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Effectiveness Quantum Teaching Model in Elementary School Students' Civics Learning

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ABSTRACT
The lack of teachers in using effective learning models is a problem in this study. This study aims to determine the effectiveness of the Quantum Teaching learning model on Civics learning outcomes, this study uses the method of recording documents on articles in e-journals related to the Quantum Teaching learning model on Civics learning outcomes, from the results of recording documents obtained four similar articles with research objectives. In this, data analysis of the four articles uses a quantitative descriptive approach, namely calculating the effect size by identifying the mean and standard deviation of the t test calculations that have been carried out, the results of the effect size analysis show that the Quantum Teaching learning model is effective on student Civics learning outcomes by mostly getting very high category. The results of data analysis with the effect size of the article also found that from the four articles, the highest effectiveness of the Quantum Teaching learning model lies in the research conducted by Martini (2013) entitled the effect of the quantum teaching model based on social problems on learning outcomes. Civics class IV SD students. This social problem-based Quantum Teaching learning model can improve student civics learning outcomes because the social problem-based Quantum Teaching learning model is a model that creates an effective learning environment through interactions that occur in the classroom. So it can be concluded that the Quantum Teaching learning model is effectively used in elementary school Civics learning.

Keywords: *Quantum Teaching, Civics*

1. INTRODUCTION

Education at the Elementary School level is a very important foundation to equip students to move on to the next level of education. According to (Anugraheni, 2018) the quality of education is influenced by several factors, namely the curriculum, teachers or teaching staff, facilities and learning resources. Every lesson given at this level of education leads to the formation of a strong academic foundation for students. One of the learning processes given at the primary school level is Citizenship Education (Civics). According to Pangalila [1] Civics is an education that teaches students to become skilled and useful citizens of their environment, therefore every Civics material must have learning outcomes that train or even improve competence. According to Aprilia [2] Civics, if viewed more broadly, are not teaching programs that only increase citizenship, but carry values / character and other skills so that students are able to excel effectively. Civics learning is very important to be given to students at the basic education level. The Ministry of National Education (in Najmina [3]) states that Citizenship Education is a subject that generally aims to develop the potential of individual Indonesian citizens, so that they have sufficient knowledge, attitudes and skills of citizenship and enable them to participate intelligently and responsibly in various social lives, people, nation and state.

But in reality, in a school several problems were found, namely there were still students when learning activities were less disciplined, could not respect the opinions of friends and were less independent. This causes learning activities to be less effective so that the mastery of student competencies is not maximized. This condition also occurs in student learning outcomes towards Civics learning. In addition, when conducting interviews with teachers, teachers have not used varied learning models and students have not been given positive rewards for their activeness. From the results of observations and interviews that have been carried out, one way to arouse students' enthusiasm in learning Civics subject matter is to vary the use of learning models. Ramdhani [4] states, with variations in teaching, students

will be enthusiastic and not bored in learning, indirectly the indicators in each learning content can be achieved easily and pleasantly. According to Nopiani [5] a learning process, students should be actively involved both in the activities of observing, asking questions, collecting a variety of information in learning activities, reason, and communicate the results of their study. This is because the 2013 curriculum has used a scientific approach based on 5M, namely observing, asking questions, gathering information, associating, and communicating [6]. In addition, the learning process is directed at the development of three domains, namely the cognitive, affective, and psychomotor domains as a whole and holistically, the development of one domain that cannot be separated from the other. To achieve these three domains, teachers are required to master various models or learning methods that are in accordance with the characteristics and material of students. According to Kabang [7] with a learning model, students will be able to solve their own problems, the most important thing is to do their job according to the knowledge they have. Alternative learning models have been tested by several researchers, namely Meter and Suara Martini [8] which argues that the social problem-based quantum teaching model has an effect on the learning outcomes of Civics for grade IV elementary school students, further research conducted by Suarnata [9] entitled the influence The quantum teaching learning model with the concept map technique on the civics learning outcomes of grade V SD students got significant results. In addition, research conducted by Sukasari, Asri and Suadnyana [10] states that the application of the multimedia-assisted quantum learning model has an effect on the learning outcomes of Class V SD students. Pradnyani, et al. [11], also stated that the quantum teaching model of learning based on local wisdom of transformation has an effect on the competence of Civics knowledge of grade IV SD students. So, to overcome this problem is to use the Quantum Teaching learning model.

Quantum Teaching is a learning model that can divide the elements of learning into two categories such as context and content [12]. Quantum Teaching means changing various interactions in students into something that is useful both for themselves and for others. The Quantum Teaching model changes the various interactions that exist in and around learning moments [13] [14] added, Quantum Teaching is a variety of interactions found in and around learning moments. According to Suryanti & Yunianta [15], the Quantum Teaching model has several advantages, namely 1) it can guide and direct students 'thinking, 2) center on what students experience in the learning process, 3) grow and cause students' desire to learn, 4) creating a sense of cooperation between students, 5) offering a learning process that is fun and easy for students to understand, 6) creating a sense of cooperation between students 7) creating enjoyable learning, 8) motivating students to continue to develop, 9) students free of expression, 10) foster a sense of idealism, passion and love of teaching in teachers . This research is supported by research conducted Martini, et al [8] entitled The Influence of Sausal Problem-Based Quantum Teaching Learning Model on Learning Outcomes of Class IV Students of SD Gugus 8 Gianyar, this social problem-based Quantum Teaching learning model can improve results. Students learn Civics because the social problem-based Quantum learning model is a model that creates an effective learning environment by using elements that exist in students and their learning environment through interactions that occur in the classroom. In addition, research conducted by Yanuarti [16] states that the application of using the Quantum Teaching model can improve student civics learning outcomes.

Based on the background that has been described, research was carried out to assess how effective the quantum teaching model was. So this research entitled The Effectiveness of Quantum Teaching Model on Learning Outcomes of Civics Elementary School Students. The purpose of this study was to determine the effectiveness of the quantum teaching learning model on learning outcomes of Civics for elementary school students.

2. METHOD

This research approach uses a meta-analysis research approach through data collection activities by searching Google Scholar or Google Scholar. The articles that have been obtained are used as research samples which will later be calculated using the effect size. According to Ansor [17], meta-analysis is essentially a synthesis of a topic taken through several research reports. Waluyohadi [18] stated, in conducting meta-analysis research there are steps that can be taken including; (1) determine and study the research topics to be summarized, (2) search and collect a number of predetermined topics and select them, (3) calculate the effect size, and (4) draw conclusions and interpret the results of meta-analysis research.

The basic technique of meta-analysis research is the effect size [19]. The effect size shows the extent to which a variable can affect other variables in a study or shows how effectively a variable affects other variables [20]. Data were analyzed by calculating the effect size through research data contained in relevant articles by identifying the mean and standard deviation of data from the experimental group and control group used to obtain the effect size.

3. RESULT AND DISCUSSION

3.1 Result

First, this meta-analysis research uses research conducted by [8] entitled The Effect of Sausal Problem-Based Quantum Teaching Learning Model on Civic Learning Outcomes of Class IV SD Cluster 8 Gianyar students obtained data from interviews, document recording, and observation. The data obtained from the results of interviews were carried out with the home room teacher, the principal, and a number of grade IV students at SDN Gugus 8, Gianyar Penarukan District as follows: (1) the methods commonly used by teachers are lecture, question and answer, and assignment methods, (2) in schools still using conventional learning strategies (3) Civics student learning outcomes are still below average (4) students' understanding of the material being studied is still lacking, (5) students are less active in learning and (6) learning conditions are less conducive because teachers still use conventional learning strategies. The result of the calculation of effect size Effect Learning Model of Quantum Teaching based on the results of Study of Social Problems Civics d iperoleh effect size was calculated in this study of 2,732 who are at very high category.

Second, this meta-analysis research uses research conducted by [9] entitled The Influence of Quantum Teaching Learning Model with Concept Map Technique on Civics Learning Outcomes in Class V SD in Cluster XV District Buleleng. The research observation data that has been conducted shows that the learning outcomes in Civics learning conducted by teachers are still low. This can be seen from the number of students who have not been able to meet the minimum completeness criteria (KKM) in the Civics subject, namely 65. From the results of this observation, it is possible that learning is still dominated by teachers in the sense that students only receive subject matter without trying to develop their abilities, Lack of teacher attention to student interactions in study groups, time constraints, causing students to be more silent so that the teaching and learning process cannot run effectively.

After carrying out the research, it was found that the class that applied the Quantum Teaching learning model with the concept map technique obtained better Civics learning outcomes than conventional classes, so the research data that had been obtained were analyzed by identifying the mean and standard deviation of the experimental group and control group data used To obtain the effect size , the effect size is obtained from the effect of the Quantum Teaching Learning Model with Concept Map Techniques on Civics Learning Outcomes of 1,060 which is in the moderate category.

Third, this meta-analysis research uses research conducted by [11] entitled The Effect of the Application of a Multimedia Assisted Quantum Learning Model on the Learning Outcomes of Class V Students in Teuku Umar Cluster, West Denpasar. Through field observations, in general the learning outcomes of Civics (Citizenship Education) students in the Teuku Umar Gugus are still not optimal when compared to other subjects. Associated with the KKM score in Civics subject, which is 70, there are still many students who get scores below the KKM around 48% and students who get scores above the KKM are around 52%. Based on the description of the problem, a research was conducted on the Effect of Application of Multimedia Assisted Quantum Learning Model Against Class V Student Civics Learning Outcomes, Teuku Umar Cluster, West Denpasar. After carrying out the research, the results showed that there were differences in the posttest results of the experimental class and the control class, then the research data that had been obtained were analyzed by identifying the mean and standard deviation of the experimental group and control group data used to obtain the effect size, the calculation results were obtained. The effect size is 2.72 which is in the very high category.

Fourth, this meta-analysis research uses a research entitled The Effect of Learning Quantum Teaching based on Local Wisdom Tat Twan Asi Civics Knowledge Competency Grade IV Elementary School Students by [11] explained that Quantum Learning is combined with local wisdom Tat Twam Asi provide learning experiences for students where this learning will develop students' ability to solve a problem innovatively based on moral or ethical teachings so that students can respect each other and suppress the ego which is a barrier for us to realize that we are all basically is the same. In this Quantum learning, student learning styles are freed according to student characteristics but still adhere to Tat Twam Asi. After implementing Quantum Teaching Learning based on Local Wisdom Tat Twan Asi Civics Knowledge Competencies for Class IV SD Students, a significant difference is obtained in the results of students' Civics Knowledge Competencies which are applied with Tat Twan Asi Local Wisdom-based Quantum Teaching learning with students who learn conventional learning, where In this study students who were applied with Tat Twan Asi Local Wisdom-based Quantum Teaching learning were higher than those applied with conventional learning, then the student Civics knowledge competency data were analyzed by identifying the mean and standard deviation of the experimental group and control group data used to obtain effect size, the result of the calculation of the effect size is 1.86 which is in the very high category.

3.2 Discussion

The Quantum Teaching learning model on Civics learning outcomes is stated to be effective, this is evident from the four articles found that most of the effectiveness

of the Quantum Teaching learning model on learning outcomes of Civics for Primary School Students is in the high category The effect of the Quantum Teaching learning method is effective in improving student Civics learning outcomes because the learning model emphasizes collective attitudes or behaviors in working or helping among others in regular cooperation in groups, consisting of two people or in pairs, starting with the teacher asking questions asking students to think about answer individually. After that the teacher asks students to pair up and discuss everything they have thought. The teacher asks pairs of students to share something that has been discussed with their foreign student partners. This is supported by research conducted by Trianto [21], namely the Quantum Teaching model, which can increase the enthusiasm of students in learning, because there is interaction and thinking in pairs, giving students more time to think, and to respond to and help each other. In addition, this research is also supported by research conducted Wijayanto [22] which states that the Quantum Teaching learning model is effectively used to improve student learning outcomes and activities.

The results of this study are in line with the opinion. The results of data analysis with the effect size of the article also found that from the four articles the highest effectiveness of the Quantum Teaching learning model was found in research by [8] entitled The Effect of Sausal Problem-Based Quantum Teaching Learning Models on Results Learning Civics Class IV SD Gugus 8 Gianyar Students. This social problem-based Quantum Teaching learning model can improve student civics learning outcomes because the social problem-based Quantum learning model is a model that creates an effective learning environment by using elements that exist in students and their learning environment through interactions that occur in the classroom [23]. In order to make it easier for teachers to interact with students, teachers can relate the material to be studied with problems in social life that are familiar to student life. The implications of this study consist of theoretical implications and practical implications. The theoretical implication in this study is that the selection of the appropriate learning model affects students' Civics learning outcomes. While the practical implications in this study are 1) providing information to other researchers regarding the effectiveness of the Quantum Teaching learning model on Civics learning outcomes with an effect size value of 2.732 in the high category 2) providing information to elementary teachers to develop teaching skills using appropriate learning models to generate enthusiasm for student learning so that learning objectives can be achieved, which can be seen from the increased student learning outcomes. 3) provide input for schools to improve the quality of education in these schools by determining policies in the form of implementing innovative learning models in the implementation of learning.

4. CONCLUSION

Based on the results of the research and discussion that has been previously presented, it can beconcluded that overall from the results of relevant research studies that have been calculated using meta-analysis, the Quantum Teaching learning model is able to improve student Civics learning outcomes in the experimental group that is larger than the control group. This shows that the Quantum Teaching learning model is effective and Teaching is suitable for use in Civics learning.

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