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USING INSIDE DEMONSTRATION METHODS IMPROVING STUDENT UNDERSTANDING ABOUT THE SURFACE OF THE EARTH AND THE SKY OF TEACHING SCINCE

(in Class IV SDN 024 Coblong District Coblong Bandung City)

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ABSTRACT

This study aims to improve student motivation, activity, and learning achievement in learning changes in the appearance of the earth's surface and celestial bodies using the Demonstration method. The use of the Demonstration method is expected to increase student activity in the teaching and learning process so that in the teaching and learning process there is no saturation in teaching and learning activities. Thus, students will be involved physically, emotionally, and intellectually which in turn is expected to change the concept of objects taught by the teacher to be understood by students. This study uses action research conducted in two cycles. Each cycle consists of four actions, namely planning, action, observation and reflection. The target of this research is students in grade IV SDN 024 Coblong, Coblong Subdistrict, Bandung City with 38 students. Data obtained in the form of formative test results and observation sheets of teaching and learning activities. From the results of research and analysis found that student achievement has increased from the first cycle of action 1, namely 78.4%, action 2: 88.2%, action 3: 95.35%, action 4: 98.25%. The behavior is 1, which is 95%, action 2: 97.20%, action 3: 98.08%, and action 4: 99.50%.
Keywords: Science, Demonstration Method, Understanding.

A. INTRODUCTION

Learning success of students is supported by several factors, especially students' learning motivation. Students with high learning motivation will enjoy all the lessons so that it will be easier to absorb the subject matter given by the teacher. In addition, another factor that is very influential is discipline because it makes students always ready to receive lessons. That way, the learning achievement will be in accordance with the expectations of teachers, parents, and in accordance with the demands of the times that need better human resources.

The teacher must be able to communicate the material and convey information with various methods so that students with different characteristics can absorb and understand the lesson as expected. The choice of a learning method in the learning process can be said to be difficult easily because the method that is "not good" in the hands of a teacher can be a "very good" method in the hands of other teachers, and a good method will fail in the hands of

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other teachers who do not master the implementation technique. In reality, there are many factors that cause not always be used methods that are considered most appropriate to the purpose, situation, and others. Teachers are often forced to use the "second choice" or "third choice" method.

What is important to be considered by the teacher in such circumstances is the limits of the strengths and weaknesses of the method used, to be able to formulate conclusions about the results of the evaluation. Demonstration is a teaching method that is very effective in helping students find answers to questions such as, How to make it?

What are the ingredients and materials? Which is the best way? How can the truth be known? Demonstration as a method of teaching means that a teacher, an outsider who is deliberately requested, or even a student can show the whole class a process, for example how to prove the nature of light that light travels straight.

The Demonstration Method is an expository method / learning method that is giving and receiving (the teacher gives knowledge to students). This method is quite effective because it helps students to get answers by observing a particular process or event, where activity is usually more than the teacher.

If in the Demonstration method, more activity from the teacher therefore the Demonstration method likes to be combined with an Experiment method that directly involves students to experiment in finding answers to the problems posed. This method is a key element in inquiry and discovery approaches (learning by finding).

With experimentation, students can get answers about:

How do students know that is true?

Which method is the best way?

What will happen?

What material is it?

The implementation of this method can be carried out in classrooms or special places which are intended as experimental / demonstration (laboratory) implementation. In its implementation, the Experiment method can be coupled with Demonstrations. In the field of Natural Sciences using the Demonstration method is a way of learning by raising problems.

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This Demonstration Method is often exchanged in its use with the Experiment method. In the demonstration questions may arise, but the question is not planned in advance. In the demonstration there is an exchange of ideas or opinions to get the same opinion emphasizing how to list examples, types, and uses of some of the properties of light in everyday life, making a list of examples, types, and uses of some simple plane work applications in daily life , based on direct observation.

Based on the background that has been explained, in general the main problems that will be examined are "How to use the Demonstration method can increase students' motivation, activities, and learning achievement on changes in the appearance of the earth's surface and celestial objects in grade IV elementary school?".

B. STUDY OF THEORY AND LITERATURE

1.Experimental Method

Teachers are often forced to use the Demontration method. The important thing to be considered by the teacher in such circumstances is the limits of the strengths and weaknesses of the method used to be able to formulate conclusions regarding the results of the evaluation / effort. Demonstration and experimentation are teaching methods that are very effective in helping students find answers to questions such as: "How to make it?", "What material is it made of?", "Which method is the best?", And "How can the truth be known? -his?". The implementation of this method can be carried out in the classroom or in special places that are intended as an experimental / demonstration (laboratory) implementation.

2. Strengths and Weaknesses of the Demonstration Method

a. The advantages of the Demonstration method

Students' attention can be focused on things that are considered important by the teacher so that important things can be observed as needed. Students' attention is more easily focused on the learning process and is not focused on other things.

Can reduce errors when compared to just reading in the book because students have obtained a clear picture and results of their observations.

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If students actively participate in experimentation, students will experience practical experiences to develop their skills and gain recognition and appreciation from their friends and teachers.

Some problems that raise questions for students can be answered when observing the demonstration / experiment process.

b. Weakness of the Demonstration method

The catching power of each student is different so the teacher must repeat the same section so that students can take lessons.

The time needed for the teaching and learning process will be longer than the lecture method.

Demonstration will be an unfavorable method if the demonstrated tool cannot be observed carefully by all students.

For example, the tool is too small or the explanations are less / unclear.

Demonstrations become ineffective if they are not followed by an activity where students themselves can participate in experiments and make the activity a valuable experience.

Not everything can be demonstrated in class. For example, tools that are very large or in other places that are far from class, or material that is not intangible, such as freon gas.

Sometimes, if a device is brought into the classroom and then demonstrated, students see a process that is different from the process if it is in a real situation.

1) How Teachers Can Plan Effective Demonstrations

a) Formulate clear objectives and skills or activities that are expected to be achieved or implemented by the students themselves if the demonstration ends. b. Consider whether the method is reasonable to use and is the most effective method to achieve the planned goals.
b) Whether the tools needed for the demonstration can be obtained easily, and whether the tools have been tried first so that the demonstration does not fail.
c) Is the number of tools / materials possible to demonstrate clearly?

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d) Establish an outline of the demonstration steps that will be carried out. It is better before the demonstration is carried out, the teacher has tried first so as not to fail on time.
e) Take into account the time required. If time is available to give students the opportunity to ask questions and comments during and after the demonstration. Prepare questions for students to stimulate observation.
f) During the demonstration, we ask ourselves whether:
    i. Those statements can be clearly heard by students.
    ii. Whether the tool has been placed in a good position so that each student can see clearly.
    iii. It is recommended that students make notes as needed with sufficient time.

Establish a plan to assess student progress. Discussions are often necessary and students try again demonstrations and experiments to get better dexterity., Using Demonstration Methods to Improve Students' Understanding of the Surface of the Earth and Celestial Objects.

According to constructivism, knowledge is a construction (formation) of people who know something (schemata). Knowledge cannot be transferred from the teacher to others because everyone has their own scheme about what they know. Knowledge formation is a cognitive process in which there is a process of assimilation and accommodation to achieve a balance so that a new scheme (plural: schemata) is formed. A person who learns it means forming an active and continuous understanding or knowledge.

The principles of constructivism are widely used in learning science and mathematics. The principles taken are: (1) Knowledge is built by the students themselves, both personnel and socially, (2) Knowledge cannot be transferred from the teacher to the student, except only with the activity of the students themselves to reason, (3) Students actively construct continuously so that there is a change in concept towards a more detailed, complete concept, and in accordance with scientific concepts, and (4) the teacher merely helps provide means and situations so that the student's construction process runs smoothly (Suparno, 1997).

According to the philosophy of constructivism, good thinking is more important than having the right answers to a problem being studied. Someone who has a good way of thinking, in the sense that his way of thinking can be used to deal with new phenomena, will be able to find solutions to other problems (Suparno, 1997).

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It is often stated that according to the new paradigm of education, the role of the teacher must be changed, namely not just conveying the material to the students, but must be able to be a mediator and facilitator. Mediators and facilitators can be translated into the following tasks:

a. Provides a learning experience that allows students to be responsible for designing, process and research. Therefore, giving a lecture is not a teacher's main task.
b. Provide or provide activities that stimulate students' curiosity and help them to express their ideas and communicate their scientific ideas.
c. Provide a means that stimulates students to think productively.
d. Providing opportunities and experiences that best support student learning.
e. The teacher must encourage students.
f. The teacher must provide a conflict experience. Monitor, evaluate, and show whether the student's thoughts are running or not.
g. The teacher shows and questions whether the student's knowledge applies to dealing with new related problems.
h. The teacher helps evaluate students' hypotheses and conclusions (Suparno, 1997).

In order for the roles and tasks to run optimally, several activities need to be done and also some thoughts that need to be realized by the teacher.

1. Teachers need to interact a lot with students to better understand what they already know and think about.
2. The goals and what will be made in class should be discussed together so students are truly involved.
3. The teacher needs to understand which learning experiences are more in line with the needs of students. This can be done by participating as students in the middle of students.
4. Engagement is needed with students who are struggling and trust in students that they can learn.
5. The teacher needs to have flexible thinking to be able to understand and appreciate students' thinking because sometimes students think based on assumptions that are not received by the teacher (Suparno, 1997).

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Using the Demonstration method departs from a belief that someone is interested in learning when he sees the meaning of what he learns. People will see the meaning of what they learn if they can connect information received with prior knowledge and experience.

2. Finding (inquiry)

Finding is a core part of contextual-based learning activities because the knowledge and skills acquired by students are expected not to be the result of remembering a set of facts, but the results of finding themselves. Finding activity (inquiry) is a cycle consisting of observation (observation), asking (questioning), presenting allegations (hiphotesis), data collection (data gathering), and conclusion (conclusion).

3. Asking (Questioning)

The knowledge a person has always starts from asking. Asking questions is the main strategy of contextual based learning.

Questioning activities are useful for:

(a) digging up information,

(b) explore students' understanding,

(c) generate student responses,

(d) knowing the extent of students' curiosity,

(e) knowing things that students already know,

(f) focus attention on something the teacher wants,

(g) generate more questions from students, and

(h) to refresh students' knowledge.

4. Learning Community

The concept of the learning community suggests learning outcomes are obtained from the collaboration of others. The learning community occurs when there is two-way communication, two groups, or more involved in the learning of mutual learning.

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5. Modeling

Modeling basically states what is thought, demonstrating how the teacher wants his students to learn and do what the teacher wants his students to do. In contextual learning, the teacher is not the only model. Models can be designed by involving students and also from outside.

6. Reflection (reflection)

Reflection is a way of thinking or responding to what you have just learned or thought back about what you have done in the past. The realization in learning, the teacher leaves a moment for students to reflect in the form of direct statements about what was obtained that day.

7. Actual Assessment (Authentic Assessment)

Assessment is a process of collecting various data that can provide an overview of student learning progress. Keep in mind that the teacher can ensure that students experience the right learning. The focus of the assessment is on the completion of relevant and contextual tasks and assessments carried out on the process and results.

C. RESEARCH METHODS

The research method implemented is classroom action research (classroom action research) which refers to the teacher's actions when implementing learning as an effort to improve learning activities that have been carried out. This is in accordance with the findings of Kasbolah (1998: 15) who stated that "Classroom action research is action research in the field of education carried out in the classroom area with the aim of improving and or improving the quality of learning".

This class action research procedure consists of 2 cycles and each cycle consists of 4 actions. Every action carried out is the result of reflection from the previous results in order to make changes in a good direction according to the factors examined in the planning. Kemmis and Mc. Tagart (Aqib, 2006: 22) reveals that in classroom action research there are four important stages, namely:

(1) compile a planning action,

(2) the execution of acts (acting),

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(3) observation (observing), and

(4) reflecting.

This research phase is carried out in a continuous manner, starting from action I of cycle I to action 4 cycles.

In this classroom action research it is planned to have two cycles and each cycle consists of four actions. The details of each cycle are as follows:

a. Cycle 1 consists of four actions, namely action 1 to do learning with material changes in appearance on the earth, action 2 to do learning with matter occurs a storm and its effect, action 3 to do learning with material erosion and its effects, and action 4 to do learning with forest fires and their effects.
b. Cycle II consists of four actions, namely action 1 to do learning with material changes in the sky, action 2 to do learning with matter occurs day and night, action 3 to do learning with material changes in the shape of the moon, action 4 to do learning with material position of celestial bodies .

After completing each action, an interview with students is conducted. In addition, researchers also discussed with observers about learning observations that have been carried out. Furthermore, the results of the interviews were used as material for analysis and reflection on the implementation of learning.

This classroom action research was carried out at SDN 024 Coblong, Coblong District. The subjects of the study were fourth grade elementary school students as many as 38 students, consisting of 23 male students and 10 female students. The focus of this class action research is the use of the Demonstration method to improve student learning achievement in learning to understand the changes in the appearance of the earth's surface and celestial bodies.

As a data collection tool, the researchers compile research instruments, in order to obtain accurate data in data collection in accordance with the problems in the study. The instruments that will be used in this study include observation sheets, interview sheets, field notes, Student Worksheets (LKS), evaluation questions, and cameras.

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Data collection techniques carried out by researchers with qualitative data collection techniques through the description of the data has been analyzed. Data collection techniques in this study are as follows:

a. Observation,

b. Interview,

c. Field Notes,

d. Student worksheet,

e. Evaluation,

f. Documentation,

Data analysis is carried out as a test of the action hypothesis that has been formulated. Data processing and analysis are carried out continuously from the beginning to the end of the learning process. Data analysis techniques used, namely qualitative analysis using observation sheets, interview guidelines, field notes, and individual questions. After the data is collected, then analyzed and reflected.

D. RESEARCH RESULTS AND DISCUSSION

Cycle I

1. Cycle I Action 1

Cycle I Action I was carried out in class IV with the number of students who were present as many as 36 people and did not attend 2 people. Learning cycle 1 action material 1 concerning changes in appearance on the earth. Based on data obtained from field notes, observation sheets, and interview sheets, there are several important findings that occurred during the study.

a. The first finding, at the exploration stage and modeling student motivation is seen when changes in appearance on the earth. Students are more motivated to learn by using various media. In addition, the results of interviews with several students show students feel happy and most like learning changes in appearance on the earth.
b. The second finding, regarding student activities, during the direct learning process students seemed enthusiastic and active when holding group discussions, they also worked according to the instructions contained in the LKS.

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c. The third finding, at the stage of asking, some students asked questions about the results of group discussions and during the learning process such as "Mom, I do not understand how to change appearance on the earth", "Mom if I doubt mention changes in appearance on the earth?"
d. The fourth finding, student achievement when working on questions in groups and individuals. The acquisition of the results of the worksheet activities carried out by seven groups, group I got a score of 100 because it answered all the questions correctly, but could not make conclusions yet.
b. Group II got a score of 80 because of the five questions there was one question that was not right, because it was less thorough, namely about changes in appearance on the earth so that some students from other groups gave comments and questions such as "Why changes in appearance on the earth?", "Why changes in appearance on the earth eclipse is not spoken? ".
c. Group III gets a score of 70 because of the five questions can answer three questions correctly, two questions are not right.
d. Group IV gets a score of 90, group V gets a score of 95, group VI and VII get a score of 100 because they can answer questions and make conclusions in the LKS correctly.
e. As for the acquisition of individual scores, the lowest score is 40 and the highest value is 100 and the average grade is 78.40 for the first cycle of action I.
f. The fifth finding, the mistake of filling in the final test by students.

2. Reflection on Cycle I Action 1

Based on the description and the results of the analysis carried out by the researcher, action 1 research can proceed to the next action, namely action 2. Some things that must be corrected for the next action so that students can go through the stages of using the Demonstration method properly are:

a. First, the teacher introduces more learning media by means of a storm and its effects are more varied.
b. Second, minimizing the role of the teacher when students discuss groups, giving motivation by holding a competition for each group, which group is the fastest to work correctly gets an additional score.

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c. Third, the teacher answers all student questions by first motivating students to think critically by giving other students the opportunity to answer questions asked by their friends. After several students answer their friends' questions, then the teacher gives clarification of the correct answers to the questions posed by the students.
d. Fourth, the teacher conducts guided interviews to students who are wrong in answering some questions, namely by asking the cause of their errors in filling out the final test.
   Of the 36 students, they answered less carefully. After receiving the information, the teacher followed up by giving guidance and guidance that in doing the final test they had to be careful and not in a hurry.
e. Fifth, the teacher again explained the material about the storm and its effects.

Following up on the shortcomings, the researcher then implemented action 2 by using the Demonstration method with the form of learning going on a storm and its influence.

3. Cycle I Action 2

In Action 2 of Cycle I, the number of students who attended 37 people and no one attended. Learning material in cycle 1 of action 2 is about the occurrence of storms and their effects. Based on data obtained from field notes, observation sheets, and interview sheets, there are several important findings that occurred during the study.

a. The first finding, at the exploration stage, students' motivation was seen when they saw a picture of a storm and its influence. Students are more motivated to learn by using various media. In addition, the results of interviews with several students show students feel happy and most like learning while playing a model of a picture of a storm and its effects.
b. The second finding, regarding student activities, during the learning process takes place students look enthusiastic and active when holding group discussions, they also work according to the instructions in the LKS.
c. The third finding, at the stage of asking, some students asked questions about the results of group discussions and during the learning process, such as "What is meant by a hurricane?", "What happened to a storm, ma'am?".
d. The fourth finding, student achievement when working on questions in groups and individuals. The results of the LKS work done by seven groups, all groups scored 100. As for individual scores, all students scored above 60, with the highest score of 100 and

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the lowest score of 90 and obtained an average grade of 98.20 based on individual test results.

e. The fifth finding, there are still errors in filling in the final test by students.

4. Reflection on Cycle I Action 2

Based on the description and results of the analysis carried out by the researcher, action 2 research can be continued on the next action, namely action 3. Some things that must be corrected for the next action so that students can go through the stages of using the Demonstration method properly are:

a. First, the teacher introduces more learning media by using a more varied Demonstration method model.
b. Secondly, minimizing the role of the teacher when students discuss groups, giving motivation by holding a competition for each group, which group is the fastest to work correctly gets an additional score.
c. Third, the teacher answers all student questions by first motivating students to think critically by giving opportunities to other students first to answer the questions posed by their friends. After several students answer their friends' questions, then the teacher gives clarification of the correct answers to the questions posed by the students.
d. Fourth, the teacher conducts guided interviews with students who have not received a score of 100, namely by asking the cause of their error in completing the final test. Of the 37 students, they answered less meticulously and hurriedly answered. After receiving such information, the teacher followed up by giving guidance and guidance that in doing the final test they had to be careful and not in a hurry.
e. Fifth, the teacher again explained the material about the occurrence of the storm and its influence. For example, heavy rain, very strong winds, thunder, lightning and lightning.

Following up on this, the researcher then carried out action 3 using the same approach, namely using the Demonstration method with the learning form of observing the occurrence of erosion and its effects.

5. Cycle I Action 3

In Cycle I Action 3, the number of students present was 38 people. Cycle 1 learning material for action 3 regarding erosion and its effects. Based on data obtained from field notes,

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observation sheets, and interview sheets, there are several important findings that occurred during the study.

a. The first finding, at the time of the initial learning activities when the teacher apperception showed erosion and influence and asked the students "Do you remember erosion and its effects?", All students answered "erosion of soil by water, ma'am!"
b. The second finding, at the exploration stage, students' motivation was seen when displaying images of erosion and their effects. Students are more motivated to learn by using various media. In addition, the results of interviews with several students showed that students felt happy and liked the learning best while playing a model of the image of erosion and its influence.
c. The third finding, regarding student activities, during the learning process students seemed enthusiastic and active when holding group discussions, they also worked according to the instructions in the LKS.
d. The fourth finding, at the asking stage is almost the same as the action, some students filed the previous question. Following up on the lack of questions about the results of group discussions and shortcomings in action 3, researchers during the learning process, such as "Mom, what kind of erosion?", "What is the difference between water erosion and others?". the forest and its influence is a form of student creativity.

The role of the teacher in the learning process. using the Demonstration method by then implementing action 4 with one using the same approach, namely:

6. Cycle I Action 4

Cycle I Action 4 is carried out with the number of students present as many as 38 people. Cycle 1 learning material that resembles an image of erosion and its effect. this is directing the students' answers by facilitating action objects 4 is about fires around the results of group discussions and during the learning process, such as "Mom, what factors cause the forest to burn?" will happen if the forest burns out? ", and" What is the impact on life if the forest runs out? " The questions from students are a form of student activity in the learning process, where students' learning motivation about the picture of forest fires and their effects begins to emerge.

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a. The fourth finding, student achievement when working on questions in groups and individuals. Acquisition of worksheet activities carried out by seven groups, all groups scored 100. As for individual scores, all students scored above 60 with the highest score of 100 and the lowest score of 80 so that the average grade was 98.33 for the cycle I action 4.
b. The fifth finding, there are still errors in filling in the final test by several students.

7. Reflection on Cycle I Action 4

Based on the description and the results of the analysis carried out by the researcher, the first cycle of action 4 research can be continued in the next action, namely cycle II action 1. There are still some things that must be corrected for the next action so that students can go through the stages of using the Demonstration method properly. To follow up on these deficiencies, the researcher then carried out cycle II of action 1 by still using the Demonstration method.

Cycle II

1. Cycle II Action 1

Cycle II Action 1 is carried out with learning material, which is about changes in the sky. Based on data obtained from field notes, observation sheets, and interview sheets, there are several important findings that occurred during the study.

a. The first finding, at the Exploration stage, students' motivation was seen when manipulating the image model of change in the sky. Students are more motivated to learn by using various media. In addition, the results of interviews with several students showed students feel happy and most like learning while playing a model of picture changes in the sky.
b. The second finding, regarding student activities, during the learning process takes place students look enthusiastic and active when holding group discussions, they also work according to the instructions in the LKS.
c. The third finding, at the stage of asking, some students ask questions about the results of group discussions and during the learning process, such as "Mom, what is the sun really?".
d. The fourth finding, student achievement when working on questions in groups and individuals. The acquisition of the results of the worksheet activities carried out by seven

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groups, only group I got a score of 100. As for individual scores, all students scored above 60 with the highest score of 100, and the lowest score of 85 so that the class average of 97 was obtained based on test results. individual.

e. The fifth finding, there were still errors in filling in the final test by several students.

2. Reflection on Cycle II Action 1

Based on the description and the results of the analysis conducted by the researcher, the cycle II action 1 research can be continued on the next action, namely action 2 with several things must be corrected for the next action so that students can go through the stages using the Demonstration method properly. Following up on these shortcomings, the researchers carried out action 2 using the same approach, namely using the Demonstration method with the form of learning observation and manipulation of the model occurring day and night.

3. Cycle II Action 2

Cycle II Action 2 is carried out with learning material about occurring day and night. Based on data obtained from field notes, observation sheets, and interview sheets, there are several important findings that occurred during the study.

a. The first finding, at the Exploration stage, student motivation is seen when manipulating the model. Students are more motivated to learn by using various media. In addition, the results of interviews with several students show students feel happy and most like learning while playing the picture model occurs day and night.
b. The second finding, regarding student activities, during the learning process, students seemed enthusiastic and active when holding group discussions, they also worked according to the instructions contained in the LKS.
c. The third finding, at the stage of asking, some students ask questions about the results of group discussions and during the learning process, such as "Mom why is there day and night?".
d. The fourth finding, student achievement when working on questions in groups and individuals. The acquisition of the results of the worksheet activities carried out by seven groups, all groups received a score of 100. As for the acquisition of grades all students scored above 60, with the highest score of 100 and the lowest score of 85 so that the class average was 98.20 based on the test results individual.

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e. The fifth finding was that there were still errors in filling in the final test by several students.

4. Reflection on Cycle II Action 2

Based on the description and results of the analysis carried out by the researcher, the second cycle of action 2 research can be continued on the next action, namely action 3. Some things need to be corrected for the next action so that students can go through the stages using the Demonstration method properly. To follow up on these deficiencies, the researcher then carried out action 3 by using the same approach, namely using the Demonstration method with the form of observations of changing moon shape.

5. Cycle II Action 3

Cycle II Action 3 is carried out with the learning material, which is about the changing shape of the moon. Based on data obtained from field notes, observation sheets, and interview sheets, there are several important findings that occurred during the study.

a. The first finding, at the Exploration stage, student motivation is seen when the shape of the moon changes. Students are more motivated to learn by using various media. In addition, the results of interviews with several students show students feel happy and most like learning while playing a changing moon shape model.
b. The second finding, regarding student activities, during the learning process, students seemed enthusiastic and active when holding group discussions, they also worked according to the instructions contained in the LKS.
c. The third finding, at the stage of asking, some students asked questions about the results of group discussions and during the learning process, such as "Mom, why does the shape of the moon change?".
d. The fourth finding, student achievement when working on questions in groups and individuals. The acquisition of the results of the worksheet activities carried out by seven groups, all groups got a score of 100. As for the acquisition of individual scores all students scored above 60 with the highest score of 100 and the lowest score of 85 and obtained an average grade of 98.80 based on the test results individual.
e. The fifth finding, there were still errors in filling in the final test by several students.

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6. Reflection on Cycle II Action 3

Based on the description and results of the analysis carried out by the researcher, the 2nd cycle action research 3 can be continued on the next action, namely action 4. Some things must be corrected for the next action so that students can go through the stages using the Demonstration method properly. To follow up on these deficiencies, the researcher then carried out action 4 using the same approach, namely using the Demonstration method with a form of learning to observe the image of the position of celestial bodies.

7. Cycle II Action 4

Cycle II Action 4 is carried out with learning material regarding the position of the celestial body. Based on data obtained from field notes, observation sheets, and interview sheets, there are several important findings that occurred during the study.

a. The first finding, at the Ploration stage, students' motivation is seen when the celestial body is positioned. Students are more motivated to learn by using various media. In addition, the results of interviews with several students showed students feel happy and most like learning while playing the position model of celestial bodies.
b. The second finding, regarding student activities, during the direct learning process students seemed enthusiastic and active when holding group discussions, they also worked according to the instructions contained in the LKS.
c. The third finding, at the stage of asking, some students asked questions about the results of group discussions and during the learning process, such as "Mom, how to observe celestial bodies?".
d. The fourth finding, student achievement when working on questions in groups and individuals. The acquisition of the results of the worksheet activities carried out by seven groups, all groups received a score of 100. As for the acquisition of individual scores all students scored above 60 with the highest score of 100 and the lowest score of 85 and obtained an average grade of 99.40 based on individual results.
e. The fifth finding, there are still errors in filling in the final test by some students even though not as much as the tests on previous actions.

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8. Reflection on Cycle II Action 4

Based on the results of the analysis and reflection, the researcher during the study immediately had an increase in student achievement. This can be detached from the development of the average value of each cycle that goes up, namely cycle I (92.82) and cycle II (98.35).

Following up on the final test results from action 4 cycle II the researcher concluded that using the Demonstration method on the material to understand the changes in appearance of the earth's surface and celestial bodies in class IV elementary school can be said to be successful and not continued.

Mistakes made by a student while working on the final test, do not affect the conclusion of the success of the application using the Demonstration method on the material understanding the changes in the appearance of the earth's surface and celestial bodies. This is only a mistake caused by students' lack of accuracy in filling out the questions.

9. Discussion

Cycle I

Learning achievement is obtained from the results of processing the final test during action 1 through action 4 in cycle I, which increases from action 1 to action 3 and increases to action 4.

The development of student learning achievement in cycle I can be seen from the following diagram, where the average value in action 1 from 78.40 rises to 88.20 in action 2 and becomes 95.35 in action 3, then rises again to 98 , 25 in action 4. The overall average in cycle I is 90.50.95,35, 98,25,100,88,20,78,40,80,60,40,20.

Action 1	Action 2	Action 3	Action 4
78,4	88,2	95,35	98,25

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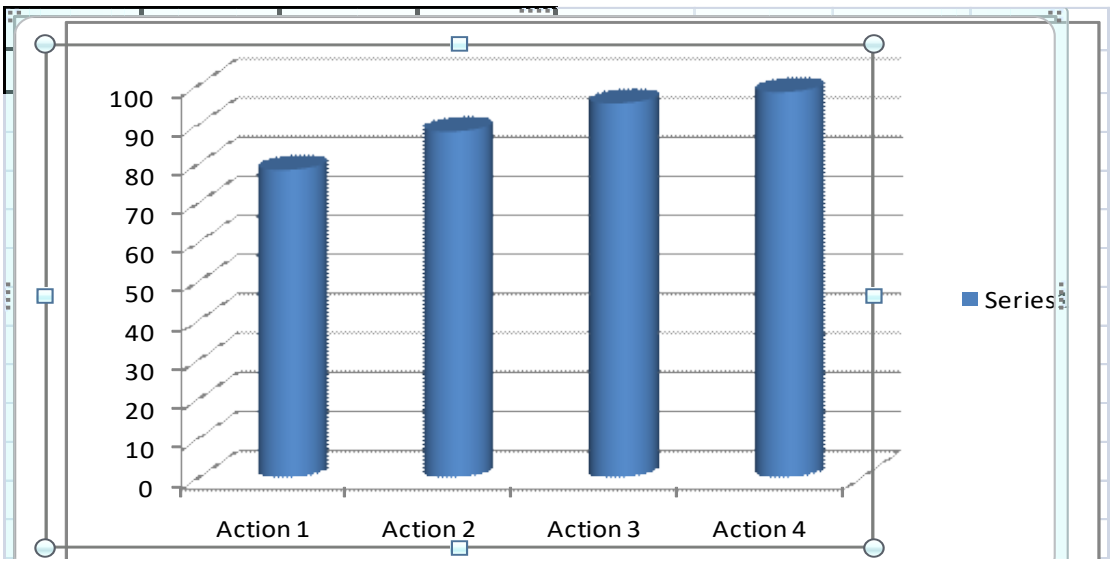

Figure 1. Average Cycle I Diagram

Cycle II

Learning achievements obtained from the results of processing the final test during action 1 to action 4 in cycle II affect the increase. Student achievement development in cycle II can be seen from the following diagram, where the average value in action 1 of 95.00 rises to 97.50 in action 2, and rises again to 98.70 in action 3, then rises again to 99.80 in action 4 so that the average cycle II is 97.70. The overall class average from cycle I to cycle II experienced an increase of 93.87 in cycle I. 99.5-100, 98.8-99, 97.5-98.97, 96.95-95.94, 93 , 92.

Action 1	Action 2	Action 3	Action 4
95	97,5	98,7	98,8

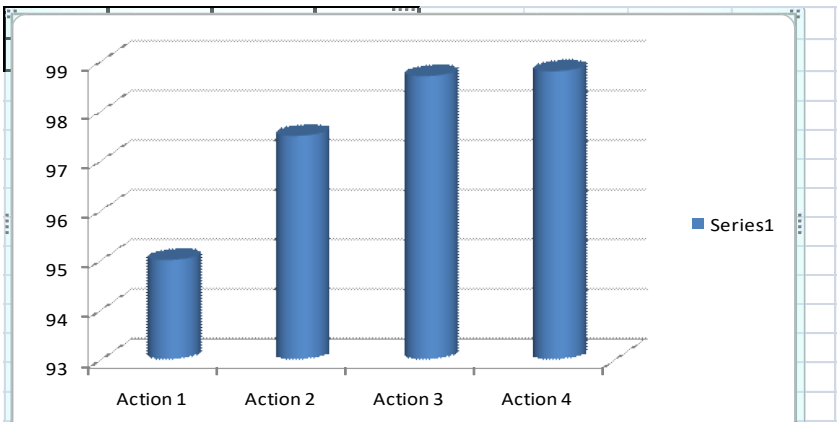

Figure 2. Average Cycle II Diagram

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E. CONCLUSIONS AND SUGGESTIONS

1. Conclusion

Based on the results of the research and data analysis that has been carried out, the researcher draws conclusions as follows.

a. Motivation of students in learning to understand the changes in the appearance of the earth's surface and celestial objects using the Demonstration method has increased. This can be seen from cycle I, students feel happy and challenged when understanding the changes in the surface of the earth and heavenly bodies. In cycle II, students feel happy and proud because they are directly involved in understanding changes in the appearance of the earth's surface and celestial bodies.
b. Student activity in learning to understand the changes in the appearance of the earth's surface and celestial objects using the De-monstration method increases. In cycle I, students look rigid in understanding the changes in the appearance of the earth's surface and celestial bodies, have not established good cooperation when discussing, students feel embarrassed when in front of the class to report the results of the discussion. Cycle II, students begin to get used to understanding changes in the appearance of the earth's surface and celestial bodies. Students feel happy to understand the changes in the appearance of the earth's surface and celestial bodies, each group of compact sudak understands the changes in the appearance of the earth's surface and celestial bodies, and students are bolder in front of the class to explain about understanding changes in the appearance of the earth's surface and celestial bodies.
c. Student learning achievement in learning to understand changes in the surface of the earth and heavenly bodies using the Demonstration method based on the results of the final test has increased. This can be seen from the acquisition of the average (x) of each cycle, namely the cycle I obtains an average (x) 90.05 and cycle II obtains an average (x) 97.70.

2. Suggestions

Based on the conclusions, in terms of improving learning actions, as well as improving various aspects of learning, both in the process and learning outcomes, the researcher can present some suggestions as follows.

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a. In order to increase student motivation, especially in learning Natural Sciences (IPA) by using the Demonstration method, the media used should be more varied, both from teachers and students. Students are given the freedom to express ideas / ideas that are used to understand the changes in the appearance of the earth's surface and celestial objects that are few students and easy to find.
b. In increasing student activity in understanding learning changes in the appearance of the surface of the earth and celestial bodies by using the Demonstration method as well as the teacher gives an interesting impression of the learning that will be given. This can be done starting from the beginning of the activity until the end of learning, such as a proportional working group division (the spread of smart students evenly distributed), the number of members to the group is not too much so that the mobility and collaboration between group members is more conditioned, the media used can manipulated by students so that students can be active in finding concepts, instructions in the worksheets must be clear and given an answer sheet so that students can easily carry out activities that are governed in the LKS and can be written directly after observing and manipulating instructional media, and students are given direction on how to ask questions and report the results of good discussions.
c. To improve student achievement in understanding learning changes in the appearance of the earth's surface and celestial objects by using the Demonstration method, the teacher should provide questions that are able to explore students' initial knowledge, the language in LKS and the final test is easy to understand, giving students the opportunity to find the concept yourself, students are directly involved in the learning process such as understanding the changes in the appearance of the earth's surface and celestial bodies, giving direction to students to be more careful and not in a hurry when working on LKS and final tests.

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