

The Optimization of Early Childhood Scientific Approaches to the Center of Play in Kindergarten Fastabiquil Khairat Samarinda

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Abstract

The purpose of this study is to describe: (1) the designing effort of learning with scientific approach to 5-6 year olds in the playing center, (2) optimizing the scientific approach to 5-6 year olds in the playing center, and (3) the development of cognitive intelligence of 5-6 olds after learning using scientific approach at the TK Fastabiquil Khairat Samarinda playing center. This study uses a qualitative approach. Respondents of this study are educators and learners. Data collection by interviewing educators. In addition, interviews were also conducted observation on 16 students as well as documentation. The data were analyzed based on interaction analysis model, they are data collecting, data reduction, data display, and conclusion / verification drawing. From the interaction of these four components, form a data analysis cycle, namely (1) data collection, (2) data reduction, (3) data display, (4) conclusions / verification. And the research draws to the following conclusions: (1) the lesson plan to optimize the child's scientific approach involves all teachers and head of TK Fastabiquil Khairat Samarinda and all made according to the needs of the children or the children's age with the curriculum 2013 as reference. (2) The use of implementation looks good at all Playing centers. At every activity, children are given the opportunity to observe, ask, collect information, share and communicate optimally. (3) Cognitive development of 5-6 year old children in TK Fastabiquil Khairat Samarinda generally reached its indicators.

Keywords: Optimization of children's scientific approach; Playing center.



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1. Background

Education in Indonesia is implemented in stages, from basic education to higher education. The first formal education experienced by Indonesian children is early childhood education becomes an early stage that is prepared to undergo education at the next level of education, namely at elementary school, upper secondary, to higher level. So early childhood education becomes very important. Santoso (2007) stated that education in kindergarten is a preparation for entering elementary education.

The results of education in kindergarten greatly affect basic education. The influence of education in kindergarten is crucial. Education Kindergarten has a very important role to develop the child's personality and prepare them to enter the next education level.

Early Childhood Education (PAUD) based on Law Number 20 of 2003 is a coaching effort aimed at children from birth up to 6 years, which is done through the provision of educational stimulus to help growth and physical and spiritual development so that children have readiness to learn in entering further education.

Curriculum 2013 Early Childhood education aims to encourage the development of the potential of children to have readiness to pursue further education. Understand the readiness of children in following education at a higher level. Ability in question consists of the ability attitude, ability of knowledge and skills. The ability of skills to support knowledge is applied through the scientific process. The scientific process or in this curriculum is often called a scientific approach aimed at building a systematic thinking pattern with a continuous set of processes from the most concrete develops the real work as a result of a high-level thought of the child's experience.

The scientific approach is one of the approaches in building a way of thinking so that children have the ability to reason through the process of observing to communicate the results of his thought. It is based on Piaget's idea that "Children learn by building their own knowledge through the experience they gain." Vygotsky argues that "The environment, including other children or adults and the media greatly helps the child in learning to enrich the child's experience.

On the basis of the description above, this penetration to explore information in depth about Optimalis Early Childhood Scientific Approach at Playing Center at TK Fastabiquil Khairat Samarinda. This study focuses more on the optimization of the scientific approach to play centers conducted by teachers.

This research is aimed to Optimalization of Early Childhood Scientific Approach at Playground Center at Kindergarten Fastabiquil Khairat Samarinda has three main characteristics in education development, namely: (1) in learning is using curriculum 13, (2) has a complete learning program and is a school that achievement, and (3) school facilities and infrastructure in good condition, and teachers competence, thus the researchers based themselves on the three main features to explore more about the Optimization of early childhood scientific approaches to the center of play in Kindergarten Fastabiquil Khairat Samarinda

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2. Definition of Scientific Approach

The scientific approach is one of the approaches in building a way of thinking so that children have the ability to reason through the process of observing to communicate the results of his thought. To that end, the curriculum of 2013 PAUD brings the way of learning of children to have the competence of attitude, knowledge and skills which is the process of the result of the child's investigation on the environment. The understanding of attitude is built through habituation and modeling. Development of knowledge and skills can be done through a scientific approach.

The scientific process or in this curriculum is often called a scientific approach aimed at building a systematic thinking pattern with a continuous series of processes from the most concrete to evolving into real work as a result of high-minded thinking. Scientific thinking skills are applied in the learning process that begins by: (1) observing by means of all the sensory devices so as to feel the sensations generated from the body's ability to think, (2) asking as a process of giving space to the child to cultivate the curiosity of the object observed. Curiosity as a driver for children to do the next step is (3) Gathering information as a way to answer the curiosity. The process of gathering information is done by involving all learning resources that exist in the environment, not only limited from teachers, but can be from books, internet, parents, professionals and so on. (4) reasoning, ie, processing the information that has been collected to answer the questions that came before. The process of reasoning is an important part in order to build new knowledge that is connected with the knowledge that has been previously owned. The results of children's reasoning process have a new understanding of the concept. (5) communicating, ideas and understanding of knowledge about new concepts poured into various works in the form of oral, art, drawing and others.

2.1. Definition of Playing

Playing is an entire activity of children, including pleasure work and is a method of how they know the world. Playing is not just a time but a child's need as well as food, love. About playing Hurlock states any activity done for the fun generated without consideration of the final result. Piaget in Mayesty (1990) says that the play is

An activity that is repeated and gives pleasure to one's self, while Parten (Mayesty, 1990) views play activities as a means of socialization where expected through play can give children the opportunity to explore, discover, express feelings, be creative, and learn in a fun way. In addition, play activities can help children know about themselves, with whom he lives, and the environment in which he lives.

2.2. Model of Center Learning

Sentra is a learning center or learning resource center which is a vehicle designed to stimulate various aspects of development in early childhood. Another term center that has the same meaning and is often used is the area or angle of activity

3. Research Method

3.1. Research Approach

This type of research uses a qualitative approach. Descriptive research is to get a clearer picture of the phenomena that occur in relation to the problem under study. According to Nawawi (1999) descriptive method can be interpreted as a problem-solving procedure that is investigated by describing or describing the state of a subject or object of research of a person, institution, society and others based on facts that appear or as it is. The reasons for using qualitative approach are:

- a. Research relates to social behavior of educators and learners.
- b. The problem studied is very descriptive
- c. Research is the main data collector
- d. Research on Optimizing the Scientific Approach of 5-6 years old Children in the center of play
- e. In the determination of conclusions researchers used check and direct from various viewpoints obtained from various sources of information.
- f. Analysis begins at the beginning of the study when data collection up to after the data collected in whole and in depth

3.2. Place, Time and Research Object

This research will take in the Garden of Fastabiqul Khairat Samarinda Jl. AW. Syahrani Rt 14 Sub Samarinda Ulu. Researchers take the location with consideration already using Curriculum 2013 early childhood and has been accredited with the value of A. Where teaching and learning activities carried out from Monday to Friday from 7:30 to 12:00.

The subject of this research is a scientific approach that is the ability to observe, ask, collect information, mengasosiasi, and communicate. And the object of this study is a student aged 5-6 years or group B in the Kindergarten Khstatqul Khairat kindergarten. All components are the main factor in the learning process in Kindergarten Samarinda.

3.3. Data Collecting Technique

Data collection methods used are observation, interview and documentation

1. Observation

Observations in this regard were made to obtain some information related to the optimization of the scientific approach. This observation is done directly to all activities performed by both teachers and students.

2. Interview

Interviews were conducted by researchers with teachers and students, based on field observations

3. Documentation

Document analysis is performed to collect data sourced from archives and documents both inside and out of the class, which relate to the research.

4. Data analysis Technique

Data analysis in this study is a process that requires an effort to identify and formulate the hypothesis shown. Data analysis is intended as an effort to process data into information, so the characteristics or nature of the data can be more easily understood and useful to answer problems related to research.

a. Data Reduction

Data reduction steps include summarizing activities, selecting the main points of classifying, directing, disposing of unnecessary, and organizing the data so as to obtain a complete picture to conclude the results of research

b. Data Display

Presentation of data in the study see the overall picture of certain parts of this study, should be attempted to create various matrices of graphs and charts. Everything is designed to combine information arranged in a coherent and easy form.

c. Verification (conclusion draw)

Any data obtained or analyzed and summarized though it is not yet clear makna, but it will make it clearer and more and more data obtained and support verification. Final conclusion will be obtained until the data where the optimization of the scientific approach of children aged 5-6 years in the center of play in Kindergarten Fastabiqul Khairat Samarinda.

5. Data Validation

Each qualitative research requires a standard to see the degree of confidence or truth of the results of the study, so that the data collected can be justified.

4. Discussion

4.1. Teachers' Design to Optimised Learning Process through Scientific Approach towards 4-5 Years Old Students

1.Master design in optimizing learning with scientific approach in children ages 5-6

2.Learning with a good scientific approach will foster children's thinking skills. To be optimal in applying the approach it is important to look at several things as follows: a) guide the child to arouse the desire to play, b) encourage the child physically to play, c) direct the game with other friends, d) encourage the child with words to play, e) Construct a problem to solve the child, f) the teacher gives the opportunity to try / explore and use various objects / materials in various ways; g) the teacher provides support with questions (and / or proper guidance.

4.2. The Implementation of Scientific Approach towards 5-6 Years Old Students at the Playing Center

The scientific approach in early childhood emphasizes the provision of direct experience. Children always interact with their environment, anytime. That's where the scientific approach is implemented. A scientific approach by observing, questioning, gathering information, reasoning and communicating will build the child's scientific abilities.

Essentially a child under 6 years old is in the playing period. Providing educational stimulation in the right way through play, can provide meaningful learning in children. The child is given the opportunity to search, find, make choices, express opinions, and actively conduct and experience themselves. Learning activities are planned and implemented to develop the child's physical and psychic. Learning activities are conducted in a fun way in accordance with the way of thinking and cognitive development of children.

4.3. The Development of Students Cognitive Skill after the Implementation of Scientific Approach at the Playing Center

Observation results and research data that has been done shows that learning by scientific approach can improve the cognitive abilities of children on the aspects of observing, asking, gathering information, reasoning, and communicate. Aspects that show the development of a very good and in line with expectations are aspects, gather information, reasoning, communicating. Aspects that show very good progress. The aspect that showed a very good development and in line with expectations is the observing aspect because in the first month it has shown 13 children from 16 children observed. While in the second month all children have developed a scientific approach in terms of ability to observe. The ability to collect information on the first month of 8 children and in the second month increased to 14 children who could collect information from all activities performed, the reasoning ability which in the first month 6 children and in the second month increased to 10 children, while in communicating aspects of 3 children in the first month increased to 8 children who can communicate all activities undertaken, mentioning materials and tools used along with its characteristics. According to the observations of researchers, on the aspect of observing an object or the incident looks very enthusiastic children make observations because the activities and materials prepared by teachers in learning is very interesting children's attention.

5. Conclusion

From the results of research conducted related to the optimization of early childhood scientific approaches to the center of play at Kindergarten Fastabiquil Khairat Samarinda then can be drawn conclusion as follows:

1. The design used by the teacher has designed the learning program for the optimization of the scientific approach in children aged 5-6 years in the center of play Fastabiquil Khairat kindergarten is first must determine the type of activities to be performed and adapted to the theme. After that formulate the objectives of the activity, determine the material that will be needed in the learning activities, readiness of children that includes emotional readiness, introduction of rules of play, division of labor, the division of centers and so forth. Then proceed with the setting of the environment that includes the place that will be used by the child to do his activities (learning).
2. The scientific approach emphasizes more on the approach in building a way of thinking so that children have the ability to reason through the process of observing to communicate the results of his thought.
3. The scientific approach of observing, questioning, gathering information, reasoning, and communicating has developed well and as expected. This is because teachers / educators as facilitators and motivators are very instrumental in designing or designing activities that are fun and interesting for children.

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