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Development of Game Based Basketball Basic Technique Learning Model for Students

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ABSTRACT

This research aims to: (1) develop of game based basketball basic technique learning model for students,(2) determine the effectiveness of development game based basketball basic techniques learning models. This research is a development research that follows the development design proposed by Borg and Gall, which performed three stages: (1) the stage of identification and needs analysis, (2) the stage of development design and draft models of basketball learning basic techniques for students, and (3) the testing (expert review and testing). Small group trial conducted at the two class that have basketball learning courses and large groups test was conducted at the four class that have basketball learning courses too. The data was collected using documentation, testing, non test, questionnaire, and observation. The data were analyzed descriptively, qualitatively and quantitatively. The results of this research were development game based basketball basic technique learning model for students, that consisted of 30 topics. According to the experts, basketball trainer, and the result of the test, it concluded that the development models basketball learning basic techniques for students was effective to improve basic techniques for students.

1. Introduction

Learning is an interaction between students and educators who are outside and inside the classroom who exchange learning resources. Learning that is carried out by each individual can make the individual act and think creatively and can be a change that can be used in the future. According to Samsudin (2008: 48)

"In essence, learning is a process of change in personality in the form of skills, attitudes, habits and intelligence". Zainal Aqib (2013: 66) states "the teaching and learning process (learning) is a systematic effort by the teacher to realize the learning process runs effectively and efficiently starting from planning, implementation and evaluation", the world of education is a very important world in life. Humans who are always accompanied by education, their life will always develop in a better direction. In the scope of learning, one of the physical education lessons that must be mastered by students of the physical education study program is basketball learning, where there are several basic techniques that must be mastered and passed, namely passing, dribbling, and shooting.

Basketball is one of the most popular sports in the world. This sport is very popular with various groups, both men and women, young and old, even from various lower, middle and upper classes. "Basketball is one of the most popular sports in the world. Fans of all ages feel that basketball is a fun, competitive, educational, entertaining and healthy sport "(Jon Oliver, 2007: 6), basketball is a team sport that requires a high level of anaerobic and aerobic fitness (Delextrat, 2018: 32). In the learning process, the variation in the learning model is still very minimal so that learning related to basketball material cannot be fully understood so that students are confused and feel bored in learning it. The researcher intends to use a play approach with the intention of making basketball learning cheerful and happy, so that the learning process can be maximized. In line with the opinion of Smith and Pellegrini (in T Musfiroh 2014: 1.5) "playing is an activity carried out for one's own sake, carried out in fun ways, not oriented towards the end result, flexible, active, and positive". This means, playing is not an activity done for the sake of pleasing others, but solely because of one's own desire. According to Moritz Lazarus (in T Musfiroh, 2014: 1.9) "children play because they need refreshment or to restore energy that has been used up for routine daily activities. This implies that if children do not play, they will suffer lethargy due to lack of refreshment ".

In the first observations based on the needs analysis obtained by observing the learning of basketball learning subjects, many students experienced difficulties and were less interested in the basketball learning process, especially in basic technical skills which caused the material presented to be less than optimal. Based on the problems experienced by students in learning basic basketball techniques, researchers want to develop a basic basketball technique learning model that suits their needs by completing existing models, reproducing and modifying simple game-based learning.

2. Research Method

This study use a development method that is based on the draft model proposed by Borg and Gall in 1983, with ten steps for development starting from; (1) Conducting preliminary research (pre-survey), (2) Planning, (3) Developing types / forms of initial products, (4) Conducting field trials, (5) Revising main products, (6) Main field trials (more area), (7) Revision of operational

products, (8) operational field tests (due diligence), (9) Revision of the final product (final revision) and, and (10) disseminating and implementing the product.

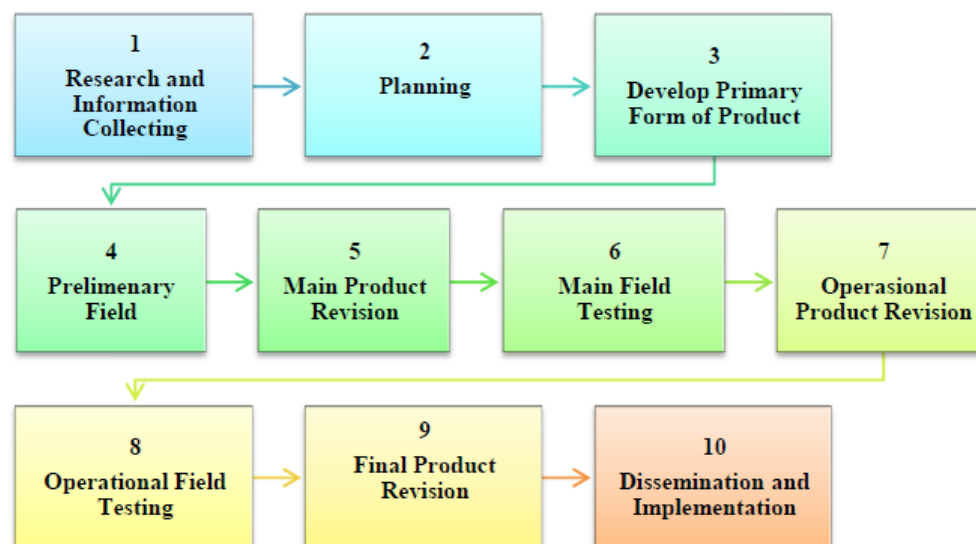


Figure 1. The stages of Borg and Gall Model Development (Borg, W.R. & Gall, M.D, 2005: 590)

This research is broadly divided into three stages of development, namely; (1) the identification and needs analysis stage, (2) the design and model draft development stage, and (3) the testing phase (expert review, small group trials and field trials). Small group trials were carried out at the Universitas Singaperbangsa Karawang totaling 2 classes of basketball learning subjects, field trials were also carried out at the Universitas Singaperbangsa Karawang. Data were collected through documentation studies, questionnaires and observations as well as tests and non-tests, aimed at testing the practicality and effectiveness of the models analyzed descriptively with the following test criteria: a. The development of a game-based basketball basic technique learning model for students is said to be valid, if: (1) More than half (50%) of the validators state that this learning is based on strong theory. (2) More than half (50%) of the validators stated that the components of this learning model were consistently related to each other. (3) The test results show that the components of this learning model are interrelated. (Ratuman, in Ardana, 2007: 101). b. The development of a game-based basketball basic technique learning model for students is said to be practical if: (1) More than half (50%) of the validators gave the consideration that this learning model could be applied in class, the lecturer stated that they could apply this learning model in the field and the level of implementation of this learning model must be high. c. The development of a game-based basketball basic technique learning model for students is said to be effective, if it meets the following criteria: (1) Student activity in participating in learning is high. (2) Student learning achievement is classified as good, namely at least 85% of student learning outcomes are in the

good category. (3) At least 85% of students have positive responses. Positive responses are characterized by the majority of students' answers to 4 and 5, while negative responses are characterized by students' answers 1, 2, and 3 on a scale of five. (Ardana, 2007: 104) In large group trials (field testing), namely in stage III evaluation, testing was carried out with experimental studies, to analyze the effectiveness of developing a game-based basketball basic technique learning model for students. In the basketball learning course, experiments were carried out by comparing the conditions before and after implementing the development of a game-based basketball basic technique learning model for students (before-after experiment). Large group trials were carried out on a larger and more heterogeneous number of students and were carried out twice. To determine the effectiveness of the development of the basic basketball technique learning model for students in improving learning outcomes in basketball learning subjects, the data design was analyzed using inferential statistics with t-test using computer assisted services SPSS 20.00 at the significance level (α) = 0.05. The steps taken in field research activities are as follows: (1) determining the research subject group; (2) carry out a pre-test; (3) trying to develop a game-based basketball basic technique learning model for students; (4) carry out the post-test; (5) looking for the average score of the pre-test and post-test results, then comparing the two; (6) determine data normality test and determine data homogeneity; and (7) looking for the difference between the two averages through statistical methods (t-test) to determine whether there is a significant effect of using the basic basketball technique learning model for students.

3. Results

From the results of validation, small group trials, and field trials, basically the development of a game-based basketball basic technique learning model for students has met the criteria or requirements for implementing a learning model, namely: syntax, social system, the principles of reaction, the support system, as well as the instructional and accompanying effects.

The learning model of the basic basketball technique based on a game for students has also met the validity, practical, and effective requirements, where the results of the study show: a. In general, or 90% of the validators stated that the initial draft of the game-based basketball basic technique learning model for students was based on a strong theory, b. All validators (90%) state that the components of the model have a mutually supportive relationship between one another. Thus, the initial model draft for the development of a game-based basketball basic technique learning model for students has met the validity criteria, c. The model is stated to be practical, because in general or 85% of the validators stated that the game-based basketball basic technique learning model for students can be applied in the field or in class, meaning that the lecturer can apply the forms of this learning model both in the field. d. The result of the small group trial as a whole the mean of model implementation is = 85%,

which means that the level of model implementation is in the "very high" category.

The effectiveness of the game-based basketball basic technique learning model for students, from the results of small group trials that can be seen from student activity, learning outcomes and student responses to the model have met the requirements where the average student activity = 90.64 After being converted into an activity classification table student learning, so that the average value is classified into the category of learning activities at very high criteria.

The results of field tests and product tests, the level of significance of the model's effectiveness are in the area of acceptance of the hypothesis or under $\alpha = 0.05$, thus the results of the model effectiveness test are empirically proven, the product results in the form of a game-based basketball basic technique learning model for students have very good ef This is indicated by the results of the t-test on the development activities of the game-based basketball basic technique learning model with learning indicators that lead to basketball learning activities in the form of individual, pair, team and classroom games, while the benefits of the model for movement show that t- count on both tests is greater than the t-table. In other words, a game-based basketball learning model for students with simple forms of play is very effective in improving the basic techniques of learning basketball for students.

Based on the analysis stated above, the game-based basketball basic technique learning model has met the criteria namely valid, practical and effective, meaning that the model is a model that creates a basketball learning based on a strong theory, the model components are interrelated. between each other, can be implemented practically in the classroom or in the field, can increase interest and student learning outcomes to take part and participate actively in every basketball learning activity at the University.

4. Conclusion

As for the conclusions from the results of this study are:

1. Basically the development of a game-based basketball basic technique learning model for students has met the requirements for implementing a learning model, namely: syntax, social system, principles of reaction, support system), as well as the instructional and accompanying effects (instructional and nurturant effects). So that this model can increase student interest in learning basketball in lectures.

2. Whereas the components of the model are interrelated with one another, which means that the model is declared valid from the trial activity. As for the practicality of the model, seen from the mean value of the model's implementation is = 85.90%, which means that the level of model implementation is in the "very high" category. While the effectiveness of the model shows that the mean value of student activity is = 91.64 after being

converted into a table for classifying student learning activities, then the value is classified into the category of learning activities "very high".

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