

Drawing Expression of 8-10 Year-Old Girls with Learning Disabilities in Regular Elementary Schools in Indonesia

Ariesa Pandanwangi^{1*} Yasraf Amir Piliang² Nuning Damayanti Adisasmito² Elmira Sumintardja²

1. Faculty of Arts and Design, Maranatha Christian University, Jl. Surya Sumantri No. 65 Bandung, Indonesia

2. Faculty of Arts and Design, Bandung Institute of Technology, Jl. Ganesha 10 Bandung, Indonesia

* E-mail of the corresponding author: aries201192@hotmail.com

Abstract

Indonesia is a country that focuses its attention on children with special needs, particularly children with learning disabilities. This special attention is due to the increase in the population of children with learning disabilities, which, according to the 2011 data, is estimated at around 1.5 million children. The learning disabilities addressed by this study are the difficulties in studying independently in class, finishing assignment, organizing work and concentrating. This study aims at identifying a main aspect of the children with learning disabilities, particularly in girls with learning disabilities, that is their self expression through drawing. The focus of the discussion is limited to aspects of visual language and visual elements created by girls with learning disabilities. The procedure of this study begins with a preliminary study or pre-research, called the initial phase, using the experiment method. The purpose of this initial phase is to obtain the drawing expression of the children with learning disabilities at a very early stage. This is conducted through a storytelling method where the girls are asked to tell stories followed by free drawing activity to express in drawing the events or occurrences they have experienced. The resulting drawings are then analyzed based on visual elements, namely object, composition, color, and visual language. This study concludes that the drawing expression of 8-10 year-old girls with learning disabilities displays the forms that they have imagined, instead of what they have seen. For example, humans are depicted in the form of schemes, while houses are depicted as geometrical shapes. In terms of visual language, most 8-10 year-old children are capable of creating natural and realistic drawing. In reality, these children with learning disabilities are incapable of doing that. This shows that these children with learning disabilities experience a delay in the ability of creating visualization in drawing. The drawings that they have created are uncharacteristic of their age, with broken lines that seem to show hesitation. They also tend to choose contrasting colors, such as blue, green, orange and yellow. This also shows that there is limitation in their choice of colors.

Keywords: art, children with learning disabilities, creative expression, drawing.

1. Introduction

1.1 Research Background

The data from Central Statistics Bureau (BPS) Indonesia in 2011 shows that from 1,5 million children, there are 317,016 school age children with special needs, including children with learning disabilities. According to Balitbang Dikbud (Center of Research and Development of the Ministry of Education and Culture) in 1997, children with learning disabilities are children who experience difficulties in doing both academic and general assignments. These difficulties are experienced by both boys and girls. The learning difficulties referred to in this study are the inability in doing class assignments, organizing work and concentrating. These are caused by neurological dysfunction, basic psychological process or other possible causes.

Ignoring these disabilities might negatively affect the children's growth, because they are unable to keep up with the environment provided by school. It is due to this concern that these children should be given special attention at home, at school and in society. Parents often do not realize their children's disabilities. They demand the best conditions; they want their children to be the best in class, to participate in competitions, to take a lot of courses despite their children's learning disabilities at school. As a result of being afraid of their parents, the children refrain from telling their parents about their real conditions. This, of course, creates a dilemma. The children that should have been given more attention are treated like other normal children and are placed in public (regular) schools.

In some developed countries, children with learning disabilities are the main concerns of both the government and academicians, and are an important issue studied in various multi-disciplinary research. What role does the discipline of art play in this concern? There are not yet too many studies in art on this concern. New studies on this concern is considered important, since the children with learning disabilities need certain attention from academicians.

1.2 Formulation of Issue

The children with learning disabilities enrolled in regular schools undergo pressures from their school environment, through parents, class teachers, and academic standards, so that they have to face uncomfortable

situations at school. This condition affects their activities, so that they need a certain activity that may help them express themselves. This issue is formulated as the following:

The number of children with learning disabilities is significantly increasing, but some parents are still unaware of their children's condition that they register their children into regular schools. This causes great discomfort in learning for the children. This issue concerning the visual expression of the children with learning disabilities is further formulated into the following research questions:

- a. What kind of visual expression in drawing is produced by school girls with learning disabilities from age 8 to 10 years old?
- b. What factors influence the visual expression of the school girls with learning disabilities from age 8 to 10 years old?

1.3 Research Objectives

This study aims to

1. Identify the visual expression produced by school girls with learning disabilities in relation to the pressures they undergo at school.
2. Describe the environmental factors that influence the visual expression in the drawings of the school girls with learning disabilities.
3. Help educators detect early the signs of children with learning disabilities through their drawings.

2. Research Methodology

This study employs a qualitative method, a method that emphasizes on the collection of primary qualitative data, which in the case of this study are the children's drawings, photographs, displays and data analysis according to the real condition in the field. The obtained data are in the form of words sourced from the field data (Creswell, 2014: 205). The pictures selected for this study are not abstract drawings, but those that represent reality, whose forms can be clearly identified and thus "readable." Girls are chosen for this study since they biologically possess a faster growth hormone than boys. According to previous studies, it is concluded that girls from 8-10 years old experience faster growth than boys of the same age range. Due to their faster growth, girls are more prone to pressures from their community. This proneness causes girls to be less adaptive to their community. In addition, the number of girls with learning disabilities is three times more than the number of boys with similar disabilities (Santrock, 2009: 246). This is caused by a greater biological proneness they possess compared to the boys. According to the aforementioned causes, the study is focused on the drawings created by girls with learning disabilities. The discussion of this study explains the result of the analysis of the visual language and visual elements in the drawings by girls with learning disabilities.

The initial phase of this study employs the experimental method through storytelling. The girls are asked to tell a story followed by free drawing to illustrate the events they have previously related (Pandanwangi, et al, 2011:119). The purpose of these activities is to obtain the drawing expression of the children with learning disabilities at a very early stage. The experiment method in the study utilizes the *One-Group Pretest-Posttest Design*, which consists of an experimental group whose members share the same experience (Santrock, 2009). In practice, the experiment conducted on this group consisting of children with learning disability is not compared to another group, or the control group. During experiment, direct observation is also conducted in the field towards the children's drawings, in order to identify the visualized visual elements. The indicator of this observation is the Visual Language theory proposed by Tabrani (2005:186-188), which states that the children's visual language demonstrates a distinct, frameless way of visualizing. This distinct is commonly signified first by magnification or minimization; an object is made bigger or smaller than the other objects. The second characteristic is the top-to-toe, in which an object is depicted from head to feet. The third is the X-ray, in which an object is depicted as if it is transparent or see-through, for example a child may draw her pregnant mother with a visible baby on its stomach. The fourth is representation, in which an object is drawn incompletely and the incomplete object acts as representation of the whole object. A child, for example, may draw only three fingers instead of five fingers on one hand. This distinct visual language is utilized to help analyze the children's drawings.

To analyze the representative nature of the children's drawings, this study employs the visual language approach. Tabrani explains that the representative nature of children's drawings may be identified through children drawing in multiple time settings. The resulting drawing becomes sequential, consisting of scenes and objects that move around within one space. Children's drawings commonly have a system called the Flat Space and Time. This means that in one same sheet of paper, a child can draw different rooms and times. For example, a child drew a house with a dining room and a living room, both visible at the same space. The multiple times mean a child can draw events from morning until night time on one same drawing plane. Since the Flat Space and Time system has time dimensions, it can tell a story, relate a message or an event and communicate a child's experience (Tabrani, 2005:3-4).

2. Literature Review

2.1 Definition of Expression

The word “expression” according to Oxford Learner’s Dictionary (2000:442) means a locution or a show of feelings. Feelings can be further understood as anything that is meant to be shown, such as being sad, angry, cheerful and happy. In this respect, drawing expression is showing a feeling or an activity of expressing feelings on a two-dimensional plane using visual elements, such as dots, lines, shapes, colors and composition.

According to Wolff (in Joseph, 1973: 30),

“[t]he drawings were being viewed as expressions of a body image that is shaped by external as well as maturational influences. Among the external influences, prime importance was attributed to the parental figures. A third dimension in organization of body image was conceted to perceptual processes in which sensation and movement were inextricably interwoven.”

According to the statement, drawing can be used as a means to express oneself, which is influenced by external factors, such as school environment consisting of teachers, peers and learning atmosphere, as well as by internal factors, such as parents or family.

Read (in Gaitskell, 1993) states that the development of a child in drawing comprises three steps of activity: *the activity of self expression, the activity of observation and the activity of appreciation*. Based on this statement, drawing may be used as a medium for someone to express herself, which is influenced by external factors, such as the studying environment at school, peers, and learning atmosphere, as well as by internal factors, such as parents or family. This study chooses random and spontaneous expressions on children’s drawing because the children’s drawing strokes are still honest and innocent. In coloring, they also apply what they imagine. For example, a green leaf or tree may not be green on a child’s drawing, but perhaps red or other randomly chosen colors.

2.2 Children’s Drawings

Children’s drawings have attracted considerable attention from researchers working in the fields of arts, art education, and psychology of art. Damayanti (2007: 70) defines drawings as those made with purpose using various techniques such as line strokes to create shapes and represent clearly recognizable objects, without them being abstract in nature. This definition clearly marks that such drawings are representative of objects of known shapes.

Another researcher, Yudith, states that children funnel their imagination by drawing or illustrating dots, lines, and shapes to materialize their imagination. Drawing can be an effective communication tool to deliver ideas or emotions concretely, from abstract forms to particular symbols. Such symbols often represent the expression of imagination from a child’s drawing. Thus, drawings allow children to develop their imagination, opening access for others to read their emotions and capture ideas contained within (Yudith, 2005: 102-103). A usual form of children’s drawing is human form, of which Golomb (1992) states that “*the first human forms are usually "tadpole" drawings, a large circle with legs attached*” (Milbrath, Constance, 2010: 76). Golomb states that in their early years, gifted children often draw human figures resembling tadpoles with heads made of circles and arms attached to it. In this case, such is a symbol of primitive human figures (Milbrath, Constance, 2010: 98). Goodenough in Joseph (1973: 30), an expert in the psychology of children’s drawing, states that drawings may be used as a pre-screening device prior to therapy sessions, be it speech or trauma therapy. Children’s drawings are used in such fashion as they are capable of conveying stories or narrating a series of stories without words; the “text” is the objects of the drawings.

2.3 Child Development

Child development (Crain, 2007: 16-19, Hurlock, 2010: 37-38) can be classified into stages as the following:

1. First stage, infancy (0-2 years). This stage is where an infant experiences its senses.
2. Second stage, childhood (2-12 years). During this stage, children begin forming early reasoning faculties linked to bodily movements and senses but still incapable of processing far off or abstract events. A small girl throwing a ball at a target, for instance, demonstrates her intuitive knowledge of speed and distance.
3. Third stage, adolescence (12-15 years). This stage is the transition from childhood to adulthood. During this period, children begin newly acquiring certain physical strength.
4. Fourth stage, adulthood. Children have fully become social beings, beginning at puberty (15 years old).

For the purposes of this paper, the range chosen for this study is the childhood stage. More specifically, it studies those between eight to ten years old within the given primary education age limits in Indonesia.

2.4 Child Development and Children's Drawings

Children's drawings are closely tied with child development. Based on evidence gathered from years of research, Tabrani, an expert in visual language, states that by the age of eight children tend to prioritize objects, which are made larger and "transparent." Children's drawings consists of spatial and temporal elements, uses layers of numerous backgrounds, repetitions, imagery, plural compounding, flatness, and decorative tendencies (Tabrani, 2005: 4). By the age of ten, the eyes begin to play much greater role in details; hence drawings made by children in this age group tend to include more detailed elements. Drawings may also be a product of the imagination and "record" of events, making them seem naturalistic through the use of visual languages.

Betty Edwards, another expert in children's drawings, in *The New Drawing on the Right Side of the Brain* (1997: 75-78) mentions that children between eight to nine years old are in a period of complexity, in that they attempt to incorporate greater details in their drawings, often bearing similarities to realist art. Boys, for example, frequently draw objects they saw, such as tanks and cars. By the age of ten, this group of children enters a stage of realism, drawing realistic pictures and incorporating perspective to provide depth, space, and light. The findings of both experts share similarities in their periodization of a child's development and drawing. A link can, therefore, be established between a child's development and its drawings.

2.5 Visual Elements in Children's Drawings

Visual elements are important in the production of a work of art. Such elements include lines, shapes, compositions, colors, and textures (Wachowiak et al. 1993: 15-21, Fisher, 1978: 73-75). Lines are considered as part of human ingenuity as it documents objects perceived by the eyes and are fundamental structures in drawings. Compositions, on the other hand, are the product of a series of dots arranged in such a manner to create space (Hurwitz, 2007: 185; Ragans, Mittler, 1992: 4). Impressions of intersecting, curving, overlapping, and zigzagging lines convey expressions of spontaneity, hesitation, relaxedness, rhythm, happiness, confusion, or frustration.

A series of lines can be made to compose shapes such as circles, triangles, squares, or even figurative shapes. Shapes can also be formed through the use of color using ink or paint. Color is a useful learning tool as children can be asked to see the sights and learn the shapes found in nature. Nature, in any case, is the "school" to learn shapes (Wachowiak et al, 1993: 13-14). Through nature as well children can learn existing shapes such as houses, trees, vehicles, fruits, and humans. In visual art, such shapes are called "positive spaces" whereas unfilled empty spaces are called "negative spaces." With ensuing development, children learn that both spaces can be combined to create striking compositions. Composition in itself is formed through the combination of light and dark colors, in order to produce an attractive drawing. In this respect, Papandreou (2014: 92) states that children also combine the symbols that they create with the symbols from their surroundings.

The next element is color. What happens if the world is devoid of colors? Certainly it will be vacuous. Color, thus, is always used in artworks around the world. Experts (Wachowiak, 1993: 15; Ragans, Mittler, 1992: 2-3) conclude that color consists of three tone groups: 1) colors typically found in color circles as part of primary colors such as red, yellow, and blue; 2) light and dark colors; and 3) gradation color. Color has far-reaching influence including in special-needs children when using colors for their drawings.

3. Discussion of Drawing Expression of Girls age 8-10 years old with Learning Disabilities

As discussed above, drawings by girls with learning disabilities are chosen as they are representative drawings which can be "read" and are not abstract. The discussion below is an analysis of drawings made by those children.



Figure 1: R1'ANA', 8 y.o., 2nd grade
Source: personal collection

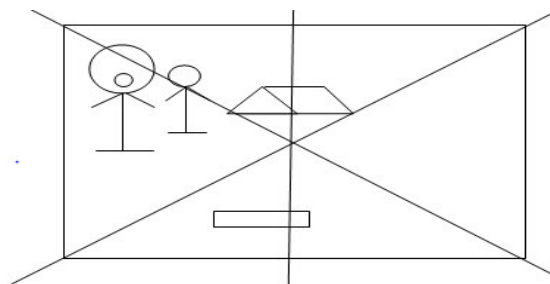


Figure 1.1: Visual structure by author

Figure 1:

The first respondent comes from a family whose parents work outside the house. She is often alone at home, hence she enjoys more activities outside her home, where she can play with her friends. Her drawing can be described as follows:

On the foreground is a geometrical object resembling a box with two circles inside. In the middle ground, there are quadrangular shapes with diagonal lines inside. On the upper background are two human figures in the basic stick figure form that is usually produced by four-year-old children. The left figure is made bigger than the figure on the right, suggesting greater importance. The shape of the house on the background is only represented by geometrically drawn roof and is drawn very small in scale compared to the figures, suggesting lesser importance. The outline for the human figures is in orange, while the outline for the house is red. The visual structure of the drawing displays an asymmetrical composition; objects fill the left side of the paper, while the right side is left empty. The figure considered important is also placed on the left side.

Drawing interpretation: This drawing tells the story of the child who is about to go with her sister on a car. In this drawing, the child figure is considered important. The narrated object depicted by the child is at a considerable minimum for children at her age. Her house is not considered important, hence it is depicted as very small and only represented by the roof. The colors that she visualizes are only used for outlines, orange for human figures and red for house roof. The surroundings outside her home seem to attract her more, since both her parents work outside. She has many outdoors activities to do with her friends. At 8 years old, a child should have been able to get over the stick figure depiction of human forms and steps into having a ratio in capturing body gestures and movements, so that the child can enter the stage of more perfectly portraying human objects, no longer limited to stick figures. The drawing above indicates a problem that should be immediately addressed.



Figure 2: R 2 'P', 9 y.o., third grade
Source: personal collection

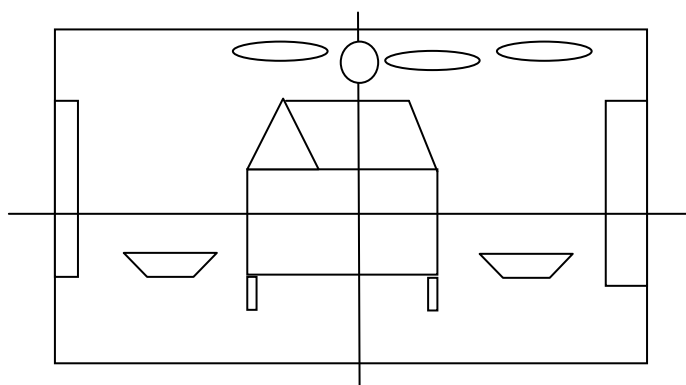


Figure 2.1: Visual structure
By author

Figure 2:

The second respondent is the second child of three siblings. Her mother is a housewife, while her father works at a government office. The subject that she dislikes the most is mathematics. She has a tendency to not color her drawing. In finishing her drawing, she took a longer time than her friends. Her drawing can be described as follows:

On the lower foreground there is an object resembling fences colored in brown that is repeated horizontally. On the middle background, she draws a house surrounded by flowers growing in flowerpots. There is no human figure. The drawing is dominated by geometrical shapes, such as parallelogram, trapezium, triangle, and square, while curves and organic shapes become supporting elements of this drawing. The house is made larger and becomes the focal point of the drawing, which suggests greater importance. The other objects are made smaller, suggesting lesser importance. The house supported by poles suggests that it is a house on stilts. The window is made transparent, suggested by the transparent curtain on the window pane. On the door, "welcome" is written, indicating that the house owner welcomes any visitors. The house stands between two flowerpots, with three flowers in each, which is depicted using only outlines. The house area is further bordered on either side by trees, represented by curves going upward and curves shaped into the outline of a tree. On the right side, a rectangular shape is visible in such a way that suggests that it is seen from the side. The trees are not considered to be of great importance; the one on the left is depicted only in outlines, while the one the right is depicted as dense leaves covered by a brown plane, which suggests a dividing wall.

On the upper background, a yellow sun with orange rays is depicted as being in between two clouds, colored in bright blue. This drawing suggests that the house is a comfortable shelter since it is surrounded by fences and high walls. The composition of this drawing is focused on the center, seen from the placement of the house object and the sun. The colors of this drawing are dominated by brown, blue, and green.

The depicted visual structure looks symmetrical, the objects on the two sides of the paper are made similar. The narrated object is placed at the center. Even though the house is not colored, it seems to dominate the drawing plane.

This drawing can be interpreted as the child narrating that there is nobody home. She even thinks that she does not have to depict herself. The centered composition she makes suggests a desire for attention from her family. The the depicted environment is the exterior few of a house, since the exterior provides her with visual texts not found inside. She seems to much more comfortable to be outside of the house. Seen from her visual shapes, as a 9-year-old girl, she should have had a balanced ratio in capturing the visual elements in her surroundings. However, this drawing seems to unfinished; objects are not completely colored, the tree stem on the left is only depicted in half.



Figure 3: R3 'TS', 10 yrs, 4th grade
Source: personal collection

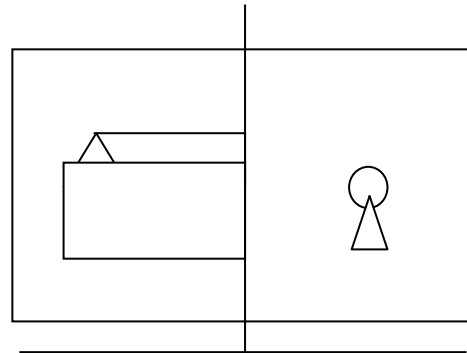


Figure 3.1: Visual structure
By author

Figure 3:

The third respondent, TS, is the first child from four children. Her mother is a housewife, while her father runs a screenprinting business in Bandung. The subject that she dislikes the most is mathematics. According to an interview with her class teacher, during mid-semester test, she needed two hours to finish drawing on an A4 paper. She is also often absent from school, due to illness and other excuses. Her drawing can be described as the following:

On the foreground, there is a line that signifies the ground where objects stand. In the middle, a human figure is drawn on the right. Even though TS is already 10 years old, the human figure she created looks a drawing of a five year old. The figur is drawn in colorful outlines. It seems that this human figure is preparing to leave, seen from the left hand carrying a purse. The house on the left is depicted geometrically, with the roof colored brown and the walls outlined in red. From observation, TS often creates repeating, discontinuous lines. The coloring process seems rushed and not all objects are colored. TS considers that the colored outlines are representative of the colors she wants to use, so that she thinks she does not need to make color blocking for every object.

On the upper side of the paper is depicted a rainbow between two blue clouds, while a yellow sun is placed on the upper left. The composition of the drawing can be considered asymmetrical, seen from the different composition of objects on either side; however the drawing plane is divided right in the middle. TS favors visual texts of outdoor situations, such as house, rainbow, nature, and sun. These elements of nature is called the "positive space", while the empty space is called the "negative space", even though in the end TS attempts to combine the positive and the negative to create an attractive composition.

The drawing can be interpreted as the story of a child who is about to leave, leaving her house carrying a purse in her hands. Her complexion denotes happiness and her lips form a smile. For a 10 year-old girl, however, she should have been able to produce a more detailed figure in her drawing.



Figure 4: R4 'ACS', 10 y.o., 4th grade
 Source: Personal collection

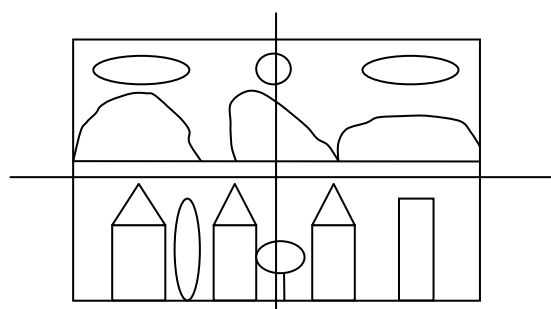


Figure 4.1: Visual structure by author

Figure 4:

ACS, the fourth respondent, is the elder of two siblings. Both of her parents work

On the foreground, there is a line that signifies the ground where objects stand. The drawing depicts three rectangular houses with triangular roofs. Each house has a door. On the space between the houses are a human figure and a flower. Above the houses are flying birds. There is also a green tree to the right of the houses.

The upper part of the plane depicts a landscape of three mountains and trees, represented by a tree in each mountain. Two birds fly on the either side of mountain at the center. The sun shines between two light blue clouds and the birds. The featured colors are bright colors and the objects are made repetitive, such the houses, mountains, and trees that are repeated three times.

On the upper side of the paper is depicted a rainbow between two blue clouds, while a yellow sun is placed on the upper left. The composition of the drawing can be considered asymmetrical, seen from the different composition of objects on either side; however the drawing plane is divided right in the middle. ACS favors visual texts of outdoor situations, such as house, rainbow, nature, and sun. These elements of nature is called the "positive space", while the empty space is called the "negative space", even though in the end ACS attempts to combine the positive and the negative to create an attractive composition.

The drawing can be interpreted as telling a story how the child loves activities outdoor. Her figure and the flower are considered of greater importance, due to their larger depiction. The colorful outlines can be interpreted as her enjoyment of doing activities outdoor and are starkly different from the other objects drawn in black outlines.

The discussion above can be formulated into the following table:

Table 1 Drawing expression of girls with learning disabilities

Description	Respondent 1	Respondent 2	Respondent 3	Respondent 4
Foreground	Car	Fence	Ground line	Ground line
Middle	Rectangles	House, flowerpots, trees	House, one human figure	Three houses, one human figure, flower, trees, birds
Upper	Houses, two figures	Sun, cloud	Sun, cloud, rainbow	Sun, cloud, mountains, birds
Colors	Orange and red outlines	Brown, green, and blue; black outline	Brown, red, yellow, and blue; red, yellow, and black outlines	Yellow, blue, green, and red; black outline
Composition	Asymmetrical	Symmetrical	Asymmetrical	Asymmetrical

Table 1 explains that the drawing expression of girls with learning disabilities is dominated by objects of houses, sun, and clouds. This is likely caused by the uncomfortable situations that the children face at home. The outdoor situations are considered giving more comfort to the children. They express objects that are usually drawn by younger children. The middle ground of the drawing planes is dominated by objects that make up the visual texts that narrate a story. Another form of expression the usage of colors, which are mostly used for outlines. The children form objects from the outline in order to create clearly narrated objects. The compositions are mostly asymmetrical, suggesting a story to tell.

From the four drawings above, similarities are found in the depiction of objects, such as the ever-present houses. Usage of colors are at a minimum, and most of the children likes to use colors only for outlines. They also seem to hesitate when drawing lines, shown in the repeated strokes or discontinuous lines. The abilities of these girls in drawing objects resemble more the drawing capabilities of children under eight years old. This is inconsistent with an opinion from Crain (2007) that states that a child's age develops along with her

ability to draw. This certainly applies only to children without psychological or developmental problems; this does not apply to children with developmental problems, particularly girls with learning disabilities.

4. Conclusion

The number of children with learning disabilities increases each year, particularly girls with a frail psychological development. Efforts to anticipate the growing number are needed, one of which is by implementing the discipline of art as a way to help these children through a therapy of drawing.

The drawing expression of girls with learning disabilities from age 8-10 is dominated by objects of houses, sun, and clouds. This is likely caused by the uncomfortable situations that the children are facing at home. The outdoor situations are considered giving more comfort to the children. The lines are drawn using short repeated strokes. The human figures that they depict resemble those usually produced by children under eight years old. The human figures drawn by these children with learning disabilities, as compared to drawings of normal 4-5 year-old children, show a delay in the acquisition of drawing skills. This is shown, for instance, in drawing human figures as schematics (stick figures). Several objects always stand on the ground line. The middle ground of the drawing planes is dominated by objects that make up the visual texts that narrate a story. Another form of expression the usage of colors, which are mostly used for outlines. The children form objects from the outline in order to create clearly narrated objects. The compositions are mostly asymmetrical, suggesting a story to tell.

In conclusion, the drawing expression of the girls with learning disabilities from age eight to ten can be detected early through the human figures that are drawn as schematics or stick figures, circular heads, legs and arms drawn as straight lines, and geometrically shaped bodies, particularly triangular.

5. Acknowledgment

I would like to thank Maranatha Christian University for awarding a scholarship for me to pursue my doctoral degree. I would also like to extend my earnest gratitude to my promotors at Bandung Institute of Technology, with whom I intensely discuss matters related to the writing of this paper.

6. References

- Crain, William (2007). *“Teori Perkembangan: Konsep dan Aplikasi”*. Edisi ketiga. Yogyakarta: Pustaka pelajar. 16-19.
- Creswell, John W (2014). *“Penelitian Kualitatif & Desain Riset”*. Edisi ketiga. Yogyakarta: Pustaka Pelajar. 205.
- Damayanti, Nuning (2007). *“Transformasi Wujud Visual dan Pnggayaan Ilustrasi pada Naskah Jawa Periode Tahun 1800-1920”*. Disertasi ITB. 70.
- Edwards, Betty (1999). *“The New Drawing on the Right Side of the Brain”*. New York: Penguin Putnam Inc. 75-78.
- Fisher, Elaine Flory (1978). *Aesthetic Awareness and The Child*. USA: F.E. Peacock Publisher, Inc. 73-75.
- Gaitskell, Charles D (1975). *“Children and Their Art: Methods for the Elementary School. Third Edition”*. USA: Harcourt Brace Jovanovich. Inc.
- Hornby, A S (2000). *“Oxford Advanced learner’s Dictionary”*. Oxford University Press. 442
- Hurlock, Elizabeth B (2010). *“Perkembangan Anak”* Jilid Kesatu. Edisi Keenam. Jakarta: Erlangga. 37-38.
- Hurwitz Al, et al (2007). *“Children and their Art: Methods for the Elementary School”*. Eight Edition. USA: Harcourt Brace Jovanovich College Publishers. 185.
- Joseph H, Di Leo (1973). *Children’s Drawings As Diagnostic Aids*. New York: Brunner/Mazel Publishers. 30.
- Milbrath, Constance (2010). *“Patterns of Artistic Development in Children; Comparative Studies of Talent”*. USA: Cambridge University Press. 76, 98.
- Pandanwangi, Ariesa. Et al (2011). Annual International Conference; Chapter: Educational & Social Sciences. *“The learning process visual art for children with learning disabilities”*. ISSN: 2089-208 X. Banda Aceh: Syiah Kuala University Press. 119.
- Tabrani, Primadi (2005). *“Bahasa Rupa”*. Bandung: Kelir. 4, 186-188.
- Ragans, Mittler. (1992). *Understanding Art*. Illinois: Mc Graw-Hill. 2-3, 4.
- Rubin, Judith Aron (2005). *“Artful Therapy”*. USA: John Wiley & Sons, Inc. 102-103
- Santrock, John W (2009). *Psikologi Pendidikan*. Jakarta: Salemba Press. 246.
- Wachowiak, Frank and Roberts D. Clements (1993). *Emphasis Art: A Qualitative Art Program for Elementary and Middle Schools. Fifth Edition*. New York: Harper Collins College Publisher. 13-14, 15-21.

Online resources:

Maria Pappandreu (2014) *Communicating and Thinking through Drawing Activity in Early Childhood*, Journal of Research in Childhood Education, 28:1, 85-100, DOI: 10.1080/02568543.2013.851131. Published online: 20 Dec 2013. <http://dx.doi.org/10.1080/02568543.2013.851131> Downloaded on 2 Februari 2015. 92

The IISTE is a pioneer in the Open-Access hosting service and academic event management. The aim of the firm is Accelerating Global Knowledge Sharing.

More information about the firm can be found on the homepage:

<http://www.iiste.org>

CALL FOR JOURNAL PAPERS

There are more than 30 peer-reviewed academic journals hosted under the hosting platform.

Prospective authors of journals can find the submission instruction on the following page: <http://www.iiste.org/journals/> All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Paper version of the journals is also available upon request of readers and authors.

MORE RESOURCES

Book publication information: <http://www.iiste.org/book/>

Academic conference: <http://www.iiste.org/conference/upcoming-conferences-call-for-paper/>

IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digital Library, NewJour, Google Scholar

