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THE EFFECTIVENESS OF THE SAINTIFIC APPROACH IN IMPROVING STUDENT LEARNING RESULT 4 "TEMA INDAHNYA KEBERSAMAAN" IN ELEMENTARY SCHOOL PURWANTORO 1 MALANG

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Abstract. The scientific approach is a learning process designed to enable students to learn actively by doing the 5 M process of observing, asking, trying, reasoning and communicating. Learning by using a scientific approach can encourage students to find out from various sources by making observations and not just receiving knowledge from teachers. The purpose of this study is to determine the effectiveness of scientific approach in improving student learning outcomes of grade 4 on the theme of togetherness in SDN Purwantoro 1 Malang. This research uses a quantitative approach with a simple experimental research type. Method in the form of observation, interviews, questionnaires and documentation. From the 4th graders of SDN Purwantoro 1 Malang, 2 classes were taken: experimental class and control class with 30 students. Data analysis used Independent t test with SPSS 16 tool. From the research result can know the average value of learning result of experiment class 88, mean while control class average learning result 80 and Sig 0,000 <0,05 hence Ho rejected, its mean there are differences in learning outcomes of the experimental class with the control class. So it can be concluded very effective approach can improve thematic learning theme beautiful together in SDN Purwantoro 1 Malang.
Keywords: Scientific Approach; Learning Outcomes; Tema Indahnya Kebersamaan

A. INTRODUCTION

Thematic learning is an approach in learning that combines teaching materials in a subject or inter subjects with all aspects of child development in terms of cognitive, affective, and psychomotor. Thematic learning is a learning approach with several subjects so one to provide meaningful learning to learners Trianto (2001: 34) Learning is meaningful because students will understand the concepts they learn and then experience directly and connect them with concepts they already understand.

Learning in the 2013 curriculum is competency learning by strengthening the process of learning and authentic assessment in achieving the competence of attitudes, knowledge, and skills , Prabowo (2010: 22). Strengthening of learning process in curriculum 2013 that is by using scientific approach. Learning with a scientific approach is a learning that encourages students in doing activities menanya, try, reason, observe, conclude and communicate.

The success of students in the learning process is influenced by individual factors themselves and factors from outside the individual. Factors from within students for example student learning outcomes. Learning outcomes are the abilities students have after receiving a learning experience. Student learning outcomes are influenced by students' ability and quality of teaching. The quality of teaching is teacher. The basic skills of teachers in the field of cognitive, attitude, and behavioral areas.

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Based on the results of observations conducted by researchers at primary school Purwantoro 1 Malang on August 10, 2016 there is a low learning outcomes in class IV on thematic learning "tema indahnya kebersamaan" because students do not understand the material, teachers use almost 80% lecture method and learning boring. Observasi (10 Agustus 2016) Although in Primary School Purwantoro 1 Malang has implemented the 2013 curriculum, but the teacher has not used a fully scientific approach. This can be seen when the student receives the learning material, one of the students is sent to read and the other is only listening, when the material from the Indonesian language subjects of the students are sent forward to write and the others record what is written on the board until the time out, teachers also often ask students to work on the LKS without any discussion. This kind of learning makes students busy in the classroom, easy to get bored, and not yet fully understand about the material being studied.

The above learning situation and condition causes passive students and conducive learning atmosphere not yet materialized. Conditions like these make it a challenge for classroom teachers to improve their performance. According to Uzer Usman that the work of a professional nature required some areas of science that must be studied and applied for the public interest. Professional work is work that can be done by those who are specially prepared for it. Usman (2006: 14-15) So the understanding of professional teachers is a person who has the ability and expertise in the field so that teachers are able to do the job with the maximum and can improve student learning outcomes on the "tema indahnya kebersamaan".

Learning outcomes are the most important thing in learning. Learning outcomes in students is a change in student behavior both in terms of cognitive, affective, and psychomotor. Dimyati and Mudjiono (2006: 3-4) mention the learning outcomes are the interaction of learning and teaching. Nana Sudjana (2009: 3)Teachers end in the learning process evaluation process. While the student is the end of the learning process.

The low learning outcomes of students in grade 4 of Purwantoro 1 Malang primary school is a problem for teachers, therefore teachers are expected to make new innovations related to thematic learning especially in "tema indahnya kebersamaan". But in reality the teacher just deliver the material just to the learners, this causes decreased learning outcomes of learners.

In the curriculum of 2013 there is an approach is a scientific approach. The scientific approach is the approach used in learning through the scientific process of asking, reasoning, trying, observing, concluding and confirming. This approach is considered as the best way to improve students' learning outcomes in cognitive, affective, and psychomotor aspects.

In the previous research mentioned that the scientific approach can give a significant influence in improving learning motivation. As revealed by I Nyoman Sumayasa in his journal entitled The Effect of Implementation of the Scientific Approach to the Motivation of Learning and Learning Outcomes of Indonesian In Grade VI Students in Karangasem Elementary School that scientific approach can increase learning motivation and student learning outcomes increase. And the learning process will be able to walk with a lot of fun so it can establish and improve students' learning motivation in comprehending Bahasa Indonesia materials. From the above background, the researchers are interested to conduct research entitled "***The Effectiveness of Scientific Approach In Improving Student Results Class 4 In" tema indahnya kebersamaan "In Primary School Purwantoro 1 Malang***"

B. RESEARCH METHODS

The research was conducted in Purwantoro Primary School 1 Malang in the odd semester of 2016/2017. Samples from all subjects were 2 classes. Independent variable of research is thematic teaching with scientific approach, while for dependent variable of research is result of learning.

The type of research is experimental research with data collection techniques that is initial observation, unstructured interviews, test methods, and documentation. Research stage is preparation of research by conducting preliminary observation for problem identification

and analysis of cause of problem, then determine subject and sample, followed by arranging research instrument. Instrument used in the form of learning book "beautiful theme togetherness" and write test sheet

The next step is the implementation of the research using 2 class 4 samples, for the experimental class using scientific learning that is class 4 A, while for the control class does not use scientific approach that is class 4 B. During the 3 weeks of classroom meeting the teacher uses the saintic approach to the beautiful theme of togetherness. The last stage is data processing, discussion, and conclusion.

C. RESULTS AND DISCUSSION

1. Results

a. Pre test and post test results

The pre-test and post-test scores obtained from grade 4 A students during field trial are as follows:

Table C.1 Results of Field Trial on Pre-Test

Criteria	n	P (%)	Information
<75	18	60 %	Not complete
>75	12	40 %	Completed

In table 1.1 the results of pre test show that less students than KKM is as much as 18, and students who reach KKM as many as 12 students, then thematic learning in grade 4 is said still not complete.

Table C.2 Results of Field Trial on Post-Test

Criteria	N	P (%)	Information
<75	0	-	-
>75	30	100 %	Completed

In table 1.2 post test result showed that less students than KKM did not exist, and students who reached KKM as many as 30 students by reaching 100% percentage, then thematic learning in grade 4 is said to be complete.

This demonstrates the effectiveness of the scientific approach. In view of the results of post test in table 1.2 can prove the importance of learning by using the scientific approach on "beautiful theme togetherness" is more effective and important to apply for learners in elementary school.

b. Independent Samples Test

The data of pre test and post test values are further through independent samples test with the help of SPSS 16 computer. The result of t independent test samples test is as follows:

Table C.3 Group Statistics

	hasil	N	Mean	Std. Deviation	Std. Error Mean
eksperimen_kontrol	1	30	88.00	4.472	.816
	2	30	80.83	3.239	.591

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Table C.4 Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
eksperimen_kontrol	Equal variances assumed	5.581	.022	7.109	58	.000	7.167	1.008	5.149	9.185
	Equal variances not assumed			7.109	52.856	.000	7.167	1.008	5.145	9.189

In making the decision, it can be seen from sig (2 tailed), if sig <0,05 then Ho is rejected and Ha accepted. It can be seen that the learning result after using the scientific approach is more effective than before. The sig 0,000 data obtained from the t-test results indicate that there is a significant difference between the students' learning outcomes after using the scientific approach compared to before using the scientific approach.

In making decisions with manual counting, then from the data that has been obtained can be identified that the data scale is the interval because there are levels, distrbusi normal population, data processing using Dependent sample t-test. The test criterion is the t-test on the dependent sample test.

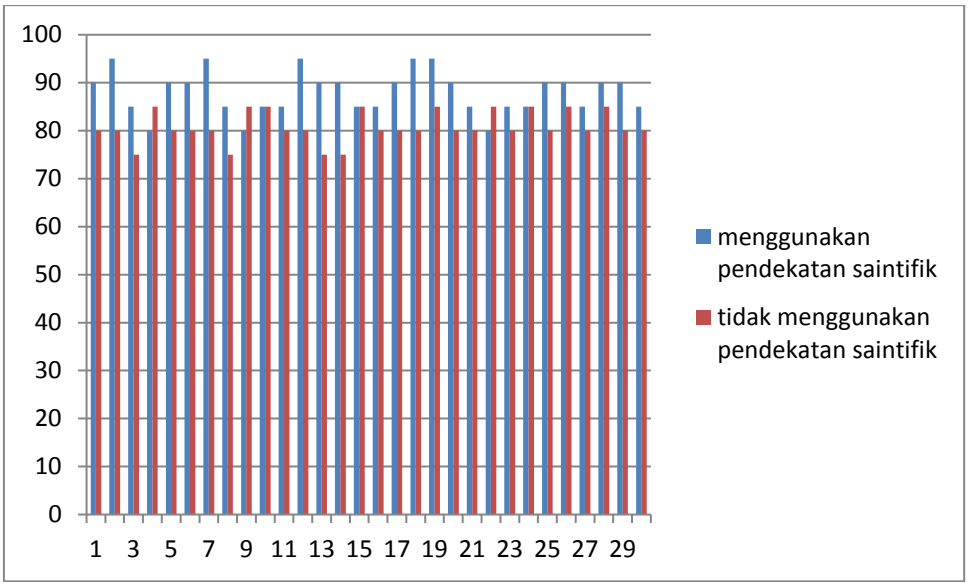
The Ha formula is there is a significant difference in the learning outcomes of students in grade 4 A in Purwantoro Primary School 1 Malang after using a scientific approach. The hypothesis is accepted because t count> of t table, so the conclusion, there is a significant difference in the learning outcomes of grade 4A students Purwantoro 1 Malang after using the approach on "beautiful theme togetherness" and it can be said that scientific approach is significantly effective to improve the results student learning.

c. Learning Outcomes of the cognitive domain

Table C.5 Results of cognitive domain learning

No	Criteria	Cognitive value	
		Learning "the beautiful theme of togetherness" with a scientific approach (4 A)	Learning "the beautiful theme of togetherness" does not use a scientific approach (4 B)
1.	The number of students	30	30
2.	Minimum value	80	75
3.	Max value	95	85
4.	average value	88	80

For more details can be seen in Figure 1. Graph of comparison of cognitive domain learning results as follows:



D. DISCUSSION

The learning process is the process of developing the activity and creativity of learners, with a variety of interactions and learning experiences. Taking note of the activities and creativity of these learners becomes important, because it affects the success of learning in the classroom. Teacher's job in the classroom is able to condition the environment, in order to support the change of student's learning behavior. Therefore, the steps taken by the teacher is to divide the learning activities into three stages, among others, the first done pretest, the second process and the third post test.

Pretest is the first step used to colonize the general science learning process. As for the results of this pre test is not satisfactory, and it appears that students are still difficult to answer simple questions. After the post test, the learning process is more effective.

In studying the "beautiful theme of togetherness" which is wrapped in scientific approach students do a lot of activities menanya, manalar, try, observe, conclude and communicate that can make students more understanding about the benefits of material learned for life.

The independent samples test shows that Sign 0,000 <0,05 then Ho is rejected so that there is a significant difference in the scientific approach to the "beautifulness togetherness theme" at Purwantoro Primary School 1 Malang. This difference can be seen from the average of experimental class learning outcomes (class using scientific approach) average is 88, whereas the mean result of learning result of control kolas students (class which do not use scientific approach) is 80.

A scientific approach is a process of learning that is in such a way that learners do activities like a science in the field of experts. The scientific approach is intended to provide understanding to learners in knowing, understanding the various materials using a scientific approach. therefore learning conditions are expected to be created directed to encourage learners in finding out from the activities of obeservation and not just be told only by the teacher. Learning by using a scientific approach is preferable to learners because it helps learners master learning objectives and get results above the KKM (Umiati, 2015:p.2-3).

This is also based on previous research conducted by Umiati, using scientific approach in improving learning outcomes in the subjects of Islamic Religious Education .. Students feel easier in learning the material. The scientific approach also enables students to learn optimally so that the learning process is complete and done.

Research conducted Maria Imanuela Ine states that the application of scientific approach in improving student achievement on economic subjects of market subject.

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According to researchers scientific approach is more emphasis to learners as a subject of learning that must be actively involved in learning activities. Students are directed to find out for themselves the facts and knowledge related to the subject matter. In this way it is expected that student learning achievement will be improved in the end.

Learning by using a scientific approach is in great demand by learners and even increase enthusiasm in learning. Some of the weaknesses of thematic learning are due to not using a scientific approach and learners are very bored with the existing learning.

E. CONCLUSION

Sig value. 0.000 <0.05 then Ho is rejected so it can be concluded that using the scientific approach in learning is very effective in improving student learning outcomes in SDN Purwantoro 1 Malang. Differences in classes using the scientific approach (experimental class 4 A) and the class did not use a scientific approach (control class 4B) can be seen with the average learning outcomes obtained, ie the experimental class with an average of 88 while the control class with average 80. Learning by using a scientific approach on the theme of beautiful togetherness is more mininati students because more can understand the material, they can dig their own knowledge, and learning based on scientific work.

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