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## DEVELOPMENT OF A BALANCED LEARNING MODEL FOR PHYSICAL EDUCATION STUDENTS

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### Abstract

The learning carried out in physical condition formation lectures so far has not provide much variety in learning, so it appears that learning is boring and less enjoyable. This research aims to create a sports balance learning model for physical education students at Karimun University. This research uses the 4D method, in 4D research there are 4 stages, namely define, design, development, and disseminate. The analysis technique used is descriptive analysis. The results of research are: a) Development of a sports balance learning model for physical education students is feasible and can be used. b) Trials have been carried out on sports balance learning model products for physical education students, which have been tested and proven to be able to improve students' skills. The development of a balance learning model for physical education students has a level of product suitability with learning objectives of 96%, product suitability with students of 90%, product suitability with the material of 92%.

**Keywords:** Learning Model, Balance, Physical Education

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### INTRODUCTION

Sport is physical activity carried out to maintain and improve health, both physical and spiritual. Sports continue to develop rapidly along with the times and increasingly sophisticated technology with various characteristics in the form of needs, busyness and lifestyle. According to Rosdiani, (2012), the growth of various sports cannot be separated from the influence of socio-cultural conditions, economic conditions, geography and politics. Science and technology which continues to advance rapidly requires everyone to learn continuously, something new is always discovered, which means that people who are passive or silent will definitely miss out on all current developments.

Education in Indonesia has placed sport as a medium for forming the character of the nation's children in accordance with the culture of the Indonesian nation and reflects the values of Pancasila. Efforts to improve the quality of human resources, sports science is directed at improving physical, mental and

spiritual quality, and is aimed at forming character and personality, high discipline and sportsmanship, as well as increasing achievement, improving the nation's morale Lesmana, (2019). In essence, learning in higher education is a process of educational interaction between students and their environment, such as interaction with lecturers, materials, methods, facilities and infrastructure, learning media, social environment, etc., this is in line with Ningrum, (2014) who stated that learning is a series of activities, which involves information and an environment that is arranged in a planned manner to make it easier for students to learn. These factors are always related and influence each other in the learning process. One of the sports that takes part in the world of education in Indonesia is swimming, which is implemented in the learning process at all levels of education, including at universities.

The condition formation course is one of the courses that is generally taught in various study programs related to sports, health and fitness. This course aims to provide an in-depth understanding of physical aspects in the context of health and physical performance. Course Description: The physical condition formation course is a course that discusses basic concepts and practical applications regarding an individual's physical condition. In this course, students will learn important aspects that influence health, fitness and physical performance. Aspects of physical fitness studied include endurance, strength, speed, agility, flexibility, coordination and balance. According to Widiastuti, (2015), athletes must have overall physical abilities which are usually called general motor abilities or motor abilities, the division of components of which includes: (1) heart and lung endurance, (2) muscle strength, (3) flexibility, (4) speed, (5) explosive power (power), (6) agility, (7) balance, (9) coordination.

Balance is a physical condition related to the body's ability to maintain a position in a state of static or dynamic balance. This opinion is strengthened by the opinion of Kalma, (2015) who provides his own understanding that balance is the body's ability to maintain a state of balance (the body), both at rest and in motion. According to Muladi & Kushartanti, (2019) balance is the ability to

maintain a balanced body position when placed in various positions. Amaral et al, (2013) provides a definition of balance as the ability to maintain posture and body position quickly when standing (static balance) or when moving (dynamic balance).

The learning carried out in physical condition formation lectures so far has not provided much variety in learning, so it appears that learning is boring and less enjoyable. Therefore, a varied learning model is needed so that it can raise student motivation and interest in learning.

Asyafah, (2019) learning model is a conceptual and operational learning design that has a name, characteristics, logical sequence, settings and facilities that are relevant to learning needs. The definition of this learning model is broader in scope than approaches, procedures, strategies, methods and learning techniques

The aim of this research is to create a learning model for body balance in physical education students. The specific aim of this research is to produce a learning model for body balance for physical education students in physical condition formation courses.

## METHOD

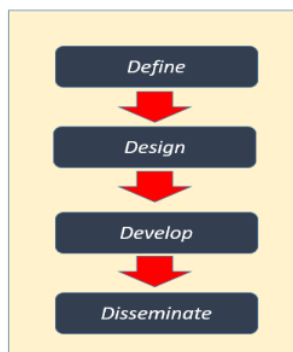
This research uses the development research method, looking at the problems found in the preliminary study, so to solve the gap between expectations and reality, development research is the right type of research to solve these problems. According to Harjanto (2011) a model is something that can describe a person's thinking patterns. A model usually describes a whole set of interrelated concepts. A model can be considered as an attempt to concretize a theory as well as an analogy and representation of the variables contained in the theory.

Research on developing a balanced learning model for students began with preliminary studies, product creation, expert assessment, small group trials, revisions, large group trials and revisions. Due to time and budget limitations, this research only reached the large group trial stage.



Mulyatiningsih (2012) explains 4 development steps, namely the 4D model which consists of:

Picture 1. Model 4D



The 4D model steps are as follows:

#### 1. Define

This stage is carried out to determine and define development requirements. In this development research, the define stage is formulating a balance learning model design which includes main material, objectives, strategies and training products. Next, determine the theme and place of research.

#### 2. Design

At this stage the researcher has created an initial product or product design. In the context of game model development, this stage is carried out to create material according to the results of the analysis of the material to be presented. Design, namely the activity of creating a balance learning model design, namely making the initial product, namely developing a balance learning model of 18 learning models consisting of 11 static balance learning models, dynamic balance 7 learning models.

#### 3. Development

At this stage there are three activities, namely product development of body balance learning models for physical education students in physical condition

formation courses, validation or assessment of product designs and product design trials on subjects.

#### 4. Disseminate

At this stage there are three activities, namely: validation testing, packaging, diffusion and adoption

### Participants

There are two subjects in this research, namely, product validation (judgment) subjects and product trial subjects.

#### 1. Subject of product validation

- a. There is 1 Material Expert, namely a sports lecturer or academic whose role is to determine and assess the material in the development product according to the level of correctness and depth of the material.
- b. Physical trainer 1 person, namely a trainer or expert who is an expert in sports physics. Expert trainers play the role of assessing the development products made in terms of the suitability of the material substance and form of the game presented.

#### 2. Product trial subjects

- a. There is 1 Physical Education lecturer, namely a lecturer and trainer or lecturer at Karimun University.
- b. Karimun University Physical Education students, where 10 students for small group trials and 20 students for large group trials.

### Procedures

The location of this research was carried out at the Karimun University sports field for product assessment by material experts, lecturers and students. This research was carried out from Januari to Februari 2023, while the report preparation stage was carried out in March 2023.

Data collection techniques include initial product development data, expert test result data and group trial result data. The data collection techniques used in this research are described, namely observation techniques and questionnaire techniques. The instruments used are questionnaires and documentation.



The research instruments used by experts and lecturers are:

Swimming expert assessment of balance learning model development products. Assessment is based on aspects of product suitability to learning objectives, product suitability to students and product suitability to material.

The questionnaire instrument was prepared with several material assessment indicators for experts and lecturers as users. The questionnaire/questionnaire instrument grid can be seen in the following table:

Table 1. The questionnaire/questionnaire instrument

Variable	Indicator	Sub Indicator	Question Items
Balance Learning	Product suitability to learning objectives	Cognitive	1,2,3
		Affective	4,5,6
		Psychomotor	7,8,9,10
	Product suitability for students	Interest	11,12,13
		Security	14,15,16,17
		Convenience	18,19,20
Product compatibility with the material	Learning Material Needs	21,22,23	
	Variety	24,25,26	
	New Knowledge	27,28,29,30	

### 1 Design or Data Analysis

In this research, the data analysis technique used is descriptive analysis by looking at the percentage of scores obtained using a formula :

$$\Sigma = \frac{\text{maximum score that can be obtained}}{\text{maximum score}} \times 100\%$$

### 3 RESULT AND DISCUSSION

Based on the results of the validation of the learning model by material experts and trainers, product revisions were then carried out in accordance with comments and suggestions from material experts and trainers. The revised product is used in learning Physical Condition Formation through small or limited group trials and large group trials. The test of using the game model is carried out by the lecturer. The trial use of the balance learning model is a product development process to produce a balance model that is suitable for use in balance learning for students at

universities as well as providing alternative learning models in the implementation of the lecture process.

The following will describe the results of research that has been carried out in accordance with development research according to 4D, namely: as follows:

#### A. Define

At this stage, we formulate material for product development of balance learning models in courses on the formation of the physical condition of physical education students. The learning model material created is learning static balance and dynamic balance. The aim of the learning model is related to cognitive, affective and psychomotor aspects and in an effort to improve the physical balance ability of physical education students. The strategy applied is to warm up first so that students are ready to carry out heavier activities. After that, a balance learning model was given and closed with a cool down sports activity

#### B. Design

Design the research to be carried out, determine the time of the research, the officer implementing the research and determine the sports balance material that will be carried out relating to static and dynamic. To make it clearer, see the table below:

Table 2. Variations of balance learning models

No	Balance	learning models
1	Static	5 model variations
2	Dynamic	11 model variations
	Total	18 model variations

#### C. Development

The next research step is to develop a balance learning model for physical education students, totaling 18 variations of learning models consisting of static balance and dynamic balance. Then validation is carried out by experts and trainers, then after validation, the product will be tested in small groups and large group trials with students and questionnaires will be given to users, namely lecturers and students, regarding the product being developed. The following are





the results of the sports balance learning model for physical education students

that has been validated, as follows:

Table 3. Expert validation of learning models

No	Balance	learning models	Description
1	Static	Airplane Position	18 Worthy
		Stand on tiptoe 1 foot	Worthy
		Stand on 1 leg and the other leg around the body	Worthy
		Stand 1 leg and 1 leg in front of the body up and down	Worthy
		1 leg squat, 1 leg back	Worthy
		Split Squats	Worthy
		Side plank with 1 leg and 1 hand	Worthy
		Stand on one foot, the other foot steps forward and backward	Worthy
		Stand 1 foot tall and lean your body to the side	Worthy
		Stand on 1 leg, 1 leg hovering to the left and right	Worthy
Stand on 1 leg, 1 leg lifted and rotated	Worthy		
2	Dynamic	Step onto the bench with 1 leg straight	Worthy
		Step down from the bench with 1 leg straight	Worthy
		Walk on a 5 cm board	Worthy
		Jump 1 foot forward as far as 10 meters	Worthy
		Jump 1 foot forward - Back	Worthy
		Jump laterally left and right 1 foot	Worthy
		Jump 1 foot onto a bench	Worthy

that, questionnaires were also given to lecturers and students as users of the learning model developed.

#### Test Results on the Use of Learning Models by Lecturers

The revised product is used in learning sports balance through small or limited group trials and large group trials. The test of using the game model was carried out by the Penjaskesrek study program lecturer. The trial of using a game model in swimming learning is a product development process to produce a learning model that is suitable for use in physical condition building courses for students at universities as well as providing alternative learning models in the implementation of the lecture process.

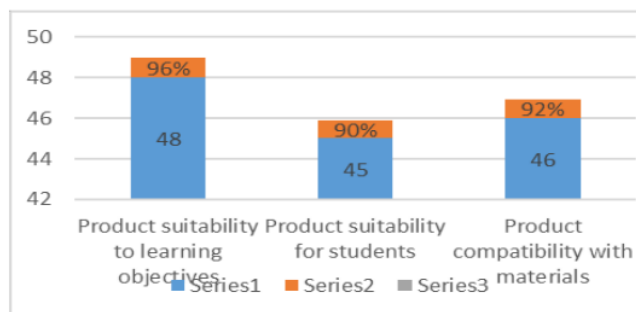
Some comments and suggestions from test results on the use of learning models by lecturers:

- a. Instructions for implementing the sports balance learning model must be made clearly so that it is easy to understand.
- b. The objectives of the balance learning model for students are made clear and detailed.
- c. Users such as lecturers and students must warm up well before learning for security and safety.
- d. It is necessary to sort the learning models from easy to difficult.

Based on data from trials on the use of learning models by lecturers, the following data were obtained:

No	Indicator	Score	Percentage	Description
1	Product Suitability to Learning Objectives	48	96%	Very Good
2	Product Suitability for Students	45	90%	Very Good
3	Product compatibility with material	46	92%	Very Good

To make it clearer, you can see it in the bar chart below:



Based on the data above through the validation and trial stages, it can be concluded that the development of a balance learning model for physical education students has a level of product suitability with learning objectives of 96%, product suitability with students of 90%, product suitability with the material of 92%. The overall results of the development of a balance learning model for physical education students are classified as very good and suitable for use.

Thus, 18 variations of developing a balance learning model for Karimun University physical education students can be applied in learning. Looking at the results of research on the development of a balance learning model for physical education students, especially on static balance and dynamic balance material, can improve sports skills and daily life.

#### D. Disseminate

At this stage the researcher submits the research results to the physical condition course lecturer and is published in a reputable national journal.

#### Discussion

The approach to learning sports balance material for students is carried out by considering the available resources and physical condition abilities which are then packaged in the form of games by prioritizing fun situations using strategies, methods, materials and media that are interesting and easy to do. Asyafah (2019) states that there are several reasons why it is important to develop learning

models, namely: a) effective learning models are very helpful in the learning process so that learning objectives are more easily achieved, b) learning models can provide useful information for students, c) variations learning models can give students enthusiasm for learning, avoid boredom, and will have implications for students' interest and motivation in participating in the learning process, d) developing a variety of learning models is very urgent because of the differences in characteristics, personalities, learning habits of students, e) the ability of lecturers/teachers to use learning models and f) the demand for professional lecturers/teachers to have motivation and a spirit of renewal in carrying out their duties/profession.

Thus, it is important to develop a balance learning model for physical education students so that the learning carried out can be more effective and efficient in achieving the learning goals that have been set. The learning objectives set in general must refer to the cognitive, affective and psychomotor domains.

Sungkowo & Rahardjo (2012) that in the national education system the formulation of national education goals, curricular goals and also instructional goals, can classify Bloom's learning outcomes broadly into three domains, namely the cognitive domain, the affective domain and the psychomotor domain.

The results of the research show that the sports balance learning model for physical education students, totaling 18 variations of the model, is very good, seen from the level of product suitability with learning objectives of 96%, product suitability with students of 90%, product suitability with the material of 92%. Thus, it can be used and applied in learning to form physical conditions, especially in static balance and dynamic balance material.

## CONCLUSION

From the research results, it can be concluded that:

- a. Development of a sports balance learning model for physical education students is feasible and can be used.



- b. The product for developing a balance learning model for physical education students has a level of Product Conformity with Learning Objectives of 96%, Product Conformity with Students of 90%, Product Conformity with the material of 92%.

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