

## PILOTING A MODEL OF EDUCATIVE AND ATTRACTIVE PHYSICAL ACTIVITIES BASED ON *DOLANAN ANAK*

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### **Abstract**

This study was aimed at applying Majeda based on *Dolanan Anak* as a means of optimizing kindergarteners' growth and development. This study was conducted in small- and large-scale tryouts. The study employed the research and development approach. The small-scale piloting was conducted at TK/SD Model Sleman and TK PKK Temanggal, Sleman while the large-scale tryout was conducted at TKN Pembina Wonosari, TK ABA Kauman Yogyakarta, TKN Pembina Galur, TKN 1 Sleman, and TK ABA Karangmojo XVII. The results show that the model format needs to be revised into new Majeda that consist of six components. The guideline needs to be revised into four sections. Based on the results of the piloting, it can be concluded that Majeda based on *Dolanan Anak* is appropriate for further operational testing.

**Keywords:** *Dolanan Anak*, kindergarteners, model of educative and attractive physical activities

### **MODEL AKTIVITAS JASMANI YANG EDUKATIF DAN AKTRAKTIF BERBASIS DOLANAN ANAK**

### **Abstrak**

*Penelitian ini bertujuan untuk mengujicobakan model aktivitas jasmani yang edukatif dan atraktif berbasis Dolanan Anak sebagai wahana untuk mengoptimalkan tumbuh kembang siswa TK. Penelitian ini melaksanakan ujicoba lapangan skala kecil dan skala luas. Penelitian ini menggunakan pendekatan penelitian dan pengembangan. Ujicoba skala kecil dilaksanakan di TK/SD Model Sleman, TK PKK Temanggal. Ujicoba skala besar dilaksanakan di TKN Pembina Wonosari, TK ABA Kauman Yogyakarta, TKN Pembina Galur, TKN 1 Sleman, and TK ABA Karangmojo XVII. Hasil penelitian menunjukkan bahwa format Majeda berbasis Dolanan Anak perlu direvisi menjadi model berkomponen enam. Panduan penggunaan model perlu direvisi menjadi panduan dengan empat bagian. Berdasarkan hasil uji coba, Majeda berbasis Dolanan Anak layak untuk dipergunakan dalam uji operasional.*

**Kata kunci:** *aktivitas jasmani yang edukatif dan atraktif, dolanan anak, siswa taman kanak-kanak*

### **INTRODUCTION**

Foundational in physical growth, mindset and personality development of the child will be determined by the acquisition of a learning experience since the child is still in early childhood. The experience gained through the process of interaction with the family, community, and educational institutions is a learning process, which is

crucial for the growth and development of the children. Physical growth and development of knowledge, skills, attitudes and behavior among children will depend on what is seen and perceived by children from the neighborhood, and what is taught by parents to their children.

The effort in optimizing the golden age of children in order to give children adequate

facilities to experience optimal growth and development was pursued by the government and society. Efforts are made through the improvement of the organization of children's education since early childhood or Early Childhood Education Development (ECED). Department of Pediatrics, Soochow University (2015) stated that childhood is a critical period for physical, psychological and behavioral development. Compared with adult, child is relatively less independent. Family, kindergarten, school, and community are important settings for their development. Health care should be planned specifically based on children's characteristics and needs in different age groups.

It is considered necessary that children in early stages should have enough experiences and education in exploring the new experiences. This efforts can be done through early childhood education. One type of early childhood education is kindergarten (TK). Mansur (2007: 127-128) states that TK is one form of early childhood education units in the formal education that organizes educational programs for children aged four to six years.

In the management of kindergarten learning process, teachers need to understand and take into consideration the characteristics of learners. These characteristics, include (1) children aged 4-6 years were divided into group A for ages 4-5 years, and group B for ages 5-6 years of age (*Peraturan Pemerintah No. 27 Tahun 1990*), (2) children who are experiencing growth and development. Growth is an increase in the number and, size of cells as they divide and synthesize new proteins; results in increased size and weight of the whole or any of its parts. It can be viewed as a quantitative change. Development is a gradual change and expansion; advancement from a lower to a more advanced stage

of complexity the emerging and expanding of the individual's, capacities through growth, maturation, and learning. It can be viewed as a qualitative change (Department of Pediatrics, Soochow University, 2015).

Significant growth in quantity changes is experienced by children, such as height, weight, and body size. Payne & Isaacs (1995: 15-17) states that there are two terms of growth and physical development of the child's motor, i.e. gross motor movements, and fine motor skills. The development means that the child undergo a qualitative development in a variety of capabilities, namely: ability gross motor and fine motor skills, cognitive abilities, language skills, psychosocial and socio-emotional sphere, moral and religious values, and the arts and creativity.

*Permendikbud No.137 Tahun 2014* about ECE's National Standards stated that early childhood children are expected to undergo development appropriate to their ages level. Child growth and development includes growth and developmental aspects of religion and moral values, physical-motor, cognitive, language, social-emotional, and the arts. Thus, kindergarten students who experience optimal growth and development have (1) understand and implement their religion values and good moral values, (2) have physical gross and fine motor ability adequate, as well as correct health and safety behaviors, (3) have cognitive abilities include learning and problem solving, logical thinking, and symbolic thinking, (4) have the ability to understand the language consists of receptive language, expressing the language, learn the language pragmatics, express feelings, ideas, and desires in the form of graffiti, and literacy, (5) have social-emotional abilities include self-awareness, a sense of responsibility for themselves and others, and prosocial behavior.

Child growth and development is a complex process, which includes not only physical growth, but also the maturity of systems, development of functioning. The process of growth and development is influenced by a variety of internal and external factors (Department of Pediatrics, Soochow University, 2015). In order for the child's growth, and optimal child development can be achieved, in addition to pay attention to the characteristics of children, kindergarten teachers have to design and implement the learning process in accordance with the characteristics, interests and needs of learners. Therefore, teachers need to choose and use methods and appropriate learning models in the learning process. Selection of methods and learning models should pay attention to learning payload to be delivered, the characteristics of the child, the ability of teachers, and the school's capacity. Moeslichatoen (2004: 24-29) suggested that kindergarten teachers use teaching methods appropriate to the characteristics and the development of kindergarten children.

The Ministry of National Education (2008: 19) states that there are five common teaching-learning model implemented in kindergarten. All five models are models of classical learning, model of group learning with scaffolding activities, model of workstations or points of activity learning, model of area learning, and model of beyond centers and circle time. Although the five teaching-learning modes have the particularity of each, but the teaching-learning models have in common the learning steps, namely: preliminary activity/initial, core activities, breaks/meals, and end/closing activities. In addition, the fifth models of teaching-learning pack integrated thematic learning materials in the form of theme and sub-themes that will be presented to the students.

Learning in kindergarten is very close related with the play, because play is the primary vehicle for learning in kindergarten. As said by Morrison (1988: 260) that play cherished values as a learning medium which is suitable for children ages in kindergarten. Willis & Hyman-Parker (2010) states that play is an activity that shows how children learn and assimilate new things into the knowledge or skills they already possessed. Saskatchewan Education (1994) outlines that through play children's early learning can be achieved. Socio-emotional development, intellectual activity can be developed through play. Hayati, Serhati, & Nurhayati (2012: 153) add that creative play activities is one means to stimulate children learn to express feelings, thoughts and their view of the world. Therefore, the chance to play was a key factor in the learning program in kindergarten. Moeslichatoen (2004: 24-25) adds that the play has an important meaning for the growth and development of children, hence the use of the play is a must for kindergarten, and can not be ignored at all. For kindergarten children, learning is playing and playing. Playing promote meta-skills and competence in perception, memory, language, communication, and representation. Learning is a process of change in skills, knowledge, and competence in stages when children participate in play activities (Wood & Attfield, 2005: 87).

One type of activity that is known as children's play and has a diversity of types is a traditional children's games or *Dolanan Anak* (Children's Play). Various types of *Dolanan Anak* can be chosen by the teacher and implemented in the learning process. *Dolanan Anak* is one of the popular play activities and loved by children. These games have educational values that are important. Wijayanti (2008, 12) states that *Dolanan* derived from the word *dolan*

which means "playing". *Dolan* which means playing gets the suffix -an, thus becoming *dolanan*. *Dolanan* in the form of the verb is playing (to play), as a noun is a game (game). Poerwadarminta (1939: 73) adds that *dolanan* means (a) play, (b) the means used for fun for kids, and (c) of the game. Dananjaya (1991, 171) states that *Dolanan Anak* everywhere in the world are usually distinguished by gestures such as running, jumping or by simple social activities like tag, hide and seek, fighting, or based on basic math or dexterity of the hand such as counting or throwing stone to a certain holes, or speculative games.

Dananjaya statement is in line with the thought of Ki Hadjar Dewantara. Ki Hadjar Dewantara (2009: 147-148) states that: "Some kids Java games, such as: boast, gateng, and unclang, which educates children to be careful (bead pratitis), agile, clear the eyesight, and others. Then too the game, such as: *dakon*, *Cublak-Cublak Suweng*, and *kubuk* that educating children about understanding the calculations and estimates. ... In addition, the game of *gobak*, *trembung*, *raton*, *cu*, *geritan*, *obrog*, archery, *si*, *jamuran*, *jelungan*, and others that are sports which would educate children in terms of: the strength and health of the body, dexterity and courage, visual acuity, and others".

Learning in kindergarten is a typical process that implements the process of nurturing and developing the interests and stages of child development. Therefore, learning in kindergarten is instructive and attractive activity. Activities that are educational, because it is the process of providing the opportunity and facilitation to the child so that the child has a learning process to develop all the potential intelligence to be harmonious, and balanced. Activity is attractive means that the learning process carried out by utilizing the playing

activity to be interesting, challenging, and fun for children. With characteristics such learning, children will be willing and happy to follow the learning process.

By paying attention to the discussion above, it can be shown that *Dolanan Anak* has the characteristics needed in order to be used in the learning process. Therefore, *Dolanan Anak* placed as a vehicle to deliver learning material presented. In addition, learning to use *Dolanan Anak* is an activity that is both educational and attractive. With these reasons, learning model is then called a model of physical activity-based educational and attractive *Dolanan Anak* and shortened to Majeda based *Dolanan Anak*. Majeda development based on *Dolanan Anak* has entered the second stage of field tryouts. Field tryouts carried out in two stages, namely small-scale tryouts and large-scale tryouts.

## METHOD

This study aims to produce a model of teaching learning method in kindergartens, which utilizing *Dolanan Anak* as its base. Therefore, this study uses the approach of research and development by Borg & Gall (1983). Borg & Gall (1983: 771-772) states that research and development in education is a process used to develop and validate the educational product.

In effort to reach the purposes of development Majeda based on child's *Dolanan*, this research will be done in three stages, namely: (1) preliminary study and design of model; (2) piloting test of model; and (3) operational testing, revision and preparation of modules, and dissemination model. Stages of research done on this occasion is the field tryouts of Majeda based on *Dolanan Anak*.

The implementation of the second stage of research and development is consist of two activities, namely a small scale try

out, and a large-scale try out. The small-scale piloting was conducted at TK/SD Model Sleman and TK PKK Temanggal, Purwomartani Kalasan Sleman. The large-scale tryout was conducted at *TKN Pembina* Wonosari, TK ABA Kauman Kraton Yogyakarta, TKN Pembina Galur Kulonprogo, TKN 1 Sleman Sekip Depok Sleman, and TK ABA Karangmojo XVII, Karangmojo Gunungkidul.

## FINDINGS AND DISCUSSION

Tryouts of the model was implemented as a follow up on the results of preliminary studies and model development. Piloting of the model was the implementation of the second phase of of research of the three stages of research and development that will be done. The first phase of the research was to produce a draft Majeda based on *Dolanan Anak*, which has five basic components. This draft was getting validation from an expert, and socialized at kindergarten teachers. After socialization, then a second stage study or the tryout stage, small-scale tryouts and its revisions, and large-scale tryouts and their revision were conducted. Test results and discussion are presented as follows.

The first small-scale tryout was conducted in *TK/SD* Model Sleman, in two meetings, on 4<sup>th</sup> and September 5<sup>th</sup>, 2014. The second small-scale experiments conducted in Kindergarten of *PKK Temanggal* Purwomartani in one meeting on September 13, 2013. The results of pilot scale small indicates that the format of the model needs to be improved and more adapted to the requirements of a learning model in accordance with the opinion of Joyce, Weil, and Calhoun (2009). Component models become more complete because of the five elements become six components. However, actually the fifth element is substantially similar to the six

components of the final model, only the initial model does not include the substance of the concept and assessment of learning outcomes yet.

In addition, teachers in the field give considerable input for the improvement of the model, so *Dolanan Anak* can be modified without losing its substance and the children can do *Dolanan* easily. It is not required that all *Dolanan* must exist in every stage of the learning activities; *Dolanan* could be at the beginning of activity, core activities, or at the end of the activity. It is highly dependent on the specified learning objectives and content or theme/sub-themes presented.

By taking into account various input from those involved in small-scale tryouts, based on *Dolanan Anak* format undergo significant changes from the five into six components interrelated components and unity. All six components are: (1) concept: that describes what is meant by Majeda *Dolanan Anak* based, (2) Material/theme-subthemes: describe what will be learned by the students on the learning episode, (3) Learning Objectives: describe about targets to be achieved by students after attending the learning process, (4) Syntax/ learning steps: the stages or steps to be done in the implementation of learning, (5) the activities of teachers and students: explaining about what activities are to be implemented by teachers and students during the learning process, and (6) the assessment of learning outcomes: shows how teachers carry out an assessment of the results or performance of the students as a result of learning. With improvements made based on these inputs, based Majeda *Dolanan Anak* ready to be tested on a large scale.

A large tryout was conducted at five selected kindergartens. Each kindergarten performed in one meeting and was observed

by a team of experts. The implementation of large-scale tryout was at State Kindergarten of Pembina Wonosari on September 19<sup>th</sup>, 2014, Kindergarten of ABA Kauman Yogyakarta on September 23<sup>rd</sup>, 2014, State Kindergarten of *Pembina* Galur dated on September 26<sup>th</sup>, 2014, State Kindergarten of Lendah 1, on October 2<sup>nd</sup>, 2014, and Kindergarten of ABA Karangmojo XVII on October 13<sup>th</sup>, 2014.

Large-scale test results show that based on observations by a team of researchers, teachers had been able to implement Majeda based on *Dolanan Anak* in accordance with the concept set out by the research team. In addition, the evaluation experts pointed out that teacher had been able to make the selection of *Dolanan Anak* in accordance with the material/themes/sub-themes presented. Teachers had the right to choose the model/learning methods, according to the model/learning methods and values selected in *Dolanan Anak*, according to the model/learning methods and elements that were developed in the *Dolanan Anak*.

Because teachers had the ability to choose *Dolanan Anak* that fit the theme/sub-themes were presented, and the students understood and comprehended with *Dolanan Anak*, and the number of students was in accordance with the rules of the Games of the Child, the learning process could proceed smoothly and well, such as is illustrated in the following description.

Students actively participated in *Dolanan Anak* in learning, and students were enthusiastic in the implementation of the learning model based on *Dolanan Anak*, so students seemed happy to play *Dolanan Anak*. Therefore, the class was orderly and controlled; although the class was crowded, the atmosphere was full of happiness.

Due to large-scale tryout results that teachers have to understand Majeda adequately, then Majeda based *Dolanan*

*anak* is not revised or improved on substance. Although the results of these studies show that teachers have an adequate understanding of the concept Majeda based on *Dolanan Anak*, but there are still shortcomings which need to be repaired.

When carefully considered from RKH (Daily Lesson Plan) used, and implementation of RKH in the learning process there is still a shortage that has not been in line with expectations of researchers, which is largely *Dolanan Anak* is still placed as the opening activity at the start of activities, so it is still slightly *Dolanan Anak* used in core activities. Therefore, the use of guidelines based on *Dolanan Anak* Majeda need to be updated by adding elements that have not been listed so that manual use of Majeda based on *Dolanan Anak* format be (1) introduction: background, objectives, and the scope, (2) Majeda based on *Dolanan Anak*: concept, content/theme-subtema, learning objectives, syntax/measures, the activities of teachers and students, and assessment of learning outcomes, (3) how to use: preparation, execution, and reflection, and (4) the cover. Free use of the complete format is presented in the other appendix.

Having regard to the tests carried out showed that Majeda based on *Dolanan Anak* has undergone revisions in format and the user guide. The final form of both is as follows. Majeda format based on *Dolanan Anak* has six components, namely (1) concept, (2) the material/theme-subthemes, (3) learning objectives, (4) syntax / learning steps, (5) the activities of teachers and students, and (6) the assessment of learning outcomes.

Guidance on the use of Majeda based on *Dolanan Anak* have the basic elements: (1) introduction: background, objectives, and the scope, (2) Majeda based on *Dolanan Anak*: concept, content/theme-subtema,

learning objectives, syntax/measures, the activities of teachers and students, and assessment of learning outcomes, (3) how to use: preparation, execution, and reflection, and (4) the cover; bibliography; and attachments.

By taking into account the results of field tryouts, which successfully completed Majeda format based on *Dolanan Anak*, and guidelines for its use, the researcher believes that Majeda based on *Dolanan Anak* is quite feasible for operational test and tested its effectiveness in the next stage so that the model deserves to be disseminated to the general public.

## CONCLUSION

Based on the proposed introduction, description and analysis of the data, and use the results of the discussion, the conclusions that can be drawn are as follows. *First*, small-scale tryouts were conducted in TK/SD Model Sleman and TK PKK Temanggal in three meetings, and managed to revise *Dolanan Anak* Majeda based on six components: concept, material/theme-subthemes, learning objectives, the syntax/learning steps, the activities of teachers and students, and evaluation of learning outcomes. *Second*, a large tryout was conducted in *TKN 1 Pembina* Wonosari, TK ABA Kauman, *TKN Pembina* Galur children, TKN 1 Sleman, and TK ABA Karangmojo XVII in five meetings at all schools kindergarten. The result has been established Majeda based on *Dolanan Anak* which has six components as referred to in paragraph 1. As a result of the implementation has not been satisfactory, the manual use of the model should be revised, so that the guide has a framework with the following elements: introduction (background, objectives and scope); Majeda based on *Dolanan Anak* (concept,

theme-subtema, learning objectives, syntax, teacher and student activities, and assessment of learning outcomes); how to use (preparation, execution, and reflection), and the closing (a bibliography; and attachments). *Third*, Majeda based on *Dolanan Anak*, the results of the tryouts have the form of a final conclusion as contained in point 1 and point 2. Therefore, Majeda based on *Dolanan Anak* is adequate to be applied in the operational testing.

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