



Development of a Game Based Volleyball Learning Model at Sungai Kakap 21 State Elementary School

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Abstract

This study aims to develop an effective game-based volleyball learning model at Sungai Kakap 21 state elementary school. The research method used is development research. The stages of the research include needs analysis, designing learning models, implementing learning models, and evaluating the effectiveness of learning models. Literature study and field observations were conducted to identify students' needs and learning conditions at Sungai Kakap 21 state elementary school. The learning model is designed by considering the elementary school curriculum and learning principles that are appropriate to child development. The implementation of the learning model is carried out through sports learning sessions involving grade 4 students. Relevant data is collected during implementation to evaluate the effectiveness of this learning model. The results showed that this game-based volleyball learning model was effective in increasing student interest and participation, as well as technical and tactical skills in volleyball. This research makes an important contribution to the development of innovative and fun sports learning models in elementary schools.



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INTRODUCTION

In general, physical education may be defined as instruction in physical activity, game, or sport that is intended to further the objectives (Budi, 2021). Sports education in elementary schools has an important role in developing motor skills, teamwork, and student discipline. One of the most interesting sports to teach at the elementary school level is volleyball. However, in practice, volleyball learning is often still dominated by formal approaches and focuses on technical instruction. This approach can reduce students' interest and participation in sports learning. If the infrastructure or facilities supporting the physical education learning process are not sufficient, the learning activities will not be as effective. Many instructors continue to conduct their lessons only in the context of the school's current infrastructure and amenities. Students may get disinterested in their studies due to a lack of imaginative and creative lecturers. In these conditions, the instruction children get is not the best possible (S.Sudadik, 2020). 21 Sungai Kakap State Elementary School is one of the elementary schools where learning volleyball still faces several challenges. These challenges include the lack of interest and participation of students in learning sports, limited facilities and adequate equipment, and the lack of a fun and active approach for students in learning volleyball.

In accordance with the findings of interview observations at Sungai Kakap State Elementary School 21, there were issues with fundamental movement learning, specifically: (1) Student scores from volleyball learning materials were still quite near to the KKM. (2) Some students find it difficult to play volleyball because the rules are excessively rigid and inconsistent with the actual game, and they also struggle to carry out the tradition

of handing down volleyball-related learning materials. Therefore, it is necessary to develop an innovative and effective learning model in teaching volleyball at 21 Sungai Kakap State Elementary School. The game-based learning model can be an attractive alternative, because the game approach can increase student interest, participation and involvement in sports learning. By developing a game-based volleyball learning model that suits the needs of students and the learning conditions at 21 Sungai Kakap State Elementary School, it is hoped that it can increase the effectiveness of sports learning, develop students' technical and tactical skills in volleyball, and create fun and motivating learning experiences for students. to actively participate in sports learning.

Several research findings demonstrate the benefits of game creation in physical education instruction using volleyball content. Considering what (Supriatna, 2020) investigation revealed that the module's development findings may be utilized as a guide for creating learning materials that will help players appropriately and accurately grasp the fundamental motion material used in volleyball games. Additionally, (Haryanto et al., 2015) research and development of learning volleyball games using interactive media yielded results in field trials (large group) with research subjects numbering up to 30 students that were 93.6% effective and in trials (small group) with research subjects numbering up to 8 students. The product in the form of an interactive volleyball game media was deemed feasible for use based on the findings of this study. An interactive volleyball game that may be utilized as a teaching tool for students at SMP Negeri 6 Situbondo Regency was the ultimate product of this research and development. Thus, this study aims to overcome the problems that exist in learning volleyball

at 21 Sungai Kakap State Elementary School through the development of an effective game-based volleyball learning model

METHODS

The research method used in research on the development of a game-based volleyball learning model at 21 Sungai Kakap State Elementary School consists of several stages. Sugiyono (2011) claims that research and development are fundamental research efforts to learn about consumer demands, followed by development operations to create products and assess their efficacy. The research and development model used in this study is the Research and Development research and development model from Borg and Gall (in Juniarta & Winarno, 2016) which consists of ten steps. All research procedures are of course not standard steps that must be followed completely in its entirety.

The first stage was a needs analysis, in which a literature study and field observations were carried out to identify the needs of students and the learning conditions at SD Negeri 21 Sungai Kakap. After that, designing a game-based learning model for volleyball was carried out. This design includes the selection of learning content, learning structures, task and activity arrangements, as well as evaluation strategies that are in accordance with the elementary school curriculum and the principles of effective learning. After the learning model is designed, the next stage is the implementation of the learning model in Sungai Kakap 21 Public Elementary School. The sports learning session using a game-based learning model is carried out by involving grade 4 students. During implementation, the teacher guides students in carrying out the volleyball game activities that have been designed,

provides guidance, and provides feedback. Next, evaluate the effectiveness of the learning model. Relevant data was collected during implementation, including field observations of student participation, field notes on student skill progress, and feedback from teachers and students regarding learning experiences. This data is analyzed qualitatively to identify changes and improvements that occur after the application of the learning model. The final stage is reflection and revision. Evaluation results are used as a basis for reflecting on the learning model that has been developed. If needed, the learning model can be revised or adjusted to increase its effectiveness. This reflection and revision process involves teachers, students, and other related parties in the development of learning models.

RESULT

Research on the development of a game-based volleyball learning model at Sungai Kakap 21 Public Elementary School showed significant results. During the implementation of the learning model, there was a marked increase in students' interest and participation in learning sports, especially in learning volleyball.

Table 1. Improvement of Students' Technical Skills in Volleyball

Technical Skills	Before Implementation	After Implementation
Servis	49	85
Passing	30	75

The data in the table shows a significant increase in students' ability to master volleyball basic techniques after following a game-based learning model. Prior to the implementation of the learning model, only 40% of students were able to serve correctly. However, after implementation, the percentage of students who were able to serve correctly increased

to 85%. The same thing happened with passing skills, where only 30% of students were able to pass well before, but after implementation, the percentage of students who were able to pass well increased to 75%. Likewise, with the spike technique, the percentage of students who were able to do it correctly increased from 25% to 70%. These data indicate that the game-based learning model is effective in improving students' technical skills in volleyball.

Table 2. Improvement of Students' Tactical Skills in Volleyball

Technical Skills	Before Implementation	After Implementation
Understanding Game Patterns	35	80
Game Strategy Setting	30	75

The data in the table shows a significant increase in students' tactical skills after following the learning model. Prior to implementation, only 35% of students were able to understand game patterns and make the right decisions when playing volleyball. However, after the implementation of the game-based learning model, the percentage of students who were able to understand game patterns increased to 80%. In addition, the percentage of students who were able to organize game strategies also increased from 30% to 75%. This data shows that the game-based learning model can improve students' tactical understanding in the context of volleyball games.

Table 3. Increasing Student Participation in Volleyball Learning

Student Participation	Before Implementation	After Implementation
Active Participation	50	90

The data in the table shows a significant increase in student participation

in learning volleyball. Prior to implementation, only 50% of students actively participated in sports learning sessions. However, after the implementation of the game-based learning model, the percentage of students who actively participated increased to 90%. This data shows that the game-based learning model can increase student motivation and involvement in sports learning.

DISCUSSION

The results of the research on the development of a game-based volleyball learning model at 21 Sungai Kakap State Elementary School showed that the implementation of this model had a positive impact on learning volleyball at school. In the aspect of technical skills, there was a significant increase in students' ability to master basic volleyball techniques such as serving, passing, and spikes. This can be interpreted that the game-based learning model is able to improve students' technical skills in playing volleyball.

In addition, improvements were also seen in students' tactical skills, such as understanding game patterns and setting strategies. The game-based learning model provides an opportunity for students to better understand the concept of the game, gain direct experience in dealing with tactical situations, and make the right decisions. Thus, this model succeeded in increasing students' tactical understanding in the context of volleyball games. Furthermore, the research results also show an increase in student participation in volleyball learning. Implementation of game-based learning models can increase student motivation and involvement in sports learning. Students become more actively participating in learning sessions, which in turn can improve their learning outcomes.

The results of this study provide important implications for the development of volleyball learning at 21 Sungai Kakap State Elementary School and can also be a reference for other schools in implementing similar learning models. The game-based learning model has proven to be effective in increasing students' interest, participation, and technical and tactical skills in volleyball. This research is corroborated by research (Destriani et al., 2019) in which the results of the research show that overall the development of volleyball game learning is appropriate for the learning process for Physical Education students, FKIP, Unsri. Research (Sujito, 2020) Based on the results of research proving the Upper Passing Learning Model for Middle School Students can be developed and applied in volleyball learning in Junior High Schools. The Upper Passing Learning Model for Middle School Students can effectively improve the passing ability of volleyball in Junior High School students. The Upper Passing Learning Model for Middle School Students can make a positive contribution in supporting the achievement of goals in PJOK learning in Junior High Schools, because in addition to being able to improve volleyball passing skills, students can be motivated to do a variety of learning. Other research (Anggara & Suharjana, 2013) From the results of the assessment of material experts, it can be concluded that the volleyball learning model that is structured is very good and effective, so that the learning model is suitable for use in volleyball learning for students in the upper grades. Research (Mustaghfirin & Sukiyandari, 2020) The results showed that physical education experts categorize the chain volleyball game that was developed in the very good category and game experts categorize the chain volleyball game that was developed in the good category. Small group trials

and large group trials get very good categories, so it can be concluded that the development of a chain volleyball game is feasible to use in the learning process at school

However, this research also has some limitations. First, the research was conducted in only one school and in a specific context, so generalizations of the findings need to be made with caution. In addition, the time of the study and the number of samples were also a limiting factor in generalizing the results of this study to a wider population. For follow-up research, it is recommended to involve more schools and a representative sample of students. In addition, longitudinal research can be carried out to see the long-term impact of implementing game-based learning models on students' skills in volleyball.

CONCLUSION

Based on the results of research on developing a game-based volleyball learning model at Sungai Kakap 21 Public Elementary School, it can be concluded that the implementation of this model has a positive impact on volleyball learning at that school. The game-based learning model is effective in increasing students' interest, participation, and technical and tactical skills in volleyball. So it is stated that the developed game-based learning model is feasible to use. The results of this study make an important contribution to the development of volleyball learning at SDN 21 Sungai Kakap. Game-based learning models can be an effective alternative to improve sports learning which is more fun, active, and oriented towards developing student skills.

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