

# INCREASE MOTIVATION AND LEARNING ACHIEVEMENT OF GRADE V STUDENTS OF SD NEGERI 1 PERNASIDI IN LEARNING SCIENCE WATER CYCLE MATERIAL USING THE WORD SQUARE LEARNING MODEL ASSISTING CANVA MEDIA

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**Abstract:** The aims of this study was to boost the positive influence for motivation and achievement in learning science "water cycle material" by employing the word square learning methods. This classroom action research was conducted over the course of two cycles. The research subject were all 25 students from class V SD Negeri 1 Pernasidi. Data collection methods include observation, tests, documentation, and questionnaires. Data analysis was completed in three steps: data reduction, data presentation, and drawing conclusion. The findings revealed that after implementing the word square learning methods, students word square and learning achievement increased. This is supported by the fact that the average percentage of students' motivation increased to 69.4% in cycle I and further increased to 83.3% in cycle II. Then the percentage of student achievement increased from 52% in cycle I and increased to 60% in cycle II. Thus it can be said that the use of the word square learning The utilization of Canva media as an assistive tool in the methods of word square has shown to increase the motivation and learning achievement of fifth grade students at SDN 1 Pernasidi in the science subject, specifically in the water cycle material.

**Keywords:** motivation and learning achievement, water cycle, word square learning metode

## INTRODUCTION

Education is an activity carried out by humans in fulfilling efforts to develop knowledge. Education is not limited to schools known as formal education, but education is able to take place in an informal way, this is carried out with reference to student experience. Basically, both formal and informal education have something in common, namely as a means in trying to achieve the goals that have been set. Based on Law No. 20 of 2003, education is a process that has been designed to produce conducive conditions for starting learning activities. The purpose of this is to encourage students to actively participate in educational activities by increasing the development of individual potential in order to achieve control over the spiritual dimension, self-control, attitudes of intelligence, noble ethics, and skills relevant to each individual, society, state, and nation.

As an educator, teachers are required to have the ability to provide guidance for students so that the purpose of education can be achieved. Teachers must have the ability to inspire motivation in students so that they can undergo a series of learning accompanied by good motivation. This will trigger students to get achievements in accordance with what has been determined. Therefore, in order to increase student motivation towards the learning process, teachers must be able to create a plan to increase student motivation.

The word square learning method is a learning method with a focus on the combination of the ability to produce question answers with accuracy when finding answers contained in the word box. This method has a similar technique to fulfilling crossword puzzles although there is a difference where the word square learning method already has the answer hidden through additional boxes that have been given letters as tricks. The Word Square learning method is a development method derived from lecture techniques, which are then combined with a focus on the characteristics of students who are active during the learning process. Based on this understanding, a conclusion can be drawn if the word square learning method is the result of expansion derived from lectures by focusing on students. So that this learning method, can be more easily implemented by teachers than using the lecture method, this is because this learning method is a derivative form of the lecture method. In addition, activeness is one of the factors that can trigger student motivation so that they can be more enthusiastic in the learning process.

Referring to Sardiman (2018: 73), motivation has a definition, namely as an internal drive to carry out certain activities with the aim of achieving targets. In learning activities, motivation is essential to increase the desire of students to undergo the learning process well. In accordance with Sardiman's explanation (2018: 75), motivation involves all aspects that provide student support to participate in the learning process, maintain the continuity of learning within students, and provide direction to learning activities so that they have the ability to achieve the desired goals. When students have a high desire to be active in learning, student achievement tends to increase.

High learning motivation will make students carry out activities joyfully and without needing to be reminded, and they will continue to learn to achieve the desired goals. However, learners with low learning motivation may not engage in learning activities independently, even if they are reminded to do so. In the context of learning motivation, there are aspects that are used as a basis for assessing the scope of student learning

motivation. Uno (2014: 23) explained that there are six markers to measure learning motivation, which are as follows:

- 1) Hope to achieve success.
- 2) Encouragement to learn.
- 3) Future ideals.
- 4) Rewards earned from learning.
- 5) The existence of interesting learning activities.
- 6) The existence of a conducive learning environment, which allows students to learn well.

With this marker, we can evaluate and understand student learning motivation more deeply. Achievement in learning a lot is the expectation of every student when undergoing education, parents also want children to get high achievements in learning activities. Learning achievement can be defined as the results we obtain as an indicator of the ability and level of mastery of the material and material that has been taught. Learning achievement describes the student's position and reach in an effort to achieve agreed goals in all fields of study. Symbols used to signify values, both letters and numbers, must describe achievements only. (Ahkad Syafi'I et al, 2018: 117-120). Learning achievement can be used as a measure to understand the learning material that has been delivered Thus, it can be said in general if learning achievement is the product of learning activities undertaken by students at schools that have passed the measurement process through an evaluation system.

The achievement of student achievement is not only influenced by factors within students, but also there are factors outside students. According to Wahab (2015: 247-248) mentioned aspects that affect students' learning achievement, including:

- 1) Impact of quality education and learning.
- 2) Growth and brain effects.
- 3) Emotional intelligence

Internal factors or aspects contained in students such as the level of competence, enthusiasm for learning, hobbies, nature and learning methods, crafts, socio-economic conditions, physical, and psychological aspects. While external factors or aspects controlled by surrounding conditions, one of which is the most dominating learning

atmosphere so that it can have a significant impact on school learning outcomes is the ability of teachers, namely whether teacher competence is sufficient standards or not so that the learning process can run well.

Natural Sciences (IPA) can be described as a discipline of knowledge that has a structured theoretical framework, with general application and limited to natural phenomena. This science has developed through the application of scientific methods such as observation and experimentation, and requires a critical and objective scientific attitude. (Trianto, 2014: 136-137). It can be concluded that science is one of several fields of study in elementary schools with teaching quality that is still problematic today, The focus of the problem of science is learning that focuses on doing questions without using methods that can make students more interested in participating in learning. No wonder it is still a student with low learning scores. This is because teachers still apply lecture techniques by not including teaching aids in learning, making students feel bored when following the learning process. To solve this problem, teachers can use learning facilities such as teaching aids so that they can provide additional assistance for students when trying to learn the material. In addition, student motivation will be more motivated in undergoing the learning process so that they can be more focused and not bored because students devote attention to being more active in the learning process. That way, we can solve problems related to low science scores so that student learning achievement will increase (Barimbing, 2018: 144). To provide assistance for students so that they are able to better capture the material studied, researchers use canva media. It is hoped that the use of Canva media can help students so that they can better understand the learning material learned. According to Azhari (2021: 1-8), media is a tool to channel information or learning activity materials that will be given by the source of the message (teacher) to the recipient (student). Learning media is a means that can facilitate the learning process and explain the understanding of the material provided so that it can complement the learning targets that have been designed. Learning media can be defined as everything that has the ability to describe as everything that has the ability to display information from information sources to information recipients (Fauhah, 2014: 104-117). Learning media is universally an instrument or material used in the educational process with the aim of conveying information from learning sources. The use of Canva media in this study greatly determines the success of each cycle, because with this Canva media there are various

existing materials and there can also be learning videos and games that make students more motivated and interested in following learning.

The use of canva media in this study is because with canva media can help the learning process by creating learning conditions to be more enjoyable, students will also be interested and pay more attention. In addition, Canva media is also able to provide convenience for teachers and students in an effort to master the material in learning. Effective and fun learning for students (Bohonalo, 2017: 7).

Research on the use of the word square learning method was previously carried out by Edy Murwanto (2018). The implementation of the word square learning method has significant benefits in efforts to increase motivation and learning achievement of grade IV students of SD 2 Getassrabi in the material of Village and District Government Institutions. The data shows that the average percentage of students' initial motivation scores in the pre-action stage is 30%, then increases up to 60% in cycle I, and always increases up to 80% in cycle II. While the average score of students in pre-action time is only 59 and only 40% of students who complete experience an increase in the average score of students to 60% and 60% of students complete in the first cycle and continue to increase the average score of students to 85 with a success percentage of 90%.

Referring to the study, a conclusion can be drawn that the application of the word square learning method increases the achievement of completeness of student motivation and achievement. This conclusion occurs because teachers are able to do learning methods well and successfully encourage students to be motivated in following the learning process. So that students are more confident and enthusiastic about following learning and get the expected learning achievements. It can be concluded that increasing student achievement can be realized by motivating students to be able to undergo the learning process. Because with motivated students, students will be more enthusiastic about learning the material and get the desired learning results. Referring to Sudjana (2013: 22), optimal learning achievement can be observed from achieving the level of learning completeness, proficiency in completing tasks, and a positive appreciation of the subject matter. In line with that, in his research, Susanto (2013: 5) explained that the changes that occur in students, both in terms of cognitive, affective, and psychomotor aspects, are the result of the learning process carried out. From the two expert definitions, a conclusion

can be drawn if student learning outcomes are achievements from the efforts of teachers and students who contribute to each other to obtain the planned learning goals. When teachers apply learning techniques that are suitable for their students, students will be comfortable following learning and with that atmosphere students will get the expected learning results.

## RESEARCH METHODS

Ongoing research is Classroom Action Research (PTK) which implements the word square learning method. In this type of research, namely Classroom Action Research, research is illustrated as a series consisting of four phases, namely planning, implementation, observation, and reflection as described by Kemmis and McTaggart (1988).

Classroom Action Research that has been carried out in semester 2 of the 2022/2023 academic year is open from April to May 2023. This research involved grade V students at SD Negeri 1 Pernasidi, with a total of 25 students consisting of 15 students and 10 female students. The related study runs for two cycles consisting of four stages, as seen in Figure 1.

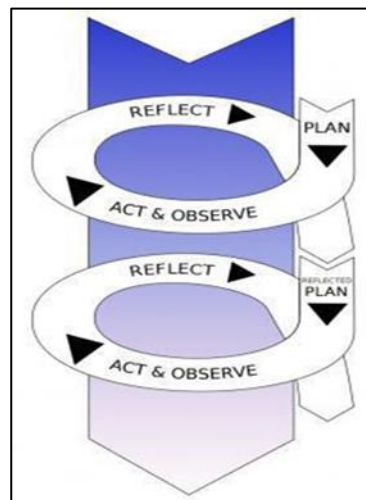


Figure 1. Self-reflective spirals (Kemmis & McTaggart, 1988)

Explanation from figure 1. The stages of PTK above are explained according to Kemmis and McTaggart (1988):

1. Planning

Planning is prepared based on the results of initial reflection on implementation. In the planning details, there will be steps that will be taken to correct, raise, or make changes to the behavior and attitudes that are expected to solve existing problems. The planning can be adjusted according to real events.

2. Action Execution

Implementation of actions related to efforts carried out by researchers to improve, improve or improve an existing problem and guided by initial planning. Actions carried out in Classroom Action Research (PTK) should be based on theoretical and empirical considerations, so that the results obtained are in the form of increasing the quality of work and expected learning achievements.

3. Observation

Observation activities in PTK can be said to be activities to obtain the data needed in ongoing research. Researchers examine the results obtained from the steps that have been taken by students.

4. Reflection

In this reflection activity, researchers continue the results of data obtained from previous observation activities. The data is then analyzed, organized and summarized as a result of the study. Any information obtained needs to be studied in relation to the results of relevant existing research. With this reflection activity, it can be concluded that the implementation of actions can affect learning outcomes or not. In other words, reflection is part of the PTK to find out the cause and effect changes of the implementation of this PTK. If the evaluation results have not reached the set goals, then this PTK can be continued in the next cycle until the results obtained are as expected.

## **RESULTS AND DISCUSSION**

Ongoing research in grade V SD Negeri 1 Pernasidi on the science learning process of water cycle material is carried out using 2 PTK cycles with each cycle consisting of 2 sessions. In cycle I, at the first meeting, the material was delivered to students by running the word square learning method supported by Canva media. Before starting the learning process, the teacher inserts motivational sentences to students in order to increase their

enthusiasm when participating in learning. However, researchers experienced an initial problem in the study, namely students who still did not understand the word square learning method. This is because students are the first to use the word square learning method. This can be seen from the low scores of students at the first meeting and there are still a number of students who cannot get complete scores.

So far, science learning is still fixated on using monotonous methods, such as lectures and direct instructions. Through this learning method, it will cause student motivation to decrease when participating in learning so that students are more easily disinterested and bored. Children have a tendency not to pay attention to science learning, especially water cycle material with monotonous methods. This will result in low levels of student achievement. To overcome this problem, classroom action research will be conducted aimed at applying the square word learning method. The focus of this research is to increase the amount of motivation and learning achievement of grade V students of SDN 1 Pernasidi on water cycle material.

#### 1. Learning Motivation

After using the word square learning method in science learning, water cycle material appears that there is an increase in student learning motivation from pre-action to student achievement results as expected. These values are shown in Table 1.

Table 1. Increased percentage of motivation for the science learning process of water cycle material from pre-action to cycle II

Cycle/ Meeting	Minimum Percentage	Percentage Yield
I/1	75%	$22/36 \times 100\% = 61,1\%$
I/2	75%	$25/36 \times 100\% = 69,4\%$
II/1	75%	$28/36 \times 100\% = 77,8\%$
II/2	75%	$30/36 \times 100\% = 83,3\%$

Based on Table 1, it can be seen that the percentage of student motivation in the first meeting of the first cycle was 61.1% (in the Sufficient category), which has not reached the minimum percentage set at 75%, while in the first cycle of the second meeting there was an increase to 69.4%, (Good) but still below the minimum



percentage determined. At the first meeting of cycle II, there was also an increase to 77.8% (in the good category) at this meeting had reached the specified minimum percentage, and continued to increase to 83.3% in the second cycle of the second meeting and had far exceeded the minimum percentage determined.

The results of the percentage of student learning motivation in this study can also be seen in Figure 2. Graph of Learning Motivation Percentage Results:

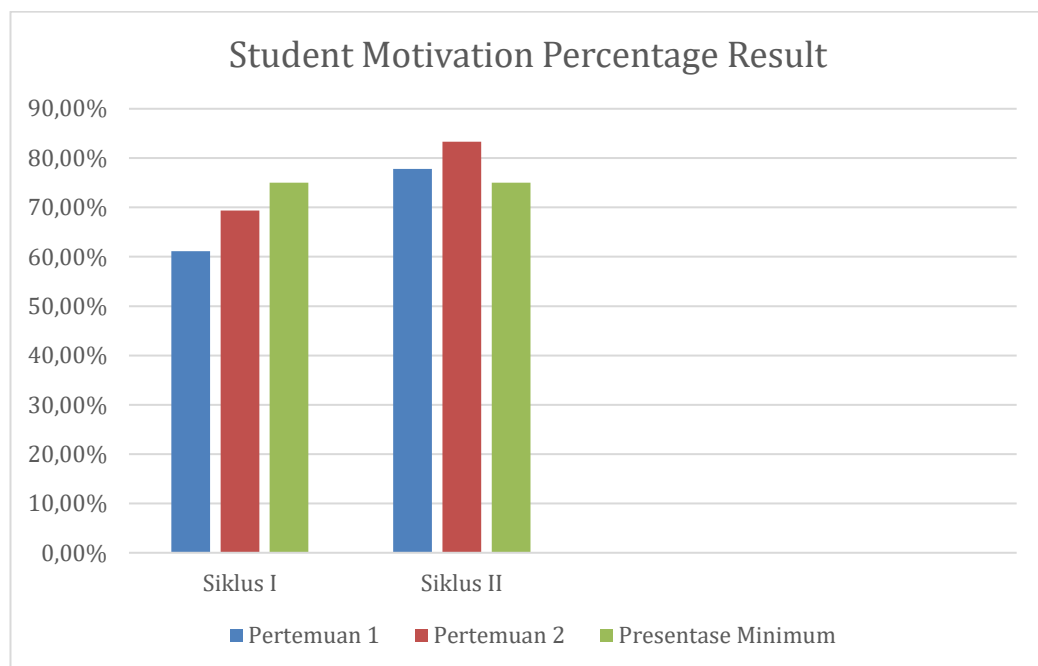


Figure 2. Graph of Improvement in Student Motivation Percentage Results

It can be seen in the diagram of the percentage of student motivation in science learning activities water cycle material in the first cycle of the first meeting shows that the percentage value of student motivation results is 61.1% which shows sufficient criteria and is still below the minimum percentage that has been set, which is 75%. In the first cycle of the second meeting, the percentage of student motivation was 69.4%, which showed good criteria but still below the minimum percentage that had been determined. In the second cycle of the first meeting there was an increase to 77.8% which showed good criteria and had exceeded the minimum percentage determined, and continued to increase in the second cycle of the second meeting to

83.3% which showed very good criteria and had far exceeded the minimum percentage determined.

## 2. Learning Achievement

After applying the word square learning method in science learning on water cycle material, there was an increase in student achievement from the pre-action stage to reaching cycle II. Information on such improvements can be found in Table 2.

Table 2. Improved Assessment of Student Learning Achievement

Cycle	Lowest Value	Top Rated	Complete	Relative Frequency
<b>Pratindakan</b>	55	85	5	$5/25 \times 100\% = 20\%$
<b>I</b>	64	84	13	$13/25 \times 100\% = 52\%$
<b>II</b>	70	100	15	$15/25 \times 100\% = 60\%$

Based on the data listed in Table 2, it can be seen that at the pre-action stage, when running the word square learning method for water cycle material, students had an average score of 64.2% (below the KKM score). The highest score was 85 and the lowest score was 55, with only 5 students (20%) achieving KKM scores. In the first cycle, there was an increase in the average score of students to 76.48 (above the KKM score). There was a high score of 84 and a low score of 68, and 13 students (52%) who achieved KKM scores. In the second cycle, there was an increase in the average score of students to 81.2 (above the KKM score). There was a high score of 100 and a low of 70, with 15 students (60%) achieving KKM scores.

Figure 3 shows an increase in student learning development after running the word square learning method in learning science water cycle material.

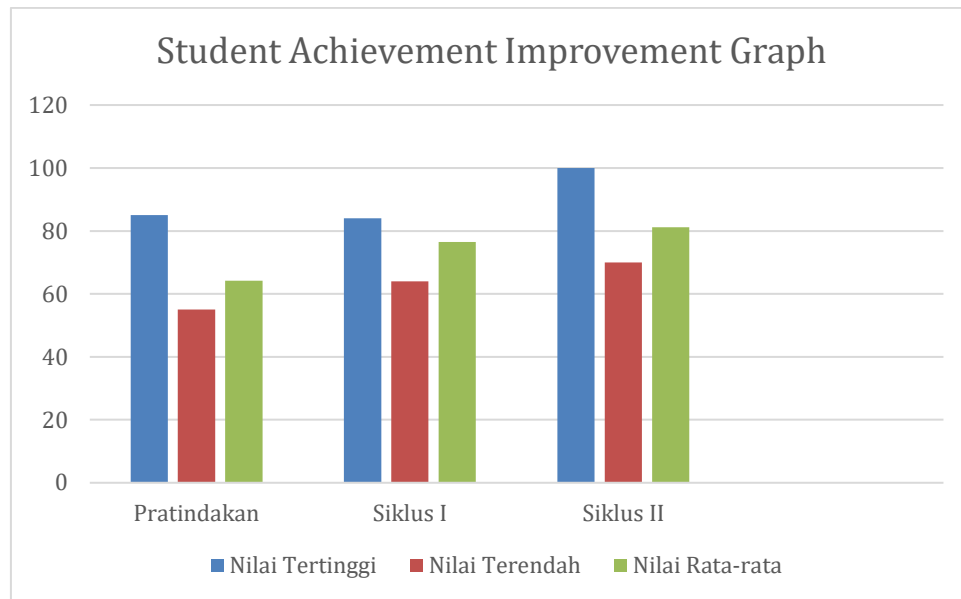


Figure 3. Student achievement improvement graph

It can be seen that in the pre-action of science learning, the water cycle material in the pre-action and has not used the word square learning method shows the highest value is 85, the lowest value is 55, and the average value is 64.2 (below the KKM value). In the first cycle after using the word square learning method, there was an increase in the highest score to 84, the lowest value to 68, and an average score of 76.48 (above the KKM value). In cycle II, there continued to be an increase with the highest value reaching 100, the lowest value of 70, and the average value of 81.2 (above the KKM value).

## CONCLUSION

This word square learning method deserves to be implemented and expanded by teaching staff in an effort to support students in the process of increasing their motivation and learning achievement as observed in grade V students of SD Negeri 1 Pernasidi in learning science water cycle material, there is a significant increase in each cycle. In cycle I, there was an increase in the percentage of student learning motivation from an average percentage of 61.1% in the pre-action stage to 60.4%. Furthermore, in cycle II, there was a further increase to 83.3%. Meanwhile, the increase in student achievement increased with student completeness in pre-action only 20%, increasing to 52% and continuing to increase to 60%. In addition, there was an increase in the average score of students. In the

pre-action stage, the average score of students was 64.2%, then increased to 76.4% in cycle I, and continued to increase until reaching 81.2% in cycle II.

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