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Increasing learning outcomes for volleyball passing using cooperative learning methods

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Abstract

This study aims to determine the learning outcome passing volleyball at SMK Bhakti Nations Banjarbaru South Kalimantan using cooperative learning methods. The research used is PTK which uses 2 cycles and there is a design for each cycle, plans, observations, actions, or results and finally reflection or evaluation. The target in this study were students of SMK Bhakti Nations Light Vehicle Engineering class, as many as 24 students. Sources of data obtained through the initial test and final test passing under volleyball. Data analysis techniques used in this research is descriptive. The results showed that through a cooperative approach from initial tests through to the final test. The average result of the skill of the initial test was 575 and the average value of 23.95, only 30.26% with cooperative learning approach will be unchanged or increased value overall to be 980 with the average value per individual 40.83, or 51.57% in Cycle I. Later, the second cycle increased to 70.33%, or more than 70%, or more than half of the sample has been said to be used to make passing under volleyball properly Conclusions from this research is the method of group learning positive effect in improving student achievement, which is characterized by increase the thoroughness.

Keywords: Cooperative Learning; Volleyball; Passing.

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INTRODUCTION

Passing is a way of playing a ball that comes lower than the shoulders using both wrists together. Gery (2023) argue that passing under is a ball gouging technique "Digging is an understood defensive or passing technique the ball is played with the forearms". Rahmat et al., (2021) passing volleyball is sometimes also used to play ball games where precision is important, such as passes and passes. Dearing (2108) recommends the spoon method because of its adaptability to all uses of a straight forearm. Regardless of the technique chosen, the key for players who form a good arm pass is to get the wrists

together. Pratiwi & Anggara (2021) another definition of the meaning of passing is used to receive a spike serve that is directed hard (hard driven), the ball falls and the ball heads towards the net.

Stated that one type of cooperative emphasizes activity and interaction between students to motivate each other and help each other master the subject matter to achieve maximum achievement (Salvin, 1989; Slavin, 2015). Zahrok (2018) said, one of the group learning models is the cooperative learning model. Bodsworth & Goodyear (2017) the cooperative model is a group learning model that has recently received attention and is recommended for use when teaching physical education.

Haugland et al., (2022) cooperative learning strategies are a series of learning activities carried out by students in groups to achieve learning goals. Slavin (2015) there are four important things in cooperative learning, namely: the presence of students in the group, the existence of rules in the group, the existence of learning efforts in the group, and the existence of competencies that must be achieved. Rojas et al. (2022) action research for physical education is a form of study that is reflective and is carried out to improve the rational ability of teachers' actions in carrying out tasks, deepen understanding of the actions they carry out, and improve the conditions in which physical education learning practices occur. is done. Yulianti et al. (2019) starting from planning, implementation, observation, and reflection for each cycle. Bakti Bangsa Vocational School students whose daily activities are carrying out practical learning about car repairs and getting to know machines so that when practicing physical education learning in the field is still far from perfect. Researchers want to achieve learning goals that are full of innovation, therefore, the novelty of this research is conducting action research in improving volleyball passing results for Bakti Bangsa Vocational School students using cooperative learning methods.

METHOD

This research was carried out at SMK Bakti Bangsa Banjarbaru. The time for carrying out this research began in March 2020 until the next cycle, there were 24 class X students from the light vehicle engineering department. It was

observed that the assessment of volleyball activities, one of which was passing under volleyball, was very unsatisfactory. Students also laze around while carrying out volleyball practice activities. This research uses action research. By using this (Kemmis et al., 2014) the model used in classroom action research design has a cycle which include stages 1) planning, 2) action, 3) observing 4) reflecting, in each round. In this research, the action research model used by Stephen Kemmis and Mc Taggart is used, which uses a spiral cyclical self-reflection system. As in the following picture:

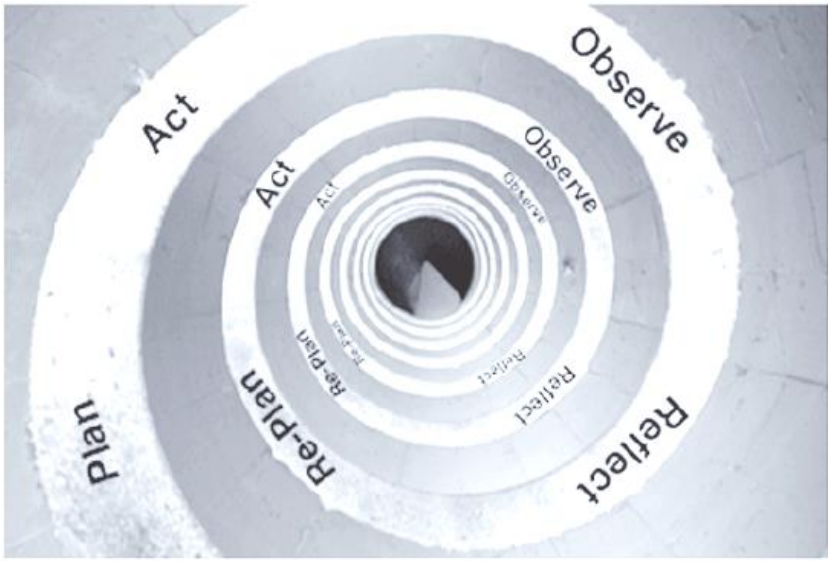

Figure 1. Kemmis and McTaggart's Spiral Model

The stages that will be followed in this research are as follows: (1) Planning: prepare instruments to record and analysed data related to the process and results of actions. Make re-planning for the second cycle, if the desired results cannot be achieved in the first cycle; (2) Action: planning the learning process in this cycle is by providing learning models in modelling and modelling volleyball under passes. Learning activities will be carried out by implementing learning models with a cooperative approach, which have been designed by researchers. Such as group division starting from random groups, heterogeneity, and student achievement groups. The planning for the implementation of learning is more focused on the material of passing under volleyball using a cooperative and playing approach. At this planning stage, learning is carried out by applying learning models that focus more on peer collaboration in groups. Such as ability groups, homogeneous groups, or team tournaments; (3) Observing: identify the advantages and disadvantages of the

learning process and outcomes that are being carried out during the activity; and (4) Reflection: based on the results of observations and field notes, data will be obtained on the findings of problems that arise during the learning of volleyball passing. These data findings will be used as a basis for developing action plans in the next cycle. The problems that exist in cycle I will be resolved, and the advantages or disadvantages will be maintained or even improved.

RESULT

So, the results of the research are observed assessment in the finally test of cycle II, regarding the overall passing movement of volleyball, the evaluator has carried out an assessment of the skills that have been carried out by the students. From final test results in cycle 1 and cycle there were significant differences. Improvement in students' volleyball passing results can be seen from the calculation results from the final test data for cycles I and II, namely as follows:

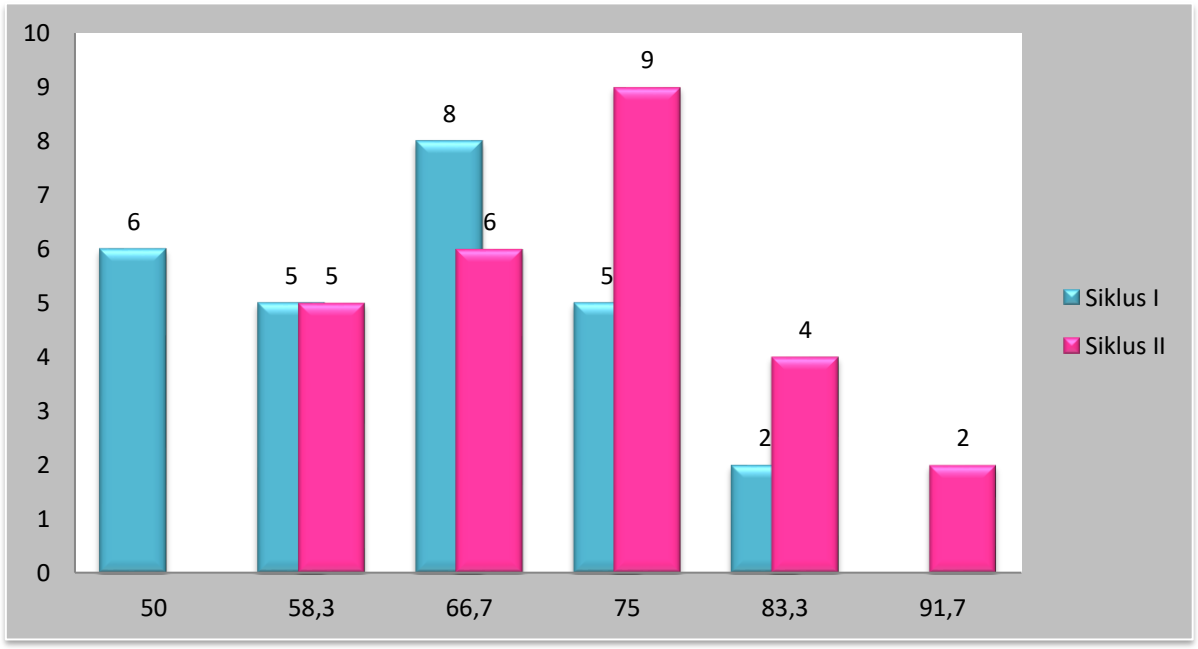

Figure 2. Diagram of learning results for volleyball bottom passing in cycle II

Table 1. Results of volleyball passing assessment

No.	Category	Passing grade	Cycle I		Cycle II	
			F	%	F	%
1.	Passed	> 60	15	62.50	20	83.33
2.	Not Pass	< 60	9	37.50	4	16.67
	∑		24	100	24	100

Table 2. Percentage Analysis of Evaluation Results by Trial Subjects

Mark	Meaning	Information
≥ 80%	Valid	Successful learning
65-79%	quite Valid	Successful learning
45-59%	Less Valid	Learning was unsuccessful
30-39%	Invalid	Learning was unsuccessful
< 29%	Invalid	Learning was unsuccessful

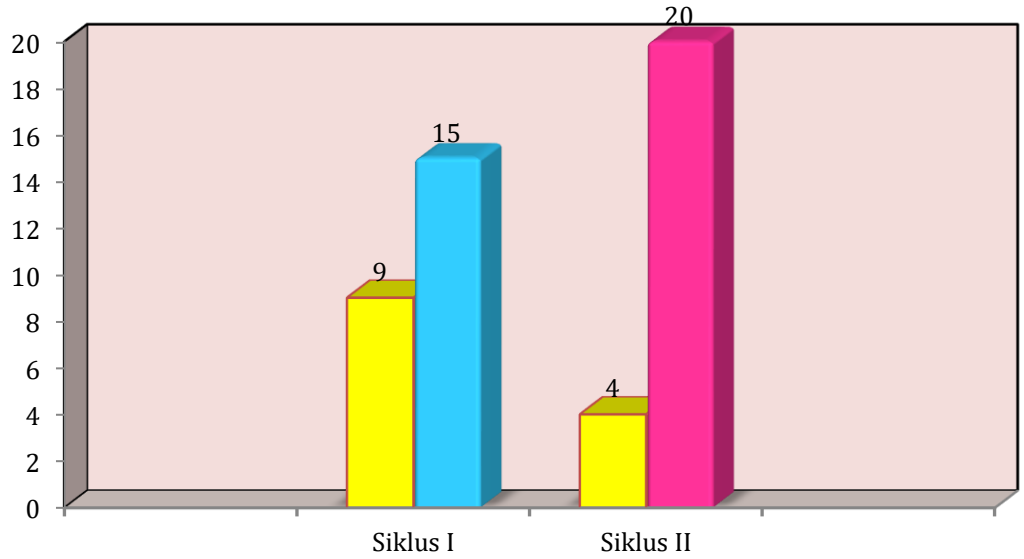

Figure 3. Diagram of learning results for volleyball passing in Cycle I and Cycle II

Action Success Criteria in this research is said to be achieved if the quantity of student (80%) experienced changes and were active in the process of learning volleyball passing. Student learning outcomes increase in physical education learning, especially this can be seen when given teaching material for volleyball passing which provides a cooperative learning pattern approach. Students can socialize well with other students and teachers. Students have courage in the lower passing movement of volleyball. Students become motivated to follow the volleyball passing process. The teaching and learning atmosphere are more conducive and enjoyable for students. Each meeting will be observed by researchers and collaborators, observations are made to see improvements or changes to increase correspondence. Field notes are used to

record what activities are carried out by students, before and after receiving learning, which functions as evaluation material, and determines further actions.

DISCUSSION

The results of the research showed that there were differences in volleyball passing abilities using cooperative learning methods. This is proven by the increase in the number of students whose scores are above the minimum completion criteria that have been set. The cooperative learning method has adequate characteristics to facilitate learning of volleyball material (Setiawan et al., 2020). This method offers a more interactive learning experience and attracts students' attention. Cooperative learning methods focus on solving real problems and applying concepts in real life contexts as a group (Khamdanah et al., 2023). This method involves students actively in the learning process through using problems as a starting point for developing new understanding, skills, and knowledge. In the context of volleyball passing ability, cooperative learning methods can have a positive influence. By applying this method in the volleyball learning process, students will be invited to actively participate in problem solving and developing passing skills in groups. In applying this learning method, students will be given situations or problems that are real and relevant to volleyball. They will be asked to analyse the problem, search for relevant information, identify possible solutions and apply the concepts they have learned to solve the problem as a group (Casey & MacPhail, 2018).

While implementing this learning method, students will be involved in various activities, such as group discussions, research, presentations, and reflection. Through this method, students will develop a deeper understanding of effective techniques and strategies in passing volleyball which have been discussed in groups during the learning process. They will learn to apply concepts such as correct body position, proper hand movements, concentration, and teamwork. Apart from that, students will also improve collaborative, problem solving and critical thinking skills through interactions and discussions with classmates (Bjørke & Mordal Moen, 2020). Thus, the

cooperative learning method applied can contribute to improving students' volleyball passing abilities by actively involving students in problem solving and applying learning concepts.

In applying this cooperative learning method, students are invited to think critically and solve problems (Huang et al., 2017). Students must analyse situations, identify relevant information, connect concepts, and make appropriate decisions. In the context of volleyball passing, students will learn to recognize problems that occur when passing, evaluate and choose the right technique, and find effective solutions. This process will develop critical thinking skills and encourage students to work collaboratively in groups. In the context of volleyball, students will learn to interact, communicate, and work together with team members to achieve the same goal, namely improving their volleyball passing abilities. Through teamwork, students can support each other, share ideas, and expand their understanding of volleyball passing. This cooperative learning method can create an active, challenging, and interesting learning atmosphere. Learners become more involved and take personal responsibility for their learning. In the context of volleyball passing, students can feel success and excitement as they see their abilities improve. This will help develop a positive attitude towards learning volleyball.

CONSLUSION

Based on student learning results in the first cycle, the average score for the volleyball underpass learning class was 63.90 with a completion percentage of 62.50% of students who passed, indicating that it was not enough to meet the completion criteria because achievement had to be 80%. And seen from the student learning outcomes in the second cycle it was 72.91 with a completion percentage of 83.33% of students who passed.

The calculation results, namely from the initial and final tests of the research with a sample size of 24 students, achieved an increase of 83.33% or more than 80% or more than half of the total number of samples. It was said that they were used to passing volleyball well and correctly. The implementation of the cooperative learning the method used, namely cooperative learning, makes learning activities and processes very active, interesting, and varied. It can be

seen from the enthusiasm of vocational school students in the process of learning physical education, especially volleyball passing. Creating good results makes it easier for teachers to manage physical education learning about volleyball material. will be better.

AUTHOR'S CONTRIBUTION

Author 1: Writing - Review & editing. Author 2: Methodology. Author 3: Software and Writing - Original Draft. Author

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