

THE APPLICATION OF THE EXAMPLE NON EXAMPLE LEARNING MODEL TO THE STUDENTS' IPA LEARNING OUTCOMES FOR CLASS V

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DOI: <https://doi.org/10.21107/Widyagogik/v10i1.15670>

Received May 29, 2022; June 26, 2022; Accepted July 12, 2022

Abstract

This study aims to determine the completion of science learning outcomes for fifth grade students of SD Negeri 2 Air Satan. The research method used is in the form of a quasi-experimental. The population is all fifth grade students of SD Negeri 2 Air Satan and the research sample is 14 students. Data was collected by using saturated sampling technique. The data collected through the test was then analyzed using the z test. Based on the results of data analysis with a confidence level = 5% and dk = 13, it shows that $z_{count} = 2.89$ and $z_{table} = 1.64$ ($z_{count} > z_{table}$). Thus, it can be concluded that the science learning outcomes of fifth grade students of SD Negeri 2 Air Satan after the implementation of the non-example example learning model were significantly completed. α

Keywords – Application; Non Example; Science Learning

1. Introduction

Education is something that cannot be separated from human life. Education is a process in the formation of a child's personality and ability to reach maturity(Ihsan, 2013). Education can not be separated from the name of learning, the learning process can be done anytime and anywhere. A person can be said to have learned if he experiences a change in his knowledge, attitude or skills. Learning is a change that occurs in a person after completing learning activities(Djamarah, 2015).

The problem faced by educators in Indonesia today is the low quality of education caused by students who lack interest in learning and the learning model used by educators is less creative, resulting in low student learning outcomes. Learning outcomes are a change in behavior obtained after carrying out learning activities(Arrezha et al., 2018). An educator must be able to understand the characteristics of children's development, these characteristics are the cognitive, psychological, moral, physical and motor development of elementary school students(Trianingsih, 2016). In addition to mastering teaching materials, educators should also be able to master classes using various learning models, learning models are plans used to build curriculum, design learning materials and to integrate learning in Joyce's classroom.(Nafi'ah, 2018)the characteristics of the learning model are logical theoretical rationale, rationale, behavior needed so that the learning model can be achieved and the required learning environment(Ngalimun, 2017)and educators are required to be creative in designing learning in accordance with the 2013 curriculum. An educator using the 2013 curriculum is required to be more creative and innovative in carrying out learning in the classroom, because the 2013 curriculum uses thematic learning where educators must be able to link one learning to another. . One of the subjects contained in the 2013 curriculum is science subjects.

Science is referred to as the science of nature, which studies about events that occur in nature(Aprilia, 2015). Science also learns about various physical aspects of living things, namely about plants, animals, soil and so on. IPA is

classified into three parts, namely IPA as a product, IPA as a process, and IPA as Susanto's attitude (Ariani et al., 2017). Based on the results of initial observations obtained from Mrs. Amsyah, S, Pd as the homeroom teacher for class V at SD Negeri 2 Air Satan, it shows that student learning outcomes are still low. Science learning outcomes are below the maximum completeness criteria (KKM) that have been set by the school, namely 70. This is because when teaching and learning activities are still centered on educators; educators still use the lecture method, question and answer, and assignments; in delivering material, educators are still less creative in packaging learning so that learning is not interesting and boring for students; In the science learning process students cannot find concepts through their own experiences, students often do other activities such as playing with their classmates in class, chatting with friends, doing other tasks during the teaching and learning process; Student learning outcomes in science learning are still low because students find it difficult to understand science material because they are not involved between the material and the real world of students. One solution to solve this problem is to apply the Example Non Example learning model.

Example Non Example teaching and learning strategies that use an image as an intermediary for delivering subject matter, (Astriani, 2017). The advantages of the Example Non Example learning model students will be more critical in analyzing an image, students know the application of material such as sample images and students are given the opportunity to express their opinions (Harahap, 2018). The weakness of the Example Non Example model is that not all teaching materials can be presented in the form of images and require quite a lot of time (Wulan et al., 2014). The Example Non Example learning model can be a solution to teaching problems in the classroom, students who were initially passive in the classroom can be active in participating in learning so that it triggers and spurs students' interest in learning to get maximum learning outcomes. The first step of the Non-Example Example learning model is to prepare a picture, the second is to present the picture by pasting or displaying it using OHP, the three

students observing the images that have been presented, the four students conducting discussions, the fifth presenting the results of the discussion, concluding and evaluating (Ngalimun, 2012). Several studies on the Example Non Example model have been carried out, based on the results of Lestari's research. Implementation of the Non Example Example Learning Model can improve student learning outcomes. This study aims to determine the completeness of science learning outcomes for fifth grade students of SD Negeri 2 Air Satan after the Example Non Example learning model is applied.

2. Method

This research was conducted at SD Negeri 2 Air Satan, Musi Rawas Regency with the aim of knowing the completeness of students' science learning outcomes by applying the Example Non Example learning model. The steps of this research include; identify problems during the preliminary study, review the literature, determine the sample to make research instruments, carry out testing of test instruments to see the quality of the questions, conduct analysis of ability tests based on test results, carry out pretests on students who will apply the Example Non Example model, implementation of the Example model Non Example, carry out posttests, data analysis, data interpretation and conclusions. The population for this study was the entire fifth grade of SD Negeri 2 Air Satan with a total of 14 students consisting of one class. the sampling step using the saturated sample technique. The samples used were fifth grade students of SD Negeri 2 Air Satan which consisted of 9 boys and 5 girls.

The method used is a quasi-experimental, namely an experiment that uses only one class in the absence of a control class with a "one group pretest-posttest design" research design. This design uses one group that is treated with the aim of comparing the conditions before and after being given treatment, namely by applying the Example Non Example model for 2 meetings conducted by Leni Sartika as a researcher. The material in this research is the water cycle.

Treatment results can be recognized as more accurate, because they can compare with the situation before being given treatment(Sustainable, 2021).

Data collection techniques used in this research are test, observation and documentation techniques. In the test technique, it is done by giving a test instrument test to get data about the question, then the question is analyzed based on: validity to determine the validity of the item, the product moment correlation formula is used.(Sugiyono, 2008); reliability, reliability is the main object of a good measurement instrument, the extent to which the benchmark results can be trusted(Riyono et al., 2016); distinguishing power, the discriminatory power of questions is the ability of questions to distinguish between students who are able to master the questions and students who are less able or have not mastered the questions.(Asmedy, 2020); and a difficulty index where how easy and difficult a question is for students(Hanafy, 2014). Then the data collection of test techniques can be done before or after being given treatment, namely by applying the Example Non Example model, in this study the test instrument used was in the form of a description of 9 questions.

The data analysis technique used in this study uses the normality test to test the assumption of normality of a data using the chi-square formula. Hypothesis testing is used to test whether after applying the Example Non Example model, it is significantly completed which is analyzed using the z test.

3. Result and Discussion

This research is a non-Example Example learning model research, the implementation of the pretest is carried out to determine the initial learning outcomes of students on the water cycle material before being given treatment using the Example Non Example learning model, the pretest questions used are in the form of essays consisting of 9 questions that have been tested. first with class VI (outside the sample). The data from the analysis of student learning before doing learning using the Example Non Example learning model can be seen in table 1.

Table 1.Pretest Results

Score	Testing Criteria	Frequency	Percentage
≥70	Complete	0	0%
<70	Not Complete	14	100%
	Amount	14 Students	100%
	Average value	25.87	

Based on table 1, students who got a score of 70 with complete criteria 0 people (0%) and an overall average score of 25.87. So descriptively it can be concluded that the initial ability of students before participating in learning with a non-example model is included in the unfinished category.

The implementation of the Posttest was carried out to determine the final learning outcomes of students on the water cycle material after being given treatment using an example non example learning model. The posttest questions used are in the form of essays consisting of 9 questions. Data from the analysis of student learning after learning by using a non-example learning model can be seen in table 2.

Table 2.Posttest Results

Score	Testing Criteria	Frequency	Percentage
≥70	Complete	12	85.71%
<70	Not Complete	2	14.29%
	Amount	14 Students	100%
	Average value	76.90	

Based on table 2, students who got a score of 70 with the criteria for completion were 12 people (85.71%) and the overall average score was 76.90. So descriptively it can be concluded that the final ability of students after participating in learning with a non-example model is included in the complete category.

The description of the data obtained from the research results is presented in Figure 1 below:

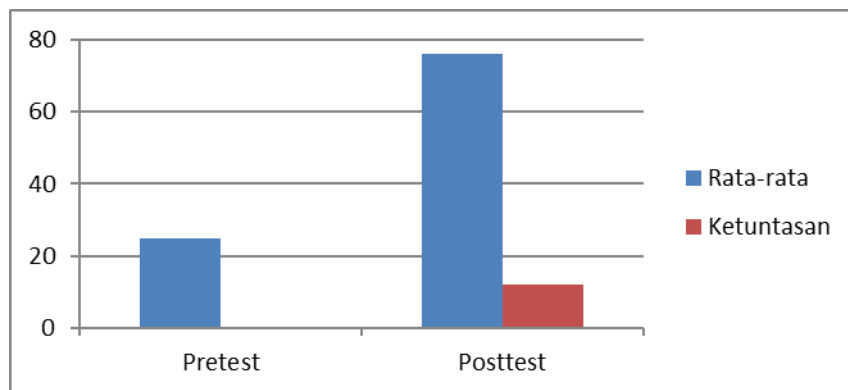


Figure 1.Description of Student Completeness Value Data

Test The hypothesis on the completeness of students' science learning outcomes was first tested for the normality of the distribution using the chi-square formula. The results of the calculation of the completeness analysis of students' science learning outcomes using the normality test showed that the posttest data came from a normally distributed population with $\chi^2_{\text{count}} < \chi^2_{\text{table}}$. The results of these calculations are presented in table 3.

Table 3.Normality Test Results

Test	χ^2_{count}	Dk(n-1)	χ^2_{table}	Conclusion
Final Test (Posttest)	0.5	13	11.1	Normal

Based on table 3 shows that the value of χ^2_{count} of pretest and posttest data is smaller than the value of χ^2_{table} . 05) because $\chi^2_{\text{count}} < \chi^2_{\text{table}}$.

Hypothesis testing was carried out to determine whether the use of the example non-example learning model was effective on the science learning outcomes of fifth grade students of SD Negeri 2 Air Satan. Because the data are normally distributed and the population standard deviation is known, then to test the hypothesis using the z-test formula. The calculation results are presented in table 4.

Table 4. Hypothesis Test Results

zcount	Dk	ztable	Conclusion
2.89	13	1.64	zcount > ztable
			Ha is accepted and H0 is rejected

Based on table 4 shows the results of the z-test analysis, it is known that the value of $z_{count} > z_{table}$, with a confidence level = 0.05, because $z_{count} > z_{table}$, namely $z_{count} = 2.89$ and $z_{table} = 1.64$, then H_a is accepted and H_0 is rejected. So that means, the average value of science learning outcomes for fifth grade students of SD Negeri 2 Air Satan after the example non-example learning model is applied is significantly complete. This is reinforced by the results of Palendeng's research that there is completeness before and after being given the treatment of the example non example learning model (Palendeng G., 2021). In this study, the researcher taught in class V as a sample class. This research was conducted to find out the science learning outcomes of fifth grade students of SD Negeri 2 Air Satan for the 2021/2022 academic year after the example non-example learning model was applied. Before the learning process begins, the researcher gives a pretest to determine the students' initial abilities. Then continued learning with the example non example learning model. The example non example learning model is a learning model using an image that is in accordance with basic competencies (Susanti, 2014), the implementation of the research began with the making of Learning Device Planning (RPP), and research instruments consisting of tests of students' cognitive abilities on the use of example non example learning models. Based on the formulation of the problem raised in this study, whether after applying the example non-example learning model, the science learning outcomes of fifth grade students of SD Negeri 2 Air Satan were significantly completed.

The results of this study indicate that the science learning outcomes of fifth grade students of SD Negeri 2 Air Satan after the implementation of the example

non example learning model have been completed. To be clearer, it can be seen in the pretest (initial test) and posttest (final test) scores in tables 1 and 2. After comparing the results of the pretest (initial test) and posttest (final test), it can be seen that there is an increase in the scores obtained by students. after teaching the material by applying the example non example learning model. In the pretest (initial test) students who scored more than 70 (completed) were 0 students (0%) and those who scored less than 70 (uncompleted) were 14 students (100%). The highest value is 38 and the lowest is 13 and based on the results of calculations from the pretest, an average of 25 is obtained,

In learning by applying the example non example learning model, students are presented with pictures to be able to attract students' attention to focus on learning, make it easier for students to understand the material being taught, improve students' thinking skills, solve problems (analyze pictures), develop ideas and ideas. children's thinking, thus the example non example learning model can be used as an alternative for the completeness of student learning outcomes.

After delivering the material using the example non example learning model, a posttest was held. The number of students who scored more than 70 (completed) in the posttest were 12 students (85.71%) and those who scored less than 70 (unfinished) were 2 students (14.29%). The highest value is 93 and the lowest is 62. The overall average value of the posttest data based on the calculations obtained is 76.90, standard deviation 8.92 and $\chi^2_{count} = 0.5$ so that the data is normally distributed, the magnitude of $z_{count} = 2.89$ and $z_{table} = 1.64$ then the hypothesis is accepted, meaning that the water cycle material lessons for students have been completed. Based on the discussion above, it can be concluded that the science learning outcomes of fifth grade students of SD Negeri 2 Air Satan after the application of the significant non-example model have been completed.

At the first meeting of students consisting of 4-5 people in each group in the learning process there were 2 groups who could make discoveries in experiments on the formation of ground water and surface water. As for the

second meeting in each group of students, who can make discoveries when analyzing images are 3 groups. In addition, there are also obstacles faced in the learning process in the classroom, namely students still rely on teacher explanations, lack of student involvement in the learning process so that students cannot understand learning on water cycle material using different methods and techniques from previous teachers. So the solution used by researchers is by applying a non-example learning model where students learn independently, students are given the opportunity to solve problems that are around them individually or in groups and students can improve understanding in the learning process on the water cycle material. This is in line with the opinion (Shoimin, 2014) which states that the example non example learning model is a learning model that teaches students about the problems that are around them through analysis of examples such as pictures, photos and a case that contains problems.

4. Conclusion

Based on the results of research and discussion of data about the application of the example non example learning model in science learning for fifth grade students of SD Negeri 2 Air Satan, the average final test score of students was 76.90 and the percentage of students who completed was 12 students (85.71%). Based on the results of data analysis shows that $z_{count} = 2.89 > z_{table} = 1.64$. Thus, it can be concluded that the science learning outcomes of fifth grade students of SD Negeri 2 Air Satan after the application of the example non example learning model were significantly completed.

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