

Available online at : <http://journal.unj.ac.id/unj/index.php/gjik>
Gladi : Jurnal Ilmu Keolahragaan 12 (04) 2021, 303-313
Permalink/DOI: <https://doi.org/10.21009/GJIK.124.09>

LEARNING MODEL THROWS CATCH IN ELEMENTARY SCHOOL CHILDREN OF LOWER GRADE AGE

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ABSTRACT

This study aims to produce a catch and catch learning model for elementary school students. This study used a research and development method by Borg and Gall by using 10 stages where the subjects in this study were elementary school students of lower-class age in the Kepahiang district. This study produced 21 Throw Catch Learning Models which are effective for improving the learning outcomes of catch and catch in elementary school students where this learning model has been validated first by a validation team consisting of one physical education teacher and two physical education teachers, based on the results of the small group test. and the results of the large group test of the learning model developed were declared valid and feasible to be used in catch-catch learning.

Keywords: Learning Model, Throw Catch, Lower Class Age.

INTRODUCTION

Physical education is an integral part of education where physical education is an educational process that is quite representative in preparing and developing full potential by balancing the development of knowledge and motor development, as stated by Samsudin in his book, Design and Curriculum for Physical Education, Sports and Health, Samsudin (2014) states that "Physical education is a learning process through physical activities designed to improve physical fitness, develop motor

skills, knowledge and behavior of healthy and active living, sportsmanship and emotional intelligence" (samsudin, 2014: 151).

Another opinion from Saputra (2011) states that "physical education learning plays a role in improving the quality of students. The occurrence of positive changes in student behavior such as moving habits, maintaining fitness, discipline, respecting friends is one of achieving indicator learning outcomes

through physical education (Saputra, 2011: 474).

Physical education is expected to be able to facilitate the movement needs of students as the basis for developing psychomotor aspects which are very useful for growth and development. For example, the basic movement learning process in physical education aims to develop the quality and quantity of movement in students so that students are able to move optimally, such as walking, running, jumping and other motion activities that are often done in daily life.

Gallahue (1996) in Deli, Bakle, & Zachopoulou (2006) states that *“During the early years, children spend much time interacting with their environment through movement activities such as crawling, walking, and jumping. This developmental period is critical if the child is to master the gross motor skills. Skillful movers are those who perform fundamental motor skills (stability, locomotor, manipulative) or specialized motor skills with control, efficiency, and coordination”* (Deli, Bakle, & Zachopoulou, 2006: 6).

Remembering how importance physical education as a needs in growth and motor development in children from the age of growth, physical education learning must

be able to adapt to the needs and psychology of students in the learning development process.

Throw-and-catch learning model is a manipulative motion that involves control over an object where there are two classifications of skills from manipulative motion, that is receptive and propulsive, receptive skills are receiving an object such as catching and propulsive skills have the characteristics of exerting force or force on an object, such as hitting, throwing, bouncing and kicking.

Manipulative skills are the basics of various game skills, movements that require energy such as throwing, hitting, kicking and receiving objects, such as catching are important skills that can be taught using various types of balls or by using other assistive devices.

In the implementation of the learning process, a physical education teacher should be able to mastering learning content well, Heidorn, (2015) states that *the teacher of physical education and the coach of children and youth sport teams need to have a reasonable mastery of the sport activities they will teach to their students and players — that is their content knowledge”* (Heidorn, 2015 : 3)

Based on the facts in the field, researchers made observations, it was found that the low basic movement ability of throwing and catching this was because there were still many students who were not optimal in carrying out movements, lack of creativity and teacher innovation in developing throwing and catching motion learning so that learning seemed monotonous and boring, so that students are less active in learning and result in learning objectives not being achieved.

Researchers conducted research by making a learning model of throwing and catching for lower grade elementary school children with the hope of providing a stimulus that can stimulate student activity to learn so that the learning process makes children entertained, motivated and the learning objectives of throwing and catching are achieved properly.

Basic movement has an important role in learning physical education in schools, as stated by BNSP (2006) in Hanief and Sugito (2015) stating that "one of the goals of implementing physical education, sports and health in elementary schools is to improve movement abilities and skills. basis." (Hanief & Sugito, 2015:61).

Basic movement skills or often known as fundamental motor skills are a

foundation for special skills that are used for various activities of daily life, especially for children. We can see this from various activities such as playing, sports, social interaction, and so on, which usually each activity has special characteristics of movement skills.

Williams H. Edwards (2011) states that "Fundamental motor skills such as walking, running, leaping, jumping, throwing, balancing, and climbing are gross motor skills". (Williams H. Edward, 2011:56).

Basic movement skills are not only the foundation of movement skills but also affect the growth and development of children and children's interactions in accordance with their environment.

Then Cain C. and T. Clark (2016) stated that "Fundamental movement skills are considered the basic building blocks for movement and provide the foundation for specialized and sport-specific movement skills required for participation in a variety of physical activities". Fundamentals are considered to be the building blocks for movement and provide the basis for the specific movement skills and sports required to participate in various physical activities (Cain C. T. Clark, 2016 : 261).

Basic movement skills include manipulative motion or object control, locomotor movement skills characterized by body movement, and balance or stability as part of making special skills according to needs, such as sports activities and play activities.

Hand (2012) states that: Fundamental movement skills, usually referred to as FMS, are basic building block or precursor patterns or the more specialized, complex skills used in organized and non-organized games, sports, and recreational activities. They may be categorized as body management (such as balance, roll, climb), locomotor (such as run, jump, hop, swim) and object control (such as catch, kick, throw, strike) skills to facilitate evaluation and lesson programming” . (Beth P. Hands, 2012:11).

There are several things that must be known about basic movement skills which are more broadly to make human life healthier and better in the present and in the future. Besides, if children have good movement skills it will be very useful for children in achieving a healthy life. better, in terms of health and achievement in the future. The following is a picture of the development of basic movement skills.



Figure 1. Long-Term Atlet Development Colin Higgs dkk, Developing Physical Literacy A guide for parents of children age 0 to 12 (Canada: Canadian Sport Center, 2015)

Learning is an interaction in the educational process between students, teachers, and the surrounding environment, Setiawan and Triyanto (2014) stated that "Learning can involve two parties, namely students as learners and teachers as facilitators" (Setiawan & Triyanto, 2014:40).

The same thing was also conveyed by Cegi Riyana in Setiawan and Triyanto (2014) stating that learning is a learning process where in this process a reciprocal relationship occurs, namely providing and obtaining knowledge between teachers and (Setiawan and Triyanto, 2014).

Good and correct learning is how an educator is able to create a comfortable, conducive learning atmosphere, attract students' attention and be able to meet the needs of students in the learning process.

In physical education in creating a learning atmosphere, the thing that can be done by a teacher is to innovate in the

learning model. learning model can be interpreted as a plan in preparing learning strategies that aim to create an active, appropriate learning atmosphere, and able to meet the needs and tasks of students both theoretically and practically.

Schmidt in Munasih (2016) states that learning motion is a learning process related to training or experience that will cause relatively permanent changes in an individual's ability. Movement learning has a very important role in physical education where this learning will involve the psychomotor domain in an effort to achieve the goals: (1) Developing body movement skills; (2) Mastering the movement patterns of sports skills; (3) Expressing patterns of good personal and interpersonal behavior in competitions and dances.

Then Awi Muhadi Wijaya in Rismayanthi (2013) states that childhood is a very ideal period for children to learn motor skills for the following reasons: (1) The child's body is very flexible than the body of adults so this is very helpful for children in learning motor skills, (2) Children are still not much in learning motor skills so that things will not clash with what has been learned previously and children will find it easier to learn motor skills. (3) Overall, at this time children are more daring to try than after

they grow up because children are very curious about new things so that this will lead to motivation for children to learn. (4) Children like repetition, so they will be willing to do repetition until they are trained effectively, (5) Children at this time have more time to learn motor skills (Rismayanthi, 2013:66).

Throw-and-catch learning which is a manipulative motion is given to students in an effort to form the basic motion foundation of physical education learning.

With regard to motor learning, it should be very appropriate if it is started when the child begins to actively move, because the effects of motor learning will be felt for the growth and development of the child as a whole, one of which is for the child's physical and motor development.

Fikriyanti in Hidayat (2013) states that motor skills have a very close relationship with the development of body movement control, this is formed through coordinated motor activities between the nervous system, muscles, brain, and spinal cord (Hidayanti, 2013:196).

Throwing and catching are basic manipulative movements where this manipulative motion is a motor skill movement that involves mastery of objects outside the body by the body or body parts.

Hanief and Sugito (2015) stated that "Throwing is a manipulative motion to keep objects away from the body by using one or two hands.

Throwing is a basic skill possessed by every sport in general, such as softball.

Rihatno & Djumidar (2015) stated that throwing is an important basis in softball games because every right and hard throw is a good weapon in guarding or fielding. (Rihatno & Djumidar 2015:34).

Given that throwing is a very important basic skill in the implementation of motion in sports, throwing must also be done correctly, the good and bad of the throw that is made is also influenced by the way you hold the ball.

Throwing is divided into two parts as stated Fitriani (2016) stating that "on the basis of the high and low of the ball bounce, the throw is divided into two, namely: Throwing the ball soaring high, used for long-distance passes. Flat ball throws are useful for short-range passes and shooting the ball towards the opponent's body "(Fitriani, 2016:4).

Catching is also a part of manipulative motion where this catch movement in the game is generally done to stop the ball or object being thrown.

Gallahue and Ozmun in Widiastuti (2016) states that catching is stopping an object either from below or from above where this catching movement uses the hands to reduce pressure or force that comes from below or from above one's head. (Widiastuti, 2016:171).

Catching is another basic skill apart from throwing which is used in softball, Rihatno & Djumidar (2015) state that catching the ball is an effort made by players to be able to master the ball thrown by using a glove, catching the ball is divided into three types, namely catching the ball straight, catch the ball, and catch the ground ball. (Rihatno & Djumidar, 2015).

Elementary school is the right place to develop children's movement abilities, the same thing was also conveyed by Rachnat Dody Ariesna and Kusumawati (2018) stating that "Elementary school (SD) students' physical development is a period of very rapid physical growth, which can clearly be seen in the growth of elementary school students. motor skills, very striking muscle coordination". (Dody Ariesna & Kusumawati, 2018)

Mustaqim (2016) states that "Elementary School is one of the facilities that can facilitate in training and processing children's movements so that children can

have good movement skills and subsequently can have a good level of physical fitness" (Mustaqim, 2016:40).

Based on what Mustaqim and Rachmat have said, elementary school is the right place for children to develop themselves because in elementary school children will be given learning materials related to training the movement abilities of children.

The process of maturity in children can be formed from routines that are often carried out repeatedly so that it becomes a habit pattern for children where in the formation process this is carried out gradually and adjusted to the age conditions of the child.

Kurnia in Rima Trianingsih (2016) stated that "Elementary school age children are children who are in the age range of 6 to 13 years with unique characteristics and are currently studying at the SD/MI level". (Trianingsih , 2016:199).

Apart from that, there are several views regarding the condition of elementary school-aged children as stated by Soeparwant, Sohhibin, Dwijananti, (2009) stating that "Educators give names to children aged 7-10 years with the name "Critical period in the drive for achievement" . Achievement behavior at this time has a very high correlation with achievement

behavior in adulthood" (A. SohhibinP, P. Dwijananti, 2009:97).

Awi Muhadi Wijaya in Rismayanthi (2013) states that childhood is an ideal period for children to learn motor skills for the following reasons: (1) The child's body is very flexible than the body of an adult so that this is very helpful for children in learning abilities. motor skills, (2) Children still do not learn much motor skills so that things do not clash with what has been learned previously and children become easier in learning motor skills. (3) Overall, at this time children are more daring to try than after they grow up because children are very curious about new things so that this will lead to motivation for children to learn. (4) Children like repetition, so they will be willing to do repetition until they are trained effectively, (5) Children at this time have more time to learn motor skills (Rismayanthi, 2013: 66)

A more specific view on the growth of elementary school children is conveyed by Rithaudin (2011) stating that there are three characteristics that stand out in children aged 6-10 years, the characteristics of movement and physical growth where children experience a slow growth pattern with an increase that occurs in this period not will be better than the previous period then the proportions of the body will begin to elongate

with the increase in height and weight, large muscles will be more dominant than small muscles in this growth phase there will be a difference in growth between girls and boys where the growth of girls is faster until approaching the puberty phase then the child's eye-hand and eye-foot coordination is not so good and at this time the child begins to be able to master basic movements that are relatively complex or difficult, especially at the end of the phase, the two characteristics of cognitive growth where at this time the child has a high curiosity big and they prefer to study with children who are more mature but still need assistance in decision making, children will prefer to learn something they really like, they will start imagining but are still unable to describe things clearly, the three characteristics of affective growth affective growth where in At this time children have a high interest in doing activities but will be greatly influenced by motivation then children have a high ego, aggressive and critical in dealing with certain situations then they will be very responsive to the punishment given if they are wrong. (Rithaudin, 2011)

Rithaudin's opinion regarding the characteristics of movement growth in elementary school children is reinforced by what Mudayat in Bustanol Arifin (2019)

states that there are three periods of basic movement development for elementary school children, the first is the basic movement development phase that occurs at the age of 2-7 years after that the child will enter a transition phase at the age of 7-10 years and the third is the specification phase for children aged 10-13. (Arifin, 2019)

METHOD

The research method in the study of the throw-and-catch learning model for lower grade elementary school children uses Research and Development (Research and Development) from Borg and Gall. This research and development consists of ten steps, including:

(1) Research and information collecting (2) Planning (3) Development of the preliminary form of product (4) Preliminary field testing (5) Main product revision (Main field test (7) Operational product revision (8) Operational field testing (9) Final product (10) Dissemination and implementation.

The research steps are as follows:

(1) Conducting preliminary studies or research and gathering information (library review, subject observation, and preparation for making the subject matter), (2) Making

and carrying out a plan (definition of basic locomotor movements, formulation of learning objectives, determination of tests, expert tests, and small-scale trials), (3) Develop initial product development (preparation of materials, preparation of teaching materials/books, videos and evaluation tools), (4) Conduct early-stage field trials or small groups. (5) Revise the product based on the results of the initial field trial (after input and advice from experts), (6) Conduct the main field test or large group trial, (7) Revise the operational product (after there is input and feedback). advice from experts), (8) Conduct main product tests, (9) Revise the final product based on suggestions and results of field trials, (10) Make reports on products in the form of journals and collaborate with publishers to carry out commercial distribution.

RESULTS AND DISCUSSION

The results of the preliminary study or field findings are then described and analyzed with reference to the objectives of the preliminary study. The following will describe the results of the needs analysis and field findings obtained by researchers.

First Stage Results/Small Group Trial

In small group trials, data will be obtained about the ease of the throw-and-catch learning model for elementary school students. The results of the observational data collected by the researcher can be seen that: (1) The throwing and catching learning materials are used every semester, (2) the throwing and catching materials are less varied so that students do not focus and get bored quickly. (3) It is necessary to develop a throw-and-catch learning model.

The trial subjects in the small group trial were carried out at the State Elementary School 02 with a total of 15 subjects. After carrying out the data collection stage and drafting a throwing-catch learning model, the next step is to conduct an expert test where the goal to be achieved is to obtain the feasibility or validity of the model made with direct assessment from experts. Based on the expert test conducted, it can be concluded that the variation of the throwing and catch learning model for elementary school students is feasible and can be used in learning.

The expert test carried out contained several constructive suggestions to improve the elementary school age balance model, including: (1) The use of media/tools must prioritize the safety and security of students; (2) the use of media/tools used is suitable for

elementary school students (3) the media tools used must be colored; (4) Implementation instructions must be made clearly so that they are easy to understand.

Based on the evaluation of small group trials conducted by researchers, it can be concluded that basically all learning models can be applied but must be interesting and adapted to the child's abilities.

Results of the second stage/Large group trial

The next step after the model underwent a phase II revision from experts, it was continued by testing the product to a large group using research subjects as many as 100 elementary school students consisting of 3 elementary schools, SDN 08 and SDN 04 Seberang Musi District, SDN 06 Kepahiang. Kepahiang District.

There is a comparison of numbers which shows that the results of the initial test and the final test have developed, from the initial test or pre test before the treatment of throwing and catching learning models with a score of 285.73 was given treatment in the form of a developed learning model and then a final test was held. or post test to determine the effectiveness of the developed model and data obtained amounted to 299.33. In the significant difference test with SPSS 16, the

mean -13.600 showed the difference between the results of the pre-test and the results of the post-test, the results of t-count = 13,377 df = 29 and p-value = 0.00 < 0.05 which means there is a significant difference between before and after being given the treatment of the throw-and-catch learning model to lower grade elementary school age children.

For more details, see the table below:

Table 1. Results of Pre-test and Post-Test

		Paired Samples Test					t	df	Sig. (2-tailed)
		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	pretest - posttest	13,600	5,568	1,017	15,679	11,521	13,377	29	,000

Based on the histogram diagram data, the comparison of the results of the Pretest and Posttest of throwing and catching skills which has a significant comparison between the Pretest and Posttest, it can be concluded that the Throwing and Catching Learning Model for Elementary School Students can effectively improve students' abilities in throwing and catching activities.

The results of the second phase of the trial using this model were found to be effective for catching and throwing lessons for elementary school students.

After reviewing some of the weaknesses that need improvement, some of

the advantages of this product can be conveyed, including Increasing students' courage and ability with balls, students becoming more active, and enthusiastic in learning throw catch, throwing and catching learning models for elementary school students are effective and efficient, As a reference for teaching materials for teachers.

This development research has been maximally pursued in accordance with the abilities of the researcher but in this study, there are still some limitations that must be acknowledged. The limitations include the following: Field trials of this research would be even better if carried out on a wider scope, the products used were far from perfect, the explanations and regulations in the throwing and catching learning model were far from perfect.

CONCLUSION

Based on the data obtained, from the results of small group trials and field trials and discussion of research results, it can be concluded that: (1) Through the development of the throwing and catching learning model that has been developed by researchers, student learning outcomes can increase and the throwing and catch learning process becomes varied. and students are passionate about following the lesson. (2) the throw-and-catch learning model, effective for

improving the learning outcomes of throwing and catching for elementary school students.

The development of this throwing and catching learning makes students more active in doing physical education learning and becomes effective and efficient.

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