



International Conference on  
Educational Research and Innovation



# ETHICS IN HIGH-QUALITY RESEARCH



# CONFERENCE PROCEEDINGS

Institute of Research and Community Services Yogyakarta State University  
May. 6-7. 2015





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Educational Research and Innovation



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## MESSAGE FROM THE RECTOR OF YOGYAKARTA STATE UNIVERSITY

Welcome to Yogyakarta, Indonesia!

It is a great honor and pleasure for me to welcome you all to the 3rd International Conference on Educational Research and Innovation held in Yogyakarta, Indonesia. On behalf of Yogyakarta State University and the committee, let me extend my warmest greetings and appreciation to all speakers and participants who have travelled hundreds or even thousands of miles by various transportation means to come to Yogyakarta to attend this conference. It is my strong belief that your safe journey has been due to the blessings granted by God the Almighty and the Most Merciful to Whom we without any further due have to express our gratitude and praise.

It is indeed a privilege for Yogyakarta State University to have the opportunity to organise this very important conference in which educational researchers and practitioners get together to share ideas, experiences, expectations, and research findings. This conference is held as one of the agendas of Yogyakarta State University to celebrate its 51st anniversary. The theme of this year's conference is "Ethics in High-Quality Research".

Research is one of the activities among the academic members of a university. It is a systematic effort to solve the problems or answer the questions by collecting data, formulating the generalities based on the data, then finding and developing organized knowledge by scientific method. It is expected that from research activities valuable empirical facts can be obtained to improve and develop the theory and practice to bring a better quality of education.

Unfortunately, currently issues on ethics are regaining their popularity in various practices of research, such as inaccurate data analyses, data manipulations, and plagiarism. In response to this, in this year to support the roles of the Institute of Research and Community Services of Yogyakarta State University in encouraging researchers to conduct high-quality researches, an International Conference on Educational Research and Innovation (ICERI) is held under the umbrella theme of Ethics in High-Quality Research. It provides teachers/lecturers, education practitioners, college students, and policy makers the opportunity to share their knowledge, experiences, and research findings which are innovative and relevant to develop the educational practices focusing on the process and product.

This third conference is aimed at discussing the papers on the research findings related to research ethics, and researches on character education, teaching innovations, as well as educational policies. It is expected that this conference will reach its declared objectives successfully as a strategic forum to yield recommendations on the importance of ethics in the research to produce high-quality research for the benefits of the human' s welfare.

To conclude, let me wish you a fruitful discussion during the conference and an enjoyable stay in Yogyakarta. And finally, hopefully all materials in this conference compiled into a proceeding are useful for us to improve the quality of education and educational research.

Thank you very much for your attention.

Wassalamu' alaikum warrahmatullah wabarakatuh.  
May peace and God' s blessings be upon you all

Yogyakarta, 6 May 2015  
Rector,

Prof. Dr. Rochmat Wahab, M.Pd., M.A.



## MESSAGE FROM THE ORGANIZING COMMITTEE

His Excellency Minister of Research and Technology and Higher Education,  
Vice Rectors and Deans of all faculties,  
Honourable Heads of Institutes of Research of the surrounding universities,  
Distinguished all invited speakers and all other speakers,  
Distinguished guests,  
All participants,  
Ladies and gentlemen,

Assalamu' alaikum warrahmatullah wabarakatuh  
May peace and God' s blessings be upon you all  
Good morning

First of all allow me to extend my warmest greetings and welcome to you all to the 3rd International Conference on Educational Research and Innovation, held by Yogyakarta State to celebrate its 51st anniversary.

Raising the theme – Ethics in High-Quality Research - this conference is designed to discuss the papers on the research findings related to research ethics, and researches on character education, teaching innovations, as well as educational policies. Hopefully, all discussions in this conference can be inspiring and useful for us to improve the quality of education and educational research.

Ladies and gentlemen

For your information, we will proudly present one keynote speech, four plenary presentation sessions and four parallel presentation sessions. Four outstanding speakers in the field of character education and educational research have been invited. They are Christopher Drake from Association for Living Values Education, Hong Kong, Dr. Elizabeth Hartnell-Young from Australian Council of Educational Research, Dr. Mohamed Bahaaeldin from Faculty of Education, Technische Universitat Dresden, Germany, and Dr. Nurul Taufiqurahman, Head of Innovation Center of the Indonesian Institute of Sciences (LIPI), Indonesia.

Ladies and gentlemen

We have done our best to prepare for this conference. So, my highest appreciation and heartfelt thanks to all committee members. As to err is human, shortcomings may

occur here and there. On behalf of the committee, I would therefore like you all to accept our apologies.

At the end of my speech, I would like to kindly request the Rector of Yogyakarta State University to officially open the conference.

To conclude, let me wish you a productive discussion and a fruitful conference. Thank you very much for your attention.

Wassalamu' alaikum warrahmatuliah wabarakatuh.  
May peace and God's blessings be upon you all

Yogyakarta, 6 May, 2015  
Head of Research Institute and Community  
Service of Yogyakarta State University

Prof. Dr. Anik Ghufon, M.Pd.

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## FOREWORDS FROM THE HEAD OF COMMITTEE

Assalamu 'alaikum wa Rahmatullohi wa Barokatuh  
May peace and God' s blessings be upon us all

Your Excellency The President of Yogyakarta State University Prof. Dr. Rochmat Wahab, M.Pd, M.A, ladies and gentlemen, good morning and welcome to Yogyakarta State University.

The seminar entitle International Conference on Educational Research and Innovation (ICERI) is held under the umbrella theme of Ethics in High-Quality Research. The seminar is organized by Institute of Research and Community Services, Yogyakarta State University, working together with ACER, LIPI, and University of Dresden. This seminar also dedicated to celebrate the 51<sup>st</sup> Commemoration of Yogyakarta state university.

Ladies and gentlemen, on behalf of the committee of this conference, I would like to express highest appreciation and gratitude to the keynote speakers Prof. Drs. Muhammad Nasir, Akt, M.Si, Ph.D (Minister of Research, Technology and Higher Education) and four inveted speaker :

- Christopher Drake  
(Association for Living Values Education, Hong Kong)
- Dr. Elizabeth Hatnell-Young  
(Australian Council for Educational Research, Australia)
- Dr. Bahaaeldin Mohamed  
(Faculty of Education, Technische Universitat Dresden, Germany)
- Dr. Nurul Taufiqu Rahman, M.Eng.  
(Head of Innovation Center, Indonesian Institute Sciences (LIPI), Indonesia)

The conference is around 200 participant with 121 orally presented article from lecture, researcher, teacher, and student from about 45 universities. The conference is aimed at discussing the papers on the research findings related to research ethics, and researches on character education, teaching innovations, as well as educational policies. It is expected that this conference yields recommendations on the importance of ethics in the research to produce high-quality research for the benefits of the human' s welfare.



This conference will be far from succes and we could not accomplish what we do without the support from various parties. So let me extend my deepest gratitude and highest appreciation to all committee members. I would also like to thank each of participants for attending our conference and bringing your expertise to our gathering. Should you find any inconveniences and shortcomings, please accept my sincere apologies. In conclusion, I hope that your discussions produce something useful and very pleasant stay in Yogyakarta.

Wassalamu' alaikum wa Rahmatullohi wa Barokatuh  
Thank you

Por. Dr. Sri Atun

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## THE EFFECTIVENESS OF FLEXIBLE HOMEWORK COMPARE WITH COMMON HOMEWORK MODELS ABOUT GLB AND GLBB IN SENIOR HIGH SCHOOL

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### Abstract

The purpose of this research is to find out the effectiveness of flexible homework in improving motivation and achievement compare with common homework model in the matter of : (1) students' learning result improvement (2) students' motivation. The population of this research is all students of class X SMA Santa Maria Yogyakarta. Where as the sample of this research is students of class XB (25 students) as an experimental class and class XC (25 students) as a controlling class. The data of physics learning improvement result is analyzed by using test-t. the result of this research shows that  $t_{obs} > t_{crit}$  ( $197,714 > 1,684$ ). Therefore,  $t_{obs}$  is significant and it can be concluded that flexible homework model is effective to improve students' learning achievement in the topic of GLB and GLBB. The data analysis result of students' motivation shows that student amount in each motivation level criteria is 5 students of 20% of very high-motivation student category, 18 students or 72% of high-motivation student category, 2 students or 8% of medium high-motivation student category.

**Keywords:** flexible homework, GLB, GLBB.

### 1. Introduction

Learning is a series of activities and soul to obtain a change in behavior as a result of individual experiences in interaction with the environment that involves cognitive, affective and psychomotor one of them is studying physics. The fact learning physics in school, students are only given definitions, then directly to the examples, so that learners acquire only those records in the form of symbols and formulas, no application in everyday life.

Achievement is the result of efforts that have been made. Learning physics requires an appropriate strategy in order to achieve maximum results and impact on student learning achievement. Therefore, we need a method or way teachers deliver lessons in physics. One of the tasks of teachers in improving student learning outcomes physics is to apply learning through Task Homework. Where the purpose of this homework assignment is for students to keep learning at home and can use the time outside school hours.

Based on the results of interviews conducted at The Ohio State University showed that the traditional method of homework has a negative effect on the motivation of some students. Provide settlement problems after homework is collected is not so good because students feel

they do not have time to learn the task given earlier because they have to work on the next task.

Therefore, the researchers developed a model where homework homework should not be viewed as learning assessment tools. By improving the quality and quantity of support for students with homework is to give a good answer of the questions given before the day of collection and give freedom to the students to be able to choose a matter-sola that they will work. Such a model is called a flexible homework (Bao, L & Stonebraker, 2002). This is what makes the researcher intends to conduct research on the development of traditional homework becomes a chore flexible.

### 2. Theoretical review

Homework is a learning model where the teacher gives an assignment, then the student should be accountable for the results of the task ([http://www. Metode-metode mengajar-pretest.com](http://www.Metode-metode.mengajar-pretest.com)). While flexible according to major Indonesian dictionary is easy to resolve themselves with the state or condition; supple.

From the above understanding both of understanding and flexible homework can be concluded that the flexible homework is a method given by the teacher to assign tasks such



as problems for the student to be able to do at home. Of the questions are given, students can choose their own questions that will be done, so that each student can work on different problems. In addition, students are free to choose whether to work on all problems or just do the problem in accordance with predetermined targets teachers.

The use of flexible models of homework is to assume that students are mature and responsible, so they want to try to understand the material and get good grades and homework should not be viewed as a learning tool assessment tool. The main purpose of the model Flexible homework is to improve the public relations function as a learning tool for students. Efforts to improve the quality and quantity of support received by students during their homework is done by giving a good answer of the questions given before the day of collection.

In physics learning requires an appropriate strategy that results achieved by students and the maximum effect on student achievement. Learning achievement is the success rate of students in influencing learning materials in schools are then expressed in the form of a score or value obtained from the test results of a number of specific subject matter.

Learning achievement in the form of value that would be obtained after undergoing tests students' learning presentation, which implemented a formal, orderly and well-planned. Value test presentation is also useful as a means of improving learning motivation. Experience shows that students will be keen to learn when to be held test.

### 3. Research methods

This research is quantitative research and case studies. Quantitative because the data obtained in the form of numbers and will be analyzed using statistical test-T.

The shape of the experimental method of research is composed of two classes of experimental classes and control classes. Both classes were given a pretest, followed by giving the GLB and uniformly accelerated learning. After learning the experimental class finish homework given flexible control while class was given a traditional homework. Then give the posttest to second-class matter, continued giving questionnaire. Questionnaire used is immediately closed the questionnaire, along with a statement and answer options so that respondents can just choose the answer that is considered the most in conformity with her. Furthermore, conducting interviews to students.

Interviews in this research is guided interview by preparing a list of questions yag been made. The last step is to perform data analysis with analysis of test-T.

### 4. Research result

Data obtained from research in the form of scores of questionnaires, interviews, homework, the pretest and posttest. Here are the data of the study.

**Table 1.** Percentage of Students in Each Criteria Level Motivation in questionnaire scores

Category	Interval	Control (%)	Treatment (%)
Very High	81 – 100	12	20
High	61 – 80	60	72
Moderate	41 – 60	28	8
Less	21 – 40	0	0
Very Less	< 21	0	0

**Table 2.** Percentage Increase in scores on the pretest and posttest results Each Control Problem for a Class

Classification Weight Problem		Weight Problem	The Score		The Rise Score (%)
			Pretest	Posttest	
Difficult No. 1 and 2	1	15	2,16	5,16	20
	2	15	1,2	2,64	9,6
Moderate No. 3 and 4	3	10	0,88	3,6	27,2
	4	10	0,64	1,44	8
Easy No. 5 and 6	5	5	0,16	0,64	9,6
	6	5	0,32	0,8	9,6

**Tabel 3.** Percentage Increase in scores on the pretest and posttest results Every Problem for a Class Treatment

Classification Weight Problem		Weight Problem	The Score		The Rise Score (%)
			Pretest	Posttest	
Difficult No. 1 and 2	1	15	1,8	10,68	59,2
	2	15	0,6	6,68	40,53
Moderate No. 3 and 4	3	10	0,4	6,48	60,8
	4	10	0,08	4,28	42
Easy No. 5 and 6	5	5	0,08	1,56	29,6
	6	5	0,08	1,36	17,6

### 5. Discussion



In Table 1, the results showed that the students have a high motivation that students fall into the category of very high and high. When viewed from both classes of both classes and class control treatment, the results showed that students' motivation in class many treatments are on a score of 3 (317) with a high category. While In the control class is on 3 scores (247) in the highest category. This means that both classes have a high motivation. However, if viewed from a total score of choice in learning motivation questionnaire score of 3, class treatments have a greater amount than the control class.

It can also be based on the results of interviews conducted with flexible homework models of 6 samples taken that students who have a good value, medium, and low. Students who do well tend to choose the first work after that they match with the answers already exist. Students who scored're likely to see an answer there is to know the ways of the process and then try again to do it themselves, but there is also the work first and then match the answer is no. Students who scored low tend to directly copy the answers.

In Table 2, about the numbers 1 and 2 (categories difficult) showed that students in working on an increase of 14.80% by using the model of regular homework. Problem 3 and 4 (medium category) showed that the ability of the students in working on an increase of 17.60% using the usual model of homework. Students' ability to work on the problems in the category of easy (about 5 and 6) increased 9.60% by using the model of regular homework.

In Table 3, about the number 1 and 2 (categories difficult) showed that students in working on an increase of 49.86% using the model flexible homework. Problem 3 and 4 (medium category) showed that the ability of the students in working on an increase of 51.40% using the model flexible homework. Students' ability to work on the problems in the category

of easy (about 5 and 6) increased by 23.60% with the use of models flexible homework.

Data resulting from the increase in learning physics were analyzed using t-test. the results showed that  $t_{obs} > t_{crit}$  ( $197.714 > 1.684$ ). So  $t_{obs}$  is significant and it can be concluded that the model flexible homework effectively to improve student achievement on the subject of the GLB and uniformly accelerated motion. The results of data analysis showed that the number of student motivation of students in each criterion student motivation level is 5 or 20% of the students are classified in categories that have a very high motivation, 18 students or 72% of the students are classified in categories that have high motivation, and 2 students or 8% of students classified in the category of being motivated.

## 6. Conclusion

From the analysis of the data obtained from the four learning sessions, the following conclusions research has been carried out:

1. Learning physics on the subject of the GLB and uniformly accelerated motion with flexible PR model is more effective in terms of improving student achievement compared to the usual model of homework.
2. The use of more flexible homework increases student homework motivated than usual.

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## PILOTING A MODEL OF EDUCATIVE AND ATTRACTIVE PHYSICAL ACTIVITIES BASED ON CHILDREN'S DOLANAN TO OPTIMIZE KINDERGARTENERS' GROWTH AND DEVELOPMENT

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### Abstract

One type of the games is *dolanan* (a Javanese word for 'play'), which is an activity inseparable from children world but has not been optimally used in kindergartens. Therefore, the use of children's *dolanan* in teaching-learning at kindergartens needs to be developed. This research and development study at the second stage of three stages is designed to try out a model of educative and attractive physical activities (Majeda) based on *dolanananak* as a means in optimizing kindergarteners' growth and development. This study was conducting the small- and large-scale tryouts.

The study employed the research and development approach by Borg and Gall. The small-scale piloting was conducted at TK/SD Model Sleman and TK PKK Temanggal, Sleman. 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 of the field tryouts showed that the model format needed to be revised into Majeda based on children's *dolanan* consisting of six components, i.e.: (1) concepts, (2) materials/themes-subthemes, (3) learning objectives, (4) syntax, (5) teacher and student activities, and (6) learning outcome assessment. In addition, a guide to use Majeda was revised into one with the following outline and elements, i.e.: (1) introduction, (2) Majeda based on children's *dolanan*, (3) how to use it, and (4) closing. Based on the results of the piloting, it can be concluded that the Majeda based on children's *dolanan* is appropriate for further operational testing.

Keywords: children's *dolanan*, model of physical activities, educative and attractive, kindergarteners.

### 1. Introduction

Foundationing 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 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 children. Physical growth and development of knowledge, skills, and 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.

Optimization of the golden age of children so that children get adequate facilitation to

experience optimal growth and development and continue to be pursued by the government and society. Efforts are made through improvement of the organization of children's education since early childhood or early childhood education (ECD). One type of early childhood education is kindergarten (TK). Mansur (2009: 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



(Government Regulation No. 27 of 1990 on Preschool), (2) children who are experiencing growth and development. Significant growth in quantity changes experienced by children, such as height, weight, and body size. Payne and Isaacs (1995: 15-17) states that there are two terms of growth and physical development of the child's motor, ie 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.

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. Ministry of Education (2008: 19) states that there are five common learning model implemented in kindergarten. All five models are models of classical learning, group learning model with safety activities, learning model based on the point of activity, area learning model and learning model based centers and when the circle. Although the five learning model has the particularity of each, but the learning models have in common the learning steps, namely: preliminary activity / initial, core activities, breaks / meals, and end / closing activities. In addition, the fifth model of 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 and Symon-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. 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 learn is play and play is learning. 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 and Attfield, 2005: 87).

One type of activity that is very well known children's play and has a diversity of types is a traditional children's games or *Dolanananak*. Various types of *Dolanananak* can be chosen by the teacher and implemented in the learning process. *Dolananchild* is one of the popular play activities and loved by children. These games have educational values that are important. ViviWijayanti (2008,12) states that Dolanan derived from the word dolan which means playing. Dolan which means playing gets the suffix -an, thus becoming dolanan. Said Dolanan in the form of the verb is playing (to play), as a noun is a game (game). Poerwadarminta (in ViviWijayanti, 2008: 12) adds that dolanan meaningful (a) play, (b) the means used for fun for kids, and (c) of the game. Dananjaya(1991, 171) states thatdolanan-children everywhere in theworldare usuallydistinguished bygesturessuch as running, jumpingorbysimplesocialactivitiesliketag,hide and seek, fighting,or based onbasic mathordexterity of the handsuch ascountingor throwingstonetoacertain holes, orspeculative games.

Dananjaya statement is in line with the thought of Ki HadjarDewantara. Ki HadjarDewantara (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-CublakSuweng, 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.

## **2. Research Methodology**

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

For the purposes of development Majeda Based on Dolanan anak, this research will be done in three stages, namely: (1) Preliminary Study and Design of Model; (2) Testing Model tryouts; and (3) operational testing, revision and preparation of modules, and Dissemination Model. Stages of research done on this occasion is Majeda field tryouts with based on Dolanan anak.

## **3. Results and Discussions**

Experiments of the model implemented, as a follow up on the results of preliminary studies and model development. Experiments of the model is 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 to produce a draft Majeda based on Dolanan child, which has five basic components.

This draft was getting validation from an expert, and socialized at kindergarten teachers. After socialization, then conducted the tryout stage, small-scale tryouts and its revisions, and large-scale tryouts and their revision. Test results and discussion are presented as follows.

### **3.1 Small-Scale Tryout**

The first small-scale Tryout was conducted in kindergartens and primary schools Model Sieman, as much as two meetings, on 4 and September 5, 2014. The second small-scale Experiments conducted in kindergarten 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 to be 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 yet include the substance of the concept and assessment of learning outcomes.

In addition, teachers in the field giving considerable input for the improvement of the model, which Dolanananak can be modified without losing its substance so that the children do Dolanan easily. Not required 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 Majeda format Dolanananak undergo significant changes from the five components into six interrelated components and unity. All six components are: (1) concept: that describes what is meant by MajedaDolanananak based, (2) Material / theme-subthemes: describe what will be learned by the students on the pembelajaran 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 MajedaDolanananak ready to be tested on a large scale.

### 3.2 Large-scale Tryout

A large tryoutTryout was conducted at five selected kindergartens. Each kindergarten perform one meeting and observed by a team of experts. Implementation of large-scale tryout is State Kindergarten PembinaWonosari is on 19 September 2014, Kindergarten ABA Kauman Yogyakarta on 23 September 2014, State kindergarten PembinaGalur dated on 26 September 2014, State kindergarten 1, on 2 October 2014, and Kindergarten ABA Karangmojo XVII on 13 October 2014.

Large-scale test results show that the observations by a team of researchers, teachers have been able to implement Majeda based games children in accordance with the concept set out by the research team. In addition, the evaluation experts pointed out that Guru has been able to make the selection of Kids Toys in accordance with the material / themes / sub-themes presented. Teachers have the right to choose the model / learning methods, according to the model / learning methods and values selected in Kid Games, according to the model / learning methods and elements that were developed in the Games of the Child.

Because teachers have the ability to choose games that fit the theme / sub-themes were presented, plus the students understand and comprehend with Children played games, and the number of students in accordance with the rules of the Games of the Child, the learning process can proceed smoothly and well, such as is illustrated in the following description.

Students actively participated in Dolanananak in learning, and student enthusiasm in the implementation Dolanananak play, so students seemed happy to play Dolanananak. Therefore, the class orderly and controlled, although crowded class atmosphere and happy.

Due to large-scale tryout results show that teachers have understood Majeda adequately, then Majeda based Dolanan anak not revised or improvement 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 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 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 format based on Dolanan anak. 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 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- sub-themes, (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 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.

### 4. Conclusion

Based on the proposed introduction, description and analysis of the data, and use the results of the discussion, the conclusion that can be drawn are as follows.

1. Small-scale tryouts conducted in kindergarten Model Sleman and kindergartens PKK Temanggal in three meetings, and managed to revise *DolanananakMajeda* based on six components: (1) concept, (2) material / theme-subthemes, (3) learning objectives, (4) the syntax / learning steps, (5) the activities of teachers and students, and (6) evaluation of learning outcomes.



2. A large tryout conducted in Kindergarten School 1 Pembina Wonosari, kindergarten ABA Kauman, State Kindergarten Pembina Galur children, state kindergarten 1 Sleman, and kindergarten ABA Karangmojo XVII of 5 meetings at all schools kindergarten. The result has been established based on DolanananakMajeda 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 pause should be revised, so that guide has a framework with the following elements: (1) introduction: background, objectives and scope, (2) Majeda based on Dolanananak: concept, creative / theme-subtema, learning objectives, syntax / measures, teacher and student activities, and assessment of learning outcomes, (3) how to use: preparation, execution , and reflection, and (4) the cover; a bibliography; and attachments.
3. Majedabased on Dolanananak, based on the results of the tryout have the form of a final conclusion as contained in point 1 and point 2. Therefore, Majeda based on Dolanananak adequate to be applied in the test operation.

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# **BUILDING SINERGYCAL COLLABORATION AMONG MINISTRY OF EDUCATION, DIRECTORATE GENERAL OF POPULATION, AND MINISTRY OF HEALTH FOR MARGYNAL COMMUNITY THROUGH “OPEN EDUCATION” MODEL**

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## **Abstract**

“Education is the most powerful weapon which you can use to change the world”. Quote from Nelson Mandella is real and true.

One of the education processes which is easy for public to reach and well developed and successful is the open educational model. Why should there be collaboration among Ministry of Education, Directorate General of Population, and Ministry of Health? It is because from the three aspects there is a possibility to have breakthrough of “Open Education”. The margynal community living patterns in many ways are not worthy, especially in education, health and sexual life or biological needs which are related to population growth. Why is it specially addressed to margynal community?

Excersively they have to be the main target of education and health services. The margynal community here is those who live in the river banks, under the bridges, in waste landfills, around the markets, on the streets, who do not have awareness of education, health, etc. Education is urgently needed and we have to be proactive to get in touch closely to give stimuli and motivations, and educations. Education for the margynal community is urgently needed to apply for education can change everyting like the quote from Nelson Mandella that “Education is the most powerful weapon which you can use to change the world”. Intensive education for grassroots can change the world since the number of grassrots is more than the number of high level society. Educated and characted community will fill the structure of grassroots.

A Qualified “Open Education” Model for margynal community is the solution for the problem of low educational growth in developing countries like Indonesia.

**Key words:** Collaboration, Open Education, margynal community.

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## **1. Introduction**

### **1.1 Background of the Problems**

Based on some information, e.g. from the survey conducted by UNESCO, Indonesia belongs to the very low strata of education, the 10<sup>th</sup> of fourteen countries in Asean. The teacher qualification is in the lowest grade, the 14<sup>th</sup> among 14 countries in Asia Pacific. The important problem is our attitude as Indonesian citizens to think of the solutions we have to do in relation with education which is related to social problems of the people.

We all realize that education is the fundamental base in developing human civilization, especially the civilization of a country. However, it is not easy to realize. In order to make it easier and faster to realize, all stakeholders have to collaborate. The concrete example is that a community structure is formed by some categories or aspects of human life. They are social aspect which is under the authority of Ministry of Society, population aspect which is under the authority of Directorate General of Population under the Ministry of Domestic Affairs, and public health aspect under the Ministry of Health and the Ministry of Environment.



Based on the above situation, the writer thinks that one of the ways to construct lower people community structure into a more civilized and qualified one is through education. The process of educating and upgrading the marginal communities can not only be managed by one of the stakeholders but also by all the stakeholders above. Why? It is because human beings do all the activities all together at the same time. They are from the social environmental activity, working, way of life (healthy or not), biological needs or fertility, fulfilling ethics and morality (naturally or hedonic), and their educational aspect (educated or non educated).

According to Soemardjan (in [www.septianhara.com/makalah](http://www.septianhara.com/makalah) perubahan sosial), related to social change, "social change is a change which occurs in the society which will influence the social systems of the society including attitudinal value, social attitude, and attitudinal pattern of a certain society. According to Gilin and Gilin (in septianahara), social change is a change which occurs as a variety of ways of life which are accepted by the society because of geographical change, materialistic culture, human population composition, ideology and educational diffusion or new findings in the society.

By educational process it is hoped that a change will occur from various aspects of life: a change of civilization, social and cultural changes and an increase in intellectual quality. By sinergical education, it is hoped that diffusion and innovation will occur contigiously where ideas are communicated and transferred into social systems and give positive impacts (Roger: 2003). Education is an absolute requirement for developing civilization. Without wholistic, comprehensive and adequate education, human resources will not develop well.

In this paper, specifically wants to focus on education for marginal community. The progress and the development of a country is measured by the level and the quality of the human resources in the country and education which is one of the effective ways and keys to solve the problems of backwardness and stupidity of which will finally solve the problems of poverty.

The fact is that there has still been stupidity and some people do not go to school to study for the reason of poverty, especially in the developing countries like Indonesia of which the number is quite significant so that it will influence the condition of the country. In this case, in order to make all the poor have the chances to get education the Indonesian government actually has done various ways like providing Bantuan Operasional Sekolah (BOS)

or School Operational Fund and Program Keluarga Harapan (PKH) or Ideal Family Program that are still running. However, are they the sollutions of even distribution of fund for the poor? We all can see that in fact the funds go to the wrong destinations. Why? It is because in practice, there have still been many manipulation practices of the fund of BOS, where the ones which get the funds are schools which have been well established and most of the students are not poor students.

Poverty results in negative changes in children life like slow physical, moral and mental development and the intellectual. The children of poor people who live at river banks, at both sides of railways and the waste area are marginal people who need special cares. They are groups of people who get less less attention and the solution of how to make them educated. Therefore, there will be no potentials for them to do crimes.

We have to try to change the life paradigm of all mankind that besides the needs of food for human being to live, they live for making all creatures in the universe live in tolerance. Therefore, improvement of the human thoughts is needed by all human beings that they can not live without the universe and things on it.

Human beings are not "Homo homini lupus" but are "Homo homini socius" and Homo sapiens". It means that human beings are closed friends for other human beings, who can think. Human beings are closed friends for the other life, closed friends for other lives, for all the existing habitats. Therefore, a harmonic ecosystem for all life occurs.

## 1.2 Problem Limitation and Problem Statement

Based on the above explanation the writer thinks that the problem of poverty is very complicated in relation with education in Indonesia. Therefore, the writer limits the problems of the study specifically on the importance of education for marginal society. The problem statement is:

"Why is education for marginal society crucial and urgent, especially for school-age children?"

By giving early education for them, it is hoped that the young generation is avoided from various divergences of social attitude, ethics, morality, mentality, and intellectualism, to be early anticipation of the development of marginal society-based crimes.



### 1.3 Objectives and Benefits

#### Objectives:

Based on the problem limitation above, the objective of this writing is to give input and consideration or idea in improving and considering various policies, especially in managing education, pulling poverty out, and education acquisition management for school-age children in marginal society excercively.

#### Benefit:

It is hoped that this writing will give benefit, especially for decision makers and government of the importance of cooperation and collaboration among the Ministry of Education, Directorate General of Population and Ministry of Health in solving the problem of the rising population growth in marginal societies of productive ages which tends to be proporsionally high and has negative potentials. Indonesia is in emergency condition of education. Therefore, one of the solutions is handling it all together.

### 2. Theoretical Review

Ki Hajar Dewantara, the most prominent figure of Indonesian education, stated that: "Education is an effort to trigger good attitude, thought and character of students that we can modernize and reach the completeness of our life, and the life of our children in accordance with their world" (Dewantara, 1977:14). It is in line with UU no. 2 Year 1989 about the National Education system supported by UU no 20 Year 2003 about the national eduction system as stated in article 34, saying that:

1. Every citizen of 6 years old can attend the compulsory education.
2. The central and local governments guaranty the application of minimum compulsory education of elementary school level for free.
3. Compulsory education is the responsibility of government which is done by educational institutions, the central and local governments, and society.

In addition, the opening of The Indonesian Fundamental Ordinance of 1945 states that the goal of national education is to educate the national life which is stated in detail in verse 31 that (1) every citizen has the right to ge education... and (2) every citizen has to attend elementary education and the government have to support with fund.

Eduation is urgent and fundamental for a nation since the development of a nation is determined by the quality of the citizens.

Therefore, education is the key of tackling stupidity which results in poverty. Imbalance distribution of education in Indonesia results in low rank of Indonesian education in Asean and International levels. Therefore, teachers have a very important role in the success of educational institutions of how the quality and system are designed to manage the responsibility of teaching and educating.

Sunarwan (2001:60), then stated that "It is important to learn how to see the educational system from "new perspective" dan think it in different ways".

By education, then, the changes in societies will occur from social side, value and attitude, and attitudinal pattern in the societies where they live.

### 3. Discussion

#### 3.1 Poverty Versus Education

The number of overty in Indonesia is quite high. Based on Republica.co.id, it is predicted that in 2015, 12.25% of the total Indonesian population or 30.25 million people are poor. Based on BPS (Statistic Centre Bureau) data, of the total population in 2011, 11.25 % were the poor. Therefore, there is an increase of poverty of 1%. There are three groups of people in the structure of Indonesian societies: the rich group of 20%, midle group of 40%, and the poor group of 40%.

Based on the above condition, it is not easy to lessen the number of poverty of 40%. We have to work very hard and wholeheartedly.

One of the reasons why it happens is that many programs run by the government do not get the right targets and makes poverty not easy to handle. Therefore, the government should immediately have special treatments to make the poor parents to support their children to study.

What system should be established? In this writing, the writer tries to make the scheme of base-camp model which will be offered to the government as a new policy in upgrading the poverty and stupidity by giving education with the system of "pick up service" by establishing based groups with the model of camp sites where they live. For example, an educational camp is established in a group of garbage pickers, especially for children of school



ages. The camps can also be established in river banks. The students are those who do not have the opportunity to study in formal elementary and secondary educational institutions. For those who study at the formal schools, the tuition fee is free and is supported by the government through BOS (School Operational Fund).

Who are the teachers? They are voluntary teachers of university fresh graduates who have not got jobs. The salary is allocated from the 20% of educational fund. BOS (School Operational Fund) which has been distributed to middle and high level schools should be distributed to lessen poverty and stupidity for marginal societies.

### 3.2 Why should there be Collaborations among Ministries?

Quoted in online Republica dated 15 January 2002, the government would have a new scheme to handle poverty. The government stated that the development of eastern area of Indonesia would be prioritised. However, in the writer opinion, marginal societies are in all left behind suburbs and villages in all parts of Indonesia. There should be social services related to the increasing number of population, education and health. Education is important for handling population increase which is imbalance with the economic growth to make the societies live in prosperity and their social life is well managed. Therefore, coincident cooperation is needed. Coincident means the activity is done at the same time, to reach a certain goal, and occurs at the same place. In this case, the fund is supported by three ministries. Technically, each

materials from the three ministries are delivered at the same time in the process of education which covers three interests of lessening stupidity, lessening poverty by educating them to be productive, making them have good morality and characters, and the Ministry of Health educate them not to have sex divergence and have good knowledge of fertility to have controlled children with maturity and healthy life.

By integrated didactic process of three Ministries, it is hoped that the cooperation can create *homo homini socius* (human beings who socialize with others) and *homo sapiens* (human beings who have intelligence and good attitude), to be human beings with natural attitude and healthy mentality who do not have potentials to do crimes for the lack of knowledge and the mind which is occupied by instinct, not healthy mind.

### 4. Conclusion

Based on the above idea, the writer thinks that such collaborated activity with thinking and action paradigm of effectiveness and efficiency might result maximally with fund efficiency. In this process of education, we try to produce effectiveness of a certain goal with the cheaper process but with a better process and result.

One of the efficiency problem of education is that in practice education is expensive. The solutions to make education run well are:

1. Systemic solution, by improving the social system related to educational system.
2. Technical solution, related to technical matters which have been discussed above related to the ways how to make educational processes run smoothly and have no problems in the forms of teaching and its application.

The two solutions above are practical efforts to improve teaching quality with visual aids etc.



## 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**

Foundationing 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 models 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 & Hymon-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, Seriaty, & 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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