

THE DEVELOPMENT OF LONG JUMP LEARNING STRATEGY THROUGH GAME ACTIVITY TO FIFTH GRADE ELEMENTARY SCHOOL STUDENT

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ABSTRACT

Teacher's creativity urgently required to create interesting learning atmosphere. The objective that want to achieved in this research were: 1) to develop and applied long jump learning model through game activities to fifth grade elementary school, 2) to analyze empirical data concerning student's learning effectiveness during long jump learning process through game activity. The research type that applied in this research was development research model (Borg&Gall) by applying 1-7 stages from 10 development stages. Data analysis technique that applied was quantitative analysis technique with percentage and t-test. The result of this research were: 1) From the learning expert's evaluation result obtained result 92.5%, while from game's expert evaluation obtained result 80% with very good criterion, and from learning's expert evaluation obtained result 69% with good criterion. 2) From small group result obtained result 95.22% with very good criterion, while from big group result obtained result 94,81% with very good criterion. 3) t-test result with the amount of n_1 and $n_2 = 58$ students and t-table 2.01 obtained t-count result as big as $2,375 > 2.01$ for pretest and $3,071 > 2,01$ for posttest, that long jump learning model through game activities for fifth grade elementary student on Surabaya city can be used. It conclude that: 1) through long jump learning model through game activities can student learning effectively, efficiently and fun; 2) game activities model, effectively in improve student's participation in physical education, sport and health learning according to curriculum 2013.

Keywords: development, game, variation, long jump.

INTRODUCTION

The essence of education is the process of changing one's attitudes and behavior through the development of self-potential and improved maturity. Good education will always prioritized ethics, morals, and behavioral improvements that support the development of intelligence and skills that benefit a person. In addition, the role of teachers is very important in the character formation of learners. Teachers are required to be creative so that the learning process can be takes place in a fun.

At the Curriculum of 2013 in the basic competence of Physical Education, Sport and Health Education subject in fifth grade elementary school learning based on Permendikbud No.24 Years 2016 Appendix_21 was to practice a combination of basic motion of walking, running, jumping and throwing through a modified game or sport or traditional sport.[1] In accordance with the guidance of the fifth grade student basic competencies, teachers can develop a combination of athletic basic motion through the application of teaching materials for learners. According to the basic competence of fifth grade student, this research was the development of game strategy on long jump in Physical Education, Sport and Health Education based on Curriculum 2013. Rukavina (in Jin Wang, 2012, p. 1) explain "One goal of physical education is to teach concepts that will help students learn and perform motor

skill” [2]. In the regular long jump learning usually the basic motion that taught by the teacher was the basic motion of jumping because jump is one of the activities of motion ability development that is performed from one place to another. However, in the long jump learning there is still another motion that is used namely a combination of basic motion of the walk, run, and jump. This basic and running motion can be taught when the jumper performs an initial phase that is the beginning of a person who will jump to get the optimal position in performing the foot with running speed and refusing in control. In this study learners are not only taught the basic motion of jump but also taught with running learning basic motion with the aim to optimize the initiation phase of long jump motion. Long jump learning in schools aims to help students improve the quality of health and physical fitness through understanding, positive attitudes development, as well as basic athletic motion skills as well as improving physical abilities or improving an optimal condition. Therefore, it is very important that long jump learning to applied in schools.

This research was using game approach, since elementary school students have characteristic of playfulness. Method with game activity approach is a teaching strategy which emphasize on an activity in giving freshness to physical and fun through physical activity to learners."Games are believed to be the road that may lead the child from the unknown to the known [3]. With game, it is a child's way to explore and experiment with the world around. So that affects the development of child's motor. The standing long jump test is very practical and time efficient and cheap method of assesing the muscular fitness in children and adolescents in school condition [4]. By applying strategy in the game activity, the child also learns how important the need of attention and involves the metal aspect. In addition, learning with game activity in children needs to be carried out repeatedly in order to coordinate and strengthen the leg muscles. This will be more perfect if supported by the formation of physical state, both muscle strength, muscle endurance, tendon formation in joints, style and good technique. The principle of long jump learning through game activity aims to improve physical ability or improve an optimal condition such as increasing strength, increasing speed, improving skills through a combination or coordination between running and jumping. After the students have physical ability or excellent condition, students are expected to have a high level of physical fitness.

The reason of this research background is the problem of long jump learning, which often happened that students tend to get bored because of the monotonous learning and the difficulties of the teachers to apply the learning model or the material according to the basic competence. Physical education teacher just directions how to correct the long jump and then students only imitate the movement that has been done by the teacher. Whereas in the educational context, it is necessary that not only students can imitate but educational processes that utilize physical activities which planned systematically that aim to develop and enhance individuals organically, neoromuscularly, perceptually, cognitively, and emotionally within the framework of the education system [5]. Therefore it is very important for teachers to apply appropriate learning strategies for learners to achieve educational goals.

METHOD

The design of this study applied the Research & Development design by Borg & Gall [6]. Development research is a research that aims to develop new products and refine existing ones [7]. But in this study the researchers only use the first to seventh step with consideration of existed limitations. The existing development procedure is not a standard steps that must be followed completely but can be modified according to the conditions and considerations of each researcher. This is in line with what has been stated by Ardhana (2002, p.09) that "The

procedure stated above is certainly not a standard step that must be followed by default, any developer of course can choose and determine the most appropriate measures for himself based on the special conditions faced in the development process".[8]

The subjects involved were fifth grade students from 3 elementary schools in Surabaya. The total subject involved were 164 students. Instruments that applied in this study were questionnaire needs analysis, questionnaires of learning experts, game experts, learning evaluation experts, assessment of student learning result and FCE sheets. Formative Class Evaluation (FCE) is a research instrument to determine the quality of physical education learning process of class in terms of student opinion side [9]. Data analysis was applied to determine the effectiveness of learning in physical education subject by using quantitative data analysis. Analysis of quantitative data in the form of percentage descriptive analysis technique to present the test result from small group and large group test and t test with control group pre test post test design to determine the influence of game strategy to student's long jump learning result. For the learning results with t test, the researcher only use samples from one primary school as many as 58 students. (n1 = 29, n2 = 29). T test analysis was done by using SPSS 21 program.

The formula to calculate the percentage data according Sudijono (2001, p. 40) is as follows:[10]

$$P = \frac{X}{X_i} \times 100\%$$

Information:

- P : Percentage of test subject evaluation result
- X : Number of score answers by test subject
- Xi : The maximum number of answers in the assessment aspect by the test subject
- 100% : Constants

To simplify the conclusions of percentage analysis results of the product development attractiveness level, so it applied classification criteria according to Arikunto (2009, p.245) [11] in table 1 as follows:

Table 1. Learning Media Expediency Criteria

Percentage	Description	Criteria
80 - 100 %	Very Good	Used
66 - 79 %	Good	Used
56 - 65 %	Enough	Use on condition
40 - 55 %	Poor	Need revision
30 - 39 %	Failed	Replaced

RESULTS AND DISCUSSION

The results of the research was the product of the lesson plan (RPP) and the learning strategy development module through the game activity on the long jump material that has been through several stages: expert movement analysis, learning expert, small group trial, and large group trial.

Table 2. Stage and Step Research Development

Stage	Step	Activity
Pre Development	1	Initial data collection Preparation of research proposals Needs analysis
	2	Initial product planning, making a variation of the game from combination of basic athletic movement related to long jump learning
Development	3	Initial product revisions, with suggestions from expert judgment of instructional experts, games and evaluation of learning.
	4	Initial testing using a small group of one Primary School
	5	Second product revisions, when there is an input from small group trials
	6	Second trial using a large group of two Primary Schools
	7	Revised final product
Finalization		The final product result of the development of long jump learning model through the game activity to fifth grade students elementary school is packed into learning video, lesson plan (RPP) and game module

Game product used in this research:

1. Motor Cross game

The "motor cross" game is a game developed for the basic motion combination of running and jumping, aim to make students to remain passionate about running and jumping activities to make the game fun for students as well as increase the strength and agility of the student's feet.

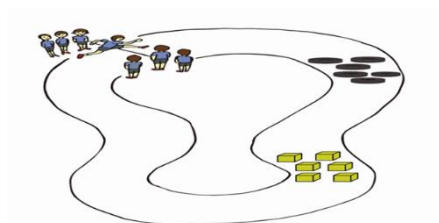


Figure 1. Motor Cross game

2. Numeric ball Game

Numeric ball are games developed for long jump learning, aimed to make student to be happy in doing activities in the learning process, given variations and combinations such as jumping, running and throwing, to make the game more challenging and fun for learners .

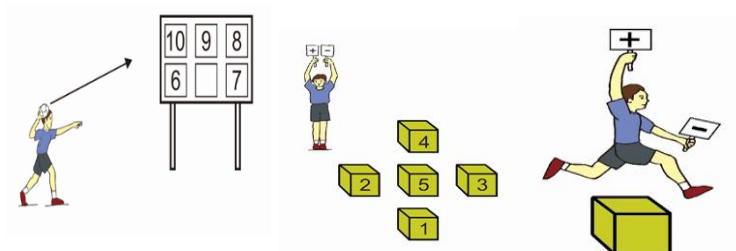


Figure 2. Numeric ball Game

3. Numeric Box Game

Numeric box gaming is a game developed for basic athletic jump lessons, aimed at learners to be happy in jumping activities, by varying and combining the basic motion of throwing and jumping, learners are instructed to jump on cardboard boxes that have been given numbers. In this game will associated with other knowledge that is counting, for the game more fun and challenging so that learners become smarter in counting. This game is associated with a mathematics learning.

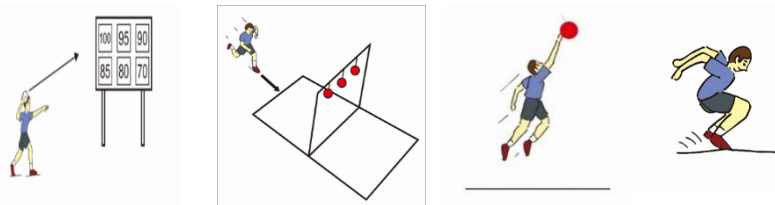


Figure 3. Numeric Box Game

4. Gaming Target Circle

The circle target game is a game developed for basic jump lessons, aimed at the learner by being given a variation and combinations such as running, jumping and landing movements combination on a round tire, this game related to the long jump material, before jumping the learner will pass through the circle as will be the goal of the student's footsteps to reach the dumping point. Before landing student will jump over the boxes that are placed before takeoff, fly, and landing on the circle targets, with the goal of being more challenging in jumping and landing.

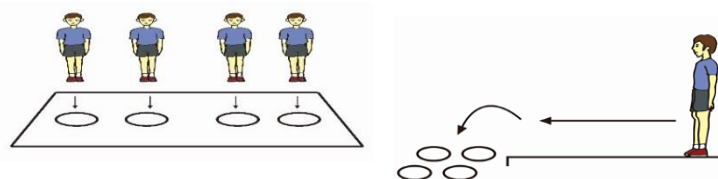


Figure 4. Gaming Target Circle

The responses and assessments of motion experts (motor learning), learning experts, and fifth grade elementary school students to products that developed for the product feasibility by respondents will presented in table 2 as a quantitative data.

Table 3. Table of Product Expediency Criteria

No.	Respondent	Percentage	Criterion
1	Game Experts	80,0%	Very good
2	Learning Expert	92,5%	Very good
3	Evaluator of Learning	69,0%	Good
4	Student Respon at Small Group Trial (FCE Questioner)	95,2%	Very good
5	Student Respon at Large Group Trial (FCE Questioner)	94,8%	Very good

From the table above, the percentage of respondents data analysis to the developed product was on very good and good criteria, Questioner analysis result from expert of learning was as big as 92,5% with description of criterion is very good, and game expert obtained result 80,0% with good criterion and also from evaluation expert obtained result 69,0% with good criterion. While the results of Formative Class Evaluation (FCE) analysis from small group

trial obtained 95.2% with excellent category and large group trial as big as 94.8 with very good category. So it can be concluded that the development of the long jump learning model through game activities for fifth grade elementary school students can be applied in accordance with the rules of Physical Education, Sport and Health subject.

Table 4. Result of T-test Control and Experiment Group

Group	N	Mean	Std. Deviation	t	Sig.	Conclusion
Control	29	87,34	3.55	3,017	0,004	Different
Experiment	29	89,75	2.44			

Based on table 4, it can be explained that the t-test using a significance level of 0.05 with the result of Sig.<0.05, so it can be concluded that there is influence of game activity on the results of long jump learning. Based on the review, evaluation, and revision, the development of learning strategies through game activity on the long jump material for fifth Grade Elementary School was a good source of learning.

The results of this study also fit with Ucus's research about Elementary School Teachers Views On Game Based Learning as a Teaching Method that game-based learning is perfect for learning that related to physical activity [12]. Play makes students physically fit, active, and reactive. This condition allows students to live in a comfortable competitive environment so that teachers can guide them in teamwork, self discipline, sportsmanship, leadership, and socialization. This research result also showed the need of teacher's creativity in processing a simple media around him in order to motivate students to be more active in sports lessons. This is reinforced by the opinion of Amri (2005, p.102) that understanding and skills in combining methods, media, and learning strategies are creativity to improve students' learning motivation [13].

After conducting revision in accordance with the above provisions, there are still some weaknesses of products that will need to be developed, among others:

1. Requires evaluation and testing on a larger or wider subject.
2. Requires research on more modern game variations
3. Requires more current but affordable and safe media for students.

In addition to having the disadvantages of the products mentioned above, this product also has several advantages:

1. This product can be used in schools with minimal school facilities because tools and materials are easy to find in the neighborhood
2. This product consists of 4 games so that during long jump learning students not easy to get bored and more excited to exercise.
3. The making of media in this product very cheap and easy to get so that can be used by school or teacher with limited fund.

CONCLUSION

Based on the research results and discussion it can be concluded that the development of long jump learning strategy through game activity in fifth grade Elementary School physical education, sport and health learning is feasible to be used as a source of learning according to student's responses in learning. With long jump learning model through simple games, students can learn effectively and fun. Therefore, Product development in the form of module development of long jump learning strategy through game activity can be used as additional

references by physical education, sports, and health teachers in the learning process. In the utilization it will need consideration of the situation and conditions that existed in school. The resulting product is a product that intended for teachers and fifth grade students of Elementary School in accordance with the 2013 curriculum.

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