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The Simple Game of the Learning Model Approach on Elementary School Students

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Abstract

This study aims to produce a product model of learning devices through a simple game to improve the speed and agility of upper grade of elementary school students, as well as determine the feasibility and effectiveness of learning device models through simple games.This learning device model was developed to be used by upper grade elementary school students, during PJOK learning, so that upper grade elementary school students are able to maintain speed and agility performance during PJOK learning. The method used in this research is a research and development method (Research and Development) the Borg & Gall model which reviews problems, data collection, product design, design validation, design revisions, product trials, product revisions, usage trials, product revisions, and dissemination. The subjects of this study were PJOK teachers and elementary school students. The trials carried out included two stages, namely small-scale trials conducted on one PJOK teacher with 20 students, large-scale trials with two PJOK teachers with 40 students, and an effectiveness test with two PJOK teachers with 40 students. Based on the findings of the data and analysis, the researcher describes several parts of the findings through the validation assessment of material experts, obtaining an average rating of 3.83 in the "good/decent" category, validation by media experts obtaining a rating of 4.1 in the "good/decent" category. "good/decent", and the validation of Indonesian language experts received an assessment of 3.9 in the "good/decent" category, at the small-scale trial stage, the teacher's assessment results were obtained at 4.2 in the "very feasible" category and the test results speed and agility by 60% and 50% in the "enough" category, at the large-scale trial stage, the teacher's assessment results were obtained by 4.3 in the "very decent" category and the speed and agility test results were 75% and 65% with category "worthy". Based on the effectiveness test of the speed variable with the 40 m sprint test, the pretest value was 5.5% and the posttest was 90%. The agility variable with zig-zag running (Illinois Aglitiy Test) obtained a pretest value of 47.5% and a posttest of 82.5%. It can be concluded that producing a learning device model through a simple game that has been validated for its feasibility and tested for its effectiveness in increasing the speed and agility of upper grade elementary school students.

Keywords: *Simple Game, Speed, Agility*

Introduction

Education is essentially one of the basic human needs in order to improve the quality of human resources in order to achieve an increasingly advanced and prosperous nation's level of life. The attainment of quality education is one of the factors that influence the success of students in the future. Schools have a very important role as a place for students to process the knowledge, skills and impersonal competencies needed for their development in adulthood so that they have a positive contribution to life in society.

Through the scope of the school will provide a learning experience that is not obtained at home. The purpose of education is a factor that is very, very important in education, because this educational goal is the direction to be achieved or to be aimed at by education. In its implementation, education cannot be separated from a goal to be achieved, this can be proven by the implementation of education experienced by the Indonesian people. The goals of education that were valid during the Old Order were different from the goals of education during the New Order.

Since the New Order until now, the formulation of educational goals has always changed in accordance with the demands of development and the development of the life of the Indonesian people and state. The Purpose of Education in Law. No. 20 of 2003 concerning the national education system, article 3 states that the purpose of education is to develop the potential of students to become human beings who believe in and fear God Almighty, have noble character, are healthy, knowledgeable, capable, creative, independent and also become democratic citizens. responsible. The above national education goals must be strived to be achieved by all education providers in Indonesia, especially education that is formal in nature. To achieve this, it takes a long time and requires a more specific analysis of the objectives of each level of education according to the ability level and needs of students. The purpose of basic education is to provide students with basic abilities to develop their lives as individuals, members of humanity and to prepare students to attend secondary education. The basic education goals above convey the meaning that the basic education goals are the foundation, basis or stepping stone to achieve higher education goals.

Elementary school is one of the levels of education in Indonesia which lasts for 6 years and is a low level formal education level which determines the character

formation of students in the future. It is at this level that the child first gains knowledge and also instills values that will later be useful in his life. Parents and teachers work hand in hand in directing children to be able to become intelligent individuals academically, spiritually, and also emotionally. This formation was carried out in stages and adapted to the portion of the children's comprehension at that time. At this time children will be taught various sciences or subjects that are relevant to their age level and of course that will support the continuation of their education to a higher level.

Childhood is an excellent opportunity for learning, namely optimizing the development of knowledge and skills (speed and agility) of children. It is during childhood that children gain more movement experience by playing both individually and in groups according to their age characteristics. The period of growth and development is very important as a provision for children when they enter school age. During elementary school children will learn through movement or playing games in PJOK lessons with the aim of maturing basic movements (Fitriani & Bayu, 2019: 249).

PJOK subjects in general are subjects that are liked by students. Because PJOK is education that uses body movement activities as teaching materials to achieve goals. Students starting from elementary school to high school prefer this subject over other subjects because PJOK tends to do learning outside the classroom. Of course, by learning outside the classroom, students' brains become more relaxed and relaxed, the physical exercise that is carried out also causes students to sweat which has an impact on student fitness so that in subsequent learning students can be more enthusiastic. Apart from that, PJOK learning also encounters several obstacles, including the limited space for PJOK learning available at school, there are still several PJOK teachers who simply drop their obligations which in the end leaves a problem. The results of a preliminary study conducted in October-November 2022 using observations and interviews with PJOK teachers with PNS and Honorary status at public elementary schools in Batulayar District, West Lombok Regency, West Nusa Tenggara Province. Based on the results of observations of students, several problems were found, namely the movement of students seemed less due to a lack of sports activities during the corona outbreak in 2019 to 2021 which caused a decrease in the quality of physical fitness, especially speed and agility in students. When PJOK learning takes place, students only look

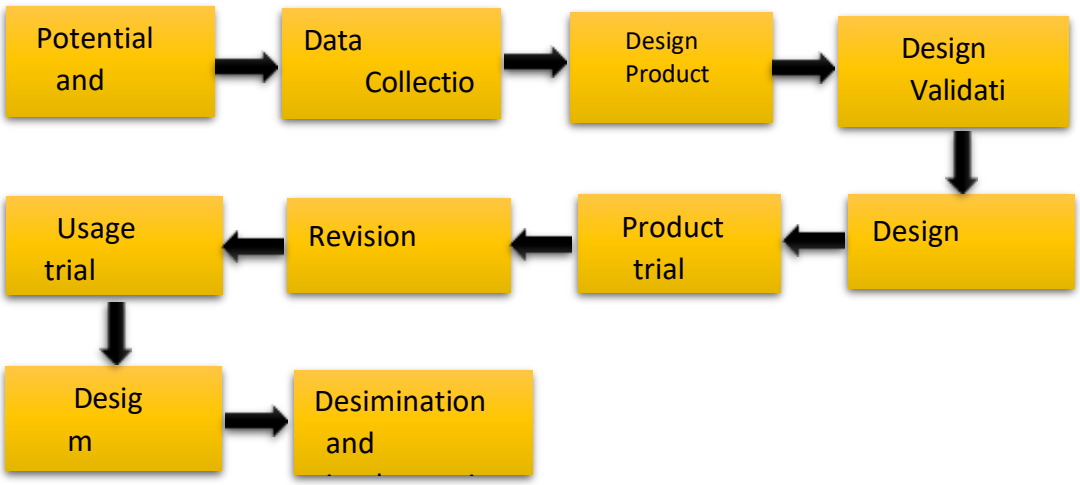
active and enthusiastic in the early minutes of learning, therefore the author will develop a simple game to help increase the speed and agility of students and the teacher will be assisted in the learning process taking place by using a book that will developed by the author and several other problems that were found when observing showed: (1) students were lazy to move during PJOK learning, (2) Learning seemed monotonous (3) The teacher's lack of creativity in packaging the learning process, (4) The number of Limited hours of lessons to provide athletic learning materials, especially fast running and agility, The number of hours of lessons is said to be limited because the time allocation for PJOK lessons in elementary schools is only once a week (3 x 35 minutes), and (5) Limited space for children's movement available at school .

Based on the background above, it is necessary to have a solution, therefore the researchers raised a title "Development of models of learning devices through simple games to increase the speed and agility of elementary school students".

Research Methodology

This type of research is research and development (Research and Development), namely the type of research used to test and produce products.
According to Sugiyono (2019: 752), research and development methods are research methods used to produce certain products and test the effectiveness of these products. Borg and Gall translated by Sugiyono (2019: 764) state that in research and development there are ten implementation steps, namely (1) potential and problems, (2) data collection, (3) developing the initial product (product design complete with specifications). , (4) initial trial, (testing the product to a limited area/subject), (5) revision to develop the main product, (revision of the product based on the results of the initial trial), (6) main field trial, (trial on the product , revision results to a wider area), (7) operational product revision, (product improvement at a higher gradation, to be tested on actual work), (8) operational product trial (product effectiveness test), (9) final product revision, (effective product revision), (10) dissemination & implementation.

The procedure for developing this simple game activity model refers to the steps written by Borg and Gall translated by Sugiyono in 2019, namely as follows:



Picture 1. The Steps of Method Research and Development oleh Borg and Gall

Source : Sugiyono (2019: 764)

Data Collection Techniques and Instruments

The instruments used to collect data in research and development are as follows.

a. Interview

The interview technique in this study used a free guided interview technique.

Arikunto (2013: 199) explains that free guided interviews are interviews conducted by asking questions freely but still following the interview guidelines that have been made. Questions will develop during the interview. Question items include: (1) the learning process is in accordance with the characteristics of the child, (2) the teacher's understanding of physical fitness, (3) the success rate of the learning process, and (4) the difficulties experienced by the teacher in the learning process.

b. Observation

According to Sugiyono (2015: 204) observation is an activity of loading research on an object. When viewed in the process of implementing data collection, observations are divided into participants and non-participants. The Likert scale is used as a measure of attitudes, opinions, and perceptions of a person or

group of people about the social phenomena to be measured and translated into variable indicators.

This indicator is used as a starting point for compiling instrument items in the form of statements or questions. Answers using a Likert scale can have positive and negative impacts, namely Strongly Agree (SS), Agree (S), Disagree (TS), Strongly Disagree (STS). In analyzing the results of quantitative research, each instrument item is given a score of 4, 3, 2, 1, by ticking according to the choice.

c. Effectiveness Test Instrument

The Effective Test was in the form of a speed measurement test using a 40 m running test, and for agility measurement tests using Illinois aglitiy tests with the following criteria.

Table 1. 40 Meter Fast Run Rating Table

Category	Boys	Girls
Very Good	Sd. – 6.3 second	Sd. – 6.7 second
Good	6.4 – 6.9 second	6.8 – 7.5 second
Moderate	7.0 – 7.7 second	7.6 – 8.3 second
second	7.8 – 8.8 second	8.4 – 9.6 second
Less second	8.9 - dst	9.7 - second

Sumber: (Sepdanius, 2019: 55)

Tabel 2. Penilaian Lari Zig Zag *(Ilionis Aglitiy Test)*

Kategori	Putra	Putri
Very good	➢ 15.2	➢ 17.0
Good	16.2 – 15.2	17.9 – 17.0
Moderate	18.1 – 16.2	21.7 – 18.0
Second	18.3 – 18.1	23.0 – 21.8
Less second	➢ 18.3	➢ 23.0

Source : (Widiastuti, 2012: 128)

Data Analysis Techniques

The data analysis techniques used in this study were quantitative descriptive analysis and qualitative descriptive analysis. Quantitative descriptive analysis was carried out to analyze the following data.

a. The value scale data is the result of the material expert's assessment of the game model draft before conducting field trials.

b. Data from material experts' observations of game models during small-scale or large-scale trials.

c. Data from the observations of material experts on the effectiveness of the game.

On the other hand, qualitative descriptive analysis was carried out for the following purposes.

1. Data from interviews with SD PJOK teachers during the preliminary study.
2. Lack of data and input on game models both before trials and after trials in the field.

Findings and Discussion

Findings

Based on the results of the material expert validation, it can be said that the development of a practical guide to learning device models through simple games to increase speed and agility for upper grade elementary school students is stated to be "good" from the material aspect for each type or model of game, this is evidenced by the value categories obtained ten types of simple games, namely: (1) bentol game (scramble for bottles), (2) lasambo game (running the ball), (3) bokardus (cardboard ball) game, (4) temple seizing game, (5) moving game marker, (6) corruption and police game (7) crossbar color game (8) gold game (scramble for headquarters), (9) bolnas game (hot ball), star switch game

Data Analysis

The data obtained at the product development stage is in the form of validation data from material experts, media experts, and Indonesian language experts, data from product trials on small scale trials and large scale trials, as well as data from field trials.

1. Analysis of Data Validation Material Experts, Media Experts, and Indonesian Language Experts

The eligibility criteria for the practical guide product model of learning devices through simple games to increase speed and agility for upper grade elementary school students are declared feasible to use if they are in the range of an average score of > 3.4 - 4.2 or in a good category. The assessment instrument for

material experts, media experts and Indonesian language experts each consisted of 12 questions. The highest score is 5, the lowest score is 1, the ideal average is 38, and the ideal standard deviation (SBi) is 8. More detailed calculations can be seen in the attachment to the conversion of scores for material experts, media experts and Indonesian language experts.

Material expert validation results of 3.8. Media expert validation results of 4.1. The validation results of Indonesian language experts were 3.9. The validation results show that the average rating of each expert is above the highest score range, namely 3.8 < X < 4.1 < 3.9. The validation results can be explained through the following graph.

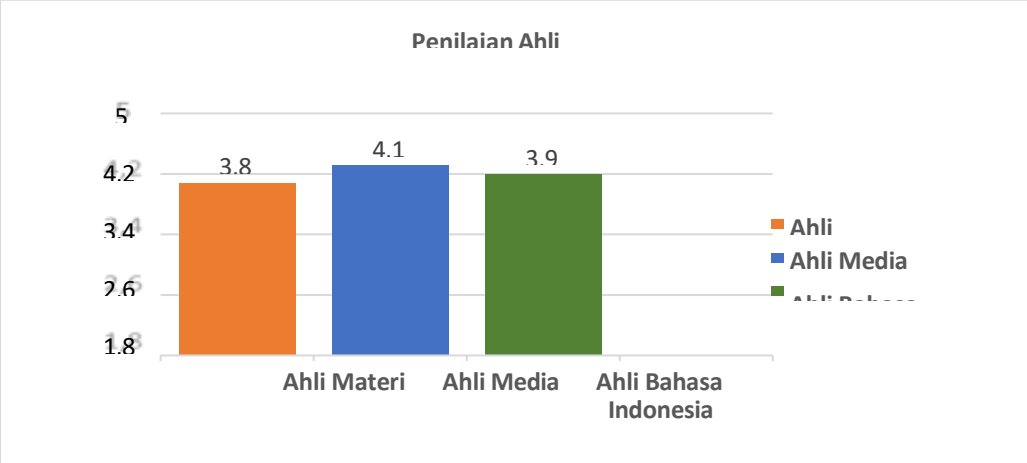


Figure 2. Graph of Validation Results of Material Experts, Media Experts and Language Experts

Based on the eligibility standard, the average final score obtained from material experts 3.8 media experts 4.1 and linguists 3.9 in the range X > $\bar{X}$i + 1.8 × SBi with an average of 3.8 < X < 4.1 < 3.9 with the category "good", so it can be concluded that the practical guide product is a model of learning tools through simple games that are developed
by the author "worthy" to be tested.

Qualitatively, the material expert commented that the product could be tested after the material was added according to the input from the material expert. Material expert input in the form of additional explanations about how to play and clarify the rules in the game. This really needs to be added to further clarify the use and workings of each material or equipment that must be provided according to the type of simple game, so that readers and users will better

understand how it works and how to arrange the tools needed in each simple game.

Media experts comment that the product or model can be trialled. The general comments from material experts are that the draft model can be continued for use in small and large scale tests, taking into account some of the inputs that have been submitted by media experts. The inputs given by media experts are related to the variety of tools used. Media experts emphasize the use of safe tools, so users will avoid traumatic elements. In addition, the media used must be able to attract the attention of users, moreover the equipment will be applied to elementary school students, so that the media needs to be made as attractive as possible so that students are more interested in using it.

2. Data Analysis of Small-Scale and Large-Scale Trial Results

After the initial draft of the practical guide to the learning device model through simple games was validated by material experts, media experts and linguists, and revised according to expert input, small-scale and large-scale product trials were carried out. A small-scale trial was conducted on one elementary school teacher and 20 students, namely at SDN 2 Meninting. The large-scale trial was conducted on two elementary school teachers and 40 students, namely at SDN 1 Batulayar Barat and SDN 1 Pusuk Lestari.

The eligibility criteria for the practical guide product model of learning devices through simple games to increase the speed and agility of upper grade elementary school students are declared feasible to use if they are in the range of an average score of > 3.4-4.2 or in a good

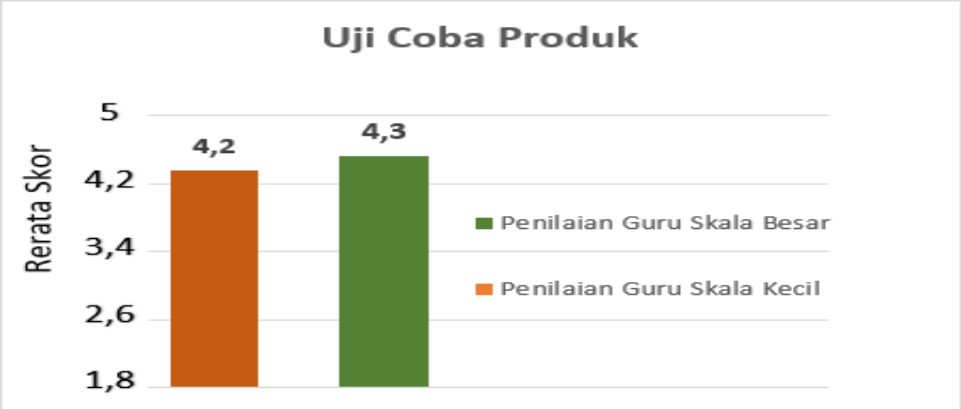


Figure 3. Teacher Assessment Graph

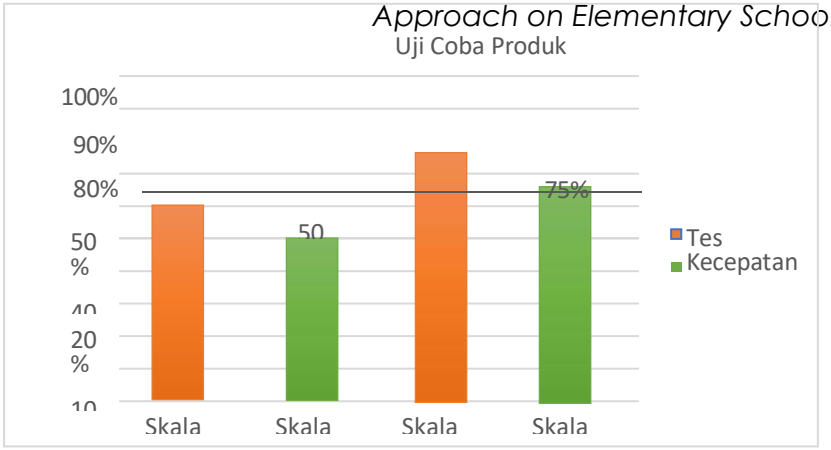


Figure 4. Graph of Product Trial Results

3. Data Analysis of Field Trial Results

a. Analysis of Speed Test Test Results

The results of the field trials were carried out on 2 elementary school teachers and 40 students, namely at SDN 1 Sandik and SDN 1 Meninting for the variable speed, the data obtained from the pretest and posttest results were as follows.

Table 3. Speed Test Test Results

Test Type	Presentase	Category
Pretest	55%	Enough
Posttest	90%	Very Good

From the results of the speed test, data was obtained that before being given treatment using a simple game model, the speed of students was included in the "enough" category with a percentage of 55%. The results of the speed test after being given treatment using a simple game model, the speed of students increased from the category of "enough" to "very feasible", with the final percentage of 90%. These results indicate that "there is an increase" in the speed of students after being given treatment in the form of a simple game model. The results of the speed test were then tested for effectiveness using the Wilcoxon test using the SPSS program. 23 for windows. The result is as follows.

Table 4. Wilcoxon Test Speed Test (40 Meter Run)

	N	Minimum	Maximum	Mean	Std. Deviation
Pretest Lari 40 Meter	40	6.6	10.5	8.418	10.155
Posttest Lari 40 Meter	40	6.2	9.7	7.548	0.9004
Valid N (Listwise)	40				

Tabel 5. Tes Statistik Kecepatan

	***Posttest* Lari 40 Meter-*Pretest* Lari 40 Meter**
Z	-5.529[b]
Asymp. Sig. (2 tailed)	.000

a. Wilcoxon Signed Ranks Test

b. Based on positive ranks

1. Based on the table above, P = 0.000 (<0.05), which means that there are differences in upper grade elementary school students from before to after being given a simple game. It was concluded that the application of a learning device model through a simple game "can increase" the speed of upper grade elementary school students.

2. Analysis of Agility Test Results

3. The results of field trials for the agility variable obtained the following data from the pretest and posttest results.

Table 6. Agility Test Results

Test Type	Presentase	Category
Pretest	47,5	Enough
Posttest	82,5	Very Good

From the results of the agility test, data was obtained that before being given treatment using a simple game model, the agility of students was included in the "enough" category with a percentage of 47.5%. The results of the agility test after being given treatment using a simple game model, the agility of the students increased from the "enough" to "very decent" category, with a final percentage of 82.5%, then an effectiveness test was carried out using the Wilcoxon test using the SPSS program. 23 for windows. The result is as follows.

Tablel 7. Wilcoxon Agility Test (Illinois Aglitiy Test)

	N	Minimum	Maximum	Mean	Std. Deviation
Pretest Lari *Zig Zag*	40	17.1	25.3	20.090	2.0430
Posttest Lari *Zig Zag*	40	16.2	20.4	23.302	29.3603
Valid N (Listwise)	40				

Tabel 8. Tes Statistik Kelincahan (Illinois Aglitiy Test)

	***Posttest* Lari 40 Meter-*Pretest* Lari 40 Meter**
Z *Asymp. Sig. (2 tailed)*	-5.516[b] .000

Based on the table above, P = 0.000 (<0.05), which means that there are differences in upper grade elementary school students from before to after being given a simple game. It was concluded that the application of learning device models through simple games "can increase" the agility of upper grade elementary school students.

Discussion

Based on the results of the analysis, it can be concluded that the product model of learning devices through simple games developed is feasible to be used as a means to enhance the learning process to be more interesting, interactive, and to carry out learning innovations. Based on the effectiveness test, it was shown that the speed and agility of the students increased after using the learning device model through a simple game.

The novelty of the product being developed is, (1) a variety of interesting and interactive games available in the learning device model through simple games, (2) a learning model that contains learning material with pictures, procedures for use, and explanations of innovative material and easily understood by students, (3) the results of the learning model are not boring students.

The simple games referred to here are games where the rules and how to play them are very simple, but have the advantage of inviting participation from all children and encouraging children to move extra intensely thereby increasing the work of the heart and lungs to submaximal anaerobic doses.The duration of the implementation is of course also adjusted, because this game usually makes students' heart and lungs work hard, so it doesn't burden students too much

(Mahendra, 2018).Implementing game modifications means that the goals to be achieved are also implemented, one of which is increasing students' movement activity during the learning process (Agustin, 2015).

Simple games contain various movement elements whose benefits can develop all elements of movement skills, including elements of coordination, accuracy, balance, agility, speed, etc. According to Damayanti et al., (2019). Movement speed is influenced by four factors, namely step frequency, step length, physical fitness and leg length. According to Yuliawan (2020), factors that can influence agility are muscle strength, speed, muscle explosive power, reaction time, balance and coordination.

This model of learning tools through simple games is a model that can help, not absolutely increase the speed and agility of students.In this case, the learning device model product through simple games can provide modified games that are useful for students when students are bored with monotonous lessons.

Conclusion and Suggestion

Based on the results of the research and discussion that have been presented in the previous section, the following conclusions can be drawn. A learning device model was produced through a simple game consisting of, (1) a bentol game (scramble for bottles), (2) a lasambo game (running after the ball), (3) a bokardus game (cardboard balls), (4) a game to seize the temple, (5) game of moving markers, (6) game of corruption and police, (7) game of crossbar colour, (8) game of gold (scramble for headquarters), (9) game of bolnas (hot ball), (10) game of switching stars, usable to increase the speed and agility of upper grade elementary school students.

Based on the results of the small-scale trial, it showed that the teacher's assessment of the learning device model product through a simple game to increase the speed and agility of upper class elementary school students in the small-scale trial was 4.2 in the very good/very decent category. The results of the large-scale trial show the teacher's assessment of the learning device model product through a simple game to increase the speed and agility of upper class elementary school students in the large-scale trial, which is 4.3 in the very good/very decent category.

Based on the results of the effectiveness test obtained in the field test of 2 teachers and 40 students with a 40-meter running speed test and a zig zag agility test, the speed and agility aspects obtained a t count of 3.200> t table (df 39) 2.021 and a significance value of 0.000 <0.05, then this result indicates that there is a significant difference between the pretest and posttest. So it can be concluded that the model of learning devices through simple games is effective for increasing the speed and agility of upper class elementary school students, with a p value <0.05.

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