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Learning Model Development Locomotor For Student Elementary School

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Abstract − Penelitian ini bertujuan untuk membuat model pembelajaran gerak dasar lokomotor lompat dengan menggunakan permainan sederhana. Model ini dikembangkan sebagai sarana untuk mencapai tujuan pembelajaran pendidikan jasmani dengan mengembangkan keterampilan gerak dasar lokomotor lompat, sehingga dapat digunakan oleh guru dalam pendidikan jasmani di sekolah. Metode yang digunakan dalam penelitian ini adalah penelitian pengembangan berdasarkan metode yang dikemukakan oleh Borg dan Gall, dengan tahapan penelitian sebagai berikut: (1) pengumpulan informasi, (2) desain draf awal, (3) validasi ahli dan revisi , (4) pengujian skala kecil dan revisi, (5) pengujian skala besar dan, (6) produk akhir, (7) pengujian keefektivitasan. Pengujian skala kecil dilakukan di SD Negeri 060875 Medan Perjuangan, pengujian skala besar dilakukan di SD Negeri 060904 Medan Maimun. Berdasarkan hasil pengujian keefektifan produk model, kenyataan membuktikan hasil pengujian produk berupa model pembelajaran gerak dasar motorik menggunakan permainan sederhana untuk siswa kelas 3 SD mempunyai tingkat reseptif yang sangat baik. efektif. Hasil uji _t berdasarkan hasil membangun model pembelajaran gerak dasar saat melompat disajikan dalam bentuk permainan sederhana menunjukkan bahwa t hitung lebih besar dari pada t tabel. Hasil penelitian menunjukkan bahwa dalam model pembelajaran gerak dasar lompat terdapat 4 permainan: (a) permainan lompat tali (b) permainan lompat karpet (c) permainan gawang (d) permainan lompat rintangan. Dengan kata lain model pembelajaran gerak dasar lompat dengan permainan sederhana ini mempunyai pengaruh dalam menunjang proses pembelajaran pendidikan jasmani olah raga dan kesehatan pada siswa kelas 3 SD.

Kata Kunci: Pengembangan, Model Pembelajaran, Gerak Dasar Lokomotor

Abstract − This research aims to create a learning model for basic locomotor jumping movements using simple games. This model was developed as a means to achieve physical education learning objectives by developing basic locomotor jumping movement skills, so that it can be used by teachers in physical education at school. The method used in this research is development research based on the method proposed by Borg and Gall, with the following research stages: (1) information collection, (2) initial draft design, (3) expert validation and revision, (4) scale small scale testing and revision, (5) large scale testing and, (6) final product, (7) effectiveness testing. Small-scale testing was carried out at SD Negeri 060875 Medan Perjuangan, large-scale testing was carried out at SD Negeri 060904 Medan Maimun. Based on the results of testing the effectiveness of the product model, the reality proves that the results of product testing in the form of a basic motor movement learning model using simple games for grade 3 elementary school students have a very good receptive level. effective. The results of the _t test are based on the results of building a basic movement learning model when jumping presented in the form of a simple game showing that the calculated t is greater than the t table. The results of the research show that in the basic jumping movement learning model there are 4 games: (a) rope jumping game (b) carpet jumping game (c) hurdle game (d) hurdle jumping game. In other words, this model of learning basic jumping movements with simple games has an influence in supporting the learning process of physical education, sports and health in grade 3 elementary school students.

Keywords: Development, Learning Model, Basic Locomotor Movements

1. INTRODUCTION

Physical education is education aimed at achieving educational goals by using physical means of movement. Through this movement educational goals can be achieved. One of the objectives of physical education according to the National Education Standards Agency (BSNP, 2006) is: (1) Improve basic motor skills and abilities. Basic movements play an important role in physical education learning, basic movement skills can be applied in various games, sports and physical activities that are carried out every day. Basic motor skills include motor movements, non-motor movements and manipulative movements (Adang, 2004) .

Games and sports are one of the activities that support physical education. Through games, children will easily get to know each other, appreciate movement, and perform enthusiastically. Therefore, developing students' basic motor skills can be carried out through various types of activities that are interesting for elementary school students, especially lower class students, which can be provided in the form of games (Anas, 2019) . In the view of (Lutan, 2001) , basic motor skills can be applied in various games, sports and physical activities that are carried out every day. Playing activities are very suitable for developing children's basic locomotor movement skills in elementary school, because basically a child's world is the world of play. Physical education teachers can use various forms of play to practice basic locomotor movements. One form of this game is a simple game.

Efforts to develop basic movement sequences for elementary school students require training services or fun approaches that are tailored to the characteristics of elementary school students. A learning model is a method or strategy

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used by a teacher to carry out the student learning process to achieve a goal that is systematically designed. The learning model that will be developed is a basic motor learning model with simple games for elementary school students which is built in accordance with the basic skills (KI) and basic skills (KD) of the elementary school physical education program, namely the independent curriculum. Determining the learning model that will be used in learning activities takes into account: (a) the objectives to be achieved, (b) learning material or materials, (c) students and (d) other non-technical considerations (Rusman, 2011) .

Based on the results of observations and interviews with physical education teachers in several public elementary schools in Medan Maimun sub-district, a picture of the problem was obtained, namely that physical education teachers who provide physical education are less creative and less diverse in providing physical education. teaching style/monotonous, the methods used are still conventional/traditional so that students are less enthusiastic and lazy to take part in learning basic movements.

To overcome the shortcomings in learning basic motor movements mentioned above, research and development of models for learning basic motor movements using simple games for elementary school students is very important.

2. METHODS

This research uses a development approach. When the research was carried out at one of the elementary schools in Medan Maimun District. The research subjects for this topic are 3rd grade elementary school students.

Small scale testing was carried out with 8 students. A large-scale experiment was carried out on 28 grade 3 students of SD Negeri 060904 Medan Maimun and SD Negeri 060875 Medan Perjuangan. The data collection tools used were: (1) interview guide and (2) learning observation guide. The data analysis techniques used are quantitative analysis and qualitative descriptive analysis.

Development procedures are the steps that must be followed before producing a product. According to (Borg, WR & Gall, 1983) , the stages of development research show that when conducting development research, there are 10 steps that must be followed, namely: (1) collecting information, (2) preparing a plan, (3) initial product development, (4) initial testing, (5) initial product development modifications, (6) initial field testing, (7) modifications to develop operational products, (8) operational product testing, (9) final product modifications, and (10) dissemination and dissemination developed products.

These steps have been adapted into seven (7) R&D process designs, namely: (1) information collection, (2) analysis of products under development, (3) initial product development, (4) expert validation, (5) testing small scale, (6) large scale testing, (7) final product manufacturing. Development research is product-oriented research so just seven steps are sufficient for this research. Ten further research developments can be developed by writing a dissertation and conducting classroom action research or experimental research. The data used in this research are qualitative data and quantitative data. This type of qualitative data comes from: (a) the results of interviews with Play Group teachers, (b) input from material experts and teachers who tested the learning model. Quantitative data was obtained from the results of learning observations in the form of a scorecard learning model. The collection tool uses an observation guide and an interview guide. Observations were carried out to collect or collect information from experts to provide input and suggestions for products that will be produced regarding the implementation of the basic motor learning process in children aged 2 to 4 years. The data analysis technique used is quantitative descriptive analysis and qualitative descriptive analysis. Quantitative descriptive analysis was carried out to analyze the following data: (1) value scale data resulting from material experts' assessment of the learning model project before conducting field tests, (2) data resulting from expert observations of learning patterns. Meanwhile, qualitative descriptive analysis was carried out on: (1) data from interviews with PJOK teachers during preliminary research, (2) input data on learning models before and after field testing.

3. RESULTS AND DISCUSSION

Model Development

The results of developing a basic motor movement learning model for elementary school students are expressed in the form of a situation that can be presented as a physical education learning model.

1. Results of needs analysis

In general, in a preliminary study or needs analysis it is necessary to clearly state two general objectives, namely:

a. How important is it to develop a basic motor movement learning model with simple games for elementary school children?
b. What obstacles and support are encountered in developing a model for learning basic motor movements for elementary school age children?

The basic motor movement learning model that will be developed is the result of researchers' discovery of problems in this field through observations and interviews with elementary school teachers. Based on observations and interviews conducted by researchers, general objectives were obtained in developing a basic motor learning model for elementary

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school age children. Apart from several general objectives, researchers can also explore several characteristics of subjects in basic motor learning. In the basic locomotor movement learning model will be developed.

Formulas	Limitation	Category
$X < (\mu - 1.0\sigma)$	$X < 7.7$	Not enough
$(\mu - 1.0\sigma) \leq X < (\mu - 1.0\sigma)$	$7.7 \leq X < 15.3$	Enough
$(\mu - 1.0\sigma) \leq X$	$15.3 \leq X$	Good

2. Needs Analysis Results Data

Building a basic locomotor movement learning model for physical education learning, developed from analysis and observation of physical education teachers, students and physical education administrators at school or in the field. Based on the results of the analysis carried out in elementary schools, the following information was obtained:

a. The form of learning basic locomotor jumping movements is less varied or more monotonous.
b. Teachers still don't know which form of learning through play should be applied to grade 3 elementary school children if the time for physical education, sports and health is long enough, namely 4 x 35 minutes.
c. The learning process is less efficient in the use of time, which means the learning process is not utilized optimally, as evidenced by students using more rest time than carrying out movement tasks.
d. Teacher creativity has not been maximized, such as modifying the tools used to support various forms of learning.
e. Students' ability to perform basic locomotor jumping skills is not yet optimal.
f. Children are less enthusiastic, lazy to follow the learning process and find it difficult to manage because the learning material provided is less diverse and monotonous.
g. Based on the needs analysis above, it is necessary to have a form of physical education learning model with basic movement material, especially jumping, which can meet the needs in the field, especially for children when teaching physical education based on the objectives of the applicable curriculum. Development objectives include: (1) cognitive aspects seen from students' understanding of the rules of the game and teacher instructions, (2) affective aspects seen from students' social skills behavior such as responsibility, cooperation and honesty, (3) psychomotor aspects. emerging aspects of the basic motor skill of jumping. The results of developing a basic dance learning model will be useful for physical education teachers.
h. The learning model for basic locomotor jumping movements that was developed is a traditional game that was chosen according to the characteristics of the learning material and the characteristics of elementary school students as well as the characteristics of their limbs. We really hope that this model of learning basic locomotor movements can attract children's interest and attention so that they can develop basic jumping movement skills. the.

3. Model feasibility

After carrying out data collection steps and drafting a basic locomotor movement learning model. expert steps g. The next step is to carry out expert testing with the aim of achieving the feasibility or validity of the model created by evaluating it directly

Researchers invited 3 experts to evaluate the feasibility of the model. A learning model for basic jumping movements has been formed, where 3 experts act as sports lecturers and sports teachers. The conclusions of the expert assessments carried out are summarized in table 4.1 below:

Table 1. Conclusion Test Expert To Model learning motion base locomotor jump with game simple

Code Expert	Number Question																						Total mark
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
	Results Evaluation																							
A1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	22
A2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	22
A3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	22

Based on results calculation table evaluation scale mark from expert towards learning models motion base locomotor jump entered in norm category as following :

Table 2. Calculation Normative Categorization Evaluation Observation Expert/ Expert

Information:

X = Total Subject Score

μ = Ideal Mean= $23\ x\ \left(\frac{1+0}{2}\right)$= 11.5

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σ = Standard deviation ideal = 1/6 [(23 x 1)] = 3.8

Refers to categorization the so results evaluation observation expert / expert on learning models motion base locomotor can known and presented into the table following This :

Table 3. Distribution Frequency Evaluation Expert Material / Game Expert

Intervals	Category	Name Game 1		
		A1	A2	A3
		F	F	f
X < 7.7	Not enough	0	0	0
7.7≤ X < 15.3	Enough	0	0	0
15.3≤ X	Good	22	22	22
	Amount	22	22	22
	Average		22	

Based on table distribution frequency above the total mark expert for learning models motion base locomotor jump that is expert one (expert education physical) of 22 lies in the interval 15.3 ≤ X. Total value expert two (expert motor) of 22 located on intervals 15.3 ≤ X. Total mark expert three (expert game) as big as 22 located on the interval 15.3 ≤ expert three (expert motor) of 22 is located in the interval 15.3 ≤ XTotal mark expert as big as 22 located on intervals 15.3 ≤ X. With use limit the minimum value is said feasible (valid) is 7.7. So, assessment expert material towards learning models motion base locomotor jump categorized as **good (worthy / valid).**

Model Effectiveness

1. Results Stage First/Trial Group Small

Model learning motion base locomotor jump For age elementary school Which researcher for after evaluated expert, then experience revision stage I. Data obtained used as base in do revision in stages First furthermore that is trials stage II.

Based on evaluation trials group small scale conducted by researchers at SD 5 Banawa middle, based on expert tests carried out about learning models motion base locomotion For elementary school age can withdrawn conclusion as following : (1) Based on expert tests carried out can concluded that learning model motion base locomotor is a viable learning model given to elementary school students . (2) For learning models motion base locomotor jump easy understood so that can makes it easier student in do movement, will but For can more convincing Again learning This will seen effectiveness and feasibility after trials group large (3) Hint implementation must made in a way clear so easy understood.

2. Results Stage Second/Test Group Big

After the results development Learning model products motion base locomotor jump For elementary school age , this tried out in scale small and has revised , then stage furthermore is do trials group big . Based on results trials limited (trial group small) which has evaluated by experts , then researcher do revision Learning model products motion base locomotor jump For elementary school age will be used in trials group big .

next step after the model experiences revision stage II of expert so next with try it out product to group big with use subject study consisting of 28 elementary school students from 2 schools namely SD 12 Banawa middle. Data evaluation from 28 participant to effectiveness model learning motion base locomotion For Primary age is shown in the table following This :

Table 4. Results motion base locomotor jump Student Treatment Attachment 1. Data Study

No	Motion base locomotor jump	
	Pretest	Posttest
1	83	90
2	76	92
3	75	90
4	83	94
5	80	92
6	82	92
7	76	86
8	81	86
9	80	90
10	78	96

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11	80	90
12	80	93
13	76	86
14	85	94
15	80	93
16	75	90
17	80	94
18	82	87
19	78	91
20	82	92
21	78	91
22	82	90
23	79	92
24	81	90
25	78	94
26	80	87
27	82	92
28	80	87

a. Mark Average

Table 5. Average Value

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest Motion Base	79.71	28	2,566	,485
	Posttest Motion Base	90.75	28	2,744	,519

Based on results *output* with use SPSS 16 that mark average results learning motion base locomotor jump before given model learning is 79.71 and after given treatment with a learning model of 90.75 meaning that mark average motion base manipulative throw catch exists enhancement.

b. Correlation coefficient

Table 6. Correlation Coefficient

Paired Samples Statistics

Based on results output table above that coefficient correlation learning before And after given model service lower is 0.519 with p-value 0.00 < 0.05 so the conclusion significant .

c. Significant Difference

Table 7. Significant Difference

Paired Samples Test

		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	Movement Pretest - Posttest Basic Movement	- 11,036	3,361	,635	- 12,339	- 9,733	- 17,375	27	,000

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In significance testing difference with SPSS 16 obtained results t- count = -17.375 df= 27 and p-value = 0.00 < 0.05 which means there is significant difference learning motion base manipulative throw catch before and after exists learning model treatment motion base locomotor jump.

Based on information the can said that model learning motion base locomotor jump For age school developed, effective basis can increase ability motion base locomotor jump For elementary school students.

DISCUSSION

Product Improvement

Based on acquisition numbers in the table above can concluded that learning model motion base locomotor jump For elementary school students can and deserve it For used in learning at school as well as effective For increase ability motion base locomotor student school base. There is comparison the numbers show results from test start and test end experience development , of test the beginning of which amounted to 1604 later given treat in the form of a learning model motion base locomotor jump Which Already developed Then new held test end or *post test* For know effectiveness model Which developed And obtained data amount 2212 becomes a learning model motion base locomotor jump effective For development learning motion base locomotor jump For elementary school students .

See weaknesses and strengths from product made there is input will be researcher convey sake achieved improvement product This, as for input is as following:

a. Use more equipment a lot and pay attention comfort as well as security can make child more maximum in carry out a learning model motion basics given by the teacher.
b. Characteristics and understanding students, requires the teacher to provide practice direct to student For learn perceived movements new For done.

Product Discussion

Learning model motion base locomotor jump made by researchers is purposeful products For help the teacher or coach in convey material learning motion base locomotor jump, boost ability motion base locomotor jump , and as reference material learning . Learning model motion base This made based on level need child in activity education physical specifically in activity Study teach motion base locomotor For child elementary school students.

Product This after studied about a number of necessary weakness improvements, then can be delivered a number of superiority product This among others:

a. Improving students' basic jumping locomotor movement abilities .
b. This model can make students more active and enthusiastic when learning basic locomotor jumping movements designed in the form of a game.
c. Students can feel comfort and safety in the process of learning basic locomotor jumping movements.
d. The basic locomotor movement learning model is more effective and efficient.
e. Can help teacher/trainer in process learning in school.
f. As a reference for learning at school.
g. Contribution to science, especially physical education in elementary schools
h. This learning model for basic locomotor jumping movements is carried out systematically from easy to difficult things.
i. Students are also required to think quickly and precisely.

1. Limitations Product

Study development This has attempted in a way maximum in accordance with ability from researchers , however in study This Still there is a number of limitations Which must recognized And stated as material consideration in generalize results from study Which achieved . As for limitations the including, among others following:

a. This research field trial would be even better if it was carried out on a wider scope
b. The product used is still far from perfect
c. The facilities and infrastructure used are still limited.
d. The explanation and rules in the learning model for basic locomotor jumping movements are still far from perfect.

4. CONCLUSION

Based on data Which obtained , from results test try field And discussion results study can concluded that :

1. With the learning model for basic locomotor jumping movements, elementary school students can learn the material effectively and efficiently.
2. With the basic locomotor movement material that researchers have developed, elementary school students can master jumping material quickly and correctly.

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