

# Development of Animation Video Media for Basic Motion Learning Based on Folk Games and Traditional Games in Children 10-12 Years

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## ABSTRACT

The purpose of this development research is to produce an animated video media for basic movement learning based on folk games and traditional games for children aged 10-12 years. The basis of development is Folk Games and Traditional Games as a means to develop the potential of children's character. Along with the development of globalization, the local culture that is manifested by traditional games is getting eroded. So it is very necessary to make efforts to develop the character of children in elementary schools through folk games and traditional games in the form of animated video media that are packaged in the learning of Physical Education, Sports and Health. The flow of research and development of Animated Video Media for Basic Motion Learning Based on Folk Games and Traditional Games for Children 10-12 Years from the picture uses the Research Development (R&D) development model from Brog and Gall which consists of ten steps. The results of the study indicate that the media "Animated Video Media for Basic Motion Learning Based on Folk Games and Traditional Games that has been developed has been validated by a media expert validator in the first stage obtaining a feasibility percentage of 73.80% including the "feasible" criteria and in the second stage obtaining the results of the percentage of eligibility of 95.20% are included in the "very feasible" criteria. And according to the material expert validator in the first stage the result of the feasibility percentage is 75.55%. included in the "feasible" criteria and in stage II the results obtained a percentage of eligibility of 92.22%, included in the "very feasible" criteria. And according to practitioners of sports, folk games and traditional games, the percentage of eligibility results is 98.18% including the "very feasible" criteria. The results of individual trials and small group trials are in the "good" category. In the large group trial stage, the effectiveness criteria were achieved with the number of students reaching 17 people in the post-test or about 89.47%. Therefore, it can be concluded that the Animated Video Media for Basic Motion Learning Based on Folk Games and Traditional Games is appropriate for use in children 10-12 years old.

**Keywords:** Animation, Video, Folk games.

## 1. INTRODUCTION

Physical education, sports and health are one of the subjects in elementary school. Elementary school is a basic formal education institution that prepares every student to be able to take or follow a higher level of formal education. The formal education in question is education that is carried out based on the education unit level curriculum in each subject, where in each subject there are content standards that contain core competencies and basic competencies or better understood as general learning objectives and specific learning objectives. which will be achieved through the learning process in the classroom.

The implementation of physical education, sports and

health is different and more unique from other forms of education, because the learning is carried out through physical activity. However, in this case, there are still many people who are misguided about physical education. Because this education uses motion or physical activity as a learning tool, it is considered that this education is only a complement because it is intended for the body only, while it is clear that students are human beings who do not consist of disaggregated parts, but are an integrated unit of various parts., so that the implementation of physical education, sports and health is for students as whole people in achieving educational goals. As stated by Sukintaka states that physical education is a process of interaction between students and the environment, through physical activities that are systematically arranged to reach humans.

Indonesia as a whole [1].

In the learning process of physical education, sports and health, the teacher plays a role in the implementation of the learning process. Teachers must pay attention to many things regarding students in learning physical education, sports and health such as aspects of child growth and development, and psychological characteristics of children. As described in the 2013 Curriculum that physical education, sports and health are media to encourage physical growth, psychological development, motor skills, knowledge and reasoning, appreciation of values (mental-emotional-sportivity-spiritual-social attitude), and habituation a healthy lifestyle that leads to stimulating growth and development of a balanced physical and psychological quality. Therefore, the subject matter, learning methods,

Based on a literature review of physical education learning materials in grades 4-6 elementary school, it includes learning basic movements (locomotor, non-locomotor and manipulative). Basic motor skills (KMD) are basic movement skills that are acquired by children and develop as they age, and form the basis for more advanced movements and specific movement patterns [2]. This is also reinforced by Nazario & Vieira [3] in concluding the results of the study that motor skills require full development in all periods in such a way that previous experience becomes the basis for experience and development in subsequent periods.

Connected with the spread of the corona virus pandemic or COVID-19 in Indonesia, many universities and schools have stopped the face-to-face learning process. So that researchers face a new phenomenon regarding the learning system. Based on the announcement made Minister of Education and Culture Nadiem Makarim admitted that he was studying the possibility of implementing an emergency curriculum due to conditions that required studying at home during the virus pandemic corona (Covid-19). In addition, students must also be ready to adapt to changes in learning regulated by schools and universities. Remote learning can be seen as more freely and flexibly accessed from home.

Starting from the problem of the spread of Covid 19, it was the research and the team who wanted to make development research on basic movement learning in subjects Physical education for ages 10-12 years ranges from grades 4-6 elementary school. Sports lessons are very different from other science subjects. Sports lessons require a large space and are related to active movement and interaction and need activity guidance. Paradigm learning objectives in the pre-pandemic period focused on improving the physical fitness of students so they are not susceptible to disease. Fitness is important to increase immunity so that you are not susceptible to disease.

Associated with the product that will be developed, the researcher refers to the previous explanation about character education that can be instilled through physical

education and sports. Sport as a means to teach physical, spiritual, social, and at the same time as a school of life. Physical Education, Sports and Health are expected to contribute in developing children's character. Because Sport and Health Physical Education does not develop in terms of intellectual and psychomotor intelligence, but in developing the child's personality it must be achieved. So Physical Education, Sports and Health have a role in shaping children in all aspects, namely Cognitive, Affective and Psychomotor aspects. Individuals who have a strong personality, good character, and noble character can be taken from the value of Physical Education.

Related to character education which is integrated through physical education, traditional games are one of the real manifestations to make it happen. Traditional games are the result of local cultural processes that are still embedded with local wisdom values. Local wisdom is basically the good values of local culture and has received recognition by the majority of the community about its goodness. In other words, local wisdom is an important investment to give students the skills, abilities and qualities to face the global world without leaving their identity or national identity.

And now, the thematic learning model has become a major issue in the world of education and has been emphasized in the 2013 curriculum at the SD/MI level. However, it must be admitted, the implementation still seems overlapping. The internalization of local wisdom values that should be owned by the nation's children is still partial. This is because the thematic learning models that are often used in general are conventional learning models. The learning model tends to be only text books and is focused only in the classroom. Whereas one of the obligations of teachers in teaching is to be able to use a variety of models, strategies, and methods, which can attract students' interest. And make the best possible use of learning resources that are around students (local wisdom), as the embodiment of one of the thematic (contextual) characteristics. Local wisdom itself is the root of national culture in which the values contained in it are full of the teachings of goodness. With the elimination of local wisdom results in the loss of the foundations of moral and identity formation nation's self.

Folk Games and Traditional Games here are games children from simple materials according to cultural aspects in people's lives. Traditional games are quite familiar with folk games which aim as entertainment and at the same time maintain social relations. In accordance with the understanding of traditional games, each region has its own characteristics of traditional games. However, most of them in Indonesia have traditional games that have similarities. This is because the values contained in traditional games are able to provide characters that reflect the identity of the nation.

Folk games and traditional games as a means to develop the potential of children's character. Along with the development of globalization, the local culture that is

manifested by traditional games is getting eroded. So it is very necessary to make efforts to develop the character of children in elementary schools through folk games and traditional games in the form of animated video media that are packaged in the learning of Physical Education, Sports and Health. Therefore, researchers are interested in conducting research by designing a learning model with the title "Development of Animated Video Media for Basic Motion Learning Based on Folk Games and Traditional Games for Children 10-12 Years Old".

## 2. METHODS

This research on the development of animation video media for basic movement learning based on folk games and traditional games for children 10-12 years old uses the Research Development (R&D) development model from Brog and Gall which consists of ten steps to find answers to problems that have been formulated, which can be seen from chart listed in Figure 1.

In general, the research and development flow of Animated Video Media for Basic Motion Learning Based on Folk Games and Traditional Games for Children 10-12 Years Old from the picture above is as follows:

Phase-1: introduction study. The first step before developing an animated video media for basic movement learning based on folk games and traditional games for children 10-12 years old, the researcher first determines, summarizes and identifies the potential and existing problems by collecting information, especially those relating to basic movement learning in schools. as well as the obstacles faced by teachers in carrying out basic movement learning activities in elementary schools during online learning. The stage aims to see the reality in the field related to the learning media that teachers use during the Corona pandemic. The preliminary study carried out literature study activities, surveys and field data collection observations to several physical education, sports and health teachers who teach in elementary schools. Preliminary studies are also used as a reference for looking for references on Folk Games and Traditional Games, starting from literature or trusted sources, namely people who have used Folk Games and Traditional Games which are modified later to learning basic movements aged 10-12 years applied in the form of animated videos that dance.

Phase-2 design of media video animations for basic motion learning based on folk games and traditional games for children 10-12 years old. The development of animated video media for learning basic movements based on folk games and traditional games for children 10-12 years old begins with the elementary school curriculum, namely the K-13 curriculum, then determines the core competencies, basic competencies and indicators of basic movement learning. The results of the analysis of each basic competency will be linked to Folk Games and Traditional Games. This linkage will be designed in the form of animated video media that helps

children 10-12 years old in learning basic movements. The draft video packaging design is more attractive, easy to use, the audio is clear with the character of the child's language, so that it is easier to use, children can learn independently without direct guidance from the teacher.

Phase-3: development of initial product design (preparation of video development materials, handbook development, and evaluation equipment). The next step is to create an initial product in the form of a series of product designs. Development of Animation Video Media for Basic Motion Learning Based on Folk Games and Traditional Games for Children 10-12 Years Old. The initial product is outlined in the learning steps systematically and logically according to the learning objectives. So that this product has the effectiveness that is feasible to use. The results of making the initial product developed will be consulted with material experts and animation video media experts.

Phase-4: design validation (early-stage evaluation). The next step in research on the development of animation video media for basic movement learning based on folk games and traditional games for children 10-12 years old is expert validation of the product design development carried out to be validated by 8 experts/experts/scientists consisting of: (1) two experts learning materials for physical education, sports and health (2) two folk game experts (3) two traditional sports game experts and 4) two animation video media experts. Validation will be carried out on the results of the development design design in the form of a narrative that contains the flow of the basic motion learning model of a dissertation with illustrated images as a complement to learning media in the form of animated videos added with the attractiveness of sound.

Phase-5: product trial (6-12 subject). The next stage of development research is a small group trial, in which this trial will be carried out with 30 children aged 10-12 years as test subjects. This small group trial aims to determine the extent to which product development can be carried out by subjects who will later become product users. The implementation of small group trials will be used as material to improve the development of animated video media for basic movement learning based on folk games and traditional games for children 10-12 years old.

Phase-6: revising the product (based on suggestions according to the results in the field at the testing stage). Phase product revisions will be carried out if there are revisions found in the small group trial stage, it will be revised immediately, if there is no trial revision for the Development of Animation Video Media for Basic Motion Learning Based on Folk Games and Traditional Games for Children 10-12 Years Old, it will be continued in groups. the greater one. In other words, the recommendation on the results of the small group trial is the second evaluation after the evaluation from the previous experts.

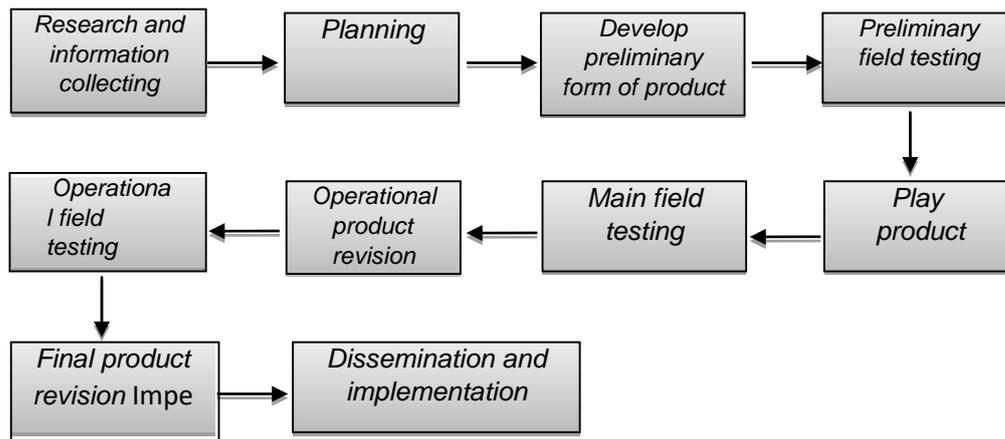


Figure 1. Borg & Gall Development Model

Phase-7: use trial with 30-100 subjects. The next activity is to conduct field trials or large group trials, in the follow-up activities of research on the Development of Media Video Animation for Basic Motion Learning Based on Folk Games and Traditional Games for Children 10-12 Years Old. Field trials were conducted on more research subjects, namely as many as 30 children aged 10-12 years. The large group trial phase was carried out to see the practicality of using animated video media for basic movement learning based on folk games and traditional games for children 10-12 years old.

Phase-8: revising the product (based on suggestions and results of main field testing. The conclusion of the large group trial is the last stage for the improvement and refinement of new products. Development of Animation Video Media for Basic Motion Learning Based on Folk Games and Traditional Games for Children 10-12 Years Old. The evaluation at this stage is the final evaluation of the development of animated video media for basic movement learning based on folk games and traditional games for children 10-12 years old and is considered acceptable and can be used as an animated video media for basic movement learning based on folk games and traditional games for children. Year.

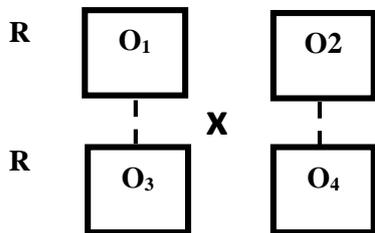
Phase-9: effectiveness test of final product revision. Final stage of product The development of Animated Video Media for Learning Basic Motion Based on Folk Games and Traditional Games for Children 10-12 Years old aims to find out the effectiveness of the use of Animated Video Media for Learning Basic Movements Based on Folk Games and Traditional Games for Children 10-12 Years Old that has been developed. At the implementation stage of this development model, the researcher uses a quantitative approach which is used to determine whether the animated video media for learning basic movements based on folk games and traditional games is effective compared to other basic motion media. This stage uses a True Experimental Design research design in the form of Pretest-Posttest Control Group Design [6].

In this design, there were two groups that were selected randomly, then given a pretest to determine

whether there was a difference between the experimental group and the control group in the initial state. Pretest results are good if the experimental group scores are not significantly different. The effect of treatment is  $(O1 - O2) - (O4 - O3)$ . The steps taken to test the effectiveness are:

- Determine the research subjects to be used as the experimental group and the control group. The population of this research is 4 elementary schools that will be selected as research subjects totaling 60 children, consisting of 30 children aged 10-12 years in the control group and 30 children aged 10-12 years in the experimental group.
- Conduct pre-test of basic movements of children aged 10-12 years which includes locomotor, non-locomotor and manipulative;
- Implementing the use of animated video media for learning basic movements based on folk games and traditional games in the experimental group while the control group was not given treatment (conventional);
- Conduct post-test to both the experimental group and the control group;
- Analyzing the results of pre-test and post-test using statistical methods (t-test) and gain score to find out whether there is a significant difference in the effect between the two experimental groups given the treatment of Animation Video Media for Basic Motion Learning Based on Folk Games and Traditional Games with the group controls who were not given basic movement learning treatment in children aged 10-12 years (conventional model).
- The data collected during needs analysis, expert validation, small group and large group trials as well as the results of observations and also suggestions for improvement from experts are used as material for product improvement and refinement, this data is more likely to be qualitative data. Quantitative data obtained from the results of the pre-test and post-test of the basic movement learning model based on traditional sports games for children aged 10-12 years in the experimental group and the control group

which will be analyzed by t-test and used as a gain score.



**Figure 2.** Experimental Design with Control Group (Pretest-Posttest Control Group Design) [4]

Information:

- R : Control group or experimental group
- O1 : The value of the initial ability of the experimental group
- O2 : Performance experimental group with new system/performance/model
- O3 : Mark initial ability of the control group
- O4 : Performance of the experimental group with the old system/performance/model

The experimental design in this study used a pretest-posttest control group design, namely measuring before and after the treatment was given to the control group and the treatment group. The research hypothesis on the effectiveness of the animated video media for basic movement learning based on folk games and traditional games is suspected to have a significant effect on children aged 10-12 years. The steps taken in this trial include: (1) determining the group of research subjects; (2) carry out the pre-test (O1); (3) try the model that has been developed; (4) carry out post-test (O2); (5) find the mean score of pre-test and post-test and compare between the two; (6) find the difference between the two averages through the statistical method (t-test) to determine whether there is a significant effect of using the model. The development of animated video media for basic movement learning based on folk games and traditional games aged 10-12 years can be taken as a whole from the results of expert validation, testing and implementation of animated video media for basic movement learning based on folk games and traditional games by analyzing qualitative descriptions with criteria which have been set.

Phase-10: mass production. Dissemination of research results, namely the development of animation video media for basic movement learning based on folk games and traditional games aged 10-12 years will be registered in the form of KI consisting of books plus CDs intended for children aged 10-12 years which can be used by lecturers and sports teachers, elementary school students, sports coaches and the wider community on a local, national and international scale. The results of the research will be published in national/international

journals and in seminars through national and international seminars.

### 3. RESULTS

The results of the media validation assessment on the Development of Animated Video Media for Basic Motion Learning Based on Folk Games and Traditional Games for Children 10-12 Years after making revisions obtained a score of 119 with a percentage of feasibility of 95.20%. The development of animated video media for basic movement learning based on folk games and traditional games for children aged 10-12 years is included in the "Very Appropriate" category to be used without any further revisions. The two results of the validation of teaching materials obtained different percentages. Each validation stage shows an increase in the developed teaching materials.

The results of the validation assessment of the Basic Movement Based Folk Games and Traditional Games for Children 10-12 Years after making revisions obtained a score of 83 with the percentage of eligibility is 92.22%. Basic Movement Materials Based on Folk Games and Traditional Games for Children 10-12 Years Old are included in the "Very Appropriate" category to be used without any further revisions. The two results of material validation obtained a score of 109 obtaining different percentages. Each validation stage shows an increase in the development of animation video media for basic movement learning based on folk games and traditional games for children 10-12 years old.

Based on the results of individual trials conducted on 20 elementary school students in the city of Medan, which got an average score of 1 which was in the "good" category, meaning that the Development of Animation Video Media for Basic Motion Learning Based on Folk Games and Traditional Games for Children 10-12 Years Old received a good rating as a sports learning media in the learning process. The results of the assessment can be concluded that the assessment of the feasibility of developing animated video media for basic movement learning based on folk games and traditional games for children 10-12 years old is based on the results of the assessment of individual test subjects, which is in the "good" category of each question item. After passing the individual trial,

Based on small groups conducted to 4 elementary schools in the city of Medan starting from grades 4-6, namely getting an average score of 1 which is in the "good" category, meaning that the Animation Video Media for Basic Movement Learning Based on Folk Games and Traditional Games for Children 10- 12 years old received an assessment predicate with good grades as a medium in the group learning process. Overall, according to the results of small group calculations, it can be concluded that the assessment of the feasibility of animated video media for basic movement learning based on folk games and traditional games for children 10-12

years old is based on the results of the assessment of the small group trial subject, which is in the "good" category of each question item. From the results of the scores that have been shown above from the small group trial, it can be stated that the Animation Video Media for Basic Motion Learning Based on Folk Games and Traditional Games for Children 10-12 Years Old is feasible to be used as a learning media product. After passing the small group trial, the Animation Video Media for Basic Movement Learning Based on Folk Games and Traditional Games for Children 10-12 Years Old in Physical Education Course continued to the field trial phase to calculate the effectiveness of the teaching materials developed on student learning outcomes.

#### **4. DISCUSSION**

This research on the development of animation video media for basic movement learning based on folk games and traditional games for children 10-12 years old uses the Research Development (R&D) development model from Brog and Gall. Eligibility of Development of Animated Video Media for Basic Movement Learning Based on Folk Games and Traditional Games for Children 10-12 Years from the results of the validation data of media experts, material experts and student responses. The acquisition of eligibility data is described as follows:

The data obtained from the results of the expert validation of teaching materials in the first stage carried out obtained a score of 91 and the percentage of feasibility results was 73.80% included in the "Eligible" criteria and had to be revised again. Furthermore, the second stage of validation obtained a score of 119 and the percentage of 95.20% feasibility results included in the "Very Eligible" category used without any revision. The data obtained from the results of the material expert validation obtained a score of 68 and the percentage of the feasibility results was 75.55% included in the "Eligible" criteria and had to be revised again. Furthermore, the second stage of validation obtained a score of 83 and the percentage of feasibility results was 92.22%. included in the "Very Appropriate" category to be used without any revision. The data obtained from the results of practitioner validation obtained a score of 108 and the percentage of feasibility results was 98.18% included in the "Very Eligible" category and can be used without any revision.

In addition to being based on the validation expert assessment, the feasibility of learning video media can be seen from the student's response to the use of Media Video Animation for Learning Basic Movements Based on Folk Games and Traditional Games for Children 10-12 Years during the learning process. Therefore, the researchers distributed student response questionnaires to Development of Animated Video Media for Basic Movement Learning Based on Folk Games and Traditional Games for Children 10-12 Years in individual trials and small group trials and see the

responses of elementary school students to the Media Video Animation for Learning Basic Movements Based on Folk Games and Traditional Games for Children 10-12 Years. From the results of individual trials conducted on 10 students in grades 4-6 SD, the average score of 1 is in the "good" category, meaning that Development of Animated Video Media for Basic Movement Learning Based on Folk Games and Traditional Games for Children 10-12 Years received an assessment predicate with good grades as a learning medium in the teaching and learning process. The results of small group trials conducted in 4 grade elementary schools got an average score of 1 which was in the "good" category, meaning that Development of Animated Video Media for Basic Movement Learning Based on Folk Games and Traditional Games for Children 10-12 Years received an assessment predicate with good grades as an elementary school physical education learning medium in the group learning process. Based on the results of the validation expert assessment and student responses to Development of Animated Video Media for Basic Movement Learning Based on Folk Games and Traditional Games for Children 10-12 Years can be said to be suitable for use.

Effectiveness Development of Animated Video Media for Basic Movement Learning Based on Folk Games and Traditional Games for Children 10-12 Years through product trials, product trials carried out namely field trials. At this stage the researcher measures the effectiveness of the use of Development of Animated Video Media for Basic Movement Learning Based on Folk Games and Traditional Games for Children 10-12 Years in learning using learning outcomes tests. Furthermore, in product trials, learning activities are carried out such as online learning activities with lesson plans which will be delivered directly by online class teachers. In explaining the material, the teacher will use the media as a learning support tool. After finished using Development of Animated Video Media for Basic Movement Learning Based on Folk Games and Traditional Games for Children 10-12 Years, students are given a post-test to see the learning outcomes after using Development of Animation Video Media for Basic Movement Learning Based on Folk Games and Traditional Games for Children 10-12 Years Old. The field trial phase was carried out in grades 4-6 SD with a total of 19 students. The effectiveness criteria are met or said to be good if students who achieve completeness are greater than or equal to 85%. Based on the field trials that have been carried out, the effectiveness criteria are achieved with the number of students reaching 17 people in the post-test or about 89.47%. Meanwhile, at the time of the pre-test, 13 students achieved completeness or about 68.42%. This shows that the completeness of 17 students after learning using Development of Animated Video Media for Basic Movement Learning Based on Folk Games and Traditional Games for Children 10-12 Years increased than the pre-test, which was 21.05%. So it can be concluded that learning using Development of Animated Video Media for Basic Movement Learning Based on Folk Games and Traditional Games for

Children 10-12 Years that have been developed can improve student learning outcomes.

## 5. CONCLUSION

This research and development will validate the feasibility of developing animated video media for basic movement learning based on folk games and traditional games for children 10-12 years old by media experts, material experts and classroom teachers as educational practitioners. From the results of the assessment by media experts, the average of 95.20% which is included in the very feasible category, and the results of the assessment by material experts obtained an average of 92.22% which is included in the very feasible category. Furthermore, the results of the assessment of educational practitioners obtained an average of 98.18% which is included in the very feasible category.

The Effectiveness of the Development of Animated Video Media for Basic Motion Learning Based on Folk Games and Traditional Games for Children 10-12 Years Old, which was developed and measured through learning outcomes test instruments. Based on the average student learning outcomes, it is known that the use of Media Development of Animation Video Media for Basic Motion Learning Based on Folk Games and Traditional Games for Children 10-12 Years in thematic

learning can improve student learning outcomes compared to the results of the pre-test, which increases by 21.05% in field trials. Therefore, based on the average student learning outcomes, the level of effectiveness of the development of animation video media for basic movement learning based on folk games and traditional games for children aged 10-12 years is in the category of being effectively used in the learning process.

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