Improving Learning Outcomes in Volleyball Games With Problem-Based Learning at SMAN 9 Pangkep


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ABSTRACT
The research aims to determine the improvement in learning outcomes for volleyball underpasses using the problem-based learning model at SMAN 9 Pangkep with a sample size of 33 (thirty-three) class XI students obtained through a purposive sampling technique using test equipment, namely knowledge tests and skills tests Passing below as a source of initial data and final research data. This research is classroom action research which consists of 4 stages, namely: (1) planning; (2) action; (3) observation; and (4) reflection using several cycles (pre-cycle and cycle I) to see student improvement after being given a learning model. problem-based learning. The results of the research showed that in the pre-cycle activities, the number of students who completed their studies was 7 students and 26 students did not complete their studies or 21% of students completed and 79% of students completed their studies. In cycle I there was a significant increase in student learning completeness to 33 students who completed or 100%. Conclusion: The problem-based learning model can improve the learning outcomes of volleyball underpassing for students at SMAN 9 Pangkep.

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INTRODUCTION
Volleyball is a fast-tempo game, so to play the ball is very limited. A player if he does not master perfect technique will allow technical errors that are certainly very detrimental to the team (Achmad et al., 2019). To be able to play volleyball, it is necessary to master basic techniques which include serve, passing, smash, and block (Gazali, 2016).
The problems found in the learning process of volleyball games are factors of students who have different characteristics in teaching, have different levels of concentration, have different passions, and have different interests. Not only from each participant, these problems also occur as a result of the learning environment (Riezky & Yusmawati, 2016). Efforts to achieve education are certainly inseparable from a process, where in the process there is an interaction relationship or reciprocal relationship between the teacher and the object taught (Amen, 2018). In addition, teachers must be able to program a creative volleyball learning process, that can support the learning process of volleyball games so that they can be more easily understood by students. The key to school success in achieving educational goals at school lies in the hands of teachers. Teachers have a role in the process of growth and development of students' knowledge, skills, intelligence.

Passing down is one of the skills in the sport of volleyball that must be possessed by students. The team will not achieve success in playing if the player does not have a good bottom passing ability. Therefore, bottom passing becomes one of the skills that must be mastered by students in learning physical education and volleyball material sports (Hartanto & Kristiyandaru, 2014). The model in teaching is a very important factor in obtaining good learning outcomes, one of which is because the success of the learning process can be influenced by the learning model (Sugiarto, 2021). Problem-based learning exposes students to problems followed by student-centered information search activities so that it involves active students (Tyas, 2017). His interests, his level of intelligence, his talents, his motivations, his cognitive abilities, and so on. All of these can affect how the learning process and outcomes (Archmatullah et al., 2023)

To create a pleasant learning atmosphere for students, it is necessary to have a model that can make students enjoy learning, and want to follow the learning to completion. Volleyball learning materials must be carried out with the right steps and of course, the right planning program and model are needed as well, so that learning objectives can be achieved optimally. However, to achieve it many factors affect the success of learning so that the desired expectations are not easy to realize. One of the learning models used in volleyball learning is using the Problem-Based Learning learning model. Problem-based Learning is problem-based learning which is student-centered learning through problem giving.

Based on observations made by researchers in class XI MIPA 1 SMAN 9 Pangkep whose students totalled 33 students, it showed that the implementation of PJOK teaching showed that 79% of students who were incomplete in playing volleyball specifically passed the bottom material. The score obtained by students so far is less than 75 as the minimum completeness criteria threshold (KKM) determined by the school. The problem faced is that the mastery of the bottom pass is still low, most students find it difficult to pass down because the technique carried out is still not appropriate in the imposition of the ball on the student’s arm when passing down the volleyball game so that the student’s bottom passing is not optimal and reaches the bottom passing indicator properly and correctly. In addition, most students are also difficult to manage when
learning, students often do things according to their wishes without heeding orders from the teacher. In addition, the use of inappropriate learning models is also the root of the problem of incomplete volleyball learning.

The Problem-Based Learning learning model has several advantages including, students better understand the concepts taught because they find the concepts themselves, involve students actively in solving problems and demand higher thinking and reasoning skills. In Problem-Based Learning, learning is said to be unfinished if one of the friends in the group has not mastered the learning material.

**METHODS**

The method used in this study is action research. This research method uses qualitative and quantitative approaches, qualitatively explaining the events experienced from the results of observed actions. The action process is observed in depth at each meeting which will later be used as material for evaluation and reflection (Sudirman and Rosmini Maru, 2016). Action plans are not stages or cycles in PTK as stated above, but really real actions about things that researchers will do from beginning to end (Miaz, 2015).

The planned time takes place in December 2023. Each cycle is planned to consist of two meetings following the PE learning schedule at SMAN 9 Pangkep School. The sample came from class XI.MIPA 1 whose students amounted to 33 students as a sample. The instruments in the study used knowledge tests and bottom-passing skill tests.

**Student Knowledge Question Instrument**

1. Explain how to do the passing technique below!
2. Where does the ball hit when passing under the volleyball?
3. What is the posture before making the bottom passing movement?
4. How to do a bottom passing technique through the net with good results?
5. What is the position of the feet when passing down?

**Volleyball Game Bottom Passing Skill test**

1. The teacher slung the nets on both poles of two volleyball courts measuring 2.43 m high
2. Students are prepared on the volleyball court and prepared to make bottom passes, in addition to students who make bottom passes outside the court area.
3. The teacher stands on the other side of the court and throws a volleyball at the student who is about to pass down.
4. Students are allowed to pass down through the net for 30 seconds, so until the line runs out.
5. Stand balanced with a pedestal two feet parallel.
6. The gaze is directed at the ball and the legs are slightly bent like a squatting person.
7. Both hands are pressed together with the ball coming between the elbow and palm.
8. Push the ball up using the hand between the elbow and palm with a forward upward push so that the ball can pass through the net.
9. The final stance is the further motion of both arms followed by the rest of the body.
10. A value of 10 for each bottom pass that can cross the net.
11. Assessment score 10-100.

Table 1.
Student Learning Outcomes Completeness Indicators

<table>
<thead>
<tr>
<th>No</th>
<th>Range of Values</th>
<th>Criterion</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>&gt; 95 – 100</td>
<td>Excellent</td>
<td>Complete</td>
</tr>
<tr>
<td>2</td>
<td>&gt; 85 – 94</td>
<td>Good</td>
<td>Complete</td>
</tr>
<tr>
<td>3</td>
<td>≥ 75 – 84</td>
<td>Enough</td>
<td>Complete</td>
</tr>
<tr>
<td>4</td>
<td>&lt; 75</td>
<td>Less</td>
<td>Incomplete</td>
</tr>
</tbody>
</table>

RESULTS AND DISCUSSION
Research Result
Description of Pre-Cycle Conditions (Initial Observation)
Before carrying out the research process, researchers together with teachers held preliminary observations to find out the situation and condition of students and classes regarding the material of lower passing ability in grade XI students of SMAN 9 Pangkep. Before being given actions that will be used as an initial reference at the time of research.

Before being given action the game approach to Cognitive and Psychomotor Assessment is as follows:

Students who complete with KKM scores above or equal to 75 are only 7 students. With the highest score of 80 and the lowest score of 60, with a total score in class of 2300 and an average score of 73.09. This proves that with an average score of 69.70, the completeness of classes for PJOK subjects has not been met, for it is necessary to have a learning model to improve students' abilities in lower passing material in volleyball games for assessment of cognitive and psychomotor abilities. 21% or 7 students with Grades 75-84 with good category. 79% or 26 students who obtained a score of <75 with less category.

Description of Cycle I Conditions (Actions)
In the first cycle, the number of students who completed learning was 33 students with 0 students incomplete or as many as 100% of students completed. In the first cycle, there was a significant increase in student learning completeness to 33 students who were thoroughly studied or 100%. 7 students or 21% with Grades 75-84 with good category. 26 students or 79% with Grades 75-84 with sufficient category. With the highest score of 90 and the lowest score of 80, with a total score in class 2710 and an average score of 82.12. This proves that with an average score of 82.12, it meets the minimum completeness criteria. This achievement is the result of recapitulation of the
value of cognitive and psychomotor abilities and explains that all students have completed and fulfilled learning completeness according to the set learning completeness criteria. As well as meeting class completeness standards, this class action research is considered qualified to end this research in cycle I.

Discussion
Precycle

Student learning outcomes in the precycle obtained assessment results on aspects of cognitive and psychomotor aspects included in the criteria of incomplete learning as much as 79% and 21% in the complete category. The main obstacle faced in the learning process is that the learning model of the lower passing material of the volleyball game is not appropriate so it does not understand the bottom passing material, for that it is necessary to explain and add material that focuses on activities or how to do bottom passing and the imposition of volleyball on the arm that is still not right.

Based on this theory, it can be concluded that the obstacles that occur during the learning process in the learning model and volleyball game material specifically passing down are very minimal so students do not understand the techniques provided, causing the incompleteness of the learning material provided. When this happens, students will find it difficult to direct and lack an understanding of the problem so they are not able to perform perfectly. This certainly affects the learning process that takes place. One of the other problems caused is the ineffectiveness of the syntax used when learning volleyball games in schools. The syntax of the learning model is one of the important things in learning because the syntax of the learning model is a general reference on how learning is carried out, by the rules and desired results of the learning model used.

Reflecting on these obstacles, teachers need to make efforts to raise students’ enthusiasm by providing an introduction to the process in learning process starting with the expansion and concentration of material on what will be learned. It is necessary in learning because it will encourage a sense of desire and direct students to the learning goals to be achieved so that in its application students can follow the learning process well.

From the problems found during the precycle, the lack of a focused material foundation and questions that directly lead to techniques for passing down, delivering learning from monotonous teachers, not utilizing learning media or because of lack so that it affects the learning outcomes of students who are less satisfactory or do not achieve KKM scores with an average score of only 69.70. This happens because students are not too good at doing bottom passing and only do it again this semester in physical education, sports and health subjects for bottom passing material in volleyball games. Learning outcomes can be seen through evaluation activities that aim to obtain evidentiary data that will show the level of student ability to achieve learning objectives (Nana Sudjana, 2016).

In this opinion, an effective model or approach is needed with the core movement of the teaching material to achieve the completeness of class learning and the criteria
for the completeness of learning subjects. Analysis of aspects of knowledge and motion results showed that the imposition of the ball on the student's arm when passing down did not fit and swinging the hand simultaneously, the hand swing was too backward so that it was unable to reach a passing height below 2 meters more by the predetermined bottom passing skill test.

The results of this value are obtained from the results of knowledge assessment (cognitive) and movement skills tests (psychomotor) of lower passing students by analyzing material related to volleyball bottom passing and passing height tests that must be achieved which is 2 meters with the conclusion that grade XI students of SMAN 9 Pangkep have not completed the bottom passing material for it needs improvement to improve the learning outcomes.

**Cycle I**

The results of the Lower Passing Assessment of the Volleyball Game of SMAN 9 Pangkep obtained data from as many as 0 incomplete students and 33 students who were complete in attending physical education, sports and health lessons for lower passing material in volleyball games. The value is obtained from the accumulation of cognitive and psychomotor assessments provided that the average score for each student exceeds or is equal to the KKM 75 score determined by the school. The average bottom passing score for class XI bottom passing material is 82.12.

The acquisition of this score is because students can analyze the material of passing under the volleyball game and are also able to use both hands with the right arm when swinging their hands and swings simultaneously between the left and right hands so that the direction of the ball can be controlled properly according to the desired direction and can cross the net that has been determined and there is no more wrong movement of improper hand imposition on the ball so that the direction of the ball becomes oblique not straight ahead.

Knowledge and skills in basic passing techniques under the volleyball game with the Problem-Based Learning learning model make learning outcomes in the first cycle make learning outcomes increase to a maximum of 100% and meet the limits of learning completeness criteria and class completeness criteria with learning completeness criteria must exceed 85% of students complete in class. Based on Kurt Lewin's theory, PTK (Classroom Action Research) is a research activity carried out by teachers to improve the quality of learning in the classroom and there are no rules that specifically regulate how many cycles must be carried out in a PTK. In line with what was stated by (Tyas, 2017) one of the advantages of the Problem-Based Learning learning model is that students can develop students' creative abilities both individually and in groups because almost every step requires students to be active.

With the Problem-Based Learning learning model in class XI MIPA I, it is very suitable to improve the learning outcomes of passing under volleyball games in physical education, sports and health subjects at SMAN 9 Pangkep which is carried out in 2 stages,
namely Precycle, and Cycle I. The improvement is seen in the scores obtained by each student on the passing material under the volleyball game.

CONCLUSION
There was an increase in the value of passing learning outcomes under the volleyball game in grade XI MIPA SMAN 9 Pangkep students, with the Problem-Based Learning learning model, there was an increase in precycle learning outcomes by 69.70 and increased to 82.12 in cycle I. With a total increase of 12.42 from the value of learning outcomes from precycle to cycle I.

REFERENCES