Model of Basic Locomotor Movement with Balance for 1ST Grade Elementary School Children

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Article Info	Abstract
	The purpose of this study was to obtain information in the process of implementing basic locomotor movement learning with balance, creating and transmitting the learning process with basic locomotor movement models with balance for elementary school children in grade I to obtain empirical data about the effectiveness and efficiency and interest of children from the motion learning process. basic locomotor with balance for elementary school children in class I and created a learning model book for teachers as a guide for teaching basic locomotor movements with balance for elementary school children. This will increase effectiveness and efficiency as well as increase children's motivation to learn basic locomotor movements with balance. This research was conducted at SDN Semanan 14 Petang, West Jakarta, with 32 children as research objects. This study uses the ADDIE learning development model, which in this model starts at the stages of Analysis, Design, Development, Implementation, and Evaluation. From the results obtained, the basic locomotor motion learning model with this balance turned out to be very effective to be applied in learning. From the results obtained, the basic locomotor motion learning model with this balance turned out to be very effective when applied in learning. This can be seen from the increase in pre-test and post-test by using the paired sample test on the SPSS 25.0 T-Test. The difference in significance on T-count is shown as -98.097 df = 31, p-value = 0.001 <0.05 ; With this, there appears to be a significant increase in the results of the assessment of children's skills at SDN Semanan 14 Petang Class I.

INTRODUCTION

Physical Education learning has an important role in shaping student health and fitness (Backman & Barker, 2020). Through physical activity applied during learning, students can improve their physical and mental condition and help maintain body balance (CDC, 2015). In addition, Physical Education Learning also helps students understand the importance of a healthy and active lifestyle. Through learning, students can understand the benefits of exercising regularly and living a healthy lifestyle, so as to apply it in daily life. Thus, Physical Education Learning has an important role in shaping students into healthy, active, and productive individuals (Setyono, 2017).

In order to assist elementary school-aged children in developing their basic motor skills, physical education teachers can follow the curriculum set by the government or by the school, and make use of various available learning resources and tools (Mahfud & Yuliandra, 2020). In addition, physical education teachers can also develop innovative and effective teaching strategies to assist children in the learning process and increase their motivation to participate in physical activities and sports (Hamid et al., 2019). Thus, special guidance and attention from physical education teachers can help elementary school-age children optimally develop their basic movement abilities and achieve healthy physical development (E. Pratiwi & Asri, 2020).

In the education curriculum in Indonesia, locomotor movement with balance is an important component of physical fitness learning material that must be developed and learned by students (Kohl & Cook, 2013). Balance is a physical fitness material that is practiced in elementary schools (Ragnarsdóttir, 2006). Locomotor learning with balance involves developing the ability to maintain a stable body position and control body movements appropriately (Lee et al., 2019). This can include exercises such as walking in a straight line, standing on one leg, doing yoga moves, and practicing balance apparatus. Good balance has many benefits, not only in physical fitness, but also in everyday life (Quennerstedt, 2019). By developing physical balance, students can reduce the risk of injury when doing physical activities or sports (Rejeki & Gunawan, 2021) (Gavin L Moir, 2015). Apart from that, good balance also contributes to correct body posture, better coordination, and increased performance in physical activities and sports (Krakauer et al., 2019).

Based on a survey conducted with sports teachers in elementary schools, data was obtained that so far the process of learning basic locomotor movements with balance has been carried out by them only in the form of learning activities which are limited to walking on a straight line (Nyberg et al., 2020). The problem occurred based on the survey, so it is suspected that teachers do not understand how to develop a learning model that can improve children's basic locomotor movement and balance skills while still looking at the characteristics at the elementary school level (Zhang, 2019).

Based on this, it is necessary to have the latest innovations in developing basic locomotor movement models with balance, especially at the elementary school level by looking at the developmental characteristics of children at that age who like playing activities (Komaini et al., 2021).

METHODS

This research uses the type of research and development (Research and development or R&D). This research adopts the development stages proposed by Gall, Gall, & Borg, in Iqbal (2020). This approach and research method for learning basic locomotor movements with balance uses the ADDIE (Analysis, Design, Development, Implementation and Evaluation) research and development model (Sri, 2012). The ADDIE model is described as a learning system designed as follows: The steps in the pre-development stage are reviewing relevant literature and research as well as preliminary studies throughout the development stage, namely preparing a model design (prototype), expert validation, limited scale trials, extensive testing, effectiveness testing and the result is a learning model product (Gustiani, 2019) (Hani Subakti, Dina Chamidah, Rosmita Sari Siregar Agung Nugroho Catur Saputro, Michael Recard Muhammad Nurtanto, Sony Kuswandi Rahmi Ramadhani, 2022). basic locomotor movements with balance for 1st-grade elementary school students (Silalahi, 2018).

A small-scale trial was carried out at SDN Semanan 14 with 15 grade 1 students. Large group trials were carried out at SDN Semanan 12, Semanan 13 and Semanan 08 with a total of 57 grade 1 students. The effectiveness test was carried out at SDN Semanan 14 with 32 grade 1 students (Marinda Sari Sofiyana et al., 2022).

Table 1. Findings from the state of implementation of development research

Results/Findings
1. The lack of basic locomotor support equipment with balance in schools.
2. Limited time teachers have to develop learning models.
3. The teacher's assumption in learning basic locomotor movements cannot be followed by many students
4. The lack of variations made by the teacher in terms of modifications so that in learning locomotor basic motion with standard equipment is still fixated without seeing the conditions in the field, a description of the characteristics of grade 1 elementary school students has been found.
5. A basic locomotor learning model has been found for grade 1 elementary school students. 6. The problem of learning basic locomotor movements has been found.

Data collection techniques by conducting pretest and post test using motion instruments, basic lokomotor movements. The results are analyzed, the point is to find out whether there is a percentage of skill improvement through the learning model given to students. This effectiveness value will arise from a significant visible improvement using a two-mean test calculation. The paired sample test of the SPSS16.0 program was used to calculate the results of this

effectiveness value, with a significance level of 0.05.

Table 2. One Group Pretest- Posttest Design Research Design

	Pretest	Treatment Posttest	
	O1	X	O2

Information:

X : Model Basic Lokomotor Movement With Balance
O1 : Pretest
O2 : Posttest

Data Type

There are two types of data collected from this study, namely qualitative and quantitative data. Qualitative data were obtained from: (1) interviews with elementary school teachers; (2) field notes; and (3) data on suggestions for improvement of the initial model draft and the results of observer observations on the implementation of small and large-scale trials. Quantitative data are obtained from (1) assessment on the scale of observation values of model implementation; and (2) assessment of effectiveness tests (Sugiyono, 2014).

Data Collection Instruments

General Interview Guidelines

The general interview guidelines contain a list of questions that outline the basic things to be asked. Interviews- how to develop questions to deepen information. The conduct of interviews is carried out openly so that informants know that research is being carried out and informants become one of the sources of information. The interviewer makes an outline and outline of the points that are

formulated, but do not need to be asked sequentially.

Test Drive Design

In testing the model that has been developed by implementing it into real learning. The teacher will provide an explanation of the learning model developed.

Participants

In this study, the research participants were grade 1 children at SD Semanan 14, 13, 12 and 08 in Semanan, West Jakarta. This research involved a total of 57 children as participants. These participants will be research subjects who will study basic locomotor movements with balance which have been designed according to the characteristics of elementary school children who like to learn while playing. Their responses to the learning model for basic locomotor movements with balance will provide important data to see the development of basic locomotor movements with balance in the elementary school children involved. By involving 1st grade elementary school children, this research is expected to provide improvements in the basic locomotor movements of 1st grade elementary school children.

Sampling Procedures

Stages of development learning model, setting targets in this case teachers as physical education learners and student assessment learning model that has been developed based on the following criteria: (1) evaluator who carries out the evaluation learning experts are determined based on their expertise; and

(2) who the evaluator is carry out the specified evaluation based on the practitioner's abilities who have been involved .

Materials and Apparatus

Data collection in this study was to review various literature or literature studies related to the model concepts that would be developed according to the product to be made and referred to needs analysis, expert review and field trials.

Procedures

Conceptually, research and devel opment approach includes 5 general steps, as explained in the ADDIE development model as follows: 1) Analysis, 2) Design, 3) Development 4) Implementation, 5) Evaluation, (Instructi onal Design: The ADDIE Approac) (Setyosaro & Suharsono, 2019).

Design or Data Analysis

To calculate the effectiveness test using (t-test) with an analysis of the difference between the two means for dependent samples. (arifin et al., 2022) (usmadi, 2020).

RESULT

In general, the results of the study are in the form of (1) The basic locomotor learning model for elementary school students in grade 1. (2) The basic locomotor motion model as a guide for learning the basic locomotor motion model for grade 1 elementary school students which presents 15 learning models for locomotor basic movement. This basic motion learning model is

implemented in 4 public elementary schools, namely Semanan 14 Elementary School, Semanan 12 Elementary School, Semanan 13 Elementary School and Semanan 08 Elementary School using the ADDIE development method (Analysis, Design, Development, Implementation, evaluation).

Results of Needs Analysis

The learning model for basic locomotor movements with balance can be carried out and developed for grade 1 elementary school students. B. This basic movement learning model was created by looking at the characteristics of the growth and development of grade 1 (one) elementary school students, so that variations in basic locomotor movement learning movements are made more interesting, challenging and efficient.

This first draft model is the second part of the ADDIE model, namely at the design stage. The target of this second stage is to design a learning model for basic locomotor movements for grade 1 (one) elementary school students that is ready to be validated by experts. There are 15 models for learning basic locomotor movements with balance that have been designed by researchers with various variations.

Analysis Phase

Based on the results of the needs analysis data that the researchers obtained through observations and interviews with physical education teachers, it can be seen that: 1). The process of learning basic locomotor movements is still monotonous, making students less enthusiastic about learning.

2) Physical education teachers need creativity and innovation in supporting the learning of basic locomotor movements.

Design stage

At this stage, the movement learning model prepared by the researcher has gone through a refinement stage based on input from the supervisor with the inclusion of images for the basic locomotor movement learning model with balance for lower grade elementary school students. From the results of the feasibility test carried out by experts, it was concluded that the model design given was that the model for learning a variety of basic locomotor movements with balance for grade 1 (one) elementary school students consisting of 15 models was declared feasible to continue.

Implementation

The next step is Implementation, at this stage the researcher applies two groups, namely a small group and a large group, this is done as a product implementation test and effectiveness test to test the effectiveness of the model. Gay and Diehl (1992) assume that the more samples taken, the more representative the sample and the results can be generalized. However, an acceptable sample size will depend greatly on the type of research. The sample in this study was for a small class 1 test at SDN Semanan 14 Sore Data Normality Test Table as many as 15 students, large group tests at SDN Semanan 12, SDN Semanan 13 and 08 as many as 57 students, and effectiveness testing at SDN Semanan 14 as many as 32 students. Based on the results of the implementation test of the basic locomotor movement learning model items for class 1.

(one) elementary school student in a large group, all 15 model items can be implemented in their entirety. And based on findings in the field during implementation, all students seemed enthusiastic in participating in the learning process.

Evaluation Phase

The following is a summary of the evaluation from expert validation which refers to the evaluation results based on the implementation stage: 1) Basically all items of the basic locomotor movement learning model with balance can be applied, but must be adapted to the available facilities and infrastructure. in schools to support the implementation of learning. 2) The learning process has gone well, this can be seen from the enthusiasm of the students in participating in the lesson, and here also the teacher must direct the students so that the students carry out the movements correctly so that the learning objectives can be achieved.

Tables & Figures

The results of the effectiveness test of the basic locomotor movement learning model carried out in this research were by applying 15 basic locomotor movement learning models with balance for students in class 1 (one) of elementary school, namely SDN Semanan. 14 students totaling 32 subjects in the experimental group were given treatment using a variety of models. learning basic locomotor movements with balance.

This test is carried out to determine the results before and after treatment. After collecting data on the pre-test, namely 1,114, then data collection was carried out again on the post-test and had a total of 1,783. Based on the description above, there are differences in the results between the pre-test and post-test, so it can be concluded based on the pre-test and post-test scores that a basic locomotor movement learning model with balance for grade I (one) elementary school students was developed. effective and can improve students' basic locomotor movement abilities.

Based on the table above, which has been calculated using SPSS, normality data is obtained at pre-test 0.06 and post-test 0.017, both data are greater than alpha, 0.05. Thus it can be concluded that both data are from normal disbruded populations. The average pre-test score was 35.13 and the average post-test score after dividing the basic locomotor movement learning model with balance was 55.72, which means there was an increase resulting from the pre-test on the post-test. Between the pre-test and post-test, the results obtained were t-count = -98.097, df = 31 and p-value = 0.001 < 0.05, which means there was a significant difference between before and after being treated with the basic locomotor movement model with balance.

In the average difference test with SPSSbtained mean = -20.594 shows the

Based on these results, it can be concluded that through the basic locomotor movement learning model developed by researchers, the researchers can improve the basic locomotor

movement abilities with balance in grade 1 elementary school students, meaning that the learning model developed has significant effectiveness.
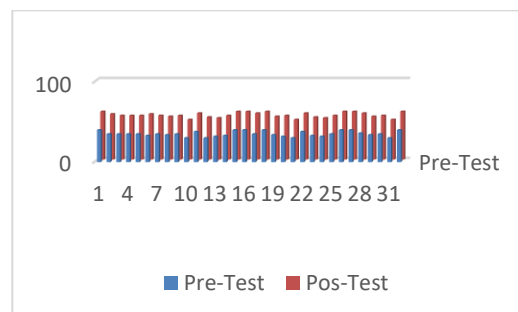

Fig 1. Graphic

The graph above produces recorded data before and after the treatment of the basic locomotor movement learning model with the balance of 1st grade elementary school students. The results obtained were pre-test 35.13 and post-test 55.72. From the graph above it can be concluded that there are changes from the pre-test and post after treatment so it can be said that there are effective and significant changes.

The test results obtained before and after the treatment of the basic locomotor movement learning model in class I (first) students, the significance test was carried out using SPSS 29 with a mean of -20.594 which shows that there is a difference between the pre-test and post-test results, tcount results - 98.097 df 31 p-value = 0.001 < 0.05 which shows that there is a significant difference between before and after treatment with the basic locomotor movement learning model in grade I (one) elementary school students. Based on the research results obtained, it can be concluded that the model for learning basic locomotor movements with balance for grade I

(first) elementary school students that was developed has a significant level of effectiveness.

DISCUSSION

Research and development learning model for basic locomotor movements with balance for grade 1 elementary school students Strive to the maximum in accordance with writer's ability, but there are still some limitations that must be declared material for consideration in drawing conclusions the results achieved. These limitations include: following: (1) this field trial the research was only carried out in one place The place is sdn semanan 14 west jakarta with a limited population; (2) learning is devoted to learning basic locomotor movements for elementary school students In grade 1; (3) some are psychological factors that are thought to influence research results that cannot be done controlled, including: interests, self-confidence, and other psychological aspects factor; and (4) there are other factors which is thought to influence research results that cannot be done controlled, such as physical condition factor.

Students learn locomotors The approach is taken with consideration available resources and basic locomotor movements with balance skills which are then packaged in form games by promoting enjoyable situations using strategies, methods, materials and media that is interesting and easy to do. Rusman in (Esminarto et al., 2016) stated that is the determination of the learning model that will be carried out used in learning

activities must pay attention to: (a) goals to be achieved, (b) learning materials or materials, (c) students, and (d) other non-technical considerations. Through the developed game model, students are invited to explore, discover and make use of objects that are easy to find, so learning becomes easy and fun so game approach will be very supportive successful learning process of basic locomotor movements because it touches cognitive, affective and psychomotor aspects of students (Eka Fitri Novita Sari, 2016). can be divided into three domains, namely the cognitive domain, the affective domain, and psychomotor domain domain. The essence of this game is physical activity carried out in earnest, voluntary, and fun. (S. Pratiwi et al., 2022) (Hidayat & Juniar, 2020). Playing is essentially a activities for entertainment. We defines play as non-competitive physical entertainment, even if playing is not must be physical. Play no means sports and physical education. Learning basic locomotor movements is also involved physical activity carried out in seriously to achieve their learning goals. (Nyberg et al., 2020). Through the drama approach, learning objectives will easy to achieve because students will do it engage in physical activity voluntarily, happily, and happily. (B.H. Susanto & Listianingsih, 2019) (Muzakki, A., & Fantiro, 2020).

CONCLUSION

Learning models of basic locomotor movements with balance for elementary school students is according to its characteristics students and effectively to improve learning basic

locomotor movements. But not only innovative and varied learning the model must continue to be developed. This is due to physical dependence teacher education at standard facilities and learning approaches in presentations basic techniques and internal standards according to the curriculum.

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