THE DEVELOPMENT OF INTRAPERSONAL INTELLIGENCE ON EARLY CHILDHOOD THROUGH COLOUR-MIXING CREATIVITY

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ABSTRACT

Intrapersonal intelligence is one of the intelligence that needs to be developed in early childhood. This can be seen at a person's ability to be sensitive to their feelings themselves. The observation of the activities of colourmixing on children in kindergarten Al Azhar Banda Aceh revealed that the ability of children to recognize colours was still low. This study aims to describing the development of intrapersonal intelligence on early childhood through colour mixing creativity. The study used classroom action research that was conducted in two cycles. Subjects were young children aged 5-6 years amounted to 34 children, 18 boys and 16 girls. Data were collected through observation and performance. The results showed that intrapersonal intelligence of children in pre-cycle, cycle 1 and cycle 2 increased significantly. It was concluded thatcolourmixing creativity can develop intrapersonal intelligence of children. Educators can use creativecolour mixing activities to enhance confident children.

Keywords: Intrapersonal intelligence, early childhood, colour mixing

I. INTRODUCTION

Law No. 20 Year 2003 on National Education System consists of early childhood education, elementary education, secondary education and higher education. Early Childhood Education is a programme aimed at children from birth up to the age of six which are carried out by providing educational stimuli to help the growth and development of children physically and mentally in order to have their readiness to enter further education.

The range of early childhood from birth to age six is critical and important in the educational process and can influence the process and the results of one's education in the future, meaning that this period is a conducive period to develop a wide range of abilities, intelligences, talents, and physical, cognitive, language, social, emotional, spiritual and artistic abilities. Clark (Sujiono 2010: 49) explains, " When a one is born a child's brain has brought considerable potentials in the 100-200 billion neuron cells stored in his brain. Each neuron cell is ready to be cultivated in order to process several trillions of information". During the developmental period, brain continues to undergo changes in accordance with the stimulation received through all five senses; this is precisely what will affect the level of intelligence, personality, and quality of a child's life.

Learning is a plausible action because the brain can store experiences in a long-term memory. Learning is a process that should be done as early as possible even since the fetus is

still in the womb. Nash (Sujiono2010: 51) states, "Learning is also closely related to intelligence, to maximize the level of intelligence of children stimuli are necessary since the first of his life". According to Talib (ArshadAhamed, 2005: 53) intelligence is "the highest gift that God has given to man, who will reach the top actualization if it is provided as a vision of existence that God has for him." Every man born already carries the potential, with the intelligence of children can actualize himself according to his ability. Meanwhile, Gardner (Sujiono, 2010: 49) describes the "Multiple intelligences are an assessment to descriptively observe on how people use their intelligences to solve problems and produce something". Children who have the opportunity to manifest their intelligences in accordance with its potential will be experts in their fields. They can learn in comfortresulting to high seriousness of children in the study and practice so that they cansucceed in their fields of interest. Children learn through playing because it is an activity undertaken for pleasure of children. Playingcan foster happiness to children as it can express a range of feelings and the ability to socialize with their surroundings. A conducive environment for children to play has to do with peers and support from adults so that any potential intelligence can be developed.

Plural intelligences consist of linguistic intelligence, logical-mathematical intelligence, naturalistic intelligence, visual - spatial intelligence,kinaesthetic intelligence, musical intelligence, interpersonal intelligence and intrapersonal intelligence. A child who develops high intrapersonal intelligence is showing signs of being able to recognize some of his/herstrengths and limitations. Armstrong (Sujiono, 2010: 61) states intrapersonal intelligence is the ability to think reflectively, which refers to the reflection of awareness about feelings and thought processes themselves.Intrapersonal intelligence looks at a person's ability to be sensitive to the feelings themselves.

Intrapersonal intelligence can be developed withstimulus using various media and educational games providing creativity in children. " Creativity is the ability of a person to create something new, whether it is the idea and the real work of the relatively different from what already exists " (VI , Rachmawati 2011: 13). Creativity gives children funbecause when they play creatively, they willfind new ways to do things so that it will give them a sense of happiness and satisfaction.

Creativity and intelligence are correlated but not absolute. This means that a creative person can be considered intelligent, but not vice versa. The birth of a creative work needs more than just intelligence. Clark (Rachmawati 2011: 13) states, "It is this experience of expressing and actualizing one’s individual identity in an integrated form in communication and with one’s self, with nature, and with other persons that I call creative." Playing gives children the opportunity to develop their creativity. While playing educational games, children can discover new ideas so that they are able to create something new and unique.

Playing provides opportunities for children to develop their creativity . Children can develop creativity with colour mixing activities so as to discover new things. Children will feel very satisfied at the time of playing because they can develop their creativity. Colour mixing activity can trigger the creativity of children as it can stimulate the curiosity of children and children are expected to further develop their activities and find new ideas. Children learn by mixing colours where they can explore every thing they touch, see, and feel. Thus, children can learn directily as they can experience something, then they learn to enjoy the process so that the creativity and curiosity of children become more developed.

Based on the observations conducted in kindergarten Al Azhar Banda Aceh, the ability of children to recognize colours was still low. Children was never introduced to colours through colour mixing activities while these activities are very fun media to introduce children to science. The children did not have a courage to pour colours into the container. Besides, some children were still asking for their classmates'help to pour the colours into the container. The introduction of colour directly to children is paramout in order to recognize colours, not just memorize the names of the colours but also the colour changes and the process of primary colours, secondary colours, and tertiary colours. Children are able to build their own knowledge and expected to influencing the development of children's intelligence. Children can learn meaningfully if all of their senses arefunctioning and in favorable circumstances. With the implementation of this activity, it is expected to provide new experiences for children so that learning becomes more fun, and also to meet with the learning objectives, that is the development of intrapersonal intelligence can be achieved.

II. METHODOLOGY

This study used the design of classroom action research. One of the characteristics of a classroom action research is the research conducted cyclically. Each cycle was done through the stages of planning, implementation, observation, and reflection. The results of observation and reflection in cycle 1 were used as a reference to enhance the next cycle. The subjects were children in the 5-6 year age group B in Kindergarten Al - AzharLamgugob, Banda Aceh, Indonesia. The school year was 2014/2015. Group B was class B8 comprising of 34 children, 18 boys and 16 girls. The research was conducted in the second semester of 2014/2015 academic year,between February and June 2015.

Data was obtained through observations with the focus on children's creativity when mixing colours. Next is assessing performance, which is an assessment that requires students to perform tasks in behaviours that can be observed . The first step was to introduce children tocoloursand its simple concepts. Children aged 5-6 years group B8were ready to be introduced with colours as a result of mixing colour combinations. The acivities started from mixing three primary colours to determine the secondary colour, then directed children to mix the secondary colours to produce new colours, which is tertiary colours.

Data analysis techniqus used in this research was a qualitative descriptive method by using words in a narrative form. In addition, to assess the success of the development of children's intrapersonal intelligence creativity through colour mixing, the following formula was used:

$$P = \frac{f}{n} \times 100\% \quad \text{(Paizaluddin, 2013:194)}$$

Keterangan:

P = Percentage
f = Frequency
n = Respondent

Sudjana (Dymyati 2013: 105) states, "The principally accomplished limitof children's learning outcomes or abilities is 75-80 %." Based on this, the researchers referred to this principal to analyse the success of this study. Performance indicators which becomes a measure of success in this research is "The learning outcomes reaching 80%, children will receive 3 and 4 indicating that children are able to recognize the process and the results of colour mixing". The marking criteria were used as follows:

Tabel 1. Marking criteria

No.	Marking Aspects	Criteria
1.	BSB (Develop Very Well) If the child is already familiar with the process and the results of the colour mixing and can create another new colour, marked 4	★★★★
2.	BSH (Develop as Expected) If the child is already familiar with the basic colours and is able to try mixing two colours, marked 3	★★★
3.	MM (Begin to Appear) If the child is already familiar with the basic colours , marked 2	★★
4.	BM (Yet to Appear) If the child is new to colour, marked 1	★

III. RESULTS AND DISCUSSIONS

Classroom action research (CAR) was conducted in PAUD Al - Azhar Banda Aceh . The research subjects were the group B8 consisting of 34 students, 18 boys and 16 girls. The used learning system is a centric system that is child-centered activities. Classroom action research (CAR) was conducted in two cycles.

3.1. The Improvement of Children's Intrapersonal Intelligence Through Colour Mixing.

Intelligence is already possesed by children from birth and will be continuously developed until adulthood. The development of intelligence would be better if done as early as possible through stimulation on the five senses. Guiding children to believe in themselves is the first step in guidance in that convince children that they know well yourself and recognize positive feelings toward themselves. Children with a full confidence generally have a personal willingness to learn and are able to control their own behavior in dealing with others.

After completing this study, researchers obtained practical advice on how to recognize and develop intrapersonal intelligence of children through several activities. Intrapersonal intelligence development through this colour mixing creativity can grow child's confidence better. Children managed to perform activities until they were finished. With this colour mixing activity, children are able to find new things because they can explore every thing they see, touch, and feel.

Based on the survey results, it revealed the intrapersonal intelligence development of children through creativity colourmixing at Kindergarten Al – Azhar Banda Aceh. The development is obviously seen from pre-cycle, cycle 1 to cycle 2.

The following is Table 1 presenting the intrapersonal intelligence development of children through creativity colour mixing at Kindergarten Al – Azhar Banda Aceh

Table 1.1 Development of Children's Abilities

No	Children's Ability	Pre-cycle		Cycle 1		Cycle 2	
		Frequency	%	Frequency	%	Frequency	%
1.	BSB	-	0	8	23,5	25	73,5
2.	BSH	7	20,5	14	41,1	6	17,6
3.	MM	13	38,2	9	26,4	3	8,8
4.	BM	14	41,1	3	8,8	-	-

The observed data on pre-cycle shows that children who performed colour mixing ability in "Develop as Expected" state (BSH) were only 7 children (20.5 %). It can be said that a child's ability to properly perform colour mixing is still lacking. It can also be seen that the children who did the colour mixing in "Begin to Appear (MM) state amounted to 13 children (38.2 %). While the development of colour mixing ability"Yet to Appear"(BM) amounted to 14 children (41.1 %). Children were still hesitating when mixing colours and poorly remembered the results of mixing colours. Very few children were able to recall of any new coloursas a results of colour mixing. Additionaly, there were still many children who were not able to perform activities according to the rules of teachers because many of them were mixing colours that were different to what the teachers said.

The ability of children in the development of intrapersonal intelligence activities with the correct colour mixing was still lacking. In addition, because the researchers did not give borders on the container, the children felt confused with the borders when pouring colours. As a results, children mixed the two different colours of the same colourso the colour mixing was failed as no new colour was discovered. From this observation, it can be concluded that the value at pre-cycle stage was still not developed as expected.

Based on observations in the first cycle, it is known that the ability of colour mixing was better than in the pre-cycle. The confidence through colour mixing creativity was increasing. The number of children who possesedself-confidence in level of "Begin to Grow Very Well' (BSB) when mixing colours increased from zero to 8 children (23.5 %), while for the ability in level "Develop as Expected"(BSH) went up from seven children to 14 children (41.1 %).

Furthermore, researchers had to continue to cycle 2 as it had not reached the indicator 80 % of learning outcomes in cycle 1. In cycle 1, the learning outcomes achieved only65 % . Children began to remember the results of mixing colours from the colours that they mixed

so they memorizednot only the names of colours but also the process of colours. Children were able to follow the teachers' rules which had been previously agreed upon.

In cycle 2 the introduction to colour was designed to be more interesting in order to attract children's interests to participate in mixing colours. Children began to have self-confidence to participate in playing activities while learning. However, there were few children who were still asking for peers' assistance at the time of pouring colours into the container, indicating that low self-confidence still occurred. Children were trained to have courage in conducting activities according to the rulesto build children's confidence by being discipline so that children will grow theirpositive confidencebecause children who have positive confidence will be better than those who have negative one.

Based on the observations during the core activities in cycle 2, the children's progress through the data obtained during the observation was increasing. The results after the implementation of the development of the children's confidence through activities was "Developed Very Well (BSB) became 31 out of 34 children (73.5 %) and "Developas Expected" (BSH) amounted to 6 children (17.6 %). This was due to the increasing of the development of the children's confidence so they managed to successfully perform the colour mixing activities. The children's confidence was highly developed as it can be observed from the chidren having courage to try to mix colours into the container, and they were able to remember colours that had been mixed. Chidreln were no longer asking for help from either teachers or peers. They pleasantly performed mixing coloursuntil the new colours appeared.

The development of children's intelligence through the creativity of colour mixing from pre-cycle until cycle 2 can be observed that children's ability were increasing from less frequency of children who were in 'Yet to Appear' level from 11 out of 14 children (41.1 %) reduced to 3 children (8.8 %). Then, it can also be seen that there was an increase of the development of children's ability from zero on pre-cycle to be 8 children (23.5 %) in "Develop Very Well" level in cycle 1, then increased again from 17 to be 25 children (73.5 %). In the second cycle of activity, the children who were categorized as 'yet to appear' were not seen anymore.

This study shows that the end results of intrapersonal intelligence development of children through colour mixing creativity has been sucessfully significant because the indicators of success states that the criteria for the end result to be considered successful if the child gets 3 and 4 stars.

IV. CONCLUSIONS AND RECOMMENDATIONS

Based on the results of data analysis on intrapersonal intelligence development of children through the creativity ofcolour mixing it can be concluded that the activities with the use of colour mixing creativity can develop intrapersonal intelligence of children. This is characterized by the increased capability of children when performingcolour mixing from pre-cycle until cycle 2. It also can be seen that the children'sability grow from14 children of 'Yet to Emerge' in pre-cycle, 3 children in the first cycle to zero in cycle 2.

4.1. Recommendations

a. In order for the application of learning becomes more interesting and fun, teachers should make learning plan better, for example teachers can use power point to provide materials with images that can draw children's attention.
b. The important thing to keep in mind is that children learn in a enjoyable atmosphere so teachers should have the number of ideas in the management of learning environments that can attract children to come play while learning.
c. Teachers can plan interestingactivities, the introduction tocolourcan be done with lots of activities such as smudging, colouring, and making walls more colourful to attract children's interests.
d. Teachers can use thecolour mixing creativity activities to raise chidren's confidence.

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