

ISSN: 2443-1753



International Conference On-Educational Research and Innovation:





# ETHICSIN HIGH-QUALITY RESEARCH



ACER TECHNISCHE UNIVERSITÄT



## CONFERENC PROCEDINGS

Institute of Research and Community Services Yogyakarta State University

ISSN: 2443-1753



### International Conference On Educational Research and Innovation





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## RI Educational Research and Innovation





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May, 6-7, 2015

#### Published by

#### Institute of Research and Community Services Yogyakarta State University

Kampus Karangmalang, Yogyakarta, Indonesia 55281

Phone : (0274) 550839. e-mail : lppm@uny.ac.id

ICERI 2015 Proceedings International Conference on Education, Research and Innovation May 6th-7th, 2015 — Yogyakarta, Indonesia

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Institute of Research and Community Services Yogyakarta State University in Collaboration with Australian Council for Educational Research (ACER) Technische Universitat Dresden (TUD) Indonesian Institute of Sciences (LIPI)

ISSN: 2443-1753

Book cover and layout designed by Apri Nuryanto

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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 plagiarsm. 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 ain ed 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 succeesfully 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 a!l

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 warrahmatullah 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 Ghufron, M.Pd.

#### 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 51st 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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#### 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 socioemotional 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 intellectual activity can be development, 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. Dolunanchild 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 usuallydistinguished theworldare bygesturessuch running, as jumpingorbysimplesocialactivitiesliketag,hide fighting, or based seek, mathordexterity of the handsuch ascountingor throwingstonetoacertain holes, orspeculative games.

Dananjaya statement is in line with the Ki HadjarDewantara. of 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, and kubuk Cublak-CublakSuweng, 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 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 Sleman, 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 pemebelajaran 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

- 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 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.
- 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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