

The Effectiveness of the Word Square Learning Model on the Social Studies Learning Results of Elementary School Students

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ABSTRACT

This study aims to find out the effectiveness of the word square learning model of social studies' learning outcomes for students in elementary schools. The study used meta-analysis. The sample of this study consists of six articles which published in 2013 until 2019 at the elementary school, especially the experimental research using the word square learning model of the learning outcomes of social studies of the students. Quantitative descriptive used in this study to calculate the effect size of those six articles by identifying the mean, variance and standard deviation of t-test calculations. The results of the overall analysis showed that the mean of the effect size was 1.33. It revealed that, the categorization has large effect. After analyzing six articles with effect size, the effectiveness of the word square learning model that has the largest effect size is a study conducted by Kd. Tia Lestari, Ni Kt. Suarni and I Wyn. Suwatra (2013). Based on the results of the analysis of the effect size it can be concluded that the word square learning model has a great influence in improving social studies learning outcomes in elementary school.

Keywords: *Meta-analysis, Word Square Learning Model, Social Studies Learning Results*

1. INTRODUCTION

Education is a conscious and planned effort to prepare students through guidance and training in their future roles. According to Sagala [1] "education is a conscious and planned effort to realize the learning process so that students actively develop their potential to have self-control, intelligence, and skills needed for themselves, society, nation and state". Education is also a form of improving the quality of human resources (HR) who are intelligent, critical and of quality.

This is in line with what is stated in the Law of the Republic of Indonesia Number 20 of 2003 concerning the National Education System which states that education is a conscious and planned effort to create an atmosphere of learning and the learning process so that students actively develop their potential to have spiritual strength, religion, self-control, personality, intelligence, noble character, and skills needed by him, society, nation and state.

It was explained that education is a conscious and planned effort, which is carried out actively to develop the abilities possessed by students. Each student has different abilities. Educators as one of the most important elements to develop and hone the potential of each student. Thus students are able to overcome the problems they experience in the future. To develop students' potential optimally, the learning process must be designed as well as possible, both the teacher's ability to choose teaching materials in class, media, facilities, supporting facilities and the most important thing is the readiness of students in receiving lessons.

The curriculum is the main support for the learning process so that the learning process in schools can be carried out optimally and conducive. According to Arifin [2] "The curriculum is a set of plans and arrangements regarding the objectives, content and learning materials as well as the methods used as guidelines for implementing learning activities to achieve certain educational goals". The current curriculum in Indonesia is the 2013 curriculum, the curriculum applies

the essence of a scientific approach to learning. In the application of the 2013 curriculum learning, it is more required to increase student activity, so that in the learning process various learning methods are needed that play an important role in achieving these goals.

The 2013 curriculum is an integrated curriculum, which consists of several subjects on each theme which is better known as integrated thematic learning. The theme used is intended to link several subjects into a subject, so that there is no clear separation between one subject and another. One of the subjects contained in integrated thematic learning is the Social Studies subject. Susanto [3] states that "social studies is a combination of social science and human life, which includes anthropology, economics, geography, history, law, philosophy, political science, sociology, religion, and psychology". Social studies lessons are one of the lessons learned in elementary school. Social studies learning is the study of various disciplines related to human activities and the environment. The purpose of teaching social studies, according to Fenton [4] is to "prepare students to become good citizens, teach students to have the ability to think and be able to continue the nation's culture". In addition, there is also a goal of social studies in elementary school according to Mulyasa [5] that is "so that students are able to develop knowledge, values and attitudes and social skills that are useful for themselves, to develop an understanding of the growth of Indonesian society in the past to the present. so that students are proud to be Indonesian".

At this time, the learning process in elementary schools still tends to be teacher centered or teacher-centered and there are still many teachers who have not implemented student centered so that the learning process looks passive because students are not actively involved in the learning process. In addition, conventional learning carried out by teachers still uses the lecture method, students only listen to what the teacher says. This causes students to feel bored and bored in classroom learning so that the learning process becomes less than optimal, which in turn will affect student social studies learning outcomes. In addition, according to Marta[6] "there are many factors that trigger the low learning outcomes of students in social studies subjects, it is the material structure is very dense, the material coverage is broad and consists of various social science studies (history, sociology, economics and geography), children do not have the learning skills to master these materials, or teachers' teaching methods are not in accordance with student characteristics".

In this case, the teacher has a big influence in the learning process. Teachers must be able to be good facilitators for students. In the learning process the teacher has not been fully able to carry out active learning and there are still many teachers who have not used varied learning models according to the material

provided. Therefore, we need an innovation in the presentation of learning in the classroom in the form of the application of learning models and the use of media that can support the learning process. By selecting the right learning model, the success of the learning process will be achieved. The learning model used will be listed / contained in the lesson plan form adapted to the material and conditions of the students, so that when the teacher teaches it does not come out of the learning context that has been designed in the lesson plan. Using the learning model can help students to make it easier to understand the material provided.

Based on these conditions, it is necessary to have a learning improvement process using innovative learning models to improve social studies learning outcomes. One learning model that can be used to improve the quality and effectiveness of social studies learning is the application of the word square type of cooperative learning model. Learning with the word square model allows students to learn actively and can train students to think critically and thoroughly. Hornby [7] stated "the word square model is a number of words arranged so that the words can be read forward and backward". In addition, according to Kurniasih [8] the word square learning model is a "development model of the lecture method which is enriched and oriented to the activeness of students in learning". This model is a model that combines the ability to answer questions by matching answers in answer boxes similar to filling in "Cross Puzzles" but the difference is that the answers already exist but are disguised by adding additional boxes with random letters / numbers. The word square learning model can attract students' attention in participating in learning because in the word square learning model students are invited to learn while playing but emphasize more on learning, so students will be interested in taking part in learning and not feel bored. This is in accordance with the opinion of Soefandi & Ahmad [9] which states that " playing can stimulate children to be active in learning activities and make children understand the world around them, so that it affects the learning outcomes obtained by children ". Thus the word square learning model is suitable to be applied in elementary schools, because at elementary school age students are very happy with games.

Learning with the word square model can be applied in all subjects and is very beneficial in learning because it can make the learning atmosphere more active and creative. Besides that, the learning atmosphere becomes more fun. Swapranata [10] stated "the word square learning model can stimulate students to think effectively because this learning model is able to act as a boost and reinforcement to the material presented, train accuracy and accuracy in answering and looking for answers in worksheets". By applying the word square learning model, it can make it easier for teachers to direct students to be more active in learning, making it easier for teachers

to improve student learning outcomes. The steps for the word square learning model according to Istarani [16] namely, the teacher prepares worksheets to be used in the teaching and learning process, The teacher delivers material according to the competence to be achieved, The teacher hands out activity sheets according to the examples, Give points for each answer in the box "

However, in studies that have been carried out using the word square learning model on social studies learning outcomes, there is no further effect on these results, whether it is successful or not. Therefore, to determine a successful use of the learning model, it is necessary to conduct a literature study to determine the effect of the success of the learning model used on the research conducted. There are many studies in the form of articles that have been published on various official websites. However, the results of this study are not widely summarized or tested again on the effectiveness of the results of these studies.

The study of research data can produce a theory that reinforces previous research results. This research can be conducted using a meta-analysis research method. Merriyana [17] meta-analysis is "a quantitative study to process or analyze several research results using statistical methods to summarize and obtain general conclusions". Therefore, to find out the effectiveness of the word square model on social studies learning outcomes of elementary school students, researchers first made observations by observing research data files in the form of articles that have been published in various accredited national journals. Researchers found more than 17 research articles on the word square learning model in social studies learning published in the 2013-2019 timeframe.

Literature-based research using meta-analysis methods has been carried out at the education level and in various subjects. Based on the background of this problem, it is necessary to conduct research with a meta-analysis method on accredited national articles. The purpose of this study was to determine the influence of using the word square learning model to be applied in learning. Based on this description, a study was conducted with the title "The Effectiveness of the Word Square Learning Model on Primary School Student Social Studies Learning Outcomes".

2. METHOD

The type of approach used is a quantitative descriptive approach. The quantitative descriptive approach is an approach used to describe a problem and is described in the form of numbers that describe the results of the research conducted. While the research method used is meta-analysis. Merriyana [11] stated meta-analysis is "a quantitative study to process or analyze several research results using statistical methods

to summarize and obtain general conclusions". Meta-analysis is a type of summarizing, reviewing articles by analyzing research data from the results of previous research on the web or google scholar that have been published nationally relating to the *word square* learning model on the social studies learning outcomes of elementary school students. The sample is part of the population studied. The sample in this study is in the form of articles that have been published nationally, especially articles that have been published with the criteria 1) made or written by the academic community (lecturers and students), 2) research was carried out at the elementary level, 3) research in the 2013-2019 range , 4) research conducted in Indonesia, 5) research subjects are in the form of using the *word square* learning model on social studies learning outcomes, 6) hypothesis testing is limited to the t test . So articles that are subject to research must meet these criteria.

Data collection in this study was carried out by browsing articles that were relevant or related to the topic under study on several electronic media or internet network sites. The data collected is data from research results in accordance with the variables studied. From the search results that have been carried out, there are 17 articles with the theme of the *word square* learning model. The 17 articles were analyzed both the content and the data needed to calculate the *effect size*, so that they were reduced to six articles that fit the predetermined criteria. The six articles that have been selected based on predetermined sample criteria will then be used as material for a research report whose *effect size* is calculated.

The data analysis technique used in this study is the *effect size* analysis technique. According to Olejnik and Algina [12] the *effect size* is a measure of the magnitude of the effect of a variable on other variables, the magnitude of the difference and the relationship, which is free from the influence of the size of the sample. The *effect size* formula is used to calculate the influence or effect of a variable on other variables from the observed research results from a number of quantitative studies involving the same research problem or research topic. Calculating the t-test *effect size* using Cohen's formula [13] as follows:

$$d = \frac{x_1 - x_2}{S_{gab}} \tag{1}$$

To find S_{gab} using the following formula:

$$S_{gab} = \sqrt{\frac{(n_1-1)S_1^2 + (n_2-1)S_2^2}{n_1+n_2-2}} \tag{2}$$

Information:

x_1 = experimental group mean

x_2 = control group mean

n_1 = the number of samples in the experimental group
 n_2 = the number of samples in the control group
 S_1^2 = experimental group variance
 S_2^2 = control group variance

3. RESULTS AND DISCUSSION

The classification of the effect size calculation results uses the Cohen's formula in table 0.1 as follows:

Table 1. Effect Size Classification

Large d	Interpretation
$0,8 \leq d \leq 2,0$	High
$0,5 \leq d < 0,8$	Medium
$0,2 \leq d < 0,5$	Low

Based on table 0.1, the calculation results are grouped into small, medium and large effects. Referring to the

Table 2. Effect Size Grouping Data by Category

No	Journal Code	Sub-Unit			Value Effect Size	Information
		Territory	Dependent Variable	Independent Variable		
1	A1	Buleleng	Learning outcomes	Local Wisdom Based <i>Word Square</i> Learning Model With Portfolio Assessment	1.83	High
2	A2	Gianyar	Learning outcomes	Learning Model Aided <i>Word Square</i> Video Media	1.18	
3	A3	Buleleng	Learning outcomes	Word Square Learning Model	2.63	
4	A4	Buleleng	Learning outcomes	Learning Model Aided Word Square Media	1.03	
5	A5	Gianyar	Learning outcomes	Learning Model Aided Word Square Media	0.67	Medium
6	A6	Padang	Learning outcomes	Word Square Learning Model	0.62	
Overall average <i>effect size</i>						High

From the six articles that have analyzed the effect size, the application of the word square learning model cannot be separated from the advantages of the learning model itself. Besides the advantages of the learning model, the effect of using learning media also has a significant impact on the application of the word square learning model such as video media, image media and local wisdom based on portfolio assessment and collaboration with other learning models.

The use of learning media is very helpful for teachers in conveying information to students, so that students can easily understand the material provided by the teacher. This is in line with Alwi [15] opinion that learning media are anything that can be used as an intermediary to transmit messages, stimulate thoughts, interests, feelings, and the will of students so that they can encourage the learning process in students. In the learning process students discuss to discuss student worksheets (LKS) given by the teacher. Through discussion, students can

effect size classification in Cohen's formula, in total, four articles have an effect size in the large category and two articles have an effect size in the medium category. The largest effect size comes from a study conducted by Lestari, Suarni and Suwatra [14] with the title of the study The Effect of the Word Square Learning Model on Social Studies Learning Outcomes of Class III Elementary School Students. The results of the analysis that have been carried out show that the overall average effect size value of the word square learning model in experimental research from the six article analyzed is 1.33 and is categorized as having a large effect. This figure means that the treatment of the word square learning model in the social studies learning outcomes of elementary school students has a great influence on students. Thus the results of the study indicate that learning with the word square model as a whole has a great influence and provides effective results on the social studies learning outcomes of elementary school students.

express their opinions and exchange information with their friends and can give respect to the opinions of others. With this LKS students will not feel bored in learning but can create a pleasant learning atmosphere because learning while playing and training students to learn discipline.

Besides that, students feel enthusiastic about participating in the learning, the learning process will be more active and fun. In line with the results of Perdani [9] research states that "learning with the word square model causing students to be more active and able to develop students critical attitudes". with an active and fun learning process it can improve student learning outcomes. Thus, a discussion of the findings and results of the study shows that the word square learning model as a whole has a great influence and provides effective results on the social studies learning outcomes of elementary school students as evidenced by the average effect of the size of articles sampled in the study.

4. CONCLUSION

From the results of the analysis of the articles that have been carried out, it can be concluded that overall of the six research articles that have been calculated using meta-analysis to determine the effect size, the use of the word square learning model is able to improve student social studies learning outcomes in the experimental group. size of the control group. From the results of the analysis of the articles that have been conducted, it is found that the word square learning model is very effective with an average overall effect size of 1.33 which is categorized as large. Based on the results of the analysis, it shows that the word square learning model has an effect on improving the social studies learning outcomes of elementary school students. So the word square learning model is suitable and effectively applied to social studies learning.

Based on the findings and results of research that has been carried out with meta-analysis, there are several shortcomings, so that there are some suggestions that are necessary as an effort to improve and similar studies in the future, namely as follows: In using the word square model in social studies learning, teachers must adjust with teaching materials and classroom situations. The use of media or other concepts is also very necessary in learning, so that learning objectives can be achieved maximally. In library research, it is hoped that the research will be carried out by researchers using a large research sample. Because the more research samples used, the better the quality of the study is compared to using a smaller sample. In library research, it should be done in detail and thoroughly. The selection of journals or articles is also carried out according to predetermined criteria and when analyzing the results of the study must be careful in order to reduce errors in calculating and inputting data from the analysis result.

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