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The Effect of Quantum Model Learning through The Ability to Finish Mathematics Report Text Question in Elementary School

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Abstract. This research is aimed to find out the effect of quantum learning model through the ability to finish report text at the 4th grade students' on mathematic subject at SDN Cengkong III Karawang. This research used quantitative method. Population used in this paper is all students in SDN Cengkong III there are 204 students. The sample is the students at 4th B as the experiment class and 4th A as controlled class. the writer uses the essay question as The data collection technique to finish report text of mathematic question. This paper compared the use of quantum learning model in finishing mathematic report text and those who are not. Data analysis technique to test and hypothesis conducted with statistic t-test paired sample test, n= 20 which means shows hypothesis is accepted . based on the research the writer can summarize that quantum learning model in teaching and learning process and in finishing mathematic report text question at 4th grade students in SDN Cengkong has a strong relationship.

Keywords: Quantum Learning, The Ability to finish report text question

INTRODUCTION ~ Pendidikan merupakan salah satu aspek yang berpengaruh terhadap kemajuan bangsa untuk meningkatkan mutu sumber daya manusia. Education is one of the aspect that plays an important role for the country to develope human resource.

Any research anlysis showed that knowledge and technology and the quality of Human resource is the important factor to determine competitive nation Wen (2003:23). From the explanation above the writer conclude that education is a concious attempt as human does to develope self potention through education and do the task to produce hight quality human resources.

Thus, the development, mastery and the improvement of knowlege as the point of our country's goal . to achieve that goal, our goverment and citizen has done some ways to develope education in any level based on the national curriculum that contains any subject including mathematic. Based on the analysis this caused by students, teacher, students, teaching aids, and tools, or teaching model that is used in performing. Students' less motivation, lack of performance of teacher can be the caused of unsuccessfull teaching and learning process.

Report text question is a question that can be delivered in oral or writing test (ashlock (1983:80). The report text that is taught in the class is taken from everyday life and students' experiences.

Thus, to answer the reality of the learing process of report text question, it needed a new kind of teaching and learning

model that create joyful environment and open-minded teacher by using quantum learning.

Quantum learning model is one of the learning model that put students as a subject learning (student oriented). In this learning process, students is the center of learning. According to the porter and hernacki (2000:14) stated that quantum learning as a metod of learning that has been effectively proven conducted in the class.

Based on the observation in SDN cengkong III grade IV known that students seemed to be unfocus in learning process, there were so many students playing with themselves and talked to each other. And less understand about learning and teaching process especially in learning mathematic. The learning process has not been using scientific approach method and still teacher centered, so that students has no chance to learn innovatively and not supported to understand the material. The teacher only use conventional methode in teaching and learning process.

METHOD

This kind of research used quantitative methode. This research used experiment method design by using controll group and experiment group. Experiment group is the class which treatment method is given

Table 1 . research design

O1	X	O2
O3		O4

Sugiyono (2014:76)

mean:

X = Quantum Learning Model
O1 = Pretest
Eksperimen group
O2 = Posttest
Eksperimen group
O3 = Pretest control group
O4 = Posttest control

Population in this research is all students of SDN CENGKONG III Karawang City, and the sample of the research is the students of IV Grade A dan kelas B. And the total is 40 students. This two classes choosed randomly as the IV A is a treatment class and the IV B is conventional class.

Data collection technique in this research used instrument test that is the ability to answer mathematics report text. Meanwhile , data analysis technique is descriptive methode by using SPSS16.

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RESULTS

Descriptive Analysis Results

The data obtained from this study are test data on the ability to solve problems

1. Initial Test Ability to Complete Mathematical report text Problems

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Eksperimen	20	08.00	15.00	12.75	2.743
Kontrol	20	11.00	17.00	15.25	3.124
Valid N (listwise)	20				

2. Final Test Ability to Complete Mathematical Story Problem

	N	Minimum	Maximum	Mean	Std. Deviation
Eksperimen	20	16.00	19.00	19.35	4.67
Kontrol	20	12.00	17.00	15.05	3.51
Valid N (listwise)	20				

Based on the research analysis, the mathematic learning process as a practical teaching and learning method that involves tools, and other approaches that has been design by teachers to facilitate students in learning mathematics indoor or outdoor class, by using TANDUR SYSTEM that is to grow, to be natural , to name it,to demonstrate, to repeat, and to celebrate.

By using several models that are right and can improve mathematics learning outcomes the methods used must be compatible with the objectives to be achieved, the materials used, the time and equipment available, the ability and number of students, and the ability of the teaching teacher, so that it can be adapted to the choice of methods learning in accordance with the whole and does not complicate students and teachers, so that the desired objectives can be obtained.

From the previous explanation it can be

concluded that the Quantum Learning model can affect the learning outcomes of mathematics namely the value is proven by the pretest and posttest values of the control and experimental classes. The pretest and posttest scores of the control class are a mean of 3,600, std deviation of 2,847, std error of a mean of 1,413. Lower is 4,464, upper is 2,736, t is 8,718, df 19, and sig (2tailed) 000. Which means that the value of r table is greater than r arithmetic. While the pretest and posttest scores of the experimental class are the mean value of 800, std deviation on for, 1,105, mean std error of 247, lowe of 1,317, upper of 283, t of 3,238, df 19, and sig (2tailed) 000. Which it means that the value of r table is greater than r count, and the pretest and posttest value of the control or experimental class is influential.

CONCLUSION

Based on the description of the research data obtained and discussion of the results of the study, it can be concluded that the results of learning mathematics in class IV SDN Cengkong 3 which is located in Kedungsari Village, Cengkong Village, Purwasari District, Karawang Regency. Based on the results of research and analysis of data in class IV, it can be concluded that the results of learning mathematics with integer counting operations using quantum learning models in the learning process, namely in the post test the experimental class obtained a T value of 8,718 and Df 19. Sig (2-tailed) equal to 0,000 which means the value of 0,000 <of 0.05 Ho is rejected. There is a significant difference in value. As for the posttest value of the control class on mathematics learning outcomes for a T value of 3,238 and a Df of 19 sig (2-tailed) of 0,000, it means that a value of 0,000 <of 0.05 Ho is rejected. There is a significant difference in the value of the use of the quantum learning model in the learning process with the material calculation of integer numbers in the fourth grade mathematics learning outcomes of elementary schools.

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