



Efforts to Improve Dribbling Learning Outcomes in Basketball Games Through a Scientific Approach With Ball Modifications

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Abstract

This research is a classroom action research (Classroom Action Research) with the stages of implementation include planning, implementing action, observation, and reflection. The location of this research was carried out in class VIII of Muhammadiyah 27 Private Junior High School. After the data was collected an analysis would be carried out: From the test of learning outcomes before using the scientific approach (pre-test) obtained 9 students (29.03%) who had achieved mastery learning, while 22 students (70.69%) have not reached the level of complete learning. With an average value of 58.33. Then learning is carried out using a scientific approach in cycle I. From the test of learning outcomes in Cycle I dribbling through a scientific approach in cycle 1, 19 students (61.29%) have reached the level of mastery learning, while 12 students (38.70%) have not. achieve the level of mastery learning. With an average value of 69.73. Then the dribbling learning was carried out again with a scientific approach. From the learning outcomes test conducted in the second cycle, 27 students (87.09%) achieved the mastery level of learning, while 4 students (12.90%) had not yet reached the mastery level in learning, with an average score of 81.66. In this case, it can be seen that there is an increase in the average value of learning outcomes in cycle I and cycle II, namely 11.93. Based on the results of data analysis, it can be said that through a scientific approach it can improve basketball dribbling learning outcomes for class VIII students of Muhammadiyah Private Junior High School 27, West Sorkam District, Middle Tapanuli Regency for the 2020/2021 Academic Year.

Keywords: *Improving, Learning Outcomes, Dribbling*

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INTRODUCTION

School is an educational institution. Education is an important component in building an individual. Where knowledge and insight can be transferred from teacher to student. One of the teaching in schools is physical education. Physical education is basically an integral part of the overall education system, aiming to develop aspects of health, physical fitness, critical thinking skills, emotional stability, social skills, reasoning and moral action through physical activity and

sports. Physical education can be defined as an educational process aimed at achieving educational goals through physical movement (Anwar, 2005), (Alfiansyah et al., 2021).

Education as one of the sub-systems of education that plays an important role in developing the quality of Indonesian people. Physical education is an aspect of the educational process that is concerned with the development and use of individual movement abilities that are voluntary and useful and are directly related to mental, emotional, and social responses. Physical education also aims to develop physical health and body organs, mental emotional development, neuromuscular development or physical skills, social development, intelligence or intellectual development (Amir Supriadi, 2022).

Sport is any physical activity that contains the nature of the game and contains struggles with oneself or with others, or confrontation with natural elements (Gimazutdinov, 2020). Sport is one form of efforts to improve the quality of Indonesian people which is directed at the formation of character and personality, high discipline and sportsmanship, as well as increasing achievements that can arouse a sense of national pride. Sports activities cover various branches such as athletics, games, water sports, and martial arts. One of the sports games that are carried out in the educational process is basketball (Tarigan & Winata, 2020).

Basketball is a sport played by two teams with 5 players per team. The goal is to get a score (score) by getting as many balls into the basket as possible and preventing the other team from doing the same. The ball can be awarded only by hand passing or by dribbling. Basic techniques include footwork (foot movement), shooting (shooting), passing and catching, dribbling (bouncing the ball), rebounding, moving with the ball, moving without the ball, and defending (Abdurrahman Yusuf Anjani Pjt, 2022). Basketball is a popular game that is fun, educational, entertaining and healthy. Basketball is a game played by two teams, where each team has five players. Where each team will try to put the ball into the basketball hoop. Basketball has become one of the mandatory subject matter that needs to be taught to students, especially at school. Besides that, basketball also stimulates children's motor skills faster and improves physical fitness and can instill social spirits.

Education is an educational process that utilizes physical activity and is planned systematically aimed at improving individuals organically, neuromuscularly, perceptually, cognitively, socially and emotionally (Santiago-Lugo & Hopple, 2019). Physical education an effective approach to pedagogic practice is to use a number of different teaching styles. It was further emphasized that Physical Education is an integral part of the overall education system,

which focuses on developing aspects of physical fitness, movement skills, critical thinking skills, emotional stability, social skills, reasoning and moral action through physical activity. With the learning process in the 2013 curriculum for all levels of education with a scientific approach. The learning process must touch three domains, namely attitudes, skills, and knowledge. In the learning process based on a scientific approach, the domain of attitude uses teaching materials so that students' attitudes know about "why". The realm of knowledge uses teaching materials so that students' attitudes know about "How". The realm of knowledge uses teaching materials so that students' attitudes know about "what". The end result is an increase and a balance between the ability to become good human beings (soft skills) and humans who have the skills and knowledge to live properly (hard skills) from students which include aspects of attitude, skills and knowledge competencies. The 2013 curriculum emphasizes the modern pedagogic dimension in learning, namely using a scientific approach.

One of the main problems in physical education in Indonesia to date is the ineffectiveness of teaching physical education in schools, the condition of the low quality of learning physical education in secondary schools has been stated in various forums by several observers. This is due to several factors, including the limited ability of physical teachers and the limited resources used to support the physical education teaching process. The quality of physical teacher education teachers in secondary schools is generally inadequate. Most physical education teachers only emphasize the final result without paying attention to the learning process. This will have a bad impact on students because of the lack of knowledge provided by the teacher and will indirectly affect the performance of the teacher and the goals of physical education will not be achieved, it will damage the image of the teacher in the eyes of students.

Table 1. Mid-semester Exam Scores, Basketball Dribbling Learning Outcomes

No	Class	Mean	Value Above	Value Below
1	VIII-I	70	7	24
2	VIII-II	74	12	18

Based on the results of observations and interviews on February 12-16, 2019 with one of the physical education subject teachers at the Gajah Mada Foundation Middle School in North Sumatra, class VIII students became the researchers' attention because of the 60 students who were divided into 2 classes, it was found that the dribbling learning results obtained class VIII students of the 60 students who scored above the KKM 30% and the other 70% scored below the KKM.

The Minimum Completeness Criteria (KKM) at the school is 75. The cause of students getting scores below the KKM is that the dribbling movement is still not good where students are still not able to do dribbling correctly in accordance with basketball competency standards. For example, students in dribbling the ball to the opponent's area are still not quite right due to the incorrect hand movement position, such as the position of the hand when dribbling the ball is still not straight resulting in the ball getting less repulsion. So that the dribbling that is done is not right towards the palm of the hand and students tend to do dribbling movements such as hitting the ball with the palm of the hand so that it is not in accordance with the effectiveness of the basic basketball technique.

Student errors in dribbling a basketball towards the palm of the hand are possible because students do not understand the technique of bouncing the ball and body posture when dribbling basketball where the students' fingers and palms are stiff, the fingers do not open wide when repelling the ball, the position is not right so the effect of the movement is wrong, then the view of students who on average see the position of the ball so they don't look towards the front, the cause of this is also because the teacher has not given material in stages and the use of media is also not optimal, the solution is based on the learning process that has not active/effective characterized by low mastery.

It can be seen when researchers made observations that the use of infrastructure and media was not used as much as possible, including the use of the school field and basketball which only amounted to 2, it was difficult for students to be effective, with the number of students in class VIII-I 31 students but as a sports teacher do not lose your mind to deal with this, it is necessary to modify the ball so that students can learn effectively, the lack of basketball facilities at school will have a direct impact on doing basketball dribbling movements freely because students have to scramble and take turns in doing basketball dribbling, by modifying the basketball researchers hope that students will be free to do basketball dribbling movements, researchers identify modifications of basketball using volleyball, there are several considerations made by researchers in modifying basketball with volleyball, 1) because of the availability of volleyball which amounts to 5 at school will help students when going to make movements, 2) contextually volleyball and basketball are big ball games, 3) volleyball has a bounce that is almost the same as basketball but is a bit lighter than basketball. Based on this, the researchers drew conclusions about the use of

learning media through modification of basketball using volleyball, so that students can do basketball dribbling properly and correctly.

The researcher concludes by looking at these conditions, it is necessary to have the right solution in addressing the problem of the physical education learning process, especially in basketball dribbling material. In this case, one alternative that can be done to solve this problem is to use a scientific approach with ball modification. Through this modified media, it is hoped that the basketball learning process can run smoothly and attract the interest of students or students. The use of this modified media can help students understand basic basketball dribbling technical skills and students are no longer passive because they already have a modified ball.

According to the researcher, it is necessary to find the right solution in this problem, so that students are more interested in participating in the learning process of sports and health physical education, especially in basketball dribbling material. In this case, one alternative that can be done to solve the problem is to improve the quality of learning through a modified scientific approach. Through a scientific approach to the basketball learning process, especially in basketball dribbling material, it is hoped that it will run more optimally. Barriers and obstacles in the learning process so far can be overcome, the use of this method will help students understand the basic techniques of basketball dribbling because in this learning students are invited to think and imagine in understanding the basic techniques of basketball through various ways of understanding materials/strategies such as clarifying, predicting, asking questions and drawing conclusions. Information from the teacher and assisted by exchanging experiences between fellow students will greatly assist the course of the learning process carried out. After that, student learning outcomes can be measured through a series of basketball learning outcomes tests.

With a modified scientific approach to the basketball learning process, especially the basketball dribbling material, it is hoped that it will run more optimally.

METHOD

In every research in science generally aims to find and develop and test the truth of a science. The research method is a method used by researchers to achieve certain goals and objectives. The research method used in this research is Classroom Action Research. Classroom Action Research is an examination of learning activities in the form of a deliberate action that is raised in the classroom together (Flôres et al., 2019). The action is given by the teacher or with

direction from the teacher carried out by students in its implementation which is useful for revealing student learning difficulties in the physical education learning process and how to overcome these difficulties as an effort to improve student learning outcomes on the material.

The design in this study was designed based on the concept of classroom action research in general. As for each action effort to achieve these goals are designed in one unit as a cycle. Each cycle consists of four stages, namely: action planning, action implementation, observation and reflection for planning for the cycle:

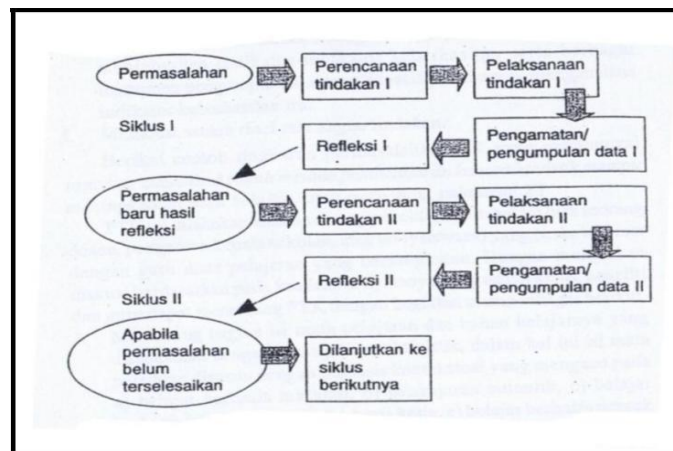


Figure 1. Cycle 1 and cycle 2

One cycle consists of four steps, namely planning, implementation, observation, and reflection. The explanation of the action research flow is presented through the following explanation:

1. Planning is a step taken by the teacher when starting his action about what, why, when, where, by whom, and how the research was carried out.
2. Implementation is the implementation of the plans that have been made.
3. Observation is the process of observing the course of action.
4. Reflection is a step to recall past activities carried out by teachers and students

To obtain the results of action research as expected, the overall research procedure includes the following stages:

- 1) Initial survey preparation stage.

The activities carried out at this stage are observing the school or class that will be used as a Class Action Research place. Informant selection stage, preparation of instruments, and tools.

2) Activities carried out at this stage are:

- a. Determining the research subject
- b. Prepare research and evaluation methods and instruments

3) Data Collection and Action Stage At this stage the researcher collects data about:

- a. Student basketball dribble learning outcomes
- b. Students' ability to the learning process
- c. Learning aids
- d. Implementation of learning
- e. Student participation and activity

4) Data analysis stage

In this stage the data analysis used is descriptive qualitative. The analysis technique was carried out because the data collected was in the form of a descriptive description of the learning development of students' dribbling. And the results of the student's ability test were described through qualitative results.

5) Report preparation stage

At this stage, a report on the implementation of Classroom Action Research is prepared from the start of the survey to analyzing the data carried out in the research

6) Description of each cycle

Each action to achieve these goals is designed in one unit as a cycle. Each cycle consists of four stages, namely: (1) action planning; (2) implementation of actions; (3) observation and interpretation; (4) analysis and reflection for planning the next cycle. The research is planned in 2 cycles.

RESULTS AND DISCUSSION

Result

This research was carried out at Muhammadiyah 27 Private Middle School, West Sorkam District, Central Tapanuli Regency, for the 2020/2021 Academic Year. Before the research was conducted, the researcher first compiled the teacher and student observation sheets which aimed to see and formulate the teacher and student observation sheets to see and formulate the problems obtained. The following is a description of the data from the observations of teachers and students in the basketball game dribbling learning process in class VIII-I of SMP Private Muhammadiyah

27, West Sorkam District, Middle Tapanuli Regency for the 2020/2021 Academic Year, which is taken from the cycle I test and the following second cycle test.

Table 2. Data on Teacher Observation Results in the Learning Process of Basic Dribbling Techniques

No	Indicator	cycle I	cycle II
1	Opening Lessons	3	4
2	Observe	3	3
3	Ask	3	3
4	Try	3	4
5	Associate	3	4
6	Communicating	3	4
7	Utilization of Learning Media	3	3
8	Giving Feedback	3	4
9	Timing	3	4
10	Closing the Lesson	3	3
	Amount	30	36
	Average	3,0	3,6
	Percentage (%)	75 %	90 %

Based on the results of observations that have been carried out in two cycles of class action implementation activities, data is obtained that the activity of physical education teachers in learning activities has increased. In the first cycle the percentage of teachers was 75%, while in the second cycle it increased to 90%.

Table 3. Student Observation Data in the Learning Process of Basic Dribbling Techniques

No	Indicator	Cycle I	Cycle II
1	Observe	4	4
2	Ask	1	3
3	Try	3	4
4	Associate	2	3
5	Communicating	2	3
	Amount	12	17
	Average	2,4	3,4
	Percentage (%)	60 %	85 %

Based on the results of observations that have been carried out in two cycles of implementing class actions, data is obtained that the activity or activeness of students in participating in learning activities has increased. In the first cycle the percentage of student activity

or activity was 60%, while in the second cycle it increased to 85%. The results and discussion contains a description of the research data, which is referred to the theory and research that supports the results of the author's research.

Table 4. Comparison of Basketball Dribbling Learning Results Pada Siklus I dan Siklus II

No	Test Value	Studen t	Fix		Percentage	
			T	BT	T	BT
1.	Cycle I	31	19	12	61,30 %	38,7 0%
2.	Cycle II	31	27	4	87,10 %	12,9 0%

Discussion

From the data analysis that has been carried out, it can be concluded that the scientific approach is able to improve dribbling learning outcomes for students of Muhammadiyah 27 Private Junior High School, West Sorkam District, Middle Tapanuli Regency, for the 2020/2021 Academic Year. Through a scientific approach that includes observing, asking, trying, associating and communicating activities, it is able to improve students' intellectual abilities/high-level thinking. With high intellectual abilities students have the ability to solve problems systematically and trigger the creation of learning conditions where students feel that it is a necessity. Finally obtained high learning outcomes.

It can be seen that student learning outcomes from the first cycle of learning can improve student learning processes on the subject of basic dribbling techniques, especially the preparation phase (head attitude), implementation phase (body attitude) and the attitude of the hands on the ball. In the test of learning outcomes of basic dribbling techniques in the first cycle, it can be seen 19 students (61.30%) who achieved completeness and 12 students (38.70%) who did not meet the expected classical completeness criteria, namely 85%. This is because some of the factors that these students have not been able to reach the level of mastery of learning are the lack of understanding of students with the process of carrying out basic dribbling techniques starting from the preparation (head attitude), implementation phase (body attitude) and the attitude of the hands on the ball so that it affects the results of the basic dribbling technique done by students (Tarigan & Winata, 2020).

Then in the second cycle of learning, it can be seen that there has been an increase in student activity from the previous cycle, students are able to do basic dribbling techniques well. In the second cycle, there were 4 students (12.90%) who had not finished and 27 students (87.10%) who had achieved completeness with an average score of 81.66. This result is greater than the completeness of learning outcomes of basic dribbling techniques in cycle I. To improve student learning outcomes, these are returned to the physical education teacher to improve student learning outcomes that have not been completed. However, classically the number of students has reached mastery learning. So this research does not need to be carried out to the next cycle.

One of the factors that support the success of learning is the use of a scientific approach that is in accordance with the learning objectives to be achieved. This is also true for educational subjects that have less interest and attention in the learning process. The results of the first cycle test turned out that the PKK value obtained by students was 61.30% and the second cycle test results the PKK value had reached 87.10%. Based on this, it can be concluded that learning through a scientific approach can improve dribbling learning outcomes in class VIII- Muhammadiyah Private Junior High School 27, West Sorkam District, Middle Tapanuli Regency for the 2020/2021 Academic Year.

CONCLUSION

Based on the results of the study, it can be concluded that learning with a scientific approach can improve dribbling learning outcomes for class VIII-I students of Muhammadiyah 27 Private Middle School, West Sorkam District, Middle Tapanuli Regency for the 2020/2021 Academic Year.

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