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Efforts To Improve Student's Learning Outcomes In Science Learning Through Contextual Strategy In MI (Elementary School) Academic Year 2018/2019

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Abstract. Contextual learning was learning that allowed students to strengthen, expand, and apply their academic knowledge and skills in a variety of settings in school and outside of school to solve real-world problems or simulated problems. This study aimed to: 1) viewed student learning outcomes before contextual learning strategies were applied; 2) saw student learning outcomes after applying contextual learning strategies; 3) improved student learning outcomes through the implementation of contextual learning strategies. This research was conducted at one of the Private Madrasah Ibtidaiyah (MIS) in North Sumatra. The subjects in this study were 28 students in Class IV. The research design was Classroom Action Research (CAR) developed by Arikunto. The results showed: 1) The average results of students before applying contextual learning strategies was 10.8%; 2) average learning outcomes after contextual learning strategies were applied is 86.80%; 3) an increase in learning outcomes through the implementation of contextual learning strategies. This study recommends that other researchers research contextual learning strategies in other subjects.
Keywords. *Learning outcomes, Contextual Learning Strategies*

Abstrak. Pembelajaran kontekstual merupakan pembelajaran yang memungkinkan peserta didik untuk menguatkan, memperluas, dan menerapkan pengetahuan dan keterampilan akademik mereka dalam berbagai jenis tatanan dalam sekolah dan luar sekolah agar dapat memecahkan masalah-masalah dunia nyata atau masalah-masalah yang disimulasikan. Penelitian ini bertujuan untuk : 1) melihat hasil belajar peserta didik sebelum diterapkan strategi pembelajaran kontekstual; 2) melihat hasil belajar peserta didik setelah diterapkan strategi pembelajaran kontektual; 3) meningkatkan hasil belajar peserta didik melalui penerapan strategi pembelajaran kontekstual. Penelitian ini dilaksanakan di salah satu Madrasah Ibtidaiyah Swasta (MIS) di Sumatera Utara. Yang menjadi subjek pada penelitian ini adalah peserta didik kelas IV berjumlah 28 orang. Desain penelitian adalah Penelitian Tindakan Kelas (PTK) yang dikembangkan oleh Arikunto . Hasil penelitian menunjukkan: 1) Rata-rata hasil didik sebelum diterapkan strategi pembelajaran kontekstual adalah 10.8 %; 2) rata-rata hasil belajar setelah diterapkan strategi pembelajaran kontekstual adalah 86.80%; 3) terjadi peningkatan hasil belajar melalui penerapan strategi pembelajaran kontekstual. Penelitian ini merekomendasikan kepada peneliti lain untuk melakukan penelitian tentang strategi pembelajaran kontektual dalam mata pelajaran lain.
Kata kunci. *Hasil belajar, Strategi Pembelajaran Kontekstual*

1. INTRODUCTION

Sciences (IPA) is one of the subjects taught at the elementary school level. Through science learning, students are expected to be able to connect the concept of natural learning with real human life. (Samatowa, 2010:3) said that natural sciences are a science that discusses natural phenomena that are arranged systematically based on the results of experiments and observations made by humans. Science is related to finding out about nature systematically, so that science is not only mastering systematic collection and science is not only mastery of

a collection of knowledge in the form of facts, concepts or principles, but also is a process of discovery (Sulistyorini: 2007:39).

The success of a person's education at the level of primary education greatly influences success at a higher level, therefore the quality of education in SD / MI must always be considered to produce quality student output. The development of students is one of the criteria for the selection of strategies in learning. The learning strategy mandated to teach MI elementary school-age students (7-11 years) is a strategy that allows participants to explore teaching material as much as possible. Students are expected to be able to use their senses in identifying the material being learned. Contextually learn about things.

Sanjaya (2006: 109) states contextual learning is a learning strategy that emphasizes the process of full student involvement to find the material learned and relate it to real-life situations, so students are encouraged to be able to apply it in their lives. According to Berns & Ericson (2001:2) in constructivism, students could construct their own knowledge bu testing ideas based on the prior knowledge and experience, applying these ideas to a new situation and integrating the new knowledge gained with the pre-exiting intellectual construct. Contextual teaching is teaching that enables students to reinforce, expand, and apply their academis knowledge and skills in a variety of in-school and out-of school setting in order to solve the stimulated or real-word problems (Johnson 2002:24). Contextual learning is a conception that helps teachers link subject content with real-world situations and motivates students to make connections between knowledge and its application in their lives as family members, citizens, and the workforce (Al-Tabany, 2014: 138). Through contextual learning, students are expected to be able to learn from reality and be able to utilize the knowledge they have gained during learning into the real world.

Research on Contextual learning has been widely carried out, including by Danis, et al (2017); Erwin, et al (2018); MS (2014); Nawas (2018); Priyono (2016); Satriani, et al (2012) and Selvianiresa & Prabawanto (2017). The results showed that contextual learning strategies gave better results, and interest in learning. The results and interest in learning are more obtained because through contextual learning, students can interact directly with learning material through the real world.

Johnson (2002:24) said that characteristics of Contextual Teaching and Learning into eight important components as follows: 1) making meaningful connection, the students can learn the materials that make sense to them because the materials itself are gained based on their real life contexts; 2) Doing significant work, the students could relate what the materials have gained in the school and also in the various contexts that still exist in real world; 3) Self-regulated learning, the purpose of self-regulated learning is to create the students to have learning regularly in order they get the knowledge as much as possible. It is done because the role of the students in contextual teaching and learning is to find their own material when they are learning; 4) Collaborating, is derived from the word "collaborate". It means that the characteristic of contextual teaching and learning is to do the group discussion, to have sharing session what they have known with the other friends; 5) Critical and creative thinking, its stresses on how the students can think critically if they find problem in order to gain the best solution. Besides, they can be creative when there is task thet needs creativity; 6) Nurturing the invidual, its stresses that the students still need the help of the other such as from adult people who mostly have more experience than the young. So, the student should respect the adult people; 7) Reaching high standard, by relating high standard as characteristics of contextual teaching and learning, it can motivate the students to have more frequency of studying; and 8) Using authentic assessment, is useful in order to get the

meaningful purposes. This eight characteristics make contextual teaching different from other methods. These characteristics became the main components in applying contextual teaching. Contextual teaching is also clearly sen that these eight characteristics ask the students for actively involving in classroom activity. Collaborating, nurturing the individual and craetive and critical thinking ask the students to responsible for learning. The role of teacher in contextual teaching is to facilitate student to find the fact or the meaning, concept, or pronciples for student's self. Once these eight characteristics applied in classroom will help both students and teacher in creating a good atmosphere where the learners have a great responsibility in achieving success in learning.

The learning outcomes of science students in one of the Private Madrasah Ibtidaiyah (MIS) in North Sumatra are low. This can be seen from the achievement of Minimal Completeness Criteria (KKM) of students who do not meet the minimum classical completeness criteria. Learning outcomes that emphasize mastery of the material through knowledge transfer and require students to master the material as much as possible are considered a failure. Teacher-oriented learning is considered not able to activate students. So that the application of knowledge gained during learning cannot be done by students.

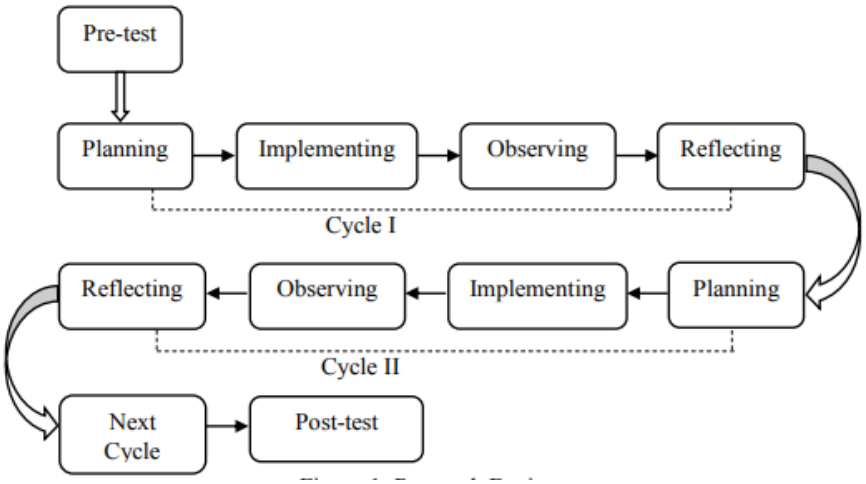
This study develops efforts to improve student learning outcomes through the application of contextual learning strategies. Contextual learning will be applied through contextual matters and the learning outcomes obtained will be sought to be associated with the real world. Through efforts to link learning outcomes with the real world, it is hoped that the learning outcomes of students will be more meaningful and can equip students' knowledge in a longer time.

2. Methods

Type of research is participant-based Classroom Action Research. This research uses a descriptive qualitative approach. Classroom Action Research is defined as a problem-solving strategy that uses concrete actions carried out in three cycles, each cycle having 4 stages: planning, applying, observing and reflecting (Arikunto, 2008: 74). The subjects were grade IV students, amounting to 28 people, the material classified animals based on their food. Data collection is done through tests, observations, and interviews. The test is used to measure learning outcomes. Observation is used to determine the level of active participation of students, the implementation of contextual learning and sources of information in taking consideration of improvements to weaknesses that occur.

Analysis of research data is carried out in several stages, namely: 1) Classifying data through grouping, selecting, focusing, simplifying data; 2) Present selected data that will be presented in simple information. The information in question is a description of the learning process and the results are obtained from a combination of observation and interview data; 3) Conclusions. From the presentation of the data, conclusions can be obtained in the form of short sentences but have much meaning. From the conclusions used to test the truth and match the meaning of the data obtained in the field.

Assessment of student learning outcomes is obtained from cognitive test scores at the end of each cycle. To find out the increase in student learning outcomes seen from the completeness of learning outcomes in each cycle consisting of individual completeness and classical completeness. Students state (individually) in learning when the final score reaches ≥ 75. In classical completeness, it is stated when the classical completeness value reaches 85%.



Pict. 1: Research Design

3. Result & Discussion

3.1. Science learning outcomes before the application of contextual learning

Based on the results of the initial tests given to students, the test results are obtained as shown in table 1. below:

Table 1. student learning outcomes pre-action

Pre-Test	Score
Average score	51.25
Percentage of mastery	10.80%

Source: Data Process, 2018

Based on the data in table 1. the average learning outcomes of the participants are low. The percentage of classical completeness is 10.80%. This means students' learning outcomes in pre-action do not meet the classical completeness criteria. In the pre-action initial test is given to participants who are not taught by using contextual learning.

3.2. Learning outcomes of participants after contextual learning is applied

Based on the pre test score data that shows the learning outcomes of science students are at a low level. So researchers and observers prepare for the implementation of contextual learning practices in Class four Natural Sciences Classified Animals based on food.

Cycle I begins with problem-solving experienced by students, namely the low learning outcomes of Natural Sciences classifying Animals according to the type of food. At the planning stage, the steps that the study goes through are: preparing a schedule, designing learning steps based on contextual learning (RPP), preparing the Student Worksheets, Preparing the Media and Learning Resources, preparing tests and observation sheets.

At the implementation stage, learning is carried out by applying contextual learning. In the initial learning activities aimed at giving apperception to students. In the main activity, students use worksheets to explain the classification of animals based on their food with the help of the teacher. The teacher tries to develop the idea that children will learn more meaningfully by working themselves, finding themselves, and constructing their own knowledge and skills. Carry out the inquiry process through observation of animal images. Develop students' curiosity by asking questions. Creating learning communities through

discussion and collaboration. In the final activity, the teacher and participants conclude the learning and give an evaluation to see the learning outcomes that have been achieved.

In the observation phase, the researcher is assisted by an observer. using learning observation sheets, recorded student activities to see the level of involvement during the learning process. Observation of the teacher is also done to see the level of implementation of contextual learning.

The reflection phase is done at the end of the implementation of cycle I. The researcher and observer reflect on the learning that has been done. The results of this reflection are the basis for seeing what is still lacking in cycle I and are corrected for implementation in cycle II.

After the application of contextual learning is carried out, a post-test is conducted at the end of each cycle. The post-test score achievements for each cycle are presented in table 2. below:

Table 2. Student learning outcomes actions I, II and III

Post Test	Score		
	cycle I	cycle II	cycle III
Average score	72.42	82.42	86.80
Percentage of mastery	60.70%	89.30%	96.42 %

Source: Data Process, 2018

Based on the data in table 2. above shows the learning outcomes achieved by students after contextual learning is applied. In the first cycle, the average student learning outcomes were 72.42. Classical completeness 60.70%. This means that in the first cycle learning outcomes have not yet reached classical completeness.

To measure learning outcomes through contextual learning the researcher is assisted by an observer. The researcher observes the activeness of students and the implementation of learning by the teacher. Based on data from the observation sheet, information was obtained that the level of student activity was sufficient. Students are still not skilled in recording the results of learning achieved during the learning process, the level of enthusiasm of students is also at a sufficient level, the activeness of students in doing assignments and working together is also at a sufficient level. In implementing contextual learning, teachers are considered to be less skilled in creating a conducive learning environment and adjust learning facilities accordingly. The teacher does not conclude the learning material. This is because the teacher does not have enough time to conclude the learning material.

In cycle II the average student learning outcomes are 82.42. Classical completeness 89.30%. This means that in cycle II the learning outcomes have reached classical completeness. Contextual learning is stated to have succeeded in improving student learning outcomes. Actions are continued to cycle III to see the consistency of the successful implementation of contextual learning.

Student activities in the second cycle are already classified as good. Students can actively participate as expected. Students can already carry out the tasks given by the teacher and actively ask questions about things not yet understood from the task. Likewise, the teacher during the learning process takes place, the teacher can create conducive learning and can facilitate students to be actively involved during the learning process.

In cycle III the average student learning outcomes are 86.80. Classical completeness 96.42%. This means that in cycle III the learning outcomes have also reached classical completeness. It also proves the consistency of student learning outcomes that are learned through contextual learning.

3.3. Improving student learning outcomes through the application of contextual learning

The problem that was found at the beginning of the study was the low learning outcomes of science students grouping animals based on the type of food. Researchers have taken action to resolve the problem. Science learning outcomes of students have increased as shown in Figure 2. the following:

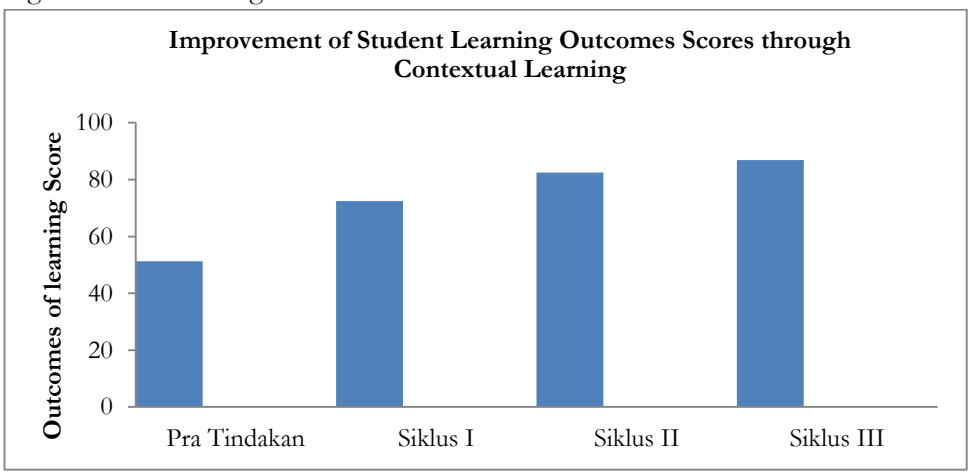


Figure 2. Improved Learning Outcomes from Pre-action to Cycles I, II and III

Figure 2 shows that after contextual learning is applied, there is an increase in science learning outcomes of students in animal classification based on the type of food. The average pre-follow-up score was 51.25; cycle I is 72.42; cycle II is 82.50 and cycle III is 86.80. This means that there has been an increase in the learning outcomes of science students on animal classification materials based on the type of food through the application of contextual learning.

Improvement of student learning outcomes occurs because, through contextual learning active students in the learning process, students learn through contextual matters so that they can replate what they have learned in the real-world context. This is consistent with what was conveyed by Wintarti, et al (2008) that contextual learning prioritizes real experiences. The results of a study conducted by Surdin (2018) state that contextual learning has a positive effect on students' social studies learning outcomes.

4. CONCLUSSION

Depend on the results of research, the summaries are :

1. Science learning outcomes of class four material Classifying Animals by Type of Food before contextual learning is applied, it is still low, that is, 3 students complete or with a classical mastery percentage of 10.8% and students who are incomplete number 25 people or with a percentage of 89 , 2% with an average value of 51.25.
2. Science learning outcomes of class four, material classifies animals by type of food after contextual learning is applied after contextual strategy is applied, namely in cycle I (Post Test I) students who complete are 17 people with a percentage of 60.7% and incomplete

students number 11 people or with a percentage of 39.3% with an average value of 72.42. Furthermore, in the second cycle (Post Test II) students who completed were 25 people or with a classical percentage of completeness of 89.3% with an average value of 82.5. Then in cycle III (Post Test III) 27 students completed or with the percentage of classical completeness of 96.42% and students who did not complete numbered 1 person or with a percentage of 3.57% with an average value of 86.80. Then the conclusion is that the research to the next cycle is not necessary because the classical completeness of 86.80 has reached the level of classical completeness set at 85%. This shows that the learning outcomes of students have increased and are classified as very high categories.

3. Through the application of Contextual strategies, in the subject of Natural Sciences the material Classifying Animals by Type of Food in fourth grade can improve student learning outcomes.

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