

## **Developing Art Lesson Plans of Early Childhood with Autism using Visual Support Approach**

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### **ABSTRACT**

The purpose of this study was to design art activities with visual support approach for early childhood with autism. The study was conducted with a 5-year-old boy diagnosed with ASD in a private preschool. The data was collected through literature reviews, classroom observations and interview with teachers. It found that he often uses echolalia, like to paint and do movement activities while he does not like loud noise and stained hand activities including changing activities. The Art lesson plans of “Knowing colors” were developed based on Early Childhood Curriculum (B.E. 2560) and participant’s information. The 5 weeks of lesson plans provide experience in 5 colors; red, yellow, blue, orange, and green which included introduction song, storytelling, art activities, and exercises. The visual support approach such as mini-schedules, real or concrete objects, and pictures are used during the art activities; painting, molding clay, and paper cutting tearing. Each lesson plan took 40 minutes a day, 3 days/week for one color. The Art lesson plans were examined the validity by 4 educational specialists and revised before application which is the next phase of this study.

Keywords: Art Lesson Plan, Early Childhood, Children with Autism, Visual Support

### **1. INTRODUCTION**

Autism Spectrum Disorder (ASD) is a developmental disorder that is caused by disorders of the nervous system in the brain (Trangkasombat, 2007) which affects 2 main development: communication and social interaction with others, restricted, repetitive patterns of behavior interests or activities. (American Psychiatric Association [APA], 2013) Children with ASD often ignore the surroundings, avoid eye contact, isolate themselves, and react differently to the surroundings, and they either excessively reacts or deficiently to the stimuli or not at all. (Centers for Disease Control and Prevention [CDC], 2015) Moreover, Children with ASD may have abstract thinking limitation. They do not understand principle and reason. Children with ASD has to learn from one situation, they cannot connect it with another situation. Their studies happen and then finishes without any connection so it is for them to understand the overall situation (Trangkasombat, 2007) Developmental defects and limitation in Children with ASD affected learning. It is necessary to change the way of learning to be appropriated. Development of awareness in Children with ASD can be done by structural activities, learning from easy to difficult that makes Children with ASD gain experience and connect it to another lesson.

Outstanding characteristic of Children with ASD when learning are understanding, conceptualizing from concrete objects, and visual learning and thinking. They understand and respond well to the patterns with obvious structure and when they participate by doing those things. (Hodgdon, 2000; Office of the Higher Education Commission, 2012). Visual Support acts as a

teaching tools for children with ASD. The use of visual support as a means of communication through the use of objects, images, drawings, photographs, symbols, which are systematically organized in the form of a calendar table to understand the ideas, and enhance communication in different environments (Quill, 1997). Teaching management for children with ASD begins with the introduction of visual support because it is conformed to the problems and their learning style which mean they are good at eyesight, visual learning, and routine (pattern) but they have difficulties in verbal and nonverbal languages. In addition, visual support helps them to know more about social rules and reduce undesirable behaviors. (Warnset, 2012 ).

Teaching management for children with ASD has been used visual support. There was evidence such research found that Pansegrouw (1994) used photographs of things that children were familiar and the symbolic images for teaching communication in Children with severe communication problems. Vedora (2009) found that visual and textual prompts were effective for children with ASD understand the questions and answer questions better. Riangraisawat (2004) used visual support, schedules as a tool for managing daily activities. The result indicated that children with ASD accept more daily changes. It is evidently cleared from that literature about using visual support appropriate for the learning style of children with ASD. The purpose of this study was to design art activities with visual support approach for early childhood with autism to knowing 5 colors, red yellow blue orange and green.

## 2. METHODOLOGY/MAIN CONTENT

### **The participant**

The researcher selected a participant using a purposive sampling. The participant is a child from a total of 15 early childhood children that the researcher taught in art subjects. The criteria selection of participant was doctor's diagnosis that 5-year-old children with ASD who has not intellectual disability and could not identify the color or pronounced colors' names. He could listen to simple commands, understand, follow, and also proceed to participate in research as scheduled.

From organizing art activities in art class by allowing participant to match the same color cards with the same color crayons for a period of 3 weeks, 1 time per week, 40 minutes each time, it indicated that he was unable to pick up the correct color of the crayon according to the color card.

### **Research Tool**

1. Non-structured interview form for the class teacher and mathematics teacher was used to collect data of the participant through the interview about communication by using words, the use of colors, interesting activities, activities that he liked and disliked, the limitations in activities, and cooperation in the classroom. The data from the interview was used to design the art lesson plan of "Knowing colors". This interview took 1 time about 20 minutes.

2. Behavior observation form was fieldnotes used in data collection while doing art activities in the amount of 5 times, including coloring with crayons, pencil colors and water colors, playing water colors by blowing colors, dropping colors and pouring colors, printing pictures with body parts and scrap materials, dough molding, tearing, cutting and patching. The researchers recorded the participant's behavior of using each type of art equipment and participation in the art activities for a period of 1 week, 40 minutes per day. The data obtained from observation was used to design the art lesson plans of "Knowing colors".

## Data Collection

1. The researcher reviewed literature, searched for information related researches such as early childhood curriculum (B.E.2560), creative arts activity guide, the use of visual support and participant's information.

2. The researcher would like to certify the research project from the research ethics committee in person.

3. The researcher interviewed the class teacher and the participant mathematics teacher about communication using words, the use of colors, interesting activities, activities that he liked and disliked, the limitations in activities, and cooperation in the classroom by using non-structured interview form for the class teacher and mathematics teacher. The data obtained from interview was used to analyze and design the art lesson plans of "Knowing colors".

4. The researcher observed the participant while doing art activities in the amount of 5 times, including coloring with crayons, pencil colors and water colors, including playing water colors by blowing colors, dropping colors and pouring colors, printing pictures with body part and scrap materials, dough molding, tearing, cutting and patching. The researcher recorded the behavior and participation in the art activities of the participants for a period of 1 week and 40 minutes a day. The data obtained from observation is used to analyze and design the art lesson plans of "Knowing colors".

5. The researcher would like to examine the validity of The Art lesson plans of "Knowing colors" by 4 educational specialists, 1 specialist with knowledge of art teaching and 3 specialists with knowledge of children with ASD. They checked the consistency of purpose, content, activity, evaluation, duration, equipment used and feasibility in practice.

## Data analysis

Qualitative data analysis clearly describes the event during participant interaction with art activities in the amount of 5 times and interview form of the class and mathematics teachers.

## 3. RESULTS AND DISCUSSIONS

### Result from Non-structured interviews with the class teacher and the participant mathematics teacher

The participant was a child from early childhood with ASD, aged 5 years old, who was diagnosed by doctor and was in accordance with the selection criteria of the participant. The data from interview in mathematics that taught about the classification of objects by colors. Non-structured interview of the class teacher and mathematics teacher found that the participant often repeated questions instead of answering questions. He likes music, movement and coloring activities. He often colors by choosing only familiar equipment, crayons, pencil colors, or his familiar colors such as blue. He colors across the paper and cannot tell the colors that has been said. He does not like when his hands are stained with colors. If there were art tools or unfamiliar activities, such as dough molding, picture painting, glue sticking, he would not cooperate, sat and swung his arm or isolated himself. When the teacher called him to do activities that required him to touch unfamiliar materials, he only touched with his thumb and index finger. Also, he did not like noisy environment and will only do what the teacher says.

### **Result from Behavior observation while doing art activities**

From Behavior observation of the participant while doing art activities for 5 times used behavior observation form, which consists of coloring with crayon, pencil colors and water color, including playing water colors by blowing colors, dropping colors and pouring colors, printing pictures with the body parts and scrap materials, dough molding, tearing, cutting and patching. Researcher found that the participant was familiar with crayons and pencil colors and always pick up blue color to paint. Moreover, the participant could not blow the color. In activities with fingerprints and scraps, the participant did not touch water colors. The participant did not cooperate and isolate himself. In dough molding activity, the participant did not catch the dough with their hands. But pressing the dough with the tip of the index finger and middle finger. The participant could tear and crumple paper but do not apply glue to the paper by himself.

### **Result from examined the validity of The Art lesson plans of “Knowing colors” by 4 educational specialists**

As a result of the examination, the researcher adjusted the recommendations based on 2 issues, the use of images and the evaluation of activities. The use of pictures should be obvious, colors are not flashy or wrong from the truth. Furthermore, this plan adds puppets while telling a story. In the expert's opinion, advice on measurement and evaluation in the art lesson plans of "Knowing color" should be added to measurement methods for evaluating diversity. Which originally used the measurement method of using color while doing art activities. The researcher, therefore, added an evaluation measure while matching items with the color card after the storytelling.



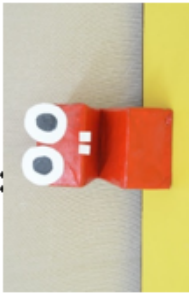
### **The art lesson plans of “Knowing colors”**

The plan's preparation of the art lesson plans of “knowing colors” contented according to early childhood curriculum (B.E.2560). The participant would know one color each week, start with red, yellow, blue, orange, and green. Colors arrangements in each week were followed by the primary colors: red, yellow, blue, and secondary colors: orange and green. The primary and secondary colors used in the art lesson plans of knowing colors according to learning management in mathematics the participant studying. In addition, these plan design activities according to the guidelines from the creative art activity handbook: early childhood together with visual support, mini schedule objects or concrete things and pictures. Moreover, this plan was designed base on the participant's information. Participant's interesting activities, activities that he liked and disliked, the limitations in activities were used to choose art equipment and design art activities. The art lesson plans of “Knowing colors” included the behavioral objectives, contents, activities, materials, measurement and evaluation that took 40 minutes, a total of 15 times, 3 days per week in 5 weeks duration. The session of each plan took 40 minutes to relate to class management in school. There are details each week shown in Table 1.

**Table 1** the art lesson plans of “Knowing Colors”

<b>Week 1 Red 1<sup>st</sup> – 3<sup>th</sup> times</b>	<b>Week 2 Yellow 4<sup>th</sup> – 6<sup>th</sup> times</b>	<b>Week 3 Light blue 7<sup>th</sup> – 9<sup>th</sup> times</b>	<b>Week 4 Orange 10<sup>th</sup> – 12<sup>th</sup> times</b>	<b>Week 5 Green 13<sup>th</sup> – 15<sup>th</sup> times</b>
Know the name and identify the red from the surroundings.	Know the name and identify the yellow from the surroundings.	Know the name and identify the light blue from the surroundings.	Know the name and identify the orange from the surroundings.	Know the name and identify the green from the surroundings.
<b>Visual support</b> Picture shows activities schedule and realia; fruits, vegetables, and familiar red toys.	<b>Visual support</b> Picture shows activities schedule and realia; fruits, vegetables, animal pictures with yellow	<b>Visual support</b> Picture shows activities schedule and realia; flowers, toys, items around, and sky pictures.	<b>Visual support</b> Picture shows activities schedule and realia; fruits, vegetables, animal pictures with orange.	<b>Visual support</b> Picture shows activities schedule and realia; fruits, vegetables, animal pictures with yellow, and green toys.
<b>Art activity</b> Coloring with crayons, pastels, and water colors.	<b>Art activity</b> Molding dough and patching.	<b>Art activity</b> Dropping water colors and painting pictures with cotton wool.	<b>Art activity</b> Using water colors paints with cotton wool and fingers.	<b>Art activity</b> Doing paper mache

Table 2 Examples of the art lesson plans of "Knowing colors"

Behavioral Objective	Content	Activities	Material	measurement and evaluation
<p>1. Matching red cards with strawberries, apples, chili and red Lego bricks after telling the story.</p>	<p>Know the name and identify the red from the surroundings.</p>	<p><u>Preparation Stage</u>                      1. Teacher ask student to view the mini schedule and describe each image in the table. Students will do activities Introduce singing, Art activities and good bye singing.                      2. Teacher and student, greet each other through singing together. "Hello, meet today"</p>	<p>-Mini schedule</p> 	<p>From observation during activities                      1. Matching red cards with strawberries, apples, chili and red Lego bricks after telling the story.</p>
<p>2. Coloring pictures of strawberries, apples, chili and Lego blocks that match the surrounding correctly 3 from 4 pictures</p>	<p>Teaching Stage                      1. Teacher tells a story by using red hand puppets, with fruits, vegetables and red Lego bricks.                      2. Teacher places fruits, vegetables, red Lego bricks and 4 color cards, red yellow blue, in the basket on the table in front of student                      3. Teacher allows the student to pick-up one-color card in the basket and match it with fruits, vegetables, red Lego bricks. Teacher makes one example: teacher picks up apples and says "Apple is red" and picks up a red card placed under the apple.                      4. Teacher takes color card back to the basket and let student choose a color card to match with the item again by himself.                      5. Teacher picks up the 1st worksheet and let student look at the picture in the worksheet, consisting of apple, strawberry, chili and red colored toys with two parts from all four parts.</p>	<p>1. Teacher tells a story by using red hand puppets, with fruits, vegetables and red Lego bricks.                      2. Teacher places fruits, vegetables, red Lego bricks and 4 color cards, red yellow blue, in the basket on the table in front of student                      3. Teacher allows the student to pick-up one-color card in the basket and match it with fruits, vegetables, red Lego bricks. Teacher makes one example: teacher picks up apples and says "Apple is red" and picks up a red card placed under the apple.                      4. Teacher takes color card back to the basket and let student choose a color card to match with the item again by himself.                      5. Teacher picks up the 1st worksheet and let student look at the picture in the worksheet, consisting of apple, strawberry, chili and red colored toys with two parts from all four parts.</p>	 <p>- Storytelling                      - Red Puppet</p>  <p>- color cards , red yellow blue size 3 × 3 in basket</p>	<p>2. Coloring pictures of strawberries, apples, chili and Lego blocks that match the surrounding correctly 3 from 4 pictures</p>

- strawberries, apples, chili and red Lego bricks
- crayons, red yellow blue
- 1<sup>st</sup> worksheet



-worksheet

6. Teachers allows student to bring objects with same color and place them together with the pictures of the items in the 1<sup>st</sup> worksheet.
7. Teachers allows student to choose crayons to match the color of the picture in the 1<sup>st</sup> worksheet and paint to the full image

Conclusion Stage

1. Teacher tell a story by using red hand puppets, with fruits, vegetables and red Lego bricks again.
2. Teacher places fruits, vegetables, red Lego bricks and 4 color cards, red yellow blue, in the basket on the table in front of student
3. Teacher asks student- "What color is this?" Then, teacher tells student to pick-up one-color card in the basket and match it with fruits, vegetables, red Lego bricks.
4. Teacher allows student to choose crayons to match the color of the picture in the worksheet and paint to the full image
5. Teacher praise when student cooperates in the activity and sing "goodbye" song.



#### 4. CONCLUSIONS

The results of data collected from interviews and observations, Participant often repeated questions instead of answering questions. He likes music, movement and coloring activities. He often colored by choosing only familiar equipment, crayons, pencils colors, or his familiar colors such as blue. He could not identify the color or pronounces colors' names. He did not like when his hands stained with colors. If there was art tools or unfamiliar activities, such as dough molding, picture painting, glue sticking, he would not cooperate and sat and swung his arm or isolated himself. Also, he did not like noisy environment and did only what the teacher said.

The art lesson plans of "Knowing colors" content according to early childhood curriculum (B.E.2560). Colors arrangements in each week were followed by the primary colors: red, yellow, blue, and secondary colors: orange and green. The primary and secondary colors also used in mathematics the participant studying. In addition, this plan designed activities according to the guidelines from the creative art activity handbook: early childhood. Art activities in this plan were coloring with crayon, pencil colors and water color, including playing water colors by dropping colors, printing pictures with scrap materials with cotton balls, cotton buds and finger-paints, dough molding, tearing, cutting and patching. Moreover, this plan used visual support, mini schedule objects or concrete things and pictures.

The art lesson plans of "Knowing colors" includes the behavioral objectives, contents, activities, materials, measurement and evaluation that takes 40 minutes, a total of 15 times, 3 days per week in 5 weeks duration. There are details each week sort the activities as appropriate consistent with the development level, interest and limitations in the use of art equipment. After adjusting the experience plan according to the instructions already the researcher conducted a trial using the color recognition experience plan with the participants for a period of 5 weeks.

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