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TEAM QUIZ LEARNING MODEL FOR STUDENT LEARNING OUTCOMES CLASS VI ELEMENTARY SCHOOL

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Abstract: This research was motivated by the low social studies learning outcomes of students due to the learning process still using lecture and assignment methods. Students take notes and listen to what the teacher explains, so that students are less active in learning activities, students' participation and sense of responsibility towards the group is still lacking, group collaboration is still low, teachers also do not hold quizzes in the learning process and students are less able to ask questions, answer and respond in good language. This research aims to determine the effect of using the *Team Quiz learning model* on the social studies learning outcomes of class VI students at SD IT Adzkia Padang. This type of research is experimental research using a *Quasi Experimental Design* with a *Nonequivalent Group Design research design.* In this research there were two study groups, the first was the experimental group, namely the group that was treated with the *Team Quiz learning model*, and the second was the control group, namely the group that was not treated. The subjects in this research were class VI students at SD IT Adzkia Padang who were registered in the 2023/2024 academic year. The sample used was class VI students at SD IT Adzkia Padang using a *simple sampling technique random sampling.* From the analysis results of this research, it can be seen that the $_{\text{calculated t value}} = 4.296$ and $t_{\text{table}} = 1.683$, where $t_{\text{calculated}} > t_{\text{table}} = 4.296 > 1.683$. From the research results, it is proven that the use of the *Team Quiz learning model* has an influence on the social studies learning outcomes of class VI students at SD IT Adzkia Padang.

Keywords: Learning Outcomes; Team Quiz Model; learning activities

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INTRODUCTION

Education is the highest and most important priority in improving human resources as stated in the preamble to the 1945 Constitution, the aim of national education is to make the life of the nation intelligent. According to Law of the Republic of Indonesia Number 20 of 2003 concerning the National Education System Article 3 which states " national education functions to develop abilities and shape the character and civilization of a dignified nation in order to make the nation's life more intelligent, aimed at developing the potential of students to become faithful and devout human beings. to God

Almighty, have noble character, be healthy, knowledgeable, capable, creative, independent and be a democratic and responsible citizen." To achieve educational goals, a learning process is needed, namely the process of interaction between students and teachers and effective learning resources in the learning environment (Ishimura, 2013) .

Learning is a process of creating conducive conditions for teaching and learning communication interactions to occur between teachers, students and other learning components (Amin et al., 2022) . In the world of education, especially in elementary schools, there are several subjects created by Government Regulation, one of which is Social Sciences (IPS) (Permatasari, nd) .

Social studies is one of the main subjects in the education curriculum in Indonesia, including at the elementary school level (Scholkmann et al., 2023) . Social studies subjects are subjects that have been considered difficult by most students, from elementary school to middle school (Tanjung et al., 2022) .

Based on the results of initial interviews conducted by researchers in class VI of SD IT Adzkia Padang, it is known that in the learning process teachers still use lecture and assignment methods, taking notes and listening to what is explained by the teacher. Systems like this create a lack of student interest, attention and motivation in the learning process. It can be seen that during the learning process, there are still students who chat with their friends when the teacher explains the lesson, do not pay attention to the information conveyed by the teacher in front of the class, students do not respond to what the teacher conveys, thus making students passive in participating in the learning process. Teachers also do not involve students in the learning process, giving students less opportunities to express opinions and questions about material they do not understand. Students are less able to summarize learning well in group discussions. Teachers also have not accustomed students to working together with each other in group discussions because the learning process is still teacher- *centered.* These problems cause the learning process to not run optimally. This can be seen from the low percentage of completeness of student learning outcomes.

Based on the problems above, improvements are needed in the learning process. One solution to overcome this problem is to use a more varied learning model (Santaolalla et al., 2020) . There are many learning models that can be used, one of which is the *Team Quiz learning model* (Abdulmajed et al., 2015) . *The Team Quiz* learning model is a learning model by playing topics taught to students who are divided into several groups (Doolittle et al., 2023) . This learning model also requires students to actively ask questions and express opinions on problems addressed to their group. The high level of student questioning and opinion activity is expected to improve students' social skills, communication and collaboration abilities in learning Social Sciences (IPS) (Subedi et al., 2022) . The use of the *Team Quiz* learning model in social studies subjects can be done by making students active and responsible through group discussions (Albusaidi, 2019) .

According to Istarani (2011:211) The *Team Quiz* learning model is a model that can increase student learning responsibility in a fun atmosphere. The *Team Quiz* learning model is a learning model with a system of dividing students into several study groups, where the learning material will be divided according to the study group so that the study group will have the opportunity to be a group of questioners and answerers (Susanto, Parijo, and Syahrudin, 2013: 2) . By implementing the *Team Quiz model* , teachers can

help students to be more creative in asking questions and conveying their thoughts and ideas so that student learning outcomes will increase, and can also increase students' sense of responsibility for what they are learning.

METHOD

This type of research is experimental research. According to Abdullah (2015:91) experimental research is research conducted to explain certain things or variables through efforts to manipulate these variables or the relationships between these variables, to determine the relationship, influence or differences between these variables. Experimental research is research that is intended to determine whether or not there is an effect of "something" imposed on the subject under study. In other words, experimental research tries to examine whether there is a cause and effect relationship by comparing one or more experimental groups that were treated with one or more comparison groups that did not receive treatment (Paramita, Rizal, and Sulistyan, 2021:14) .

The experimental research method is a research method used to search for and test causal relationships, differences or the influence of certain treatments on a variable under controlled conditions. Study carried out using *a Quasi Experimental design* with the research design that will be used is *Nonequivalent Control Group Design* . The sample was divided into two groups, namely the experimental class and the control class. The treatment given in the experimental class was using the *Team Quiz learning model* , while in the control class the lecture method was used.

Table 1 . Research Design *NonequiVIalent Control Group Design*

O_1 O_2
……
O3 O4

Source: (Sugiyono, 2014:79)

Information:

O_1 : The initial state of the experimental class before being given the *Team Quiz Model treatment*

O_3 : The initial state of the control class which is not treated

X : The treatment given is the use of the *Team Quiz model*

O_2 : Results of the assessment of the experimental class that received treatment

O_4 : Results of the control class assessment without treatment

This research was carried out at SD IT Adzkia Padang. The population of this research was all grade VI students at SD IT Adzkia Padang, totaling 63 people. The sample in the research was class VI A with 24 people as the control class and class VI B with 19 people as the experimental class. The variables in this research are 1) The independent variable is the Team Quiz learning model, 2) The dependent variable is the learning outcomes. Meanwhile, the assessment instrument in this research is a test of the ability of social studies learning material for class VI elementary school. The type of test used is in the form of multiple choice questions. The data obtained was based on the final test (*posttest*

) given to class VI as the control and experimental class. After the research was carried out, the results of the student scores were obtained which were then analyzed using normality

RESULT AND DISCUSSION

Based on research entitled the influence of the *Team Quiz learning model* on the social studies learning outcomes of class VI students at SD IT Adzkia Padang. The samples used were VIA and VIB class students for research. The research results are described in the following discussion:

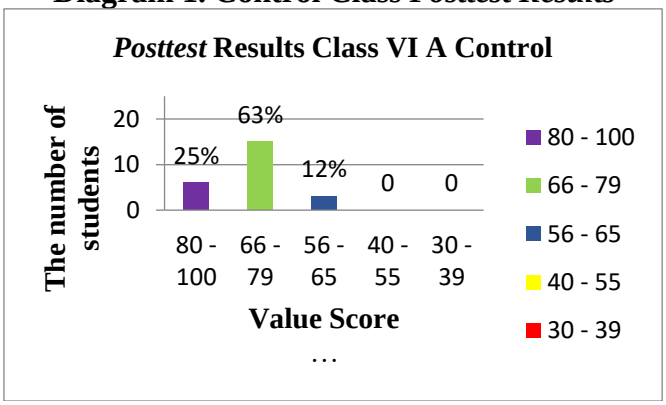
Social studies learning activities at SD IT Adzkia Padang in class VI B use the *Team Quiz learning model* as the experimental class and class VI A uses the lecture method as the control class. To determine the effect of *the Team Quiz* learning model on social studies learning outcomes, *a posttest was held* after learning. The frequency distribution table for the two classes can be seen in the following table:

Table 2. Calculation of Sample Class Learning Outcome Data

Descriptive Statistics					
Class	N	Minimum	Maximum	Mean	Std. DeVIiation
VIIA (Control)	24	58	91	72.92	9,550
VIIB (Experiment)	19	66	100	85.68	10,403
VIalid N (listwise)	19				

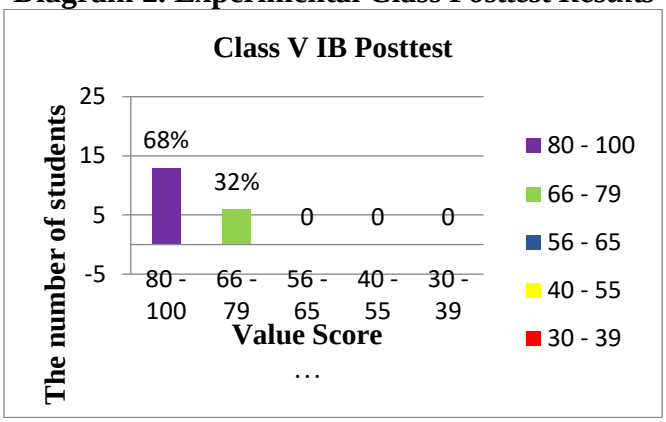
The results of descriptive statistics show that the average value of learning outcomes for class VI students after implementing the *Team Quiz model* in the experimental class was 85.68 from an ideal score of 100 , while the control class was 72.92.

Diagram 1. Control Class *Posttest Results*



(Source: Frequency and percentage statistical data class VIA student learning outcomes scores)

Diagram 2. Experimental Class *Posttest Results*



(Source: Frequency and percentage statistical data class VIB student learning outcomes scores)

In the diagram above it can be seen that student learning outcomes through *the posttest* in the experimental class are categorized as very good at 68% and good at 32%. Based on the percentage results obtained, it can be seen that there is an influence on changes in the level of student learning outcomes after the *Team Quiz model is implemented* during the learning process. Meanwhile, in the control class, the percentage results of the posttest scores were in the very good category, 25%, good 63%, and fair 12%.

Based on the results of the percentage of learning outcomes between the experimental class using the *Team Quiz model and the control class without implementing the Team Quiz* model, it can be seen that the percentage of the experimental class in the very good category is higher, namely 68%. So from these data it can be said that the implementation of the *Team Quiz model* has an influence on student learning outcomes, this can be seen in the *posttest results* in the experimental class being higher than the control class. This means that it is easier for students to understand the material after implementing the *Team Quiz model* in the learning process so that it can influence *their posttest scores* which are very high.

Table 3. Description of the completeness of social studies learning outcomes

Score	Category	Experimental Class Frequency	Percentage (%)	Control Class Frequency	Percentage (%)
0 ≤x <75	Not Completed	1	5%	10	42%
75 ≤x ≤100	Complete	18	95%	14	58%

In the table above, it can be seen that the learning outcomes of class VII students at SDN 28 Pasar Gompong in social studies learning after *the posttest was carried out* in the experimental class and the control class, the results were much different, where the completion percentage in the experimental class was 95% after implementing the *Team Quiz model* , which was higher than that of the class. control. Completeness of learning

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outcomes in the experimental class is higher than the control class because the average score for the experimental class is 85.68 to the percentage of learning outcomes for experimental class students is 95% complete. So, this means that there is an influence of using the Team Quiz model on the social studies learning outcomes of class VI students at SD IT Adzkia Padang.

The next stage is analyzing the research data, namely by testing normality. The normality test is carried out to determine whether the research data is normally distributed or not. Normality testing using the *SPSS 26* application . Based on the normality test, the significant value obtained in the *Shapiro-Wilk statement* was 0.75 in the experimental class and 0.60 in the control class > 0.05 (error/rejection level), it can be said that the data on students' social studies learning outcomes through *the post-test* declared to be normally distributed. Test the homogeneity of the social studies learning results data for both classes using the *SPSS 26* application . The results of the homogeneity test calculation of the variance of the two sample classes using the *Levene test* obtained a significance value of 0.512 > 0.05 (error/rejection level) so it can be said that the social studies learning results data is distributed homogeneous.

After carrying out the normality test and homogeneity test, it was discovered that the data for the two sample classes were normally distributed and homogeneous. Therefore, hypothesis testing can be carried out using the t-test. Acceptance criteria: if $t_{count} > t_{table}$ with a significance level of 0.05 then H_1 is accepted and H_0 is rejected, if $t_{count} < t_{table}$ with a significance level of 0.05 then H_1 is rejected and H_0 is accepted. The way to find the t_{table} is dk= $n_1 + n_2 - 2$. Based on the hypothesis test above, the $_{calculated\ t\ value}$ = 4.296 and the $t_{table\ value}$ = 1.683, meaning that $t_{calculated} > t_{table}$ = 4.296 > 1.683. So it can be interpreted that H_0 is rejected and H_1 which reads "there is an influence of the *Team Quiz learning model* on the social studies learning outcomes of class VI students at SD IT Adzkia Padang" is accepted. Where these results can be seen from the average value of the experimental class which uses the *Team Quiz model* compared to the average value of the control class which uses the lecture method.

Based on the analysis of the data that has been obtained, it can be seen that there is an influence on student learning outcomes in the experimental class who study using the *Team Quiz model* with control class students who study using the lecture method. This can be seen from the cognitive aspect which is reflected in the average score of the experimental class 85.68 and the control class 72.92. From these results it can be seen that the average of the experimental class is higher than the control class. This difference can be seen through hypothesis testing, namely using the *t- test* . From the results of the analysis, it is obtained that $t = _{4.296}$ and t_{table} = 1.683, where t = 4.296, where $t = _{1.683,\ where}$ $t = _{4.296}$. This means that H_0 is rejected and H_1 which reads "there is an influence of the *Team Quiz learning model* on the learning outcomes of class VI students at SD IT Adzkia Padang" is accepted. The acceptance of H_1 shows that learning about plant reproduction using the *Team Quiz model* can be applied in schools to increase students' understanding and interest in learning. Supported by research and theory which states that the *Team Quiz learning model* is successful in improving student learning outcomes in the learning process after being implemented by the teacher.

CONCLUSION

Based on the analysis of the data that has been obtained, it can be seen that there is an influence on student learning outcomes in the experimental class who study using the *Team Quiz model* with control class students who study using the lecture method. This can be seen from the cognitive aspect which is reflected in the average score of the experimental class 85.68 and the control class 72.92. From these results it can be seen that the average of the experimental class is higher than the control class. This difference can be seen through hypothesis testing, namely using the *t- test* . From the results of the analysis, it is obtained that $t = {}_{4.296}$ and $t_{table} = 1.683$, where t = 4.296, where $t = {}_{1.683,\ where}$ $t = {}_{4.296}$. This means that H_0 is rejected and H_1 which reads "there is an influence of the *Team Quiz learning model* on the learning outcomes of class VI students at SD IT Adzkia Padang" is accepted. The acceptance of H_1 shows that learning about plant reproduction using the *Team Quiz model* can be applied in schools to increase students' understanding and interest in learning. Supported by research and theory which states that the *Team Quiz learning model* is successful in improving student learning outcomes in the learning process after being implemented by the teacher.

REFERENCES

Abdullah, P. M. (2015). Metodologi Penelitian Kuantitatif. In *Aswaja Pressindo*. Aswaja Pressindo.

Abdulmajed, H., Park, Y. S., & Tekian, A. (2015). Assessment of educational games for health professions: A systematic review of trends and outcomes. *Medical Teacher*, *37*(S1), S27–S32. https://doi.org/10.3109/0142159X.2015.1006609

Albusaidi, S. (2019). Using activity theory to explain how a student learns in an internationalised classroom from a sociocultural perspective. *Journal of Language Teaching and Research*, *10*(6), 1142–1149. https://doi.org/10.17507/jltr.1006.02

Amin, S., Sumarmi, Bachri, S., Susilo, S., Mkumbachi, R.L., & Ghozi, A. (2022). Improving Environmental Sensitivity Through Problem-Based Hybrid Learning (Pbhl): an Experimental Study. *Indonesian Journal of Science Education* , *11* (3), 387–398. https://doi.org/10.15294/jpii.v11i3.38071

Amin, & Sumendap, LYS (2022). *164 Contemporary Learning Models* . LPPM Publishing Center.

Doolittle, P., Wojdak, K., & Walters, A. (2023). Defining Active Learning: A Restricted Systematic Review. *Teaching and Learning Inquiry* , *11* . https://doi.org/10.20343/teachlearninqu.11.25

Ishimura, T. (2013). Quantitative analysis of the impacts that social networks exert on environmental activities in a local community. *Studies in Regional Science*, *42*(4), 947–961. https://doi.org/10.2457/srs.42.947

Istarani. (2011). *58 Model Pembelajaran Inovatif*. MEDIA PERSADA.

Paramita, R. W. D., Rizal, N., & Sulistyan, R. B. (2021). *Metode Penelitian Kuantitatif*. Widya Gama Press.

Permatasari, B. D. (2019). (n.d.). The Influence of Problem Based Learning towards Social Science Learning Outcomes Viewed from Learning Interest. *International Journal of Evaluation and Research in Education, 8(1), 39-46.*

Santaolalla, E., Urosa, B., Martín, O., Verde, A., & Díaz, T. (2020). Interdisciplinarity in

teacher education: Evaluation of the effectiveness of an educational innovation project. *Sustainability (Switzerland)*, *12*(17). https://doi.org/10.3390/SU12176748

Scholkmann, A., Stegeager, N., & Miller, R. K. (2023). Integrating the Integration: The Role and Challenges of Problem-Based Learning in Bringing Together Social Science and Humanities (SSH) and Science, Technology, Engineering and Mathematics (STEM). *Journal of Problem Based Learning in Higher Education*, *11*(1), 98–123. https://doi.org/10.54337/ojs.jpblhe.v11i1.7371

Subedi, N., Hirachan, N., Paudel, S., Shrestha, B., Pradhan, A., Subedee, A., & Li, X. (2022). The effectiveness of online team-based learning in introduction to medical ethics education for medical students at a medical college of Nepal: a pilot study. *BMC Medical Education* , *22* (1), 1–8. https://doi.org/10.1186/s12909-022-03813

Sugiyono. (2014). *Quantitative, Qualitative, and R&D Research Methods* . Alphabet.

Susanto, N., Parijo, & Syahrudin, H. (2013). The Influence of the Team Quiz Learning Model on Learning Outcomes for Class Xi of Muhammadiyah High School 2 Pontianak. *Economica* , *2* (1), 1–10.

Tanjung, S., Baharuddin, Ampera, D., Farihah, & Jahidin, I. (2022). Problem Based Learning (PBL) Model with Technological, Pedagogical, and Content Knowledge (TPACK) Approach. *International Journal of Education in Mathematics, Science and Technology*, *10*(3), 740–752. https://doi.org/10.46328/ijemst.2510