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Efforts To Improve Learning Outcomes Of Lower Service Through The Application Of Inquiry Learning Methods

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Abstract. This study aims to improve the learning outcomes of volleyball underhand serve using the inquiry learning method for class IX students of SMAN 9 Gowa. This study is a Classroom Action Research (CAR) consisting of two cycles and each cycle consists of four meetings. This study took place at SMAN 9 Gowa. The subjects of this study were class IX students of SMAN 9 Gowa. The instruments in this study used test techniques, observation techniques and documentation techniques in the application of the volleyball underhand serve inquiry learning method. Based on the results of observations, discussions and research results, it can be concluded that learning volleyball underhand serve for class IX students of SMAN 9 Gowa for two cycles can improve student learning outcomes. This can be proven from the results of the study that the completion of learning outcomes based on KKM, in cycle I the percentage of graduation of class IX students of SMAN 9 Gowa was 56.66%, and increased in cycle II with a graduation percentage of 83.33%.

Keywords: Underhand Serve, Volleyball, Inquiry.

1 Introduction

Physical education is an educational process through physical activity. The objectives to be achieved are comprehensive, covering the psychomotor, cognitive and affective domains. In other words, through physical activity, children are directed to learn through physical so that there will be a change in behavior not only concerning psychomotor aspects, but also cognitive and affective. So that schools as formal educational institutions in their national implementation have established a curriculum that is designed to realize national education goals by considering the developmental stages of students and adjusted to their environment.

In the process of learning physical education, of course, a teacher must be able to teach various basic movement skills, techniques and strategies for media aids/sports, internalization of values (sportsmanship, honesty and cooperation). The activities given in teaching must get a didactic-methodical touch, so that the activities carried out can achieve the teaching objectives.

Through physical education, it is hoped that students can gain various experiences to express personal impressions that are fun, creative, innovative, skilled, improve and understand human movement.

Physical education, sports and health lessons contain several sports games including volleyball. Volleyball is a sport played by two opposing groups. Each group has six players. There is also a variation of the beach volleyball game which only has two players each. Volleyball is a sport played by two teams, each team consisting of 6 players on the field, separated by a net, each team has three touches to return the same ball to the opposing team, the match can be played for five sets which means the match can last around 90 minutes, where a player can do 250-300 actions dominated by explosive leg muscle strength (Rohendi and Suwandar, 2018:14).

One of the volleyball learning materials is underhand serve. Underhand serve is a way to hit the surface of the service box by hitting the ball using the hand from below as an effort to bring the ball to life in the game. Sudarmono Trisno Bagus Prasetyo argues that "underhand serve is a way to serve from below, namely at a height of around the player's waist area. This underhand serve is one of the easiest service techniques and also one of the types of serve that is very easy if received by the opposing team. According to Akhmad Olih Solihin and Khairul Hadziq (2010) underhand serve is done by bouncing the ball first before hitting it with a swing of the arm from below and tensed to get good results.

The inquiry learning model or method is a learning where students must maximize their ability to search and investigate something systematically, critically, logically, analytically, so that students can formulate their findings with full confidence. The inquiry learning model can also be called learning where students must play an active role in the discovery process, in the placement of students learning a lot on their own to develop activeness in solving problems. Therefore, students play an active role in the learning process, so the amount of active learning time for students will increase because of the demands of inquiry learning, namely students must be active independently to formulate problems, propose hypotheses, collect data, test hypotheses/practice and draw conclusions.

The teaching pattern seems standard, namely explaining while writing on the board and interspersed with questions and answers, while students pay attention to the teacher's explanation while taking notes in notebooks. Students are seen as individuals whose job is only to listen, take notes, and memorize. Learning that occurs in the direct model is centered on the teacher, and there is no good interaction between students. So direct learning tends to be more of a memorization lesson that tolerates convergent responses, emphasizes conceptual information, practice questions, and the assessment is still traditional with paper and pencil tests that only require one correct answer.

There are many related problems encountered when learning volleyball underhand serve, including: 1) students are afraid to try because they find it difficult to do it using a real volleyball, which causes children to get bored quickly, 2) lack of media/tools/teacher demonstrations/learning resources and the like in developing learning that is in accordance with the media used, so that teachers have difficulty in providing learning development, 3) the learning method is still transformational, namely the teacher only transfers knowledge or material to students and students do not have the opportunity to develop their creative minds in developing learning based on experience or what they experience during learning.

Based on these problems, the author plans to improve the problem by applying the inquiry method to volleyball learning. The application of the inquiry method in overcoming this problem is based on the consideration that the inquiry method is a method that prepares students in a situation to conduct their own experiments extensively in order to see what happens, want to do something, ask questions, and find their own answers, and connect one discovery with another, compare what they find with what other students find.

2 Method

Classroom Action Research (CAR) in the world of education can be carried out by teachers or lecturers in an effort to improve and enhance professional skills as educators. According to Arikunto (2010: 3) classroom action research is an observation of learning activities, an action, which is deliberately raised and occurs in a class together.

2. Research Design

Classroom Action Research is carried out through a two-cycle assessment process. Each cycle consists of 2 meetings and 4 activities, namely: (1) planning, (2) acting, (3) observing, and (4) reflecting.

3. Research Site

This research was conducted in the field of SMAN 9 Gowa

4. Research Methods

Research methods are steps taken by researchers to collect data or information to be processed and analyzed scientifically. This type of research is qualitative research using qualitative descriptive methods. The type of qualitative descriptive data analysis technique is a research method that utilizes qualitative data and is described descriptively. The type of qualitative descriptive data analysis is often used to analyze events, phenomena, or conditions socially.

5. Research Subjects

Based on the results of observations in class IX of SMA Negeri 9 Gowa, the subjects of the study were all 30 students of class IX of SMA Negeri 9 Gowa, consisting of 16 male students and 14 female students. Students of class IX of SMA Negeri 9 Gowa were chosen as subjects in the study because the researcher found problems in class IX students in learning volleyball underhand serve.

6. Data Analysis Techniques

To determine the effectiveness of a method in learning activities, data analysis is needed. This study uses qualitative descriptive analysis data, which is a research method that describes reality or facts according to the data obtained with the aim of finding out the learning outcomes achieved by students and also to obtain student responses to learning activities and student activities during the learning process of underarm service in mini volleyball games using the inquiry learning method.

The calculation of the percentage using the formula above must be appropriate and pay attention to the learning completion criteria of class IX students at SMA Negeri 9 Gowa

which are grouped into two categories, namely complete and incomplete with the following criteria.

Table 1. Criteria for Physical Education and Health Learning Completeness

Criteria for Completeness	Qualification
≥ 70	Complete
< 70	Not Complete

3 Result

Research Results

The subjects in this study were 30 students of Class IX SMA Negeri 9 Gowa. The results of the data on the ability of volleyball underhand serve in Class IX SMA Negeri 9 Gowa students will be explained as follows.

The initial data on the results of learning the underhand serve in volleyball in class IX students of SMA Negeri 9 Gowa can also be seen in the following table and bar chart:

Table 2. Initial Data on the Completion of Underhand Serve in Class IX Students of SMA Negeri 9 Gowa

No	Category	Frequency	Percentage
1.	Completed	7	23,33%
2.	Incomplete	23	76,66%
	Amount	30	100%

Students' learning outcomes in cycle I

The activities carried out in cycle I were explaining the material on volleyball underhand service through the inquiry learning model for 3 meetings and the test activity was carried out at the fourth meeting or taking scores from three aspects, namely psychomotor, affective, and cognitive aspects. Based on the learning outcomes in cycle I, the percentage of student learning outcomes completion can be explained as follows:

Table 3. Data on Underhand Service Completion of Grade IX Students of SMA Negeri 9 Gowa in cycle I.

Completion criteria	Category	Frequency	Percentage
0-79	Incomplete	13	43,33%
80-100	Completed	17	56,66%
	Amount	30	100%

Student learning outcomes in cycle II

The activities that have been carried out in cycle II are explaining the material on volleyball underhand service through the inquiry learning model for 2 meetings and for the test activity

carried out at the second meeting or taking scores from three aspects, namely psychomotor, affective, and cognitive aspects. For more details, the learning outcomes of cycle II can be seen in the following table and bar chart:

Table 4. Initial Data on Underhand Service Completion of Grade IX Students of SMA Negeri 9 Gowa Cycle II

Completion criteria	Category	Frequency	Percentage
0-69	Incomplete	5	26,66%
70-100	Completed	25	83,33%
	Amount	30	100%

Based on the learning outcomes in cycle II, the percentage of student learning outcomes completion can be explained that in cycle II the number of students in the incomplete category was 5 people with a percentage of 26.66% while students in the complete category were 25 people with a percentage of 83.33%.

4 Discussion

The learning outcomes of cycle I show the learning outcomes of underarm volleyball service of class IX students of SMA Negeri 9 Gowa with the inquiry learning model. Their average score was 71.5, which is a satisfactory category. The percentage of student learning completion in cycle I was 43.33% (not complete) with a frequency of 13 people. However, there were students who achieved scores below the school's KKM standard, which was 70, which reached 56.66% (complete), with a frequency of 17 people.

The learning outcomes of the second cycle were in accordance with the estimates. This can be seen from the increasing level of attention, activeness, and enthusiasm shown by students. One of the learning objectives is changes in students' attitudes and behavior. In the research of cycles I and II, the researcher found that students' attitudes changed during the Physical Education material with the material of underarm volleyball service.

Grade IX students of IX SMA Negeri 9 Gowa showed an increase in volleyball underhand serve through the inquiry learning model during cycle II, with an average score of 82.94, which is a satisfactory category. The percentage of student learning completion in cycle II was 26.66% (not complete) from 4 frequencies. However, there were students who achieved scores above the school's KKM standard, which was 70, with a percentage of 83.33% (complete) from 25 frequencies.

Based on the results of the discussion above, it can be concluded that the ability of the learning outcomes of lower service of class IX students of SMA Negeri 9 Gowa can be improved by using the inquiry learning model.

5 Conclusion

Based on the results of data analysis and discussion, the research conclusions are stated as follows: There was an increase in the learning outcomes of underarm volleyball service of class

IX students of SMA Negeri 9 Gowa, which in cycle I the percentage of passing grade IX students of SMA Negeri 9 Gowa was 56.66%, and increased in cycle II with a passing percentage of 83.33%.

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