatment was implemented, students' score are increase. The lowest score of vocabulary was 70 and the highest score is 100. The lowest score of grammar was 60 and the highest score is 100.

c) Pre-test Score Vocabulary and Grammar in Control Class: The lowest score Vocabulary of pre-test was 20, and the highest score was 80. From the data, it shows that students still have low ability in Vocabulary. The lowest score Grammar of pre-test was 25, and the highest score was 75. From the data, it shows that students still have low ability in Grammar.

d) Post-Test Vocabulary and Grammar in Control Class: When the treatment was implemented, students' score are increase. The lowest score Vocabulary was 40 and the highest score is 100. The lowest score Grammar was 20 and the highest score is 80.

1. The validity test result for vocabulary in Experimental class is 0.62 (moderate/sufficient), while the reliability test result is 0.77 (high). The validity test result for grammar in Experimental class is 0.64 (moderate/sufficient), while the reliability test result is 0.78 (high).

2. The validity test result for vocabulary in Control class is 0.71 (moderate/sufficient), while the reliability test result of control class is 0.83 (high). The validity test result for grammar in control class is 0.83 (moderate/sufficient), while the reliability test result is 0.90 (high).

3. The researcher found the mean score vocabulary of Experimental class is 89.5, and the mean score grammar of experimental class is 86.25.

4. The researcher found the mean score vocabulary of Control class is 70.5, and the mean score grammar of control class is 73.

5. The standard deviation score of vocabulary in Experimental Class was 10.98, and the standard deviation score of grammar in Experimental Class was 11.68.

6. The standard deviation score of vocabulary in Control Class was 13.16, and the standard deviation score of vocabulary in Control Class was 11.40.

7. The standard error of mean of vocabulary was 3.83, and the standard error of mean of grammar was 3.64.

8. The result of t_{test} of vocabulary = 4.9

9. The result of t_{test} of grammar = 3.6

Based on the calculation of the result by using t-test formula, the t_{test} is 4.9 (vocabulary) and 3.6 (grammar) and t_{table} is 1,68 (α=0,05). It is obtained that t_{test} > t_{table}.

It means that the alternative hypothesis (Ha) is accepted and null hypothesis (Ho) is rejected. In other words, there is a significant effect of using Board Game on the students' achievement in Vocabulary and Grammar.

The result difference indicates that after getting treatment, experimental class got better understanding than control class. It can be seen that there was an effect of using Board Game on the students' achievement in vocabulary and grammar.

Discussions

In discussion, interpreted the research results and draws conclusion. Board Game technique was applied to improve students' achievement in vocabulary and grammar at X grade of SMA Immanuel Medan.

Based on the data above, the use of Board Game in teaching reading shown that students' vocabulary and grammar improved before and after treatment. It can be observed from the difference in score between pre-test and post-test for each student. It demonstrates that students' scores improved after implementing Board Game.

The use of the technique could facilitate the students in understanding the text and collaboration with each other. This technique can encourage students to work together in groups and help them understand what they have learnt.

Based on the research above, it has similarity with this research in using Board Game, this technique was suitable technique to improve students' achievement in vocabulary and grammar because this technique gave students a chance to think or share their own ideas by forming group work or team work. After that, the students are demanded to be more active so that they could revised and discussed, feedback or suggestion which has function to improve students' achievement in vocabulary and grammar mastery. Those findings determined that there was a significant difference in the students' before and after giving treatment in teaching by using Board Game in teaching vocabulary and grammar.

Conclusion

After analyzing and discussing the data, the researcher draws the following conclusions: 1. Board Game was improved the students' interest in learning grammar and vocabulary. The students' score in grammar and vocabulary test before treating Board Game was low. The researcher found that the students' achievement taught without Board Game technique. It was indicated from analyzing the data statistically that the result of calculation test value 4.9 (vocabulary) and 3.6 (grammar) was higher than the Alternative Hyphotesis (Ha) was accepted, 2.It was found in the students' post-test score. The score was higher than the pre- test. Using Board game in learning activity contributed to the students' mastery in vocabulary and grammar. It was improved student's understanding in learning vocabulary and grammar. This method was increased students' vocabulary and grammar mastery.

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