The Learning Model of Volleyball Overhead Pass for 9th-grade High School Students

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Abstract. The research objective is to develop a new product used in school physical education learning activities. This study uses the development of research methods Research and development (R&D) from Borg and Gall. Subjects in this study were 75 students at three high schools, SMA 15 Makassar, SMA 6 Makassar, and SMA 7 Makassar. Data was collected by observation, study of documentation, interviews, and tests. The data were analyzed qualitatively and quantitatively. Development of a model with limited testing, comprehensive testing, and test effectiveness. Test the effectiveness of the physical education learning model developed as a learning model of volleyball overhead pass for 9th-grade high school students. for statistical significance, test differences with SPSS 16 may result from t-test = 20 149, db = 74, and p-value = 0.00 <0.05, which means there are significant differences. The volleyball overhead pass learning model for 9th-grade high school students can be developed and applied. This research produces a volleyball overhead pass learning model that can be applied to physical education learning and further researched for development.

Keywords: learning model, volleyball overhead pass, high school students.

1 Introduction

In physical education learning, a teacher must be able to develop various kinds of material that can make students move and train their basic movement abilities because, in elementary school age, children should be given multi-lateral movements that can develop all the physical elements that exist in children, without providing special training [1]. Children at this age are classified as enjoying playing, therefore, every material that will be provided must-have elements of play that are fun in nature but still do not leave out the main material about what the child wants to achieve. By creating a feeling of joy and excitement when learning physical education, motivation will automatically arise in children to continue participating in learning activities, especially in physical education [2]. According to Wittrock, as quoted by Good and Brophy, learning is a term that describes the change process starting from experience. The stages that go through in the movement learning process are (1) cognitive stage, (2) fixation stage for closed movements and association stage for open movements, (3) autonomous stage. Abdulkadir Ateng differentiates movements into: (1) closed

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movements if there are no external factors directing the course of movement, (2) open movement if the movement must be adapted to external conditions that cannot be predicted beforehand. According to Rusli Lutan, a person is called skilled or proficient, characterized by his ability to produce something of high quality, with fairly stable skills" [3]. Richard A. Schmidt defines skill as an individual's ability to achieve goals in a minimum period of time. It was stated that there are three important elements for skill, namely: (1) understanding the characteristics of the relevant environment, (2) deciding what, where and when to do, (3) producing organized muscle activity to generate movement.

Teacher performance in teaching and learning is one of the most important parts of supporting an effective educational process, especially in building a disciplined attitude and improving student learning outcomes [4]. However, if teachers fail to minimize deviant behavior by students, it often makes teachers discouraged and lazy in teaching. This of course, must be avoided by every teacher. Teachers with high performance must be able to arrange student learning stages so that they can learn by creating a learning atmosphere so that students enjoy participating in lessons, especially physical education. The position of the teacher in the teaching and learning process, especially in high school. Every physical education teacher needs to know, understand and appreciate learning principles. More than that, the skills and creativity of the teaching and learning process really determine the achievement of physical education learning outcomes. To realize the effectiveness of physical education, you must have skills and creativity, because creativity in the steps developed by teachers to achieve educational goals is one form of teacher success [5]. Physical education learning in schools is mostly packaged in the form of games and is not directed at mastering certain sports and games, but rather prioritizes the process of developing students' motor skills over time.

Safe, comfortable and enjoyable learning is a factor that can increase children's motivation to participate in the learning process [2]. It is hoped that learning like this can reduce things that hinder the process of conveying information from teachers to children. Several things cause students' lack of interest in physical education subjects, including the lack of interest in the presentation of physical education activities by teachers. This of course requires a review of didactics and methods in Physical Education teaching. It must be realized that a lack of variety in each activity will cause students to become bored which ultimately reduces their interest. Students' interest in sports games is quite large, so efforts must be made to create and present Physical Education activities in a more enjoyable playing situation. The process of delivering Physical Education material presented in a game manner or patterns is an approach that may be more effective, as children are brought into a natural state where they enjoy playing and moving. Through play, motoric aspects can be developed through play activities. One example can be observed in children running and chasing each other to catch their friends. At first they are not skilled at running, but by playing chase, children are interested in doing it and become more skilled [6], [7].

Increasing student motivation in the physical education learning process requires several factors, one of which is supporting infrastructure. The facilities and infrastructure in schools should be in accordance with the needs of each subject, especially in physical education subjects. Apart from that, a teacher is expected to be

able to modify the tools and places in the school in such a way as to enable an optimal learning process because in general the equipment and space provided by schools for learning physical education and sports varies from school to school. By creating several modifications made by elementary school teachers both in terms of equipment and place, it is hoped that it can also create young people who are physically and mentally healthy and aware of the importance of exercise and will later have a positive influence on their environment.

Volleyball learning at school is given by teachers in the conventional way, namely by lining up the students and then telling the students to do (passing) either to each other or (passing) to the teacher so that physical education learning in volleyball game material, especially bottom passing, seems monotonous and boring so many children are reluctant to carry out movements according to instructions [8]. This is due to children's lack of interest in learning so that they are not serious about learning and only some are willing to do it.

Physical education teachers must be more creative and innovative in providing learning materials, especially in volleyball lessons, so that any material provided can make children interested and enjoy doing it [9]. Physical education teachers generally only assess student learning outcomes based on the final results after students carry out movements in learning material, rather than assessing the process during which a movement is carried out. In learning material (passing) for example, what is assessed by the teacher is the result, not the student's process when doing (passing) above [10].

Physical education teachers must be more creative in providing learning material, especially in learning (passing) volleyball with a playing pattern approach so that any material provided can make children interested and enjoy doing it [11]. Apart from that, a teacher is expected to be able to modify the tools and places in the school to enable an optimal learning process because in general the equipment and space provided by schools for physical education and sports learning varies from school to school.

A learning model that can improve learning outcomes and provide learning motivation for learning (passing) volleyball, makes it easier for physical education teachers to deliver the material. To overcome this, a volleyball learning (passing) model with a playing approach is needed to improve learning outcomes in students' physical education.

2 Method

This research into the development of a passing model for volleyball uses the research and development model from Borg and Gall [12] which consists of ten steps, including: (1) Conducting research and gathering information (literature review, subject observation, preparation report on the main issue) (2) Carry out planning (defining skills, formulating objectives, determining the teaching sequence, and small-scale trials) (3) Developing initial product forms (preparing teaching materials, compiling handbooks, and evaluation equipment) (4) Carrying out initial field test (using 6-12 subjects) (5) Carry out revisions to the main product (according to suggestions from the results of the initial field test) (6) Carry out the main field test (with 30-100 subjects). (7) Carry out product revisions (based on suggestions and

results of main field trials). (8) Field test with 40-200 subjects (9) Final product revision (10) Make a report about the product in a journal.

3 Results

The evaluation results are in the form of scores for the criteria for learning objectives, learning facilities, learning implementation, and images of the upper passing learning model for high school students using the Guttman scale of 1-0. The scores and criteria used are as follows: (1) score 0 if the answer given is "Not Appropriate"; (2) score 1 if the answer given is "Appropriate."

The research was conducted at two high schools in the city of Makassar. State High School 15, and State High School 7 Makassar.

Based on the data obtained, there are differences between the Pre Test results and the Post Test results obtained by large group trials which were previously carried out by Pre Test or initial test and Post Test which was carried out on Middle School students. After that, the t-test was carried out.

Table 1. Results of Paired Samples Test

Mean	Std. Deviation	Df	Sig. (2-tailed)
-3,53333	1,51865	74	0,000

Based on data analysis, the average pre-test score was 21.7467 and the post-test average was 25.280, the pre-test standard deviation was 3.77436 and the post-test was 4.0821, the pre-test average was -3.53333 and the standard deviation was 1.51865. The t value is -20.149, the significance level is 0.05. Because H0 is rejected, there is a difference between students' volleyball passing results after being given the volleyball passing learning model in the initial test and the final test.

4 Discussion

The final product of developing a volleyball passing learning model after research is in the form of a volleyball passing learning model. Development of volleyball passing learning in physical education, sports and health subjects based on a first needs analysis in schools.

The results of the needs analysis show that, physical education teachers have taught several techniques in the game of volleyball, but the learning of upper passing techniques has not been optimally varied. Underpassing technique material is taught to 9th-grade high school students every semester, in accordance with KI and KD in the 2013 curriculum developed by each school. The facilities used in learning volleyball currently are still nets, cones and volleyballs. Teachers still use a

monotonous volleyball learning model with only learning in groups and pairs. Students are enthusiastic about learning top passing techniques, but because the learning model is less varied, students quickly get bored just playing in the field environment. The teacher has made every effort to provide top passing material so that children are more interested in learning top passing, however, due to the lack of existing learning model resources, the teacher has difficulty adding learning references for the top passing movement that will be provided. In general, teachers really need various kinds of learning models for varied upper passing movements, especially with the inclusion of learning models that are adapted from simple movements to complex movements.

Overall, the development of the volleyball passing learning model shows very good criteria and can be used in the learning process. Meanwhile, from the results of the large group trial as a whole, the model developed shows good criteria and can be used in the learning process.

5 Conclusion

Based on the data obtained from the results of field trials and discussion of research results, it can be concluded that the volleyball passing learning model for 9th-grade high school students can be developed and applied in physical education learning and improving volleyball passing skills. The volleyball underpassing learning model for 9th-grade high school students has been developed. Data on the effectiveness and results of the development of the volleyball overpassing learning model for 9th-grade high school students have been developed.

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