Visual Characteristics of Drawings from Students in Lower Grades of Elementary School

Lintang Nurcahyo, S.Pd.,Gr.
Dr. Martadi, M.Sn.
Dr. I Nyoman Lodra, M.Si.
Universitas Negeri Surabaya

Email address: lintangnurcahyo2222@gmail.com

Abstract: Students in a lower grade of elementary school have started to use pictures from their observation of their environment and constructed ideas until they arrive at the early realism stage. Using qualitative approach and samples from pictures of students in lower grades of elementary schools, this study concluded that the visual characteristics of their pictures are constructive thinking as affected by their environment and personality. Their learning tendency uses concrete, integrative, and hierarchical with the drawing types of visual, haptic, and a mixture of them. Most drawings are characterized as stacked, laying down, covering each other, bird perspective, and object reduction, with four dominating visual elements of line, area, shape, and color.

Keywords: character, visual, children's picture, low grade, elementary school

INTRODUCTION

According to Law No 20 article 17 (2003), elementary education includes elementary education or Islamic elementary madrasa and junior high school or Islamic junior high madrasa. Further, Government Regulation article 13 no 28 (1990) defines an elementary school as an educational unit that administers a formal education for six years. In Indonesia, the classes in elementary school are divided into two the lower grades (1st to 3rd grade) and higher grades (4th to 6th grade) (Supandi, 1992:44). Meanwhile, the students' ages, in Indonesia, the elementary school students are between 7 to 12 years old, with the 7 to 9 years old students belonging to the lower grade and 10 to 12 years old students in the higher grade.

This study focuses on the visual characteristics of the drawings of elementary students in the lower grades. The visual characteristics were determined through a number of indicators, such as children's thinking characters, children's physical and emotional growth, periodization of children's image development, type of children's drawing, children's drawing form of expression, and the dominant elements used by children in their drawing.

Gaitskell and Hurwitz (in Lolita, 2017) describe that children draw based on their knowledge using their own perspective, not what they see. Children's visual perspective is almost similar to the primitive perspective. Additionally, students under ten years old mostly prefer to play with their friends or with their own imagination. Together with their friends, they like to act like adults. Besides, they also perceive inanimate objects as living creatures, and children usually talk to them, as children's world is full of fantasy and imagination. Accordingly, with that imagination and fantasy, they develop their creativity when they play by adopting what they obtain and see from their environment and family education. The activities in their plays, experiments, and creation are also used as their reference in drawing an object (Tabrani, 2014:7). If we pay closer attention, each children's drawing carries a particular story for them as their drawings are the product of their imagination and fantasy.

The process of drawing materializes and combines the basic visual form (appearance). Thus, the characteristics of elements used by children should be considered, such as the dots, lines, space, shape, color, texture, and a dark and light contrast. However, children are incapable of applying all of those elements of art. Their application does not only represent children's ability to adjust particular indicators but rather shows whether their art elements application is linear with their group of

grades. The children in lower grades of elementary school generally use horizontal space-time patterns. Children express their feeling and the events they see through their drawings. They even use their drawing as they first know drawing until they are in the school age.

METHOD

This study used a descriptive-qualitative approach and a group of fundamental children and children's drawing theories to investigate the characters of the object drawn by students in the lower grades of elementary school. This qualitative method aided the attainment of accurate results from the available in-depth data (Sugiyono, 2013:15).

The research data were in the form of drawings gathered through assignments given to students in the lower grades (grades 1, 2, and 30 of State Elementary School of Gunungsari II, Surabaya, Indonesia. The obtained data were used to investigate the drawing's characteristics based on the relevant theories. The 300 drawings were gathered from the 1st, 2nd, and 3rd grades students, through ten assignments given from April 2020 to April 2021. One of those assignments asked the students to draw oranges to examine their ability to draw a geometrical object and to draw animals to see their ability to form lines (straight, curved, or spontaneous). Additionally, the students were also asked to draw trees and houses to see their ability to create shape and space. Those assignments obligate the students to draw freely with a specific theme. However, to minimize students' difficulty in interpreting the assignments, a tutorial video was also used so that students could imitate the drawing technique used in the video.

We used qualitative analysis with various stages of data reduction for the data selection, creating a data focus to have the accurate data, as well as incorporating and transforming data to be extracted become the proper primary data. Further, in the data presentation, all of the primary data was compiled systematically to facilitate an easy conclusion-making process that represents all of the data analysis results (Miles and Huberman, 1992).

Specifically, this study looked for the neutralist perspective moment (NPM) pattern, a two-dimensional drawing pattern in the flat time and space drawing pattern that synergizes with each other (Tabrani, 2014:17). Meanwhile, the flat time and space children's drawing pattern is a drawing procedure using the time and space system. Particularly, this study investigated the drawings based on the constructivist thinking theory from Jean Piaget (cognitive) and Lev Vygotsky (social construction), as well as children's drawing period, type of drawing from children in lower grades, characteristics of children's drawing, the expression of children's drawing, and the art elements in the students drawing to see the dominant art elements in the children drawing and the lower grades students' characteristics through the random matching of drawing from the students in the lower grades (1st, 2nd, and 3rd grades) of State Elementary School of Gunungsari II, Surabaya. The Gunungsari II elementary school is located in Dukuh Pakis Districts, Surabaya, with various students' characteristics and backgrounds, expected to generate multiple different drawings with different students' characteristics.

DISCUSSION

As God has blessed every child with the ability and fondness for drawing, each child has had the ability to draw without being taught by anyone (Tabrani, 2014:68). In elementary school, the drawing course is provided from the 1st to 6th grades, in both thematic and extracurricular courses. In the drawing, each child in each level has different characteristics. Sit (2012:6) describes that in each developmental stage, all children face the same occurrence. The continuation of that development stage also remains the same and consistent, even with individual differences related to the pace of children's development are observed sometimes.

The Thinking Characteristics of Elementary School Students

Gardner (in Sit, 2012:46) mentioned eight types of human intelligence, consisting of 1) verbal (linguistic); 2) mathematical (logical-mathematical); 3) spatial (visual); 4) bodily and kinesthetic; 5) musical; 6) intrapersonal; 7) interpersonal, and naturalistic intelligence. Among those types of intelligence, children have different learning tendencies in each developmental stage. According to Piaget (in Kawuryan, 2011:3), elementary students' have three learning tendencies, namely concrete, integrative, and hierarchical.

1. Concrete Learning

Concrete learning represents a condition where children learn from the real and factual occurrences and objects through what they observe, touch, hear, and try from their learning environment as the primary learning source. During this stage,

children learn and confront the authentic and natural situation and condition as truth.

2. Integrative

Integrative learning habit shows that in learning and observing an object, children perceive the object as a whole unified being. They are still unable to sort out their observed object as part of other sciences. It illustrates that children think deductively by seeing an object as a whole and then as a smaller part.

3. Hierarchical

In hierarchical learning habits, students grow from seeing an object in a simple manner to a wider and more complex manner. This learning tendency is commonly observed among students in elementary and junior high schools.

From concrete thinking, where students see an object as a whole, they gradually learn a drawing. As explained by Suparno (in kawuryan, 2011:4), constructivists perceive that through interaction with objects, events, and experiences, children construct a belief and new knowledge naturally. Through all children's cognitive thinking phases, they construct a drawing. These prevalent processes should be observed by the teachers to help them provide proper stimulus and treatment following students' thinking patterns.

Further, Robbins (in Santrock, 2008:60) explains that the cognitive functions should be moderated by numerous intermediaries and elements that shape them. Thus, Vygotsky added that the most vital intermediary and shaping element of cognition is language. Further, Vygotsky also explains that the parentage of cognitive ability is a social and cultural relationship, resulting in children's relationship that is always correlated to those two factors. This social relationship is called Zone of Proximal Development (ZPD), a factor that is difficult to be learned independently by a child but can be easily studied together by adults or their more capable peers (Santrock, 2008:60).

Characteristics of Children's Emotional and Physical Growth

Children's growth illustrates their increasing physical and emotional control capabilities. For children in the lower grades of elementary school, they should have had the excellent abilities to control their bodies, but they do not have perfect emotional development. Occasionally, their emotional state also affects their drawing, positioning their drawing as their emotional expression. Most six to eight years old children can communicate with other people, manage their emotions, be separated from their parents, and learn the differences between truth and falsity (Sit, 2012:123). Their capabilities can be observed from their learning results, such as grouping serial, grouping shapes, interest in numbers, and increasing literacy. Their increasing literacy enhances their vocabularies, ability to talk, causal understanding, and understanding of time and space concepts.

Additionally, Riyanto and Mudian (2019:345-346) describe that students' physical abilities, such as their physical or sports movement, also influence their emotional intelligence. More physical training increase students' emotional intelligence. Their emotional intelligence is positioned in the emotional anatomy in their brain, called the cortex. Tabrani (2014:38) also explains that physical and art exercises are also a process of playing that can be carried out collectively and easily. The aim of playing is not located in the results or achievement but in the whole educational process.

Periodization of Children's Drawing Development

In the periodization of children's drawing, Lowenfeld and Brittain (1964:93) classified the children drawing into stages of a) irregular smudges, b) pre-chart, c) chart, d) initial realism, and e) pseudo naturalism. Further, the chart stage is generally experienced by students in the 1st to 3rd grades. Bandi (in Burhanudin, 2016:25) stated that the children's drawing is in the chart stage rather than the object replicating stage.

Piaget (in Santrock, 2008:43) described that knowledge is constructed through assimilation and accommodation processes on the already available scheme. Further, Sit (2012:81-82) also explained that a scheme is a cognitive structure formed through an experience. Assimilation is a process of constructing a scheme by matching practice to a particular theory. Meanwhile, accommodation is a process of scheme transformation. It represents the creativity to create a new action, renew an action or combine some old terms with exploring new experiences.

Lowenfeld and Brittain (1964:147) clarified that during the developed scheme, children try to communicate with other people until they feel that they belong to their environment. The objects from their environments become their sources of knowledge to be expressed in their drawing.

Figure 1. The Drawing from Adzana Ryzqinna Putriie Sumirat (2020) in the 1st grade with themes of humans and their environmental schemes

Lowenfeld and Brittain (1964:140) classified children's drawings scheme into three, namely human, space, and basic line schemes as the plain horizon border. The children in the lower grade have their particular scheme to draw four elements that are rarely used and become the reference for naivism. Benedetti (in Roberto, 2008:113) describes naivism or naïve art as a type of work or an art genre constructed by the artist with non-academic background and independent rationale. It is characterized by poor visual elements and quality, rarely observed in the works of academic works. They have a minimum understanding of general anatomy and perspective.

Figure 2. The Drawing from Fauziyyah Arum Octaviana (2020) in the 3rd grade with a theme of World's Children Day, Human and Basic Lines Scheme as Land Surface

In addition, Lowenfeld and Brittain (1964:151) stated that even if children frequently use basic lines to draw the border between upper (sky) and lower (land) spaces, their emotional development places their drawing as an unrealized deviation, known as subjective representation.

Types of Drawing of Students in Lower Grades

Piaget (in Santrock, 2008:47-60) illustrated that cognitive development occurs in four stages. Children between seven to 11 years old are in the concrete operational stage. Their logical reasoning replaces their intuitive rationale, but only in the concrete situation. In this phase, the children already have the ability to group the objects but remain unable to solve the abstract issues. Consequently, children coordinate a number of characters and are not trapped in a singular object.

The rational and emotional aspects are observed in the children's drawing so that the drawing can be categorized into visual, haptic, and mixed (visual and haptic). Garha (1980:113) provided the specification for each of those types of children drawing, as discussed below.

1. Visual

Visual children mostly rely more on their vision in capturing the surrounding objects than on their feeling. They express their observation results in the drawing. Lowenfeld and Brittain (1964:260) mentioned that the primary tool used to capture the visual object is our eyes. Meanwhile, the low ability to capture an object is not always induced by their low vision, but it is caused by their low sensitivity during the observation process.

Figure 3. Drawing from Melody Raissa Az-Zahra (2020) in the 1st Grade with Visual Type

Children's sensitivity toward an observed object is affected by the developed ratio factor rather than their emotional factor, as Lowenfeld and Brittain (1964:261) listed a number of factors affecting the visual type.

> "Visual penetration is correlated with two factors, by analyzing the object's structure and shape and the effects of shape transformation, influenced by the lighting, shadow, color, situation, and distance. A detail observation is not always related to the visual memory, but it can indicate an excellent memory and subjective interest toward the detail."

In conclusion, the children's visual type is affected by their sensitivity or analysis of the composition and shape of their surrounding objects. From their sensitivity, they develop their drawing by adding color, distance, shadow, and size, similar to the original object.

2. Haptic

In the haptic type, children rely more on their sensitivity to capture the object so that their drawing is not in accordance with the environmental observation. The produced drawings tend to be subjective, illustrating the children's personalities.

Lowenfeld and Brittain (1964:261) stated that the primary intermediaries of haptic children are kinesthetic experience, the sensation of body muscle, touch, impression, and experience of their environment. For the haptic children, someone is illustrated as a primary subject with characteristics generated from its original shape, their emotion, and their knowledge of shape.

Figure 4. Drawing from Nurrin Maulidia Jasmine (2020) in the 3rd Grade with Theme of Beach and Haptic Type

Children attain new experiences from the activities or impressions left by their interaction with the environment. It is linear with the characteristic of haptic drawing, showing individual and subjective interest. Similarly, the color also follows the children's feelings, not what they have observed.

3. Mix (Visual-Haptic)

The mixed type combines the visual and haptic types in the drawing. All of the objects and colors are blended according to the children feeling but still regarding the authentic shape and color of the objects.

Figure 5. Drawing from Daffa Sambara Putra Supriyanto (2020) in the 3rd Grade with Mix Type (Visual-Haptic)

In summary, the children's drawings can be classified into three types. First, the visual type is constructed based on the children's observation of an object. Second, the haptic type is where children use their impression of the environment to express their feeling in the drawing. Lastly, the mix type combines the visual and haptic types to draw a particular real object, following the children's feelings.

Types of Expression from Childre's Drawing

Children have massive imagination and creation in the drawing. The distinctive creativity among children results in drawings with different expressions. Garha (1980:130) divides children drawing expression into eight groups, namely dimensional, stereotype, ideoplastic, stacked, lay down, covering each other, birds-eye view, and downsizing.

a) Dimensional is a drawing procedure for shaping different size objects within a space. The different size of the objects shows their importance level. In illustrating the importance of an object, children usually draw it singularly with no presence of other objects. A drawing with dimensions has one or some different objects.

b) Stereotype (reiteration) is characterized by the presence of the same object in a single drawing media without emphasizing its level of importance. There are numerous types of reiteration. First, a total reiteration that does not alter the object's shape and size, such as in drawing paddy and grass. Second is the object reiteration, in which the same objects are redrawn in a huge number with different variations, such as in drawing a group of chickens and trees. Third, the element repetition, where the children repeat the drawing of other objects with various modifications, such as in writing sun or mountain with eyes and mouth

c) Ideoplastic is the drawing of a transparent object that follows children's memory. In the ideoplastic mode, children want to show nonvisible objects as visible objects in a transparent form (Tabrani, 2014:73)

d) Stacked is the embodiment of children's space understanding by accumulating the components of all objects. Children draw by compiling the closest objects in the lower position, then placing the farther objects above the previous objects, and stacked again with the farther objects with the farthest objects on the top of their drawing media. Sumanto (2006:34) stated that stacked drawing represents the children's impression of their space as they place the closest object in the lowest position.

e) Lay down is the illustration of children's impression of space as they draw laid down objects as if they are in the middle of the drawing. The laydown is usually illustrated by objects that visually go around in an area (Tabrani, 2014:74). Sumanto (2006:33) also explained that the impression of space is obtained through a laydown in or outside the children's drawn object.

f) Covering each other is also a children's drawing that shows their space impression, using their visuals rather than their memory. Children with this type of drawing show an already developed cognitive compared to the other type of drawing expression since they are capable of seeing their environment factually and authentically. Sumanto (2006:35) stated that children show their space impression through the far away and close objects that cover each other. However, children with this type of drawing expression are unable to express a far-away object as a smaller object, as mandated in the guide or perspective drawing.

g) Bird-eye view is a drawing using perspective as if the one who is drawing were a bird. The children with this expression show the impression as if they see the objects from above so that the objects are presented from a high distance.

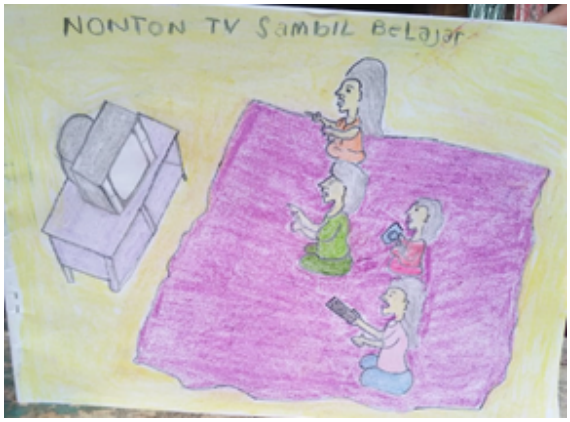

Figure 6. Drawing from Shiva Oktaviani Pratiwi (2020) in 3rd Grade Showing Space Impression (Dimension, Stereotype, Stacking, and Bird-eye View)

h) Downsizing, in this expression, children aim to show the space expression by emphasizing their perspective understanding, with farther objects drawn with smaller sizes. Sumanto (2006:35) explained that the space impression illustrated in this downsizing expression shows the children's understanding of the point of view.

These eight types of expression in children's drawings signify that each child has distinctive creativity, imagination, and creation in expressing an object. The objects in their drawing have numerous characteristics, while the children usually express only one or some of the characteristics on their drawing through dimensional, stereotype, ideoplastic, stacked, lay down, covering each other, bird-eye view, and downsizing. Those expressions are common in the children's drawing development with their different levels of ability and learning styles.

Dominant Art Elements in Students in Lower Grades of Elementary School

Soebandi (2008) stated that a drawing reflects the characteristics of children. A children's drawing is a product of what they have observed and felt. They can reduce, change, imitate, or erase some parts of an object and draw the object following their feeling and their characteristics.

With a concrete, interactive, and hierarchal thinking pattern, students are unable to learn all elements of art simultaneously. The basic elements of art are the fundamental shapes of a drawn object. Those fundamental elements consist of dots, lines, shapes, space, color, texture, as well as dark and light contrast. The children need an introduction to each of those elements. For instance, they learn through arranging dots in the picture of groups of ants, drawing up lines in the picture of grass, combining lines to form space and recognizing it in the picture of a mountain, rationalizing space into shape in the picture of a house, knowing the basic color, as well as understanding the texture and the procedure of dark and light contrast.

Of those seven elements of art, only some elements are observed to be dominant in the drawings of children in the lower grades of elementary school.

1). Dots are not massively found in the lower grades students. They mostly use dots in drawing eyes.

2). Lines are frequently used by the students as the outline to form plants, humans, buildings, mountains, and many more objects.

3). Space is the most dominant element observed in students' drawings of all objects. Even in the three-dimensional object, they visualize the object in the two-dimensional space.

4). Shape is identical with three dimensions, which requires excellent geometry logical process in their visualizing process. Thus, this element was minimally observed in the drawings of students in the lower grades of elementary school.

5). The dominant use of colors is the striking base color. The children are habituated to using the available colors since they have a minimum knowledge related to colors combination.

6). Texture is rarely observed in the drawing of students in the lower grades of elementary school since they have a minimum understanding of the texture's characteristics. If this element appears, children commonly only use dots and lines to illustrate the rough, smooth, soft, hard, liquid, or other textures.

7). The light and dark contrast is also rarely used by the children since their drawings tend to be firm in stating the dark object by blocking the objects. Besides, they usually use lines to illustrate the light, such as the sunlight.

CONCLUSION

In the drawing, children use their scheme or thinking process formed through experiences in their environments. The process consists of rationalizing the objects and events they met in their environment with the theory they have understood (assimilation) and the process of thinking alteration (accommodation). Consequently, the children's scheme can be classified into the schemes of human, space, and fundamental line or horizon as the land borders.

In addition, children thinking patterns are classified into concrete, integrative, and hierarchal, hindering the simultaneous learning of the earth elements. Students in the lower grades of elementary schools learn art elements, one by one, through a complex or thematic assignment that habituates them to an element. Most children are unable to focus on the assignment titles, such as knowing straight lines and curve lines, since they have associated the objects with their environments, known as scheme. Therefore, the assignments on the elements of dots, lines, space, color, texture, and dart, and light contrast are packed as simple thematic assignments, such as drawing grass and rain to learn the elements of the line, drawing mountain to learn the elements of space, drawing of a house to learn the elements of shape, and drawing nights to learn elements of dark and texture. Additionally, students should be habituated to using colors in every drawing activity with the proper guidance.

Students' schemes or thinking processes are frequently affected by their emotions so that their drawings become subjective representations. Children's emotional intelligence in the drawing is also influenced by their physical aspect. Thus, emotional intelligence can be trained through physical movement in drawing objects. Once the children's scheme develops and sees from a singular perspective, they begin to build a relationship with other people and become a part of their environment. In this stage, they begin to realize the drawn object through their attained information and knowledge. Then, they express that knowledge in a drawing with a flat time and space pattern.

Children's learning styles are classified into visual modalities, auditory modalities, and kinesthetic modalities, allowing students to imitate nature, as well as altering, reducing, or erasing parts of the drawn objects. Students in lower grades drawing expression tendency is divided into eight types, namely dimensional, stereotype, ideoplastic, stacked, lay down, covering each other, bird-eye view, and downsizing.

Our analysis results signify that the visual characteristic of naturalist perspective moment consists of dot, line, space, shape, color, texture, as well as the light and dark contrast. The most dominant elements observed in the drawings of children in the lower grades of elementary school are lines, spaces, shapes, and color. Meanwhile, the elements of dots, texture, and light and dark contrast are rarely used by the students since they have a minimum understanding of those elements.

REFERENCES

Agus, Sachari. (2004). *Seni Rupa Dan Desain*. Jakarta: Gelora Aksara Pratama Erlangga.

Burhanudin, Anwar. (2016). Karakteristik Gambar Ekspresi Karya Siswa Tingkat Sekolah Dasar. Skripsi. Semarang: Universitas Negeri Semarang.

Campbell, Linda, Bruce Campbell, dan Dee Dickinson. (2006). Teaching & Learning Through Multiple Intelligences, terj. Tim Intuisi, Metode Praktis Pembelajaran Berbasis Multiple Intelligences, cet. II, Jakarta: Learning Intuisi Press.

DePorter Bobbi, Mark Reardon, Sarah Singer-Nourie. (2005). Quantum Teaching: Orchestrating Students Success, terj. Ary Nilandari, Quantum Teaching: Mempraktikkan Quantum Learning di Ruang-ruang Kelas, cet. XVII, Bandung: Mizan.

Gaitskell, C. dan Hurwitz, A. (1975). Chlidren and Their Art. New York: Harcourt Brace Jovanovich.

Garha, Oho dan Md. Idris. (1979). Pendidikan Kesenian Seni Rupa Program Spesialisasi II untuk SPG. Jakarta: Depdikbud.

Kawuryan, Sekar Purbarini. (2011). Karakteristik Siswa SD Kelas Rendah dan Pembelajarannya. Makalah. http://staffnew.uny.ac.id/upload/132313274/pengabdian/KARAKTERISTIK+DAN+CARA+BELAJAR+SISWA+SD+KELAS+RENDAH.pdf. Diakses pada 10 Mei 2021.

Lolita, Aini. (2017). Karakteristik Pola Gambar Anak Usia Dini. Early Childhood : Jurnal Pendidikan. Vol.1 No. 1, 2017 hal. 44-57. Tasikmalaya: Universitas Muhamadiyah Tasikmalaya.

Lowenfeld, V. and Brittain, W. L. (1964). Creative and Mental Growth (Fourth ed.). New York: Macmillan Publishing Co., Inc.

Miles, MB dan AM, Huberman. (1992). Qualitative Data Analysis: A Sourcebook of New Methods. SAGE. Beverly Hills.

Presiden Republik Indonesia. (1990). Peraturan Pemerintah nomor 28 pasal 13 tentang Pendidikan Dasar. Jakarta: Lembaga Negara Republik Indonesia.

Riyanto, Pulung & Mudian, Deni. (2019). Pengaruh Aktivitas Fisik Terhadap Kecerdasan Emosi Siswa. Jurnal Sport Area, Ed 2019; 4 (2): 339-347. http://journal.uir.ac.id/index.php/JSP. Diakses pada 17 Mei 2021.

Roberto, K.R. (2008). Radical Cataloging: Essays At the Front. Jefferson, Callifornia and London: Mc. Farland and Company. Inc.

Sanjaya, Wina. (2009). Strategi Pembelajaran, Berorientasi Standar Proses Pendidikan. Jakarta: Kencana Prenada Media Grup.

Santrock, John W. (2008). Psikologi Pendidikan: Edisi Kedua. Jakarta: Kencana.

Sit, Masganti. (2012). Perkembangan Peserta Didik. Medan: Perdana Publishing.

Soebandi, Bandi. (2008). Karakteristik lukisan/ gambar Anak, Makalah. Solo: Maulana Offset.

Sugiyono. (2013). Metode Penelitian Pendidikan: Pendekatan Kuantitatif, Kualitatif, dan R&D. Bandung: Alfabeta.

Sumanto. (2006). Pengembangan Kreativitas Seni Rupa Anak Sekolah Dasar. Jakarta: Departemen Pendidikan dan Kebudayaan Direktorat Jenderal Pendidikan Tinggi.

Supandi. (1992). Strategi Belajar Mengajar Pendidikan Jasmani dan Kesehatan. Jakarta: Depdikbud Dirjen Dikti Proyek Pembinaan Tenaga Kependidikan.

Suparno, Paul. (1997). Filsafat Konstruktivisme dalam Pendidikan. Yogyakarta: Kanisius.

Tabrani, Primadi. (2014). Proses Kreasi- Proses Belajar-Gabar Anak. Jakarta: Erlangga.

Triharyanti, Exsiana Ida Nuraini. (Tanpa tahun). Modul Pengayaan: Seni Budaya XI untuk SMA/MA (Semester 1). Srakarta: CV Grahadi.

Undang-Undang Republik Indonesia (2003). Sistem Pendidikan Nasional. Jakarta: Lembaran Negara Republik Indonesia 8 Juli Tahun 2003 Nomor 4301.