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ENVIRONMENTAL INFLUENCE ON DRAWINGS OF CHILDREN IN LOWER PRIMARY: A STUDY OF SELECTED DISTRICTS IN GHANA

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DECLARATION

Student's Declaration

I, Sumaila Issah, declare that this thesis, *Environmental influence on drawings of children in lower primary: A study of selected districts in Ghana* with the exception of quotations and references contained in published works which have been identified and duly acknowledged, is entirely my own original work, and it has not been submitted, either in part or whole, for another degree elsewhere.

Signature: ……

Date: ……

Supervisors' Declaration

We hereby declare that the preparation and presentation of this work was supervised in accordance with the guidelines for supervision of thesis as laid down by the University of Education, Winneba.

Dr. Ebenezer Kwabena Acquah (Principal Supervisor)

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Prof. Patrique deGraft-Yankson (Co-Supervisor)

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Date: ……

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DEDICATION

I dedicate this work to my lovely mother Ms Florence Adwoa Boaduwaa of blessed memory, Mr. and Mrs Issah, Mr. Alhassan K. Halidu, Mr. Francis A. Adongo, entire family of Kabre and my lovely wife Ms. Rabbi Abu-Sadat

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ABSTRACT

The study examined the environmental influence on drawings of children in selected districts in Ghana. It was a qualitative inquiry involving children in public basic schools from the ages of seven (7) to ten (10) years. Also, cultural coordinators, teachers and parents/adult caretakers of the sampled were included in the study. Purposive and simple random sampling techniques were used. Three main methods viz. interview, personal observations, and drawing activities were employed. NVivo data analysis software program (Version 12) and inductive analysis strategy were used for the analysis. Some of the major findings were that overall drawing capabilities of the children were rated from fairly good to very good. Also, the analysis reveals that each of the different realities of the children's environment have some influence on their drawings, with the most obvious being the common reality as the drawing of the children were mainly tangible objects in their schools, home and physical environment. The study concludes that the children's capabilities and competence in drawing some household items were very high in comparism to other items. Also, there was a variance across the districts and this is an indication that children in different parts of Ghana have different capabilities in what they are able to draw. The study recommends that children should be allowed to express themselves through visual representations. Again, there is a need for flexibility and desegregation of policy action point, curricular and teaching materials to reflect the heterogeneity of children's learning environment across the country.

CHAPTER ONE

INTRODUCTION

1.0 Overview

This chapter is an introductory section to the research report on environmental influence on drawings of children in lower primary in selected districts in Ghana. It provides detailed information on the background to the study through which the problem was identified. The chapter also states the objectives of the study, followed by the research questions, delimitation, limitation and the importance of the study, definition of terms, abbreviations used as well as the presentation of the rest of the text.

1.1 Background to the Study

Drawing is regarded by many educationists and educators as one of the most fundamental activities in the learning process and intellectual development of children. The earliest expression of children's creativity and their level of mental development were manifested in the kind of drawings they were able to create and the pictures they painted (Farokhi & Hashemi, 2011). Many scholars have noted that children's drawing originate from their own lives and also that of their close friends, family and teachers as well as what is happening in their immediate social environment (Oğuz, 2010, Hsu, 2014; Biedinger, 2011). Therefore, through drawing one is able to get a clue of what is going on in a child's life and the state of mind of the child. Stolley (2012) has observed that drawing pictures, for instance, reveal the self-expression abilities of children and also help them to be able to relax and be happy.

According to Hortoványi (2017), the deep inner expression of a child is conspicuously made through drawings. Children often express their inner feelings through the scene or pictures they present in their drawings. Thus, drawing is not only a means of learning for children but also an effective medium of communication. According to Quaye (2009) and Cherney et al (2006) children's drawings represent their thoughts, ideas, and ways of interacting and adoptions to the world around them. It has been observed that children become extremely exhilarate during drawings and this is as a result of the fact that drawing helps them to express their emotion and thoughts whether sad or happy. The form and nature of creative self-expression offers a window into the background of the environment in which the child lives (Acquah, 2018) and also gives room to understand the range of personality traits that make children create pictures that are worth studying.

According to Oguz (2009), the child's characteristics alone are not enough to improve their drawings as their immediate environment have strong influences on their drawings as well. The environment consists of the external stimuli that are effective on every human development stage beginning from fertilization. The environment for children consists of their families, teachers, peer groups, socio-economic and cultural practices, and education-related information. According to Güngör *et al.* (2002), children draw an autocratic person in their family as a heavier, majestic and big figure in their drawings. Siren (2003) also noted that when children are exposed to negative parental attitudes, they often depict their parents with negative images in their drawings. For family to contribute positively towards improving the child's drawing ability, the family

must provide the child with memorized drawings and paintings and also the environment that is helpful in developing creativity and uniqueness.

In the school environment, the structure and extent of exposure to drawing and the delivery method are very important for drawing capabilities development (Wittber, 2017). Different schools have different disposition, commitment and attitude towards the teaching and learning of drawing by children. In some schools, drawing and artistic work are compulsory while some schools engage children in drawing at their leisure with no oppression and therefore serve as a means for relieving stress. In school, the sensitivity and appropriateness of content to developmental levels, interests, and needs of children all influence the extent of development of the drawing capabilities of children (Oğuz, 2010). The availability of ample spaces to work, appropriate tools and materials, sufficient time and supervision within the school environment are all conditions that are necessary for development of the drawing skills and capabilities of children.

Evidence from many studies from the foregoing discourse suggests that besides the children own individual characteristics, environment is very critical in supporting the development of creativity and interest in drawings. Thus, improving children drawing capability requires manipulation of the environment of the child to create the atmosphere necessary to challenge, intrigue and support drawing and other creative expressions of children. It is often expected that formal education system provides the support in terms of the guidance and provision of variety of materials needed for children to express their artistic creativity through the use of crayons, water-colours, pastel colours, soft dark black pencils, various papers, and drawing boards (Artut, 2004). Artut (2006) has indicated that early childhood education provides the appropriate conditions for young

children to gain artistic skills and knowledge and these conditions may not be provided by families. In a developing country such as Ghana, there is disproportionate access to the materials needed for drawing and then also, supervision at school by teachers and the general supporting environment for children is unconducive (Mbiti, 2016). In this case, the influence of the environment on children's drawing and their drawing capabilities are magnified.

Child's environment goes beyond the formal educational environment, to include their interaction with conditions at home, cultural artefacts and activities outside the immediate environment of the school (Allen, Kelly & National Research Council, 2015). The drawings capabilities of children are influence, differently, based on external environmental conditions in many developing countries tend to be largely manifold. In Ghana, the difference in tangible environmental and cultural components such as technology, architecture and art as well as intangible components such as social behaviour and norms, knowledge, beliefs, laws, customs, and habits vary across the sixteen (16) regions and over two-hundred (200) districts in the country (Anquandah, 2013). The wide difference in the social, cultural and environmental context on how children are raised present opportunity for a larger influence of environment on children, which however have not been adequately addressed or studied.

1.2 Statement of the Problem

Research in the area of children's drawing has been inspired by two major issues: the first is the concern that drawing activities have the potential to influence the social and/or cognitive development of the child and second is that children's drawing may give a clue

about the social and cultural environments as well as state of mind of children (Allen, Kelly & National Research Council, 2015). Thus, by studying children during activities and capabilities, educational research seeks to unearth the intellectual development of children and reveal the social realities of their lives. It is now emerging that the artistic expression of children and their drawing abilities itself could be influenced by not only the intellectual capabilities and development levels of the children but their social and cultural settings revealed by the artefacts that are within their vicinity and what the people within their immediate environment do. Children across the world are raised in different cultural settings and social environment that influence what they see and what they draw and how they learn to draw. Thus, it is expected that the cultural and environmental conditions of children play important role in the development of the drawing of children.

In Ghana, there is high heterogeneity in terms of the culture and artistic expression of people in the different district and regions. In addition to the difference in academic environment (teachers and school factors), the immediate socio-cultural environment of children has the potential to influence what children draw, how they draw, and their general drawing skills. Study by Abadzivor (2006) revealed that children's access to drawing materials and objects vary in Ghana and this is expected to result in heterogeneity and spontaneous drawings that children across the country make. Also, there is high heterogeneity in cultural setting, socioeconomic and educational environment of children across the country which potentially can impact drawing of children, since their drawings are believed to reflect their immediate surrounding (Oguz, 2009).

From the foregoing discourse, it is expected that by studying the drawing abilities of children within the context of their environment, one is likely to gain insight into how the artistic and drawing skills of children across different parts of Ghana are developed and possibly suggest appropriate strategies for improving children's drawing capabilities. Recent research on drawings of children in Ghana have been restricted to a few districts and also these lack specific empirical findings on environmental influence on children's drawing and left a dearth in knowledge.

In 2018, Ebenezer Acquah, an art educator, did a study on how culture affects children's drawing but did not allow the learners to interpret what they have drawn; rather the drawings were interpreted by their facilitators. Also, Quaye's (2009), work recognized the similarities and difference on cultural identities with children's drawing and how teachers can understand cultural differences through drawings made by children. However, the work was limited to a particular district; it would not be possible to generalize the result in terms of visual representation of children. The teaching strategies and methods used by the facilitators during drawing sections at the lower primary were not significantly discussed. In this work, the environmental influence on the drawing of lower primary learners has been dealt with to unearth many remaining questions. The curriculum for the visual arts education of a basic school learner in Ghana requires an idea about how the environment in which the Ghanaian child lives influences his or her drawings (Ministry of Education, 2006). Through an understanding of the way a youngster draws and the method, he/she uses to portray the environment his or her drawings, can equip one to gain an insight into children's behaviour and aspirations.

For the studies on children's drawings, a few focused on how popular culture and immediate environment including peers, recent in-school experiences or recent out-of-school experiences influence their drawing (Kitahara & Matsuishi, 2007). Currently, the Creative Art Curriculum for lower primary in Ghana promulgated by NaCCA and Ministry of Education in 2019 advocates for learners to incorporate ideas from their cultural setting into their artworks which includes drawings (NaCCA & Ministry of Education, 2019). As such, the researcher decided to investigate the extent to which learners are working to achieve the specified indicators in the curriculum.

There are many unanswered questions with regards to children's drawing in Ghana. For instance, questions such as: What do children from different parts of Ghana draw when offered a free choice to draw anything? What teaching strategies and methods do facilitators used during drawing sections? How do popular culture and immediate environment including peers, recent in-school experiences or recent out-of-school experiences influence their drawing? How do current teaching curriculum and content consider the children environment in the curriculum of drawing subjects? Answers to these questions are expected to enhance teachers and educational policymakers' understanding of the extent to which the immediate environment in which the Ghanaian child lives influence their drawings, how much attention has the newly creative art curriculum been given to children's drawings, how do children express their cultural identities in their drawings and even the challenges they may face in drawing which could be a major tool for child development.

1.3 Purpose of the Study

The purpose of the study is to identify and describe the environmental influence on the drawings of children of lower primary: a study from selected districts in Ghana. In academia, the study would make significant contribution to knowledge regarding children's environment and their educational development. It therefore aims at finding out the environmental influence on children's drawings from seven to ten years of age, and this aims at helping one to develop and appreciate the challenges and the dynamics in which children's grow and flourish.

1.4 Objectives of the Study

The main objective of the study is to examine the influence of environmental influence on the drawings of children of lower primary from age seven (7) to ten (10) years in selected districts in Ghana. The specific objectives of the study included the following;

i. To examine the drawing capabilities of children in lower primary in selected districts in Ghana.

ii. To examine the influence of the children's environment on their drawing outcomes.

iii. To ascertain how self-efficacy (past experience, facilitation/evaluative feedback and physio-emotional status) influence the drawing of children in Ghana.

iv. To explore the role educators can play to provide a convenient environment to enhance drawing capabilities of children.

1.5 Research Questions

The following research questions guided the study:

i. What drawing capabilities do children in lower primary in selected districts of Ghana possess?

ii. How do the children's environment/realities influence their drawing outcomes?

iii. How does self-efficacy (past experience, facilitation/evaluative feedback, and physio-emotional status) influence the outcome and drawing capabilities of children in Ghana?

iv. What role can educators play to provide a convenient environment to enhance drawing capabilities of children?

1.6 Significance of the Study

The findings of the study would contribute to policy and practice and knowledge dissemination in Art education in Ghana. In the first place, by examining the influence of the environment on children's drawings from selected districts in the country, an understanding of children's drawings from different cultural backgrounds has been established and that would inform learners and educators (teachers), cultural coordinators, parents/adult caretaker. The findings of the study would also inform policies regarding art education (Creative Art) in Ghana. In particular, it is expected that the findings of this study would be informative for stakeholders of the educational sector including curriculum development, implementation and monitoring units (at National Council for Curriculum and Assessment) and Ministry of Education to recognise the

value of environmental and cultural difference in shaping the drawing abilities of children.

The illustrations made by children from different cultural backgrounds expose the elements of culture and environment and their influence on children's drawings. On the basis of this, the study may also influence and contribute to the development of cultural policy in Ghana that would take into consideration how culture can be integrated into teaching and learning in schools. Thus, the findings of the study contributes to achieving the fourth Sustainable Development Goal (SDG) which emphasize on achieving inclusive and quality education for all especially the target 4.7 which calls for education to promote a culture of peace and non-violence, an appreciation of cultural diversity, and of culture's contribution to sustainable development.

In academia, the study is also expected to make unique contribution to knowledge regarding children's environment and their educational development. Socio-cultural environmental influence on students' performance has been studied in Ghana and elsewhere but the specific influence of socio-cultural and environmental conditions on the drawing capabilities and outcomes of children has not been adequately studied. The study is expected to contribute to not only new knowledge but also improve the methodology of studying children performance by adopting a more inclusive and extensive approach to such studies. Overall, the study is expected to be a useful reference and guide that provides baseline information on environmental influence on children drawing capabilities in Ghana.

1.7. Delimitation

The study seeks to examine the influence of children's environment on their drawing capabilities using data that were collected from selected Districts in Ghana. Geographically, the study focused on the Republic of Ghana but covered some selected district. The study participants are children from age 7 to 10 years that enrolled in schools in the selected Districts as well as cultural coordinators, teachers and parents of the children. The district includes the Kumasi Metropolis in the Ashanti Region, Bia West District (BWD) in the Western North Region (WNR), Tempane Municipal in the Upper East Region and Keta Municipal in the Volta Region. The selected Districts are located in geographically distinct areas and were expected to have different cultural and environmental conditions that may influence drawing abilities.

In terms of the content, the study focused on drawings activities of children from four selected basic schools, the influence teacher and school environment have on children drawing activities, home environment and cultural settings influence on their drawing and how current educational structures and contents in Ghana reflect the environmental settings of children. The analysis was limited to their drawing abilities, teaching strategies and method employed by the facilitators and not areas such as their numeracy skills, reading and comprehension among others. As a descriptive-analytic study, the analysis was limited to information obtained from responses of the study participants and observations were made from the drawings. The duration for data collected was limited to six months thus; December 2021 to May 2022.

1.8 Abbreviations/Acronyms

AS - Ashanti Region

BWD - Bia West District

CA - Creative Arts

EAE - Environmental Art Education

EE - Environmental Education

EI - Environmental Influence

GES - Ghana Education Service

GSS - Ghana Statistical Service

GSSR - Ghana Statistical Service Report

GoG - Government of Ghana

KM - Kumasi Metropolis

LTS - Learning and Teaching Scotland

MoE - Ministry of Education

NaCCA - National Council for Curriculum and Assessment

QRP - Qualitative Research Paradigm

RoG - Republic of Ghana

RJ - Reflexive Journal

SC - Social Constructivists

SDG - Sustainable Development Goal

SR - Savannah Region

WNR - Western North Region

1.9 Operational Definition of Terms

Environmental influence: It refers to contributing factors that shape the children's drawing abilities

Positionality: This relates to how the researcher identify construction, cultural background and experience that influence the way the real world is perceived and portrayed in the study

Reflexivity: This refers to the researcher's role in the conduct of the study and the way this is influenced by the object of the research, enabling the researcher to acknowledge the way he affects both the research processes and outcomes.

Reflexive journals: These are written records by the researcher himself throughout the research process which includes the details of what the he did, though, and felt while analysing the data

Social constructivists: This refers to participants' activeness in the creation of their own knowledge through drawing by influence of other environmental factors.

Self-efficacy: These are how individual's motivation to undertake a certain task is informed by their confidence or their ability to execute the task or behaviour. In this study, two pathways are conceptualised for achieving self-efficacy for drawing by children viz. past experience of the child and facilitation and evaluative feedback from teachers and parents.

Triangulation: This refers to reliance on multiple sources of database, methods, and theories to address the research questions.

1.10 Organisation of the Study

The study is organized and presented in six (6) chapters. The first chapter which is introductory in nature covers the background to the study, the problem statement and research purpose, objectives as well as the significance of the study. The second chapter covers review of relevant literature on the children drawing capabilities of children, covering also the individual, teacher and school environment factors that influence children drawing, sociocultural and environmental influence on children's drawing from global perspective and local perspective as well. Furthermore, the conceptual and theoretical frameworks that explain the foundational and fundamental understanding of how environment influence of children drawings are presented.

In the third chapter (Chapter Three) of the study, the methodology highlighting the research philosophy, the research design, paradigm and approaches are outlined. The chapter also covers the sampling and data collection techniques, reflexivity and positionality of the researcher and respondents as well as how data is collected and analysed. The findings that are obtained from analysis of data collected are presented in Chapter Four. The discussions of findings are made in Chapter five. Chapter Six presents summary of the main findings of the study, the implications and conclusions drawn from the findings and makes recommendations. The Chapter also highlight the contribution of the study to knowledge and practices as well policy formulation.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.0 Overview

Visual arts, such as drawings, are attractive to most young children and marks left on paper by young children contain meaning. It has been observed that many young children like making marks on paper and that they enjoy the activity (Anning & Ring, 2004). It is also known that children's drawings are vehicles for expression and communication. However, extensive research in this area has begun to emerge. This chapter examines the existing literature on the influence of the environment on children's drawings in lower primary school, both globally and locally. The chapter includes a critical literature review of the study's basic concepts as well as an empirical review of the influence of the environment on children's drawings in the lower primary. The chapter consists of five distinct sections. The conceptual review is discussed in Section 2.2, which addresses issues such as culture, environment, school, and drawings. Although these terms have widely accepted theoretical definitions, they are used contextually in this study. Section 2.3 provides a comprehensive theoretical review underpinning the study. Theories reviewed include the social cognitive theory and self-efficacy, theory of realities and competence and effectance theory. Section 2.4 takes a look at empirical literature review which includes influence of school environment on children drawing capabilities development, the concept of drawing and drawings capabilities development of children among others. Review of related works is also provided to enable the survey of literature on the subject. Section 2.5 outlines the identified research gap that provides justification for this work. Finally, the chapter ends with section 2.6 focusing on the discussion of the

proposed conceptual framework that has been developed to achieve the study objectives. The conceptual framework shows the relationship among the study variables.

2.1 Conceptual Review

The main concepts driving the study is discussed. The concepts that are considered relevant for this study include drawing, school, environment, culture, history of children's drawing, and children's perspectives on drawing among many others. These are further explained in detail below.

2.1.1 *Drawing - A means of expression*

Within the visual arts, drawing is one of the oldest forms of human expression. It is primarily concerned with the accurate representation of the visual world on a plane surface through the marking of lines and areas of tone onto paper/other material. Drawing has been defined in a number of ways. Drawing, according to Puglionesi (2016), is a form of visual art in which a person makes an image on paper using various drawing instruments. Drawing can be described as a meaning-making activity that occurs in particular sociocultural contexts in order to discover evidence for its communicative potentials and the relationship between thought and drawing in early childhood (Papandreou, 2014). Hopperstad (2008) pointed out that drawing is

> a meaning-making process in which children draw signs to express their understanding and ideas in a visual-graphic form and it is always meaningful for the child that makes it (a drawing), reflecting the child's interests and intentions and conveying meaning in a form the child finds suitable (p. 134).

Wood and Hall (2011) confirm the above stating that children's drawings "are a form of cultural transmission of their everyday knowledge, their imaginative capabilities

and their invented meanings" (p. 270). Since drawing can be used as a simultaneous whole, Brooks (2019) proposes that drawing can be a visual representation of thoughts, distinct from speech (oral or text). Comparably, Eisner (2013) recognises drawing as an "elementary form of expression" that allows children to develop their imagination, emotional responses and personality in a creative way (p. 13). Moreover, drawing can be "understood as enacting science learning and reasoning because this kind of activity is consistent with how knowledge is developed and communicated in the science community" (Prain & Tytler, 2012, p. 2757).

In general, the art or technique of making images on a surface, generally paper, using marks made with ink, graphite, or chalk, pen, various paints, inked brushes, coloured pencils, crayons, charcoal, chalk, pastels, erasers, markers, styluses, and various metals are each considered as drawing. Drawing may also involve the use of a computer, which is known as digital drawing. In this study, drawing refers to only the traditional method of marking object(s) on surface of paper or other medium using traditional instruments such as pencil, chalk or crayon.

2.1.2 *Environment in perspective*

Environment refers to circumstances, objects, or conditions from which one is surrounded. According to Mullai, Mozhi and Ravichandran (2013), it could also be the complex of physical, chemical and biotic factors (such as climate, soil and living things) that acts upon an organism or an ecological community and ultimately determine its form and survival. The concept "environment" is commonly used in reference to "nature", or the natural world, which includes both living and non-living (Mullai et al., 2013). The environment is also directly connected with notions of wilderness and pristine landscapes

that have not been influenced or, at the very least, have been imperceptibly influenced by human activities, by both living and non-living objects. Many other people, on the other hand, consider the term 'environment' to include human elements to some extent. Many people would consider agricultural and pastoral landscapes to be part of the environment, while others go much further and regard all elements of the earth's surface to be part of the environment, including urban areas. As a consequence, the term "world" has become synonymous with a multitude of symbols and is linked to a number of unspoken yet strongly held perceptions and values. Both of these applications, however, have a common assumption: that the 'environment' has some kind of relationship with humans. The environment serves as the 'backdrop' to the unfolding narrative of human history, as well as the habitats and resources that humans exploit, the 'hinterland' that surrounds human settlements, and the 'wilderness' that humans have yet to domesticate or dominate (Mullai, et al., 2013). However, in the literal sense, the environment refers to the 'surroundings' (environs) of an individual, object, element, or system, and thus includes all other entities with which it is surrounded (Seymour, 2016).

Individuals, objects, elements, and systems rarely exist in isolation in reality; instead, they interact with their environments to varying degrees. As a result, conceptualizing the "environment" without incorporating some notion of relationship is not particularly useful. Individuals, objects, elements, and systems all have an effect on their surroundings, and are in turn influenced by them. Indeed, the networks of relationships that exist between different entities may be extensive and complex in some cases. Therefore, the 'environment' may be conceived of as a 'space' or a 'field' in which humans connect through networks of relationships, interconnections, and interactions.

Ecologists are concerned with both the biotic (living) and abiotic (non-living) components of environmental systems - and particularly their relationships - so such a conceptualization would be familiar to those who have studied the science of ecology (Seymour, 2016). In this study however, the term environment was limited to the artificial surrounding of people in terms of culture and artefact and all the objects and activities that engulf the daily life of people.

2.1.3 *Culture - contextual understanding*

Culture relates to the behaviour and norms found in human societies, as well as the knowledge, laws, abilities, beliefs, arts, customs and habits of the people that make up these groups (Macionis & Gerber, 2011). Culture is one of the most often used concepts in sociology but is commonly considered to be synonymous with higher mental pursuits such as art, literature, music, and painting. However, sociologists believe that it goes beyond those activities. Cultural sociology is one of the American Sociological Association's most important and popular areas. The intersection of sociology, as shaped by early theorists like Marx, Durkheim, and Weber, and the rising specialization of anthropology, where researchers lead the way of ethnographic approach for unfolding and examining different cultures around the world, contributed significantly to the sociology of culture (Macionis & Gerber, 2011).

Although culture and society are conceptually distinct, the two concepts are strongly intertwined. A society is a system of interrelationships that connects individuals together. The fact that their members are organized in formal social relationships according to a particular tradition binds all societies together. Without societies, no cultures could exist. No society, on the other hand, may exist without culture. Humans

would not even be 'normal' in the way that they generally understand terms without culture. There would not be a way of expressing ourselves, no feeling of self, and human ability to think and reason would severely be limited (Itulua-Abumere, 2013). Culture is made up of both material and immaterial components. The material culture of a society consists of physical expressions of culture such as technology, architecture, and art, whereas the intangible cultural heritage of a society consists of immaterial elements of culture such as social organisation principles and science. The immaterial culture often has cultural norms that codify appropriate behaviour in society; they act as a standard for behaviour, dress, language, and demeanour in a situation, and they serve as a template for societal standards. The use of culture in this study would encompass both material and non-material aspects.

Culture has an influence on people's thoughts and behaviours, not only in terms of ethnic diversity, but also in terms of religion, and socioeconomic status (Bradley & Kibera, 2006). Chen-Hafteck (2007) states that "culture has a strong influence on child development" (p. 141) and as young children give meaning to objects, images, events and people as representations of their culture, their visual arts education should be considerate of their cultural heritage (Lind, 2005). Educators need to be aware of each child's cultural associations when teaching the arts so that they can benefit from art opportunities. Childhood can be seen as a "social construction within a cultural-historical context" (Richards, 2007, p. 23) therefore a child's context must be acknowledged as learning occurs through social, cultural and historical influences (Plows, 2014). Culturally familiar art activities that relate to children stores of knowledge can engage their interest, hence

benefiting their artistic learning as infants and toddlers take solace in the familiar things (Ministry of Education, MoE, 2017).

Local culture (a form of micro culture) may also be considered when it comes to ethnic culture, and educators should give children opportunities to see and understand objects and artifacts that are important to the community's cultures so that they can become familiar with them (Terreni, 2010; Plows, 2014). Visual art allows children to connect, recognise, and construct their cultural identity through learning and events that are relevant to their interests and experiences, encouraging their development and participation in art (Fuemana-Foa'i et al., 2009; Grierson, 2011). Artistic development and learning can be influenced and thereby promoted through recognizing an individual's knowledge resources. Learning in and through the arts is especially relevant "given the contexts in which children understand and make meaning of the world around them" (Barton, 2015, p. 63; Fuemana-Foa'i et al., 2009), therefore children's cultural cultures must be well represented in art opportunities when teaching arts education.

2.1.4 *School*

A school is a type of educational institution that provides learning spaces and environments for the teaching of students (or "pupils") by teachers (Roser & Ortiz-Ospina, 2016). The school is a unique social space where suitable teaching techniques, adequate physical space, and a favorable psychological environment are used to develop and run the education, training, and personality development of children who are the community's potential assets (Raccoon Gang, 2018). The degree to which students' learning can be enhanced is partly determined by their location within the school premises, the structure of their classroom, and the availability of instructional accessories

and facilities. Through supporting effective teaching and learning, it is assumed that a school with an adequate learning environment tends to stir up expected learning outcomes that will facilitate good academic performance (Duruji et al., 2014).

According to Rahmatullah et al. (2022), the use of the term *school* varies by country, as do the names of the various levels of education within the country. In the United Kingdom, the term *school* refers primarily to pre-university institutions, and these can, for the most part, be divided into pre-schools or nursery schools, primary schools (sometimes further divided into infant school and junior school), and secondary schools (*Burke & Grosvenor, 2008)*. In certain parts of the world, schools apply to primary education that last between four and nine years, depending on the country. In North America including the US, the term school refers to any educational institution at any level, and covers all of the following: preschool, kindergarten, elementary school, middle school, high school college, university, and graduate school (*Burke & Grosvenor, 2008)*. In West Africa, there are other forms of school such as Quranic schools, or apprenticeships which are different from formal schools (Ogunaike, 2020). In this study, school refers to formal education at all levels.

2.1.5 *History of the Study of Children's Drawings*

Most works of art will either include the representation of an image on paper or canvas, or will work from sketches of the artwork. Drawing is one of the most basic forms of art. The industrial revolution, which lasted from the late 18th century to the early 19th century, necessitated the development of design skills to sustain the growing manufacturing activity. As a result, the value and importance of introducing drawing skills to children became widely recognized. Early drawing education based on breaking down subject

matter elements into lines, and only after the child had learned this skill could they begin to represent subject matter from life (Ashwin, 1981). For example, the courses developed by Walter Smith, an Englishman who not only developed the first drawing curricula introduced in America in 1870, but also educated teachers in how to deliver it. Smith's courses consisted of a set of exercises that began with drawing a straight line without using a ruler and reflected his belief that drawing should be mastered through drill, practice and imitation (Chapman, 1978).

Henry Pestalozzi was another early art educator who had a significant influence on other European theorists. His approach was similar to Smith's; with children initially completing repeated geometric exercises with increasing complexity (Aswin, 1981). Although Smith's and Pestalozzi's materials seem to be very limited in comparison to more modern, westernised art educational programmes, their legacy lives on in step-by-step books and cultures where explicit drawing instruction is given.

2.1.6 *Children and Drawing*

Drawing is something that children all over the world love doing. This is due to their inner imagination expressing itself through visual cues, motor, cognitive, and emotional development. For children who do not yet have the ability to express themselves verbally, drawing is a particularly important activity. They show both joyful and disturbing issues as valuable and important aspects of their lives through drawing. To date, numerous studies on children's drawings have been conducted in Turkey (Ahi, Cingi & Kldan, 2016; Akbulut & Saban, 2012; Daglioglu, 2011; Guven, 2017; Hicyilmaz, Inci & Seven, 2015; Kesicioglu & Deniz, 2014; Ozsoy & Ahi, 2014; Seker & Sine, 2012; Temel & Gullu, 2016) Yalcin Teachers, violence, news, doctors, televisions, families,

environments, physical education teachers, school principals, science, and nature were among the images formed in the minds of the children in these studies. Children, especially those in their early years, enjoy drawing. The majority of them love drawing and do so often in order to serve a variety of purposes during their play or other daily activities at home and at school (Brooks, 2009a; Hall, 2009).

Children's drawings may depict important events from their experiences, aspects of what they have seen that they value, and what they have learned, remembered, and value at the time of drawing. Thus, drawing helps children to express something emotional and meaningful they have not been able to categorize or verbalize yet (Frederiksen et al., 2014). Drawings of children are largely viewed as a natural activity that they enjoy (Katz & Hamama, 2013). As a result, children's use of drawings as a simple means of expressing themselves to adults and peers develops in tandem with their cognitive and affective development. Drawing does not need verbal expressions since children learn to draw before learning verbal expressions in their native languages (Ligorio et al., 2017). As such children with limited vocabulary and vocabulary can express themselves effectively through drawings. In this context, drawings of children may be important tools to know them very well (Ligorio et al., 2017).

Individuals in reality do not only express themselves by speaking and writing (Alerby & Bergmark, 2012). When children's drawings are combined with other methods such as speaking and writing, it is possible to understand their emotions, thoughts, and perceptions about everything (Ozsoy & Ahi, 2014). Drawings, according to Diem-Wille (2001), are more powerful than words in determining people's beliefs, attitudes and perceptions. Furthermore, modern society offers many opportunities for children to be

exposed to and manipulate visual, graphical, and pictorial signs from an early age (Jolley, 2010). Bland (2012) gathered detailed information about children's imagined and ideal learning environments through freehand drawings. Pictures leave traces of tools that aid in the social development of children. These tools are linked to social power (Seven, 2013). In the literature, the concept of social power is referred to as social tools or social agents. Family, peers, school, and the media, according to Seven (2013), are essential tools in the socialisation of the individual. The human factor can be included in the socialisation of individuals, while the environment or a functional object can also be included (Seven, 2013). Given that socialisation is a process, determining the social powers that are effective in this process is essential in order to raise people who are compatible (Seven, 2013).

The development of children's drawing skills is related to their cognitive (thinking, problem-solving, and remembering) and emotional development. It requires the ability to translate thoughts into deliberate hand movements and the ability to understand and position a drawing tool (Kortesluoma, Punamaki & Nikkonen, 2008). In eliciting young students' perspectives on matters, drawing is a useful tool. Children's drawings have been shown to be reliable sources of information on a variety of topics, including stereotypes (Räty et al., 2012), prejudice (Campbell et al., 2010), person perception (Yedidia & Lipschitz-Elchawi, 2012), emotions (Misailidi et al., 2011), emotionally laden experiences such as war (Ben-Asher, 2016), various types of peer relationships (Cannoni & Bombi, 2016), and social relationships in general are all emotionally charged experiences (de Rosa, 2014).

Drawings are seen as primary symbolic activity in which the child expresses his or her own means of expression, such as thoughts, feelings, and interpretations of life experiences. Adults can give knowledge into young children's thoughts and how they form them through their drawings, which can serve as a bridge between the child's inner world and the world of communication and sharing ideas (Brooks, 2009a). Children are usually completely engaged in the subject being displayed when they draw (Brooks, 2009b).

Research suggests that drawing is an effective strategy for eliciting children's thinking about concepts and phenomena from the natural world, and for involving them in scientific thinking acknowledging that children often have ideas and unspoken knowledge, and therefore know more than they say (Delserieys et al., 2017; Ehrlén, 2009; Kampeza & Ravanis, 2012; Papandreou & Kampeza, 2012). Children may draw during classroom inquiries to display previous or current understandings, as well as to record their observations, measurements, and other amount of information gathered during learning experiences (Chang, 2012; Kampeza & Delserieys, 2019).

2.1.7 *Benefits of Drawing*

Drawings of children revealed diverse ways that children represent complicated concepts or explanations of science, suggesting that drawing can help children understand science as they progress from informal and intuitive signs to formal symbols and abstraction. The ability to imagine thoughts, concepts, and challenges is critical in assisting children in moving from simple recitation to higher levels of thinking (Brooks, 2009a). Every child's drawing is unique, and their contents, as well as the ways in which they are drawn and coloured, reflect important emotions, thoughts, and fears, other important elements, the

ability to regulate emotions, as well as perceive and draw the human figure (Drake & Winner, 2013).

Children's drawings can be used as diagnostic and therapeutic measures in a variety of settings, including therapeutic, developmental, and dental services, starting school, classroom observations, and others (Aminabadi et al., 2011; Lesinskien, et al., 2013; Einarsdottir et al., 2009; Early et al., 2010). According to research, as people get older, they grow more complex and symbolic representational strategies, and their reference points become more gender-specific (Cherney et al., 2006).

Drawing has become a more common strategy in research with younger children because drawing enables researchers to understand young children on their own terms (Tay-Lim & Lim, 2013). Drawing is a typical kindergarten activity that is used in many of the learning experiences that young schoolchildren engage in. Majority of children enjoy drawing and use it for a variety of purposes in their daily lives at home and at school (Hall, 2009). For many parents and educators, however, drawing is mostly regarded as a prewriting activity that reinforces the development of fine motor skills, "a low status, time-filling occupation" that fills gaps in the daily schedule, serves to decorate the classroom, illustrates children's versions of stories, or simply a way to relax and have fun (Papandreou, 2014). Wood and Hall (2011) propose that "drawing is much more than a pre-writing skill or a developmental transition from 'drawing things to drawing speech' (p. 270).

Drawing is more than just a means for children to express themselves visually. Children's observation of the world is guided by drawing, which lets them explore and understand it (Hall, 2009), elaborate and organize their experiences, and develop their

thinking. It can be found that their relationships with their immediate environment, attitudes, intelligence, and personality characteristics are reflected in their painting performance in terms of composition, colour preferences and content selection when children's drawings are examined (Yldz, 2012). Children may use drawing and painting to sort out relationships, experiment with concepts, and communicate what they think, according to Wu (2009). It is considered that, when drawing, children are reconstructing their thinking and representing their own mental images" (Villarroel & Infante, 2014, p. 120).

Usually, children combine their own symbols and they obtain conventional graphic symbols (e.g. letters, numerals, signboards) from their daily life which they can use to communicate their messages in their own way (Papandreou, 2014). Children's drawings are often known as reference data, or signs or symbols that relate to and refer to something they have saved (Everts & Whithers, 2006). This is why drawing is often combined, as in the case of this project, with further elaboration by the children, either written or oral. This enables the children to relate to their drawings and have further explanations (Driessnack & Furukawa, 2012). In this way, considering the fact that the causes of the children's concerns were diverse, the use of drawings served as an immensely useful support for conversations with the children about difficult and taboo subjects.

The use of symbol technique helps children to provide a different perspective on the meanings and meanings and in remembering particular incidents or moods as they associate with the circumstances through drawing than interviews or questionnaire responses (Driessnack & Furukawa, 2012; Gross et al., 2009). Similarly, these drawings

may serve as a nonverbal step in childhood experience and emotion (Jolley, 2010), and follow-up conversations about their families can generate familial knowledge of the children's relationship experiences (Gernhardt et al., 2013). Brooks (2009b) observes that "through drawing children are not only able to see what they are thinking, they are also able to play around with and transform their ideas" (p.319). The constant drawing enables children to re-examine and assess their thinking process, to talk about it with others, to exchange thoughts (Hopperstad, 2008) and to increase their awareness (Brooks, 2009b). This suggests that processes of reflection performed by drawing activities help children organize their experiences, organize events and build structures and patterns in order of time.

While parents do not place as much emphasis on drawing as they do on other things that their children participate in, they do acknowledge several advantages in it. Jolley, for example, found that 49% of the parents cited satisfaction and pride as a benefit of drawing; relaxation and enjoyment (33%) with expression (46%), (Jolley, 2010). The children who explained drawing as an opportunity to release emotions and express themselves (12%), as relaxing (11%) and enjoyable (10%) experiences have been expressed in the views of (Jolley, 2010). Learning to draw allows children to appreciate and express themselves be by means of a tangible form and individuality (Keinanen et al., 2010). Children do not only practice hand-eye coordination, but they also learn to study their subjects carefully, resulting in the development of visual sensitivity when children start drawing from real life. Having greater insight into the world around them, they may ignore what is simply superficial as they learn to see in more specific ways, becoming more sensitive to the more subtle qualities and changes of form (Barnes, 2008). Children

will learn how to make choices about what to depict and how to depict it when they are encouraged to draw.

Drawing, rather than most symbolic systems, according to Golomb (2004), is a truly creative activity for the children who has at the very least reinvent, or invent a basic vocabulary of graphic shapes across cultures and generations. Emerging literature shows that drawing may play an important role in science education, improving pupil engagement, communication skills, and their ability to understand and reason about the subject matter that they are learning, according to Ainsworth, Prain, and Tytler (2011). Tyler, et al. (2018) found that students who drew in class engaged more in class, debated at a higher level, and performed more in their workbooks in an initial evaluation of the Role of Representation in Learning Science. However, Tyler et al., (2018) suggested that further evaluation of such programs is required, preferably using pre- and post-test designs with a control group to fully evaluate the influence of drawing on the understanding and learning of pupils.

Some studies have attempted to relate the effects of drawing to cognitive development. For example, Kozblet and Seeley (2007) attempted to evaluate the frequently made anecdotal comments that artists have superior visual perception and intelligence using examples and evidence from psychology and neuroscience and 'perceive the world differently than non-artists' (p.80). They address a rising influence of evidence that suggests that being able to draw accurately is related to being able to visually see objects more accurately (based on evidence from eye tracking and fMRI studies) and that these sensations to be less distorted and how things should look by pre-existing schemata. A study of four-year old children by (Lilliard & Peterson, 2011) found

that after spending 9 minutes drawing, children performed significantly better on the Tower of Hanoi task and a backwards digit period test compared to children who had spent 9 minutes not drawing but either watching an educational television programme or a fast-paced television cartoon.

2.1.8 *Children's Perceptions of the Value of their Drawings*

During the childhood years, a child's interactions with his or her peers and other people in the environment help them develop a variety of positive and negative behaviours, skills, manners, and opinions. This serves as the foundation for their value judgments. Though a person's entire life is spent studying about values, the first information is gained in childhood (Davies, 2004; Uyank-Balat & Balaban-Daal, 2009; Dereli-man, 2014). The concept of 'value' has been defined in a variety of ways. Values are generally understood to consist of objectives produced against the backdrop of the ideas, standards, and targets adopted by a group, or behavioral patterns organized so that the individual can maintain his or her existence within the group in accordance with the standards that are considered right by a group, despite the fact that it is generally defined as an important criterion within cultures and societies (Türk, 2009; Veugelers & Vedder, 2003).

Values may also reflect common feelings, or generalized ethical principles or beliefs that are considered right and useful by the multitude of members of a social group or society in order to maintain that group's or society's existence, unity, and continuity; they may also reflect common feelings, or generalized ethical principles or beliefs that are considered right and useful by the majority of members of a social group or society in

order to maintain the existence, unity, and continuity of that group or society (Türk, 2009; Veugelers & Vedder, 2003).

Values education research in Turkey and around the world have centered on issues such as providing values, implementing values education programs, and the family's effect on values education. Existing research involving teacher or family interviews and surveys has appeared to dismiss drawing as a method of determining children's expectations (Husu & Tirri, 2007; Richardson, Tolson, Huang & Lee, 2009; Uyank et al., 2011). Pictures, on the other hand, provide children the opportunity to express their worldviews through their responses to being told a story, relaying metaphors, and both the description and their own descriptions. When drawing, a child synthesizes his or her feelings and thoughts about the subject with his or her observations and expresses them using colours, shapes, and lines (Malchiodi, 2013).

Children use their pictures to synthesize their observations from life and their opinions, and to draw on what happens in their world as they see it. For children, drawing a picture is both a fun hobby and an effective instructional tool (Hayes, et al. 1994; Johnson, 1993). Although children are often unwilling to answer interview questions, they readily provide the same detail when prompted to draw a picture (Lewis & Greene, 1983). Drawing is also used as a means of expression for children who are unable to communicate verbally (Chambers, 1983; Rennie & Jarvis, 1995). If children's drawings are properly analyzed, they can provide researchers with more detailed information about their experience and development than written or verbal texts (Yavuzer, 1997). In the fields of psychology and picture therapy, aspects of psychology have been setting the

stage (Malchiodi, 2013). The objects that children draw, the colours they use, and the art tools that they use can all provide important diagnostic and therapeutic clues.

2.1.9 *Preschool Teachers' Roles, Views, Experiences and Approaches about Children's Drawings*

The literature on the role between classroom quality and educational attainment in children has produced mixed findings (Sanders & Howes, 2013). According to studies, early childhood teachers with a bachelor's degree outperform teachers with a high school or associate's degree on global indicators of classroom consistency, offer more explanations to children's questions and are more attentive to the needs of children (Burchinal, Cryer, Clifford, & Howes, 2002; Phillips, Fox & Gunnar, 2011). A body of evidence shows that the level of teacher instruction in early childhood classrooms has a profound effect on young children's social, language competencies and academic as well as their developmental outcomes (Early & Winton, 2001; Ritblatt et al., 2013; Saracho, 2013).

Barnett (2011) argued that it is especially important for early childhood teachers to consider how experiences in the classroom influence patterns of change in children's cognitive development or thinking though they are expected to learn a lot (Bjorklund, 2012). In a developmental-appropriate manner, teachers must also be able to extend their understanding of cognitive learning to classroom activities. Early childhood teacher education programmes can immerse their students in these subjects, and field-based work is one way to do so (Macy, et al., 2009). According to Horowitz et al. (2005), understanding cognitive development is crucial for all educators, but it is especially important for early childhood educators. An early childhood teacher that has a basic

understanding of human development is more able to sequence, schedule and develop experiences that best fit children's learning needs. Teachers, according to Artut (2013), should create appropriate environments for children to express their feelings and thoughts by bridging the gap between children's drawings, their lives, and imaginary worlds. Teachers, according to Yavuzer (2014), should allow children to maintain their own expressions rather than force them to behave in accordance with their own norms. Teachers' positive responses to children's drawings give them a sense of accomplishment and help them develop a positive self-perception (Fox & Schirrmacher, 2014). Teacher attitudes that place no value on original thoughts are emotionless, and does not value children's work may suppress children's creativity and minimize their interest in drawing on the other hand (Artut, 2013). Providing corrective feedback to children's drawings, according to Artut (2010), could interfere with the inner world of the child.

Positive reactions from teachers to children's drawings, either verbal or nonverbal, inspire creativity whilst still reinforcing the child's sense of accomplishment. Positive responses, on the other hand, should be carefully chosen. Expressions like "well done" "congratulations" or "wonderful" may inhibit creativity by making the child dependent from external compliments. Adults should form sentences that show they are concerned about and appreciating a child's drawing instead of using those terms (Yolcu, 2009). Teachers should pay attention to children's small muscle development as they draw, contribute to their cognitive development by discussing the various concepts they use in their drawings, and help their social-emotional and language performance by providing them to display their drawings in a variety of ways, including presentation, drama, and dance. Furthermore, teachers may help children develop their creativity by

encouraging them to use their imagination and supporting them with the appropriate approaches (Yolcu, 2009). Respecting children's products, reflecting on children's feelings and thoughts, proposing alternatives when children pause, guiding children, and understanding children's efforts are among the values that Isenberg and Jalongo (2006) recognize when reacting to children's art products.

The most meaningful way to react to young children's drawings, according to Isenberg and Jalongo (2006), is to discuss the colours, texture, arrangement, lines, and shapes that constitute the artistic elements. Teachers must verbally define the art elements, shapes, and objects in children's drawings, talk with them about what they drew, ask them questions about the process, ask them open-ended questions, and use expressions that appreciate and support their efforts, according to Fox and Schirrmacher (2014). These strategies are part of the educational approach (Fox & Schirrmacher, 2014). The conversation in this approach aims to develop an artistic perspective and aesthetic awareness suitable for the child's developmental characteristics, stresses the process over the product, and incorporates artistic elements (Bolattaş et al., 2017). When drawing, children should be able to explore artistic elements with their teachers and peers (Wachowiak & Clements, 2006).

Anning (2002) investigated the effects on the drawing activities of children of teachers and parents' opinions on children's drawings in the North of England. According to the findings, preschool teachers are unaware of the strategies that can be used to inspire young children to draw. They could not also react to the drawings of children. Teachers stressed the role of drawing in a child's development process in research undertaken by Rose et al. (2006), and mentioned that they were not judgmental

of children's drawings and that they allowed children to draw. In a study conducted by Garvis and Pendergast (2011) with Australian preschool teachers, it was found that more than half of the teachers were not efficient to encourage visual art activities. Özkan and Girgin (2014) evaluated pre-school teachers' visual arts practices and concluded that most teachers do every day visual artwork. According to the teachers of the study, visual art education improves children's psychomotor skill and creativity and is not necessary for their art education during their studies. Ten percent of pre-school teachers reported that the methods for the teaching of the visual arts were not appropriate in the study conducted by Şahin, Kartal and İmamoğlu (2013).

Similarly, research by Dilmaç et al. (2008) revealed that pre-service teachers want to use different methods and strategies in the course, which investigated the perception of preschool teacher regarding drawing. In addition to these studies, there are scale studies that examine the attitudes and implementations shaping the drawing action of children at home or at school (Burkitt, et al., 2010) and that determine the approaches of the teachers towards children's drawings (Bolattaş et al., 2017).

2.1.10 *Child Development in Art*

Comprehensive studies in the areas of art education, psychology for learning and child development have different perspectives on the importance of the arts in the education and how arts have an effect on children's development. When young children undergo various stages of development, they learn different skills and master different levels of each development field (Squires & Bricker, 2009; Voress & Pearson, 2013). Similarly, children through various stages of art development and, in turn, the arts contribute to the development and mastering of different skills.

Lowenfeld and Brittain (1970) investigated the cognitive, physical, and social/emotional development of children at each stage in relation to the emerging artistic skills at each stage; they consider art to be a means of expression for young children that not only becomes their language of thought, but also facilitates adults' understanding of children's development. Consequently, researchers propose that, "The arts constitute a tool to explore pre-verbal functioning, both to gauge psychological well-being and to interact with the inner world through the playful and spontaneous possibilities for self-expression that the arts can enable" (Atkinson & Robson, 2012, p. 1349). Others argue that the arts can help children develop skills in a variety of domains, especially in terms of supporting social-emotional development by increasing motivation and interpersonal skills (Brown, 2013; Brown & Sax, 2013), encouraging communication (Chang & Cress, 2014; Duh, 2016), and promoting cognitive development (Chang & Cress, 2014; Duh, 2016); (Baker, 2013; Lowenfeld & Brittain, 1970). "The arts provide children with experience, meaning, and development of thought and in particular; they create meaningful links with concepts being taught through active learning activities" (Baker, 2013, p. 2).

2.1.11 *Learning through Visual Art in Early Childhood*

Early childhood education and care is a term that refers to an educational system that supports children from birth to the age of eight. It is also known as child care, childcare, early daycare, childhood education, and a variety of other terms (Rhodes & Huston, 2012). Many of these early childhood environments have a positive or negative impact on children regardless of the label (Sanders & Howes, 2013). Many findings show that the quality of early childhood education has a direct effect on children's developmental

outcomes as well as their language capacities academic and social (Ritblatt et al., 2013; Saracho, 2013). The literature that emerges from these studies serves as a catalyst for advocating for higher-quality early childhood education and care for young children (Whitebook et al., 2009b). Children learn through exploration and investigation in art media, much as they do in free play. Terreni (2010) states that art is "often identified as a distinct area of play" (p. 2), and that by engaging in and with various arts during early childhood, infants, toddlers, and young children will not only be able to achieve present learning outcomes, but will also be able to develop behaviors and attitudes that will promote future learning (Vecchi, 2010; Barton, 2015).

While also fostering creative abilities and knowledge, learning and participating in the arts, whether in music, dance, visual art, drama, or promotes a child's holistic development. Educators in early childhood education must recognize that arts education is a creative environment where children can discover their identities and worldviews while advancing holistically (Grierson, 2011). In the end, arts education should encourage the balanced development of infants, toddlers, and young children by promoting their learning and aesthetic enjoyment in a free-play creative environment with supervised support if required, while engaging them in culturally relevant activities that attract and sustain their attention. Ultimately, arts education should be a stimulating, soothing, and enjoyable subject in which children can develop, learn, and develop as artists. Since it encourages learning and contributing to and advancing their holistic development, infants, toddlers, and young children benefit from arts education (Grierson, 2011).

The arts are an important part of a child's early development since they help them improve their cognitive, social, problem-solving, and personal competencies, as well as their physical, verbal, and emotional development (Danko-McGhee & Slutsky, 2007; Barton, 2015; Duh, 2016). As a result, arts education and activities for toddlers, infants and young children would benefit them in a multitude of ways, shaping and enhancing their physical, cognitive, social, and emotional abilities at the same time. Arts curriculum is a key opportunity for children's general learning and development, therefore providing them with a diverse range of artistic experiences and opportunities is critical. Infants are constantly growing and developing skills, constructing ideas about how things work, and toddlers are increasingly improving their physical, social, cognitive, and language capabilities in early childhood (Schwarz & Luckenbill, 2012; Ministry of Education, 2017). Participating in developmentally appropriate activities will improve their holistic skills, which will help them learn more effectively in the future.

Young children also have capabilities to understand, symbolize and represent, and they need artistic opportunities that promote their holistic development and learning skills and thus benefit from them (MoE, 2017). When teaching arts education, educators must be conscious of how children can be better supported in their holistic development, which necessitates knowledge of child development. In visual arts, children and toddlers are developed with cognitive thought and language their fine motor skills. In young children and children their markings (scribes) mean more to them when they make cognitive connections between certain symbols and identified items, whereas a child's scribbles are all about the visual perception as they produce them (Bhroin, 2007; Richards, 2007).

Teachers engaging an individual child, promoting the use and exploration of new words relating to their art in discussion, and presenting them with a way to use language meaningfully may also be explored and inspired by participation in the visual arts (Chang & Cress, 2014; Danko-McGhee & Slutsky, 2007). Arts education is becoming more relevant in early childhood, and its goal is to not only stimulate general growth but also to offer ample and developmentally suitable opportunities that will continue to enhance a child's holistic development and learning. Based on the principle of arts play, it is critical to allow infants, toddlers, and young children the freedom and unrestricted enjoyment of experimentation and exploring within the arts and when one is being imaginative, it can be seen as the same features that are seen when playing (Burrill, 2005).

With regard to learning in the arts, it is clear that the main task is to offer children the freedom to discover, explore, imagine, and experiment on their own. Furthermore, they will be forming their cognitive, psychological, and emotional thoughts and feelings about their art experiences, whether consciously or subconsciously. Young children can use art media to communicate and interact with the world in visual art practices, individually drawing on their experience and constructing their own theories about everything (Knight, 2009). However, particularly in visual arts education, teachers may often put a greater emphasis on art media and technique, limiting and hindering a child's creativity processes with adult-imposed expectations or objectives (Plows, 2014; Vecchi, 2010; McWilliams et al., 2014). Achievement learning agendas in the arts should be discouraged by parents, educators, and schools.

Lind (2005) and Knight (2009) discuss rhizomatic space and process where children have an "ungoverned opportunity to connect freely with components and

concepts" (Knight, 2009, p. 13), ceaselessly establishing relations on a continuous basis that aren't governed by a set of rules (Lind, 2005). Restricting the exploration and experimentation of the child as well as pre-determining their learning direction and advancement in the arts, does not help to foster their imagination and creativity, as it limits their rhizo thinking and space. It prevents conceptual connections being made across cognitive boundaries, obstructing the "endless possibilities for approaching any thought, activity or concept" (Sellers, 2010, p. 560). Toddlers and children should be encouraged to easily discover and explore materials and opportunities while engaging in the arts, cultivating inspiration to develop more with their creativity and ideas. This will also encourage them to share their feelings about the environment, which will aid in their general development and learning (Terreni, 2010; Grierson, 2011).

Similar to when they are free-playing, young children would not become bored, stressed, or passive if they participate in art activities that allow for freedom, experimentation, and discovery in a no-fail environment, when the atmosphere is relaxed and allows for creativity and free expression. Even with infants, parents and caregivers can give them opportunities for exploration in the arts, as even though they are young, they are still developing rudimentary theories of the world through hands-on play (Schwarz & Luckenbill, 2012; MoE, 2017). Teachers can promote the use of a variety of art media without adversely affecting a child's artistic development or expression by providing children with art environments that do not have a definite format and exact learning or target goals, allowing for individual or collaborative creativity (Terreni, 2010; Fuemana-Foa'I et al., 2009; Novakovic, 2015). This would encourage infants, toddlers, and young children to pursue and become interested in the arts on their own terms, rather

than being limited by preconceived notions of how art can be studied and taught in early childhood. The goal of arts education is to inspire, instruct, and promote knowledge and interest in the arts, rather than to impede it.

Children's creativity in the arts leads to "inspiring and inspired teaching which, in turn, motivates students to learn" (Gibbs, 2005, p. 2). This encourages educators to play a crucial role in a child's artistic development. As a result, guided participation and scaffolding are critical components in maintaining children's interest in the arts. If art experiences are too difficult for infants, toddlers, or young children, they may lose interest, which can influence their willingness to participate in future projects, especially in the visual arts. Visual arts are an important aid in promoting a child's development, and educators in an early childhood environment should be available to help a child with their artwork on an as-needed basis (Terreni, 2010; van Kuyk, 2011).

Both guided participation and scaffolding assist in the learning of the arts, but scaffolding is more likely to help young children. Their independence in the arts, coupled with their increasing curiosity in exploring and playing with a variety of materials, should be encouraged (MoE, 2017). Producing art is a means for infants and toddlers to make sense of their worlds; guided participation during art opportunities would always enable them to take the lead in artistic experimentation, but mentors can still actively encourage and facilitate learning experiences when necessary (McWilliams et al., 2014; MoE, 2017). Plows (2014) noted that "guided participation fosters the realisation of children's artistic potential" (p. 47) and through scaffolding a teacher can help the child reach a higher level of development in their arts (van Kuyk, 2011). Without any guided participation in arts play with infants, toddlers, and young children, they can become

unresponsive and passive in their art experiences and to other art. Since the goal of arts education is to foster motivation and participation in the arts, educators must offer adequate guidance as needed (Veale, 1992). Toddlers should be able to work unattended while studying the arts, practicing their talents at their own pace and asking for help if necessary. Infants should also be given opportunities that push them beyond their comfort zones, inspiring them to do new things (MoE, 2017).

Furthermore, educators in the arts should conduct research into children's desires in order to assist them in expanding on their explorations with directed guidance, allowing them to reach their full potential in their artistic journey (Danko-McGhee, 2007). Young children are becoming confident enough in their learning to risk disappointment and try again, so art experiences should be offered with little or no scaffolding by the tutor, with the emphasis on observing how a child handles and learns from their work. Despite the fact that many early childhood teachers lack sufficient knowledge and training on how to teach the arts and lack confidence in planning art activities with young children, art opportunities that are designed to engage the children's interests whilst allowing free range for experimentation can capture and maintain their attention, inevitably building upon their learning, and if needed, the teacher can be free to give basic instructions (Mages, 2016).

In early childhood, it is crucial that art education helps children increase their artistic capabilities when and where necessary to provide proper support, which does not interfere with their natural development or obstruct it, but which provides them with assistance and subsequently benefits from their arts. Art education is designed to capture and maintain interest in learning and thus, when developing appropriate arts activities, a

child's knowledge fund - the relevant previous knowledge - should be considered such that they can link up to a child's culture to experiences and use his imagination in such artistic games to explore his culture and identity (Richards, 2009; Esteban-Guitart & Moll, 2013; MoE, 2017). Richards and Fleer have noticed that if behaviours are related to children's desires and identified with a topic, they would have more chance of dealing with the materials in the light of their personal experiences during their earlier childhood (Richards, 2009; Fleer, 2012). Children may be uninterested in art experiences that have little or no meaning to them and, even if the events are fun, following them may seem futile if they cannot make positive connections to their lives. Art experiences are essential for a child's development, with artistic thinking having a unique perspective on life. As a result, just as children create understanding through play, their artistic learning and activities must make sense to them, based on their own experiences (Vecchi, 2010; May, 2013; Barton, 2015).

When it comes to encouraging holistic development and learning of the arts, cultivating artistic appreciation is critical. For children to appreciate, maintain curiosity, and thereby strive to pursue more on their own artistic journey, they must recognize what they feel aesthetically appealing (whether in sight, tone, or movement). Aesthetic appreciation should be encouraged and learned in order to further a child's holistic development and interest in the arts, as well as to foster personal conceptions in what they consider and define as "pleasing" art. More importantly, teaching and developing artistic appreciation promotes personal pride and pleasure with personal artwork, as well as supporting what a child finds aesthetically pleasing (Vecchi, 2010; May, 2013; Barton, 2015).

According to Bhroin (2007), young children's art holds a lot of value for them, so in an early childhood environment, educators must build a sense of artistic appreciation in a child's personal work by motivating them to explore and criticize it, thus improving their critical thinking and reflection skills. Since toddlers and young children will have many chances to experience other people's work, they must not be discouraged by feelings of contrast with their own work. To Richards (2007), there are many myths about child development and creativity, one of which is that the art processes are more significant than the outcomes. When it comes to visual art, though, as toddlers and small children make a piece that is important to them and aesthetically appealing, they do not want to throw it out or ignore it; instead, they want to save it for personal reasons, such as showing their parents. Consequently, educators play an important role in guiding art opportunities to further a child's artistic understanding, such as exploring and viewing artworks in a museum, discovering pleasing music pieces, or attending a play that the whole class can watch (Plows, 2014; Novakovic, 2015; Duh, 2016).

Children can reflect on what they find aesthetically appealing through contemplation, and these observations can ideally shape their own artistic journey through inspiration. Toddlers and young children learn from this in terms of their developing artistic appreciation and sensitivity to fresh ideas, since as they recognize what art is aesthetically pleasing to them, they will discuss their thoughts while still objectively reflecting on their observations, using this art to guide their present and future work (MoE, 2004; Duh, 2016; Plows, 2014). The researcher is of the view that, although children are too young to be taught artistic appreciation, promoting and teaching toddlers and young children aesthetic appreciation can inspire their work, allowing them to

continue to mature and learn in the arts holistically. Children must have the same freedom to explore and experiment in the arts that they do in free play, whether drama, dance, music, or visual art. Furthermore, since infants, toddlers, and young children are all at various stages of development, the arts enable each stage to further their holistic development and art learning while also encouraging their individuality. Arts education in a culturally sensitive and exploratory environment should promote holistic development, provide guidance, if necessary, help to explore and facilitate what a child considers aesthetically pleasing.

2.1.12 *Benefits and Intrinsic Nature of the Arts in the Early Years*

Early childhood education has always included the arts (McArdle & Wright, 2014). Early childhood arts proponents often argue that the arts are a significant, if not crucial, building block in children's development (Wright, 2012). On the other hand, there continues to be a tendency to downplay the perceived importance and role of the arts in early childhood development beyond a minor effect on engaging young learners since the arts are not considered as a "more formal" curriculum material seen on standardized tests (Barton et al., 2013). However, over the last decade, a growing body of research has emerged pointing to specific benefits for early learners that go beyond the mere idea of making artwork for the sake of making art - a "fun thing to do". Early childhood arts learning and practices of drama, dance, music, and visual arts have been found to affect achievement of identified learning outcomes as well as enabling attitudes and behaviours that promote later learning (Eisner, 2002; Gardner, 1980). These beneficial influences include:

• Social interaction through experiences of sharing resources, assuming different roles in the art making process, and helping others, differentiating one's work from others, questioning, considering, evaluating and appreciating the work of others

• Physical development through hand-eye coordination and fine-motor skills acquisition and refinement

• Expressive qualities including the ability to communicate concepts and ideas young learners may not have language to describe sufficiently but experience nonetheless

• Imagination, creativity and experimentation through trialing techniques, methods and materials and sequencing them in ways meaningful to the early learner, as well as linking one's own behaviours and actions with creative results.

• Cognitive development through arts specific language use, exploring and connecting concepts and objects to symbols, making choices over subject matter, different media, materials, and methods to produce art and;

• Problem solving skills which are often embedded in arts education such as producing a play, working out what colours or medium to use in visual arts, or deciding what sounds work together in a performance (Kindler, 2010; Mace, 1997).

What other scholars refer to as a deficit education, children who do not have access to arts-based learning are at risk of having an education that is not holistic in nature since the handlers ignore a variety of learning styles and approaches (Barton et al., 2013; Ewing, 2010). Ewing (2010) for example believes that the arts have the potential to transform "learning in formal educational contexts, and ensure that the curriculum engages and has relevance for all children" (p.1). Given the ways in which children understand and make meanings of the world around them, learning in, by, and through

the arts is especially critical in the early years. This is often accomplished by the use of signs and symbols, as well as a variety of representational modes. Children would be less likely to achieve the skills mentioned above if they do not have consistent and high-quality access to arts-based learning opportunities. Sinclair, Jeanneret and O'Toole (2010) acknowledge the integral aspect of early learning through play, creativity and imagination.

2.1.13 *Children's Development of Drawing and Creative Skills*

Children use colours and lines to reflect their imagination and creativity on paper, maximizing their creativity and freedom (Fox & Schirrmacher, 2014). Drawing is a free-form practice that a child can do without the assistance of another person (Yolcu, 2009). Young children, according to Buyurgan and Buyurgan (2012), do not mind for the aesthetics of their drawings. What matters to them is that they enjoy drawing. Drawing allows children to improve their imagination and creativity while also having emotional relief and freedom (Ayaydn, 2011). Drawing also helps children develop their perceptual sensitivity, as well as their knowledge and skills related to concepts (Zupani et al., 2015). Adults are particularly interested in children's drawings in order to further understand their inner worlds and world perceptions, to advance their educational development, to follow their linear development, to assess children, and to assist them in gaining an artistic perspective.

The child assimilates to achieve emotional and cognitive balance, according to Yavuzer. In consequence, games and drawing that are considered games need assimilation. Drawing, according to Yavuzer, is an effort to reflect the outside world, and hence the emergence of mental images (Yavuzer, 2014). Giving children experience in a

range of fields during their childhood years is critical for their overall development. “Listening to music, for example, the child develops her or his ear, repeats the words they hear, probably also moves with this, thus developing many diverse abilities. Listening to fairy tales and watching illustrations children develop their vocabulary, they develop imagination and the capacity of longer concentration” (Duh, 2013, p. 33). There are many ways to use diverse styles of expression to support a child’s cognitive, affective, and psychomotor development. It is up to the teacher to determine whether children will know how to analyze, interpret, perceive, and thereby improve their competences; reach their full capacity through imaginative creative activity and whether they will learn new skills through a variety of approaches and modes of learning. When observing works of art, the teacher’s guidance is especially important (Duh & Kljaji, 2013). Children describe everything they see around them, not just anything relating to works of art. Teachers should use this as a stimulus by offering children with new experiences, allowing them to develop and widen their words in a systematic way. Teachers should help children recognize the importance of objects and lead them actively and attentively from articulating their feelings to developing appropriate vocabulary for describing these feelings (Duh & Zupani, 2013).

A child’s drawing is an exploration of an object’s characteristics, role, function, and manifestations in its physical environment, rather than just an imitation of reality. Children may use art to explore their own thoughts, share such ideas with other children and adults either alone or in groups. By using a variety of resources and techniques; Children grow their artistic ability through art experiences; develop visual sensitivity, specific art-expressive possibilities, visual-spatial intelligence, imagination, aesthetic

perception (Kindler, 2010; Vecchi, 2010). Experiential learning is how children develop the aforementioned abilities. They do it by playing, in which they express their interests and desires, shape their attitudes, and suggest solutions to challenges (Tomi erkez & Zupani, 2011).

Drawing is a part of a young child's meaningful, playful, and multi-modal engagement with the world. It enables them to hold ideas in their minds to communicate them to others and to themselves (Ring, 2010). This implies that many processes are taking place at the same time, such as the construction of concepts and knowledge and their communication by drawing. As a result, drawing may be used to help a child make logical sense of an experience once he or she has reached a level of understanding.

What children feel, experience, knows, understands, or may imagine serves as the raw material for their drawings (Nielsen, 2012). Children learn to articulate themselves using visual cultural codes as they draw at home and in daycares, as well as they encounter and use other visual cultural idioms, such as colloquial language, body language, and media images. In particular, children's drawings are affected by the type of relationship the children have with the adults issuing the instructions, the context and surroundings in which they are created, as well as the instructions associated with the activity (Nielsen, 2012). Drawing is classified as a multimodal activity because it is frequently accompanied by other actions such as narration, singing, writing, sound effects, gestures, movements, and dancing (Hall, 2009).

When children draw gathered around a table in early childhood classrooms, observation reveals that they use a wide range of communicative practices, which usually reflect the specific learning culture of each classroom (Ring, 2010). They agree or

disagree about what to draw and how to draw it, discuss and share ideas about the drawing subject, inform others about the content of their drawings and the meaning of their symbols, occasionally copy others' symbols, narrate stories and guess the meaning of their peers' symbols (Soundy & Drucker, 2010).

2.1.14 *How Creativity Evolve in Childhood*

Humans are born into a socio-cultural environment and attempt to adapt to it from birth. Throughout the child's development, this effort of adaptation continues. As in all aspects of development, the base of a child's social and emotional development is built in the first years of life (Günindi, 2011). Therefore, early childhood is the most crucial stage in development in terms of instilling values that children will need later on in life.

Since children in this period are in the midst of the most accelerated stage of development, as their identities are developing, they are highly influenced by their immediate environment and are responsive to all kinds of training. As a result, timely and effective interventions can support their development. A child tends to follow the value judgments of the immediate society, as well as the behaviors and habits that conform to the cultural texture, between the ages of zero and six (Günindi, 2011). The 21st century has given children access to resources that enable them to work at levels of expertise formerly reserved for professionals, and the word "art" has undergone significant change. The elements of context and dialogue in their shared experience are brought to life in Eckhoff's (2012) study on the relationships between adult artists and young learners. Children in the 21st century, according to Eckhoff, are no longer seen as passive listeners but as active partners. Their artistic drive can find meaning and placement as they are exposed to meaningful and challenging environments. This is only possible in the 21st

century. The tipping point, according to Gladwell (2015), is the moment when an idea, human behaviour, trend, tips or hits a threshold and spreads like wildfire.

According to Vecchi (2010), the young artist is exposed to the learning processes and is able to form cross-disciplinary relationships, providing for a natural flow of understanding between theory, research and experimentation. Human evolution includes the act of making the first mark, the desire to experiment with a drawing tool, and the desire to imprint a trace of presence. The first line became visible as men became conscious of seeing objects that were not there and recorded them by recollection and imagination (Solso, 2005). As a result of the emergence of consciousness, symbolic expression emerged, which is the desire to communicate "outside the box" as Solso (2005) puts it. Language and art, Eisner assumes, developed together, creating metaphors through abstract linguistic symbols, and art started as a result.

In metaphor, the "outside the box" refers to how the environment collaborates with cognition to achieve higher levels of knowledge and expertise. In this situation, the collective unconscious develops into collective consciousness and learning (Eisner, 2011). Teachers have played a number of roles as developing creativity skills in children, such as encouraging children to look closely at themselves through mirrors, which enables them to mix different paints to find the nearest colour match with their skins. This was a long investigation process, but one that allowed the children to think deeply about what they were doing. Children are able to

> "explore and re-see" their skin colour due to the colour mixing and through discussion, thoughtful deliberation and self-discovery, they moved from describing themselves and others as monotone pink, white, black or brown to using more sophisticated language to describe their skin tone (Wright, 2014, p. 7).

Ellen Winner, a Professor of Psychology at Boston College and Senior Research Associate at Project Zero, Harvard Graduate School of Education found that the spontaneous works of pre-school children are unique and engaging pieces with impressive use of colour and shape, according to Turgeon (2017) in her description of the development of creativity in art. She has discovered that children had an aesthetic sense and have ideas about their work. Humans save ancestral knowledge in their unconscious, according to Rhoda Kellogg, who adopted Carl Jung's theories, and this unfurls in the early years, demonstrating the theory of a saved collective unconscious database (Eisner, 2011). Rudolf Arnhem (who was a German-born author, art and film theorist, and perceptual psychologist) instead, sees the development of children's art as ability in perception; this follows a set of defined stages common to all children. The artwork gains structure and detail as the quality progresses, and a gradual broadening of knowledge in the search to master illusion begins to take root (Eisner, 2011).

Children's intentions in creating art, according to Malin, are to find meaning in their socio-cultural environments (Malin, 2013). She maintains that knowing their works requires a cultural context, and that they are products that make life meaningful. Children develop relationships with their art as a connection between their inner world, their environment, and their intentions, and they own their work according to Malin (2013).

To Kindler (2010), humans have long abandoned the interpretation of visual realism as a means of understanding children's creations and can now focus on the quality of thought. The child's ability to engage with ideas, materials, and techniques constantly characterizes artistic creations, which are no longer just two-dimensional.

During an art lesson, art is no longer created for the sake of art, but as part of a learning process that requires the ability to apply knowledge from one area to another (Kindler, 2012). Children are natural learners, according to Robinson (2015), and their potential is enormous; they are artists in their own right. Robinson is unconcerned about whether or not creativity is an instinct and he recognizes the value and richness of creativity for future generations. For Kindler (2010), artistic development is dynamic, often reflecting the present moment and ready to move forward, redefining itself through the child's interaction with the environment and visions. According to Owen (2017), creative children demonstrate a number of interesting traits:

- Always come up with ideas and find solutions to queries
- They make presumably unusual associations between ideas and concepts
- Have a vivid imagination
- Stick to their ideas and prove their points
- Juggle and change elements to suit their theories
- Have a great sense of humour
- Are interested, committed, passionate and original
- Question with an insatiable curiosity
- Challenge existing ideas and concepts at time with eccentric proposals

2.2 Theoretical Framework

The theoretical foundation and understanding of the origin of children drawing and the factors that underpinned both their interest and capabilities in drawing has been an area of scholastic exploitation by educational researchers over the years. Many of the seminal

articles in the area of children drawing has advanced a number of theories in an attempt to explain what children draw, why they draw and the factors that influence both their interest and capabilities in drawing. Although none of the theories has received unanimous acceptance, some have wider acceptance and most appropriately explain certain concepts better than others. In this study, the competence/effectance theory, theory of realities and the social cognitive and self-efficacy theory are employed in explaining various aspects of the study. Brief description of the theories and their application in this study are presented as follows:

2.2.1 *The Competence/Effectance Theory*

The competence/effectance theory is one of the most recent theory of motivation that has gained wide acceptance and application in educational research. The theory of competence/effectance was first described by White (1959) and later integrated into Deci and Ryan (2010) theory of self-determination. Educational scholars especially Duncum (1980) has applied the competence/effectance theory in explaining how children demonstrate competence and ability in the skill of representation and control of the environment in which he/she lives. The central thesis of the competence/effectance theory is that individuals are attracted to participate in activities at which they feel competent or capable of doing. In the context of physical activity such as drawing, the competence/effectance theory explain that children, for instance, demonstrate their skill and experiences the satisfaction of achievement through drawing (Hsu, 2014). The belief with regards to that competence/effectance theory is that art is used by the child as a way of demonstrating competence *and* ability in the skill of representation and control of the medium in which he/she is working.

In this study, the competence/effectance theory was applied to explain what children choose to draw spontaneously and how they draw what they draw. As the competence/effectance theory holds, through what child draws would be motivated by their competence in drawing. Thus, by analysing what children from different parts and culture of the country draw and draw it well, the study would seek to explain how the child's environment influences their competence and capabilities in creating certain drawings. In applying the competence/effectance theory, the study acknowledges what a child draw spontaneously as what they are competence and capable of drawing well.

2.2.2 *Theory of Realities*

The theory of realities was advanced by Wilson and Wilson (1982) to explain the motivation of children in drawing. Wilson and Wilson (1982) proposed that children drawings represent their experimentation with different realities. The theory proposed four (4) different realities children's drawing represent namely the common, projected/anticipated, normative, and prophetic realities. The common reality represents their experience and immediate environment of the child which consist of people and objects. Thus, children representing their drawings with common realities would capture the objects from their domestic experiences, outings and school environment among others. The common reality also referred to as the 'real' reality is the real adults can relate to and often try to convince children that the common reality is the only reality (Wilson and Wilson, 1982). The normative reality represents an expression of judgment of right and wrong or bad and good emphasized in the child's drawing. The projected/anticipated realities represent the child's experimentation of themselves with the various alternative ways they could be such as superheroes, spies, dancers among

others while the normative reality closely related to the projected/anticipated realities refers to the child's reinvention of good and bad people or things; appropriate and inappropriate behaviour. The prophetic reality, on the other hand, represents drawing depicting the child's prediction of their future and that of the world (Wilson & Wilson, 1982).

The child's environment and realities they find themselves in is an important consideration in this study. In examining the motivation of the children and how the environment influence the child's drawing, the different realities that each child's drawing depict is important in understanding how the different realities influence their drawing. In this study, the theory of realities were employed to understand the different realities (the common, projected/anticipated, normative, and prophetic realities) that children drawings depict and then analyse how the child's environment influence the reality they seek to depict with their drawings. In applying the theory of realities, the children spontaneous drawings were examined coupled with an interview with them to find out the kind of reality viz the common, projected/anticipated, normative, and prophetic reality they represent with their drawings.

2.2.3 *The Social Cognitive Theory and Self-efficacy*

In the early 1940s, Miller and Dollard proposed a theory for studying human learning and imitation behaviour called 'the theory of learning' (Pajares, 2002). Miller and Dollard's theory rejected the claim that learned behaviour is associated with drive reduction principles. However, two decades after the existence of Miller and Dollard theory of learning, Bandura and Walters writing on 'social learning and personality development' noted that the theory of learning proposed by Miller and Dollard failed to take into

account the creation of novel responses or the processes of delayed and non-reinforced imitations (Bandura & Walters, 1963). In response to this, Bandura and Walters attempted to broaden the frontiers of the social learning theory by adding observational learning and vicarious reinforcement.

In the 1970s however, Bandura further became aware that certain key elements were still missing from not only the prevailing learning theories of the day but also his own social learning theory. Therefore, in a publication titled "Self-efficacy: Toward a Unifying Theory of Behavioural Change," he added self-efficacy to his previous theory of social learning. The social cognitive theory holds that part of human learning and knowledge acquisition can be achieved from observing others within the same social interaction context, experiences, and outside media influences. Self-efficacy is, on the other hand, the trust an individual has on him/herself on whether they have mastered a particular knowledge and skill or not. Self-efficacy beliefs, therefore, tend to be the most important determinants of human motivation which operate on action through motivational, cognitive, and affective intervening processes (Bandura, 1989).

The theory of social cognitive and self-efficacy over the years has been applied in diverse fields such as medicine, athletics, media studies, business, social and political change, psychology, psychiatry, and education. In education, Arievitch and Haenen (2005) noted that learning or education, in general, is socially manifested and that students learned from their teacher through a socially interactive environment with the teacher as the model and facilitator of the learning process. They, therefore, suggested that interpersonal social interaction with teachers and peers is prerequisite for every learning or educational encounter (Arievitch & Haenen, 2005).

Preponderance of literature has shown that Bandura's social cognitive and self-efficacy theory have been widely used and have gained widespread acceptance in studies of educational constructs especially on academic achievement, attributions of success and failure, goal setting, social comparisons, memory, problem solving, career development, and teaching and teacher education (Graham and Weiner, 1996; Pajares, 2002; Arievitch & Haenen, 2005). The general conclusion reached by most educational researchers using the social cognitive theory and self-efficacy is that self-belief and behaviour changes and academic achievement are highly correlated. The depth of this understanding prompted Graham and Weiner (1996) conclusion that self-belief/efficacy has proven to be a more consistent predictor of behavioural outcomes and performance than any other motivational constructs.

The implication of self-efficacy in academic performance is very obvious. As Shunk (1990) noted, people with high self-efficacy are more likely to show more determination in completing a task, and are known to persist longer in their efforts than their counterparts with low self-efficacy. Self-efficacy determines how active and persistent an individual can be towards an issue or subject (Bandura, 1977). Individuals with low self-efficacy tend to have lower motivation towards learning an unfamiliar subject and therefore put in less efforts in studying or learning such subjects. A study on science students in Australia revealed that students with high self-efficacy performed better in academics than those with low self-efficacy (Vialle, 2000). Vialle noted that self-confidence typically takes control of every learning experience, students with high self-confidence (high self-efficacy) participated actively in class and preferred hands-on learning experience while those with low self-efficacy shy away from academic

interactions. The relationships between the variables in social cognitive theory and self-efficacy influences academic performance is presented in Figure 2.1 below.

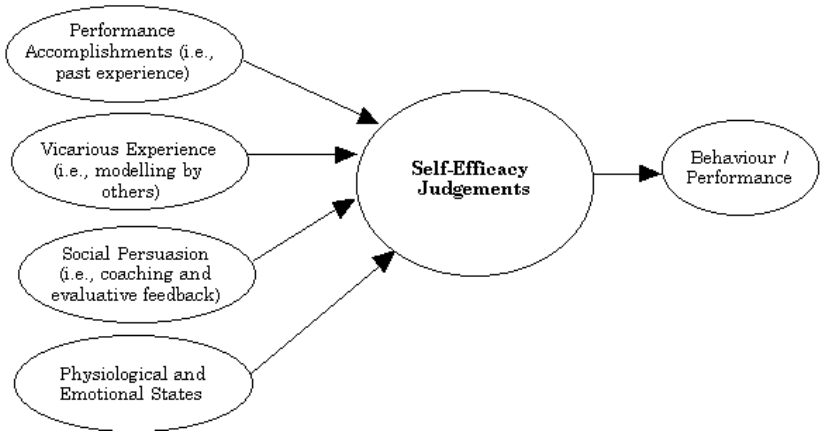

Fig. 1. Bandura's Social Cognitive and Self-Efficacy Theory Concept
Source: Bandura (1977)

In this study, the application of the social cognitive and self-efficacy theory will explain the learned drawing of children from their school environment. Art which includes drawing is a skill and therefore can be learned from imitation of others within the social environment of schools and homes. In applying the social cognitive and self-efficacy theory, the study will explain how teacher and school environment including social interactions influence children drawing capabilities development in the selected districts in Ghana and then also how home environment and cultural settings contribute children's drawing abilities and capabilities.

2.3 Empirical Literature Review

In this chapter, the empirical literature review covers drawings capabilities of children, influence of teacher and school environment on children drawing capabilities

development, how home environment and cultural settings contribute children's drawing abilities and capabilities and also explore how educational content and structure can be made to reflect the environmental setting of children. Key literature under each of the above thematic areas are presented as follows;

2.3.1 *The Concept of Drawing and Drawings Capabilities Development of Children*

Farokhi and Hashemi (2011) published "The study of children's drawings: social, emotional, physical, and psychological aspects" in the *Procedia-Social and Behavioral Sciences*, which presents the concept of children drawing. Children's drawings, according to Farokhi and Hashemi (2011), have a developmental order that correlates to the development of motor skills, emotional development, psychosocial development, and vision development. Children express themselves through drawing "what they know" in their own unique style. To put it another way, the perception, sensibility/emotions, and motor functions interact, and then the social experience factor is added, and the picture is drawn on paper.

The skilled control and development of the fingers is necessary to draw what one is thinking. Children also draw what they are familiar with. What they feel and what they want to say to others are expressed by the child's personal style, not only how they are seen. Thus, the degree to which a child is conscious of his or her surroundings, or the breadth of the child's world vision, has a significant impact on the drawing's content. Furthermore, in order to draw something, one must be interested in familiar events and matters (Farokhi & Hashemi, 2011). The drawing activity is enhanced by sensitivity to matters, things, feelings such as joy, anger, sadness, and contentment, as well as the

development of emotions (Farokhi & Hashemi, 2011). The developments of drawing activities are profoundly influenced by the development of various skills, as well as the fulfillment of life experience and the expansion of worldview. By expressing these ideas in pictures, the child's consciousness develops; it enriches the world of creativity and broadens the scope of everyday life. Correlative effects emerge as a result which develops the child's drawing skills (Farokhi & Hashemi, 2011).

Many other studies, such as Wimmer's (2015) book *The Complete Guide to Children's Drawings*, attempt to explain the meaning and interpretation of children's drawings. Wimmer discovered that many parents are concerned with their children's social functioning. Some of the most common subjects assessed by drawings are social abilities and skills. Perhaps one of the reasons seems to be that drawings enable parents and see what their children are going through behind the kindergarten or school gate, directly after they depart for work, and for hours thereafter. Since most early childhood experiences, including learning experiences, are social experiences dependent on peer group contacts, assessing social skills is important. The child learns more about himself and his environment from these experiences than from any other social interaction with adults or from books (Wimmer, 2015).

Naturally, parents must assist their children in making their first steps beyond the family greenhouse. What is the best way to do this? Popularity means being able to stand out for some parents. They will encourage their child to show off his or her abilities whenever possible. These children's drawings will often reflect this parental tendency, in that they may continue to emphasize their skills as though they are their entire personality rather than just one part of it, even though it means sacrificing their spontaneity and

freedom of expression (Wimmer, 2015). One of the most interesting things about children's drawings, according to Wimmer (2015), is that the transition is always indicated on the page before it appears in real life. It seems that children want to express their changes in nonverbal ways first, and only express them verbally and behaviourally later.

Other studies looked at the social/emotional, physical, and intellectual development of young children by observing and analyzing their drawings. Early childhood development is dependent on social and emotional development. These cognitive and emotional skills are related to the ability to communicate with others both within and outside of the classroom (e.g., teachers and peers). Children's social and emotional skills influence how they interact with others, deal with their emotions, and react to events in their environment. Furthermore, these social and emotional skills are related to the ability to properly express emotions including sadness, happiness, nervousness, and anger, as well as determining how to respond while feeling one of these emotions. Moreover, by learning cognitive and emotional skills with their peers and teachers, children can learn about their own feelings and identities.

Wu et al., (2018) define social and emotional competence as the ability to socialize with others and promote positive interaction through the use of acceptable behavior. All teachers are available to help their children in developing cognitive and emotional capabilities on a regular basis. As a part of the teacher's support, Lippard et al. (2018) conclude that children are more likely to engage in constructive actions and are less likely to misbehave as they mature in class. Lippard et al., (2018) study discovered that, as teachers focus on support, children's positive results increase and their cognitive

abilities develop. Similarly, positive or cordial teacher-child relationships, as per Breeman et al., (2015) findings, improve the psychosocial abilities and motivation of the child to communicate in the classroom.

Negative teacher-child relationships, on the other hand, have an effect on children's behavior and make them dislike interacting with their classmates in the classroom (Breeman et al., 2015). To Breeman et al. (2015), negative peer communication has an effect on children's emotional, social, and behavioral skills. Lippard et al., (2018) research demonstrated that the teacher-child partnership affects all children in the classroom equally. Lippard et al. (2018) also concluded that, when children interact with the same teacher in the same classroom, they will have different experiences. However, Cadima, et al. (2016) found no connection between self-regulation and the teacher-child relationship among young children.

But Cadima et al., (2016) discovered that because each student has a distinctive relationship with the teacher, children have unique classroom experiences. Sutherland et al. (2018) established that children with problematic behaviors are more likely to have developmental challenges in childhood and adulthood. Sutherland et al. also predicted that behavioural issues at a young age are strongly linked to adolescent behavioral challenges (e.g., drug use, violence, and dropping out of school). When it comes to changing children's behavior in early childhood, Sutherland et al. (2018), highlight the importance of interventions (such as classroom activities). Children who lack social skills, behavioral competence, or emotional skills are also at a disadvantage in the classroom, according to Sutherland et al (2018).

Young children therefore require more assistance than older children. Furthermore, attempts to raise a healthy adolescent or adult must begin in childhood. Due to this, preschool and kindergarten are important for children's development because they ensure that they have a strong foundation of cognitive, emotional, and behavioral skills. Early childhood teachers are responsible for assisting children in improving their social, emotional, and cognitive skills hence teachers must be aware of their students' characteristics and use a variety of activities to help them grow into healthier adolescents (Ng & Bull, 2018). Excellent teachers promote cognitive and emotional development through small-group activities, according to Ng and Bull (2018) and one-on-one interaction with children is also beneficial to their development.

Some studies have focused on the school environment, suggesting that children undertake a series of pictorial tasks. Drawing "something about school" (Dockett & Perry, 2015), "experience of the first year at school" (Einarsdottir et al., 2009), or "your classroom" (Einarsdottir et al., 2009) were among the requirements in some studies (Longobardi et al., 2017). Other drawings indicated a specific task, such as representing only the teacher (Ahi et al., 2016; Arslan-Cansever, 2017; Martikainen, 2019) or both the teacher and the pupil (McGrath et al., 2017).

2.3.2 *Influence of School Environment on Children Drawing Capabilities Development*

This theme covered review of studies that looked how school environment including teachers and peers influence what children draw and how they draw it. When children learn how to communicate symbolically, drawing instruction is an integral part of their education, and accepted cultural models are necessary. Independent drawings by children

use graphic sources from culture as models for production and uses for making art. “The cultural styles that most children attempt to achieve demand that they overcome many of their intrinsic biases. In the absence of good instruction, students often become discouraged and, as a result, stop most of their drawing activity” (Szekely, 2006, p. 21).

Drawing should be used to recall and express previous experiences and knowledge, as well as to elaborate new information and organize it. Perhaps this is why drawing activities have been successful in exploring young children’s ideas in various areas of the curriculum and, in some cases, enhancing learning in areas such as natural phenomena (Papandreou & Terzi, 2011; Robbins, 2009), concepts, math symbols, processes, and problem-solving strategies (MacDonald & Lowrie, 2011), as well as personal and social issues (MacDonald & Lowrie, 2011); (Einarsdottir, Dockett, & Perry, 2009).

Children’s expressions are characterized by drawings (Ouz, 2010). Children reflect their thoughts and knowledge through their depictions and drawing activities (Couse & Chen, 2010), and drawing-based research techniques have proven to be useful in gaining insight into children’s views, experiences, and perceptions about the world around them (Einarsdottir, 2010; Noonan et al., 2016). Scholars have been particularly interested in various facets of young children’s drawings, such as the content of the illustrations that they make (Ahi, 2017), the palette of colours that they use while coloring their illustrations (Villarroel, 2016), and the geometrical forms that they openly portray in their representations (Villarroel & Sanz, 2017). Burns-Nader, 2017; Söküt Açar et al., 2018) refer to drawing activities as an important way to encourage children to

express their thoughts and feelings. Some of influences of school environment on children drawing capabilities development are discussed below:

Motivation: Motivation arises as a result of the organism's needs, and it prompts the organism to take action. The child's desire for success, for example, drives him to win a drawing contest. Stimuli can also motivate a child, and the possibility of receiving a prize at the end of the contest can make him happier. Furthermore, a child motivated by his routines and remain committed to the goal of "drawing pictures every morning". Affective factors in a child's painting are his or her interest in artwork and ability to devote time and attention to drawing pictures. Other indicators of a child's inner drive include happiness, enjoyment, and a desire to create something as a result of drawing pictures. The prizes and reinforcers of drawing contests, which may also be held in classrooms, offer external motivation (Gungor et al., 2002). Moving trace objects (pencil, pastel, etc.) on a surface and drawing offers all children a great deal of pleasure.

Physiological status: A stable physiological structure is important for individuals. Disorders of the sensory organs (e.g., visual and auditory impairments, etc.) as well as chronic conditions (e.g., heart failure, diabetes, etc.) have a detrimental effect on a child's ability to draw (Ouz, 2010).

Prior experiences: Prior experiences influence our lives in both positive and negative ways. Prior interactions will help in learning if they are accepting of new learning. This is often named as "positive transition". Children who receive early childhood education, for example, are more likely to succeed in primary school than their counterparts who do not receive early childhood education. However, in some situations, prior experience may have a negative impact on new learning, a phenomenon known as

"negative transfer". A person who learnt to type on the F keyboard, for example, would not be able to type at the same speed on the Q keyboard. Therefore, school-based art activities must serve as a foundation for future art activities and have a meaningful effect on future painting activities (Ouz, 2010).

Individual differences: These differences between children in the same age group are mostly due to differences in intellectual capabilities. Children of average intelligence develop more quickly than children with learning disabilities (Ataman, 2004). A child with a high quantitative IQ score can reason, group, sort, and abstract, as well as think scientifically and calculate easily. A child with a high visual (spatial) IQ score, on the other hand, learns through visualization, imagination, coloring, drawing, drawing, and being receptive to colours, shapes, and lines (Ouz, 2010). Children's drawings may vary between those of the same age group and those of different age groups. Each child, for example, produces a drawing of a house with its own set of characteristics. They often draw houses with a triangular roof and two windows, and other times they draw houses with flat roofs and single windows. They do remember to have a chimney and blackening smokes in their pictures (Artut, 2004a). Another individual difference that influences children's drawings is their gender. Girls, for example, tend to use more colors in their drawings than boys. Warm colors (yellow, orange, red) are preferred by some children, whereas cold colors (black, blue, green, or brown) are preferred by others (Ouz, 2010).

Child psychology: In their drawings, children can express their heartbreaks, jovial feelings, and aggressive feelings. The personality structure of a child can be seen by his drawings (Atan, 2006). Drawings should be used as a release mechanism for

adolescents who struggle to integrate their inner and outer worlds. A child with a rich and complex universe, for instance, cannot be required to draw. Children should draw as long as they feel able to express themselves and use their creativity (Ouz, 2010). During the drawing process, the child's psychological state is essential. For example, a child who is afraid of going to school can draw his mother, father, and himself in a closed room; a child who has trouble communicating with his mother and father and is beaten by them can draw his father's beating hand carefully or not at all. In his drawings, the child can draw boundaries between himself and his father. He has the ability to add tails and long ears to his father figure. When a child has negative feelings toward his brother or sister, he often does not include them in his drawing or and do so in a clumsy and awkward manner. If he draws himself together with his father on the sofa and his mother serving them coffee and tea, it may be his declaration of himself in the family (Ouz, 2010). It is possible to identify the stage in the child's development where egocentrism disappears and feelings of belonging to larger groups emerge from the child's drawings (Yavuzer, 2007). Children's drawings are used by researchers to determine what the children consider important, as well as to demonstrate the child's knowledge and experience in the classroom (Farokhi & Hashemi, 2011). Educators, psychologists, and artists have all been interested in children's drawings, which have been examined in a variety of cultures (Arapaki & Zafrana, 2007).

2.3.3 *Home Learning Environment and Cultural Influence on Children's Drawing Abilities*

The search and literature that were considered under this theme addressed the cultural elements of children learning and how environment of the child and socialization

influence their drawings. Notable studies that were reviewed included Donnell and Rinkoff (2015) study on the influence of culture on children's relationships with nature published in *Children, Youth and Environments* journal; and Gernhardt, et al.'s (2015) study on the cultural perspectives on children's tadpole drawings and the interface between representation and production among many others.

At every given moment, a parent's role in the life of a child cannot be underestimated. The home is inextricably linked to a child's well-being and success later in life. The family is the primary social unit in which a child's upbringing must begin as soon as he is born, when he is still in the cradle (Hugo, 2012). The many components of a child's learning experience are often related to their academic achievements. The most influential informal learning situation in which families, especially parents, act as educators is the home environment. The family is traditionally the first and most important learning environment in which very young children develop information, vocabulary, skills, and behaviour. This has the potential to influence their school readiness, attitudes toward learning, and educational success in the future. Kapinga (2014) discovered that home environmental factors (such as parents' educational level, occupations, income, learning environment within the home, parental motivation, and availability of learning facilities at home such as books, tables, and maps) have a significant impact on the learner's academic performance.

A research from Hill (2014) showed that, because it offers a foundation for learning, a home environment for children has important implications for learning and school performance. In Australia, student performance was linked to the family's housing type, which includes those who live in public housing and those who live in private

housing. According to Kamuti (2015), child developmental outcomes such as cognitive ability, school readiness, academic achievement, and emotional adaptation are all influenced by the home environment. When it comes to environments, Vecchi (2010) mentions that when creating learning contexts, the continuous connections between the mind and the environment that create complex thought patterns must be considered. Interdisciplinary thinking must be proposed and promoted by the environment. Baker and Iruka (2013) found that the home learning environment mediates the relationship between maternal psychological functioning (risk experiences in terms of parental stress and maternal depression) and children's math achievement preparation in school. The findings suggest that the home learning environment (as measured by literacy-related items, physical activity-related items, and creativity-related items) is a significant mediator between maternal parental stress and kindergarten math achievement. Lehrl and colleagues (2012) discovered that the home learning environment (measured as home literacy) mediated the effects of family social background factors (socioeconomic status and parental native language) on children's emergent literacy competencies based on a German longitudinal study.

The Learning and Literacy subscale of the Home Observation for Measurement of the Environment (HOME) found that the home learning environment was positively correlated with preschool students' vocabulary and letter-word identification skills (Chazan-Cohen et al., 2012). A composite score of preschool students' reading, math, and vocabulary assessments was positively linked to home language stimulation (also assessed by the HOME) (Mistry et al., 2010). Over and beyond a set of control factors, Hindman and Morrison (2012) found that children of parents who were more interested at

home in teaching about letters and words made higher strides in comprehension abilities during preschool, which are used to make sense of written words.

Hindman, Miller, et al. (2012) have found that parents who participated in more home learning experiences (such as teaching letter sounds and names, reading words, assisting children in drawing, and participating in math games and activities) had preschool children with better alphabet knowledge and decoding skills. Kindergarten students' reading performance was positively related to family involvement at school (Galindo & Sheldon, 2012). Parental involvement at school was positively related to students' social skills and negatively related to students' good behaviour (generally reported as a negative correlation with problem behaviours) (Powell et al., 2010).

On the contrary, both Galindo and Shelden (2012) and Powell et al. (2010) asked parents how often they involved in educational activities with their children, such as telling a story, teaching letters, words, or numbers, teaching songs or music, playing counting games, playing with blocks, playing with puzzles, playing with shapes, and counting different things. Neither study found a relationship between parent-reported involvement in their children's lives at home and preschoolers' math scores (ECLS-K math; Woodcock-Johnson Applied Problems). Informed parents and/or children's preschool teachers may facilitate and/or direct early learning experiences at home. The findings indicate that parents participate in reading readiness activities for their children regardless of their financial situation, and that a large proportion of parents were uncertain about the right way to engage in such reading-related activities for their children at various ages and grade levels. Still more parents were uncertain how to interact with their children during math activities (Pan, Gauvain, Liu, & Cheng, 2006),

particularly when math is taught differently unlike how it was taught when the parents were in school.

According to several studies, almost all parents agreed that teachers should provide more and better guidance on how to support their children at home with specific skills as they progress through the grades (Epstein, 2011; Van Voorhis, 2011). Parents of preschool children are worried with these concerns because they know that their children's early education determines whether or not they can excel in kindergarten (Weigel, et al., 2006). Binder and Kotsopoulos (2011) looked at the relationship between drawings and development, as well as how they reflect a child's culture and environment. It was discovered that children's drawing skills are influenced by their background. Researchers consider children's drawings to be a basic childhood practice and mode of communication (Farokhi & Hashemi, 2011). Drawing has been discovered to be an important aspect of literacy development and is most certainly the first step of learning to write (Hopperstad, 2008). According to research, children like to draw whatever they like (Sal, Akyol, & Baran, 2014). Children may draw what they have seen or what they wish had happened (Merriman & Guerin, 2012).

The influences on what a child draws include, but are not limited to, the child's family, school, and cultural environment (Soundy, 2012). Drawings can represent commonplace things that a child sees and are inspired by what the child knows and enjoys (Shaban & Al-Awidi, 2013). Matsaridou (2015) discovered that cartoons, sports, and characters from animated TV shows made up about a third of children's drawings. Course book review of culture basic elements (Arslan, 2009; Çakır, 2010) and practice-

oriented recommendations for culture integration (Turkan & elik, 2007) are the subject of research on culture and curriculum/course book.

Furthermore, Arikan (2005) examines how age, gender, and social status are represented in textbooks, pointing out the "imbalance" (p.38) in how they are viewed. Teachers' behaviours toward the target culture, for example, show varying degrees of integration, according to research. Furthermore, Yazc, et al. (2009) report in their study of teacher attitudes toward multicultural education that some teachers see students in a class as the "same" or "indistinguishable" in terms of cultural identity. Language teachers stated that they do not have enough instructional time to spend on cultural issues in another study (Çakır, 2010).

Preschool is a developmental stage that deals with the recognition of gender, race, physical status, and cultural identity (Divrengi & Aktan, 2011; Kanka, et al., 2013). In terms of diversity awareness, Divrengi and Aktan (2011) outline the preschool developmental stages. Children as young as two years old may recognize gender roles in their game and toy preferences. The next developmental stage, between the ages of 3 and 4, introduces differences to children's agendas, and between the ages of 5 and 6, children begin to develop cultural awareness and ethnic group identification. Subsequently, children between the ages of 6 and 8 realize that certain racial and cultural elements are permanent. They further emphasize the importance of addressing diversity challenges with age-appropriate content at an early age, an approach that promotes the development of positive self-concept, empathy, analytical thinking, and respect understanding. Hence, teachers are encouraged to use visual images and hands-on activities to incorporate songs, stories, and folk tales from diverse groups and cultures (Divrengi & Aktan, 2011).

In a similar vein, Wan (2006) took a positive view and used books and children's literature to address diversity challenges in early childhood. Such children are expected to first know their own identity, and become mindful of other cultures and identities in order to cultivate a healthy self-concept, sensitivity, and analytical skill in the midst of prejudice (Divrengi & Aktan, 2011). Cultural differences in the perspective on the child's uniqueness and autonomy versus his interdependence with family members are expressed in the size of self-drawings, according to Rübeling et al., (2011) and Gernhardt et al., (2014b) studies. Taller figures were observed in different cultures that value independence and uniqueness.

2.3.4 *Reflection of Educational Structure and Content on the Environment of Children*

The implementation of practices that can improve rather than overshadow young children's ability to relate meaningfully to their own learning and growth is a major challenge for researchers working with young children. Learning is seen as occurring within a sociocultural framework through children's involvement in different events and practices of their families, school, and community, together with social relationships and cultural resources that serve as mediating elements that transform knowledge and create meanings, rather than transmit knowledge (Robbins, 2005; Rogoff, 2009). This viewpoint stresses that development occurs as a result of contexts, behaviors, meanings, and participation in group activities (Robbins, 2005). Children are seen as active participants as well as "experts in their own lives" (Clark, 2010), and their daily activities are given meaning and status by participatory learning. This suggests that educators and researchers need to use learning mechanisms that encourage children to engage by enhancing their

thinking, talking, interacting, and making decisions on subjects that affect their daily lives.

Children use drawings to understand and reflect on important aspects of their knowledge and experiences. Children may develop their skills as "multimodal text makers" when learning about the formal synthase of school-based literacy and numeracy while drawing is prioritized in the curriculum (Kress, 2010). Drawing is also useful for young children who may not be fully fluent in English and often unable to communicate effectively, since it provides a realistic tool for addressing certain limitations and facilitating communication, and problem-solving and meaning-making (Brooks, 2005). Kaguo (2011) found that education systems are not supportive, that there are not enough classrooms and qualified teachers in the majority of neighborhood and government-built schools. The academic performances of the students were affected by all these factors.

2.3.5 *The Effect of the School Learning Environment on a Child's Behaviour and Performance*

The learning environment is a combination of human practices and material environments, as often as ecology combines living and physical conditions (Balog, 2018). The learning environment consists of certain elements which affect the learning curve of the student. People; teaching materials, technical tools, and learning resources; curriculum, training, and instruction; and physical environment/learning space, according to Balog (2018). People are those who have an effect on a student, either directly or indirectly, by a connection or relationship, and who can help them develop and succeed in their careers. Teaching materials, technical tools, and learning resources are materials, advanced tools, or other instructional resources that are compatible with the curriculum

and used to facilitate student learning. The core foundations of the learning process are curriculum, training, and instruction; they affect one another and play a critical role in facilitating the flow of knowledge and delivery of instructional content/curriculum. The learner's physical area/learning room refers to the physical environment of the learner's environment which could evoke positive responses and hold the interests of those who live there (Balog, 2018).

The physical environment in a school setting includes things like school facilities, equipment, and school practices like making facilities available, allocating staff to teach primary education, and promoting participation (Bary, 2005). The learning environment in this study is characterized as resources, facilities, or equipment found in schools or areas of study that assist teachers and students in the acquisition of social studies knowledge, skills, and attitudes. Learners in modern environment need learning environments that cater to both their individual and collective needs. To meet this challenge, educational leaders need to create empowering and engaging physical and cultural environments (Orlu, 2013). In formal education settings, the teaching-learning process cannot take place in a vacuum. It happens as a result of interactions between different components of the learning environment. Teacher, students, content, learning process, and learning situation are all elements of the teaching-learning process in the classroom (Lawrence, 2012).

In order to improve their success, students in the process of socialization need a positive atmosphere and role models (Gilavand, 2016). For this reason, learning environments which are clean, quiet, and comfortable are important. Furthermore, every concerned educationalist should make creating an ideal learning environment a priority

because comfort should be a combination of many factors such as temperature, lighting, and noise control, among others (Murugan & Rajoo, 2013). Children usually use their own symbols for those that they get through their everyday life (e.g. letters, numerals, signboards), and/or traditional visual symbols, that they may use to communicate their ideas themselves (Papandreou, 2014).

Mondal (2012) identified a number of important factors that can influence the learning process, including the intellectual factor, which refers to the mental level of the individual. Learning variables are those that may impair the learning process due to ineffective work or research approaches or a limited experimental experience. Health, nutrition, physical development, visual and physical defects, and glandular abnormality are also physical factors. Mental factors are attitudes that are significant in the formation of personality, such as interest, cheerfulness, and open mindedness. The complex psychology of motivation is closely related to personal factors such as instincts and emotions and social factors such as cooperation and rivalry. The teacher is an important factor in the learning process as an individual person hence the way in which his/her personality interacts with the personalities of the pupils helps to determine the kind of behaviour which emerges from the learning situation (Brown, 2015).

Physical conditions for learning include classrooms, equipment, textbooks, school supplies, and other instructional materials, among other items (Mondal, 2012). Students must feel safe, both physically and emotionally, before they can excel academically, and in order to have a safe learning environment, students must feel welcomed, supported, and respected according to Waldman (2016). Personalizing learning helps students develop skills such as working collaboratively, critical thinking, communicating

effectively, developing academic mindsets and using knowledge and information to solve complex problems, all of which help students become more engaged (Raccoon Gang, 2018). Students must also feel close to their teachers, staff, and classmates. Schools may help students build these connections by emphasizing social and emotional learning (SEL). For a higher academic achievement, students must feel supported by all those involved with their learning experience, such as classmates, teachers, administrators, families and community members (Waldman, 2016).

It would not happen by accident that conducive learning environments exist. They should be created through conscious procedures such as positive interactions with students and positive behaviors, among other things, that encourage learning activities in the classroom (Becton, 2017). Linda's (2007) study on learning environments suggests that teachers should be knowledgeable about the subject matter and then use a combination of teaching tools to engage students in the learning process. In South Africa, Umameh (2011) discovered that the abundance or lack of key school services was related to better mathematical educational outcomes. According to research conducted by Dadzie (2010) in Ghana, unequal distributions of resources in schools and inadequate educational infrastructures have a negative impact on educational quality. In a study titled *The Effect of Environmental Factors in Teaching and Learning in Primary and Secondary Schools in Edo State, Nigeria*, Eimuhi and Ogedegbe (2016) looked at environmental factors to determine the outcome of teaching and learning at all times and in all places, and found that the more enriched the learning environments are, the greater and more widespread the benefits for acculturation are. In addition, Ezike (2018) looked at the classroom environment and students' academic interests as predictors of achievement in Senior

Secondary Chemistry students in Ibadan, Oyo State, Nigeria. The findings revealed substantial relations between classroom environment and academic achievement, as well as significant contributions from both classroom environment and academic interest.

Similarly, Odeh, et al. (2015) conducted research with the goal of determining the effects of the school environment on secondary school students' academic achievement. The findings of the study revealed that school environment, discipline, and physical facilities have a significant effect on secondary school students' academic achievement in Benue State, Nigeria. This means that schools that do not have the necessary learning facilities and do not create a favorable environment for teaching and learning are unlikely to get the best out of their students, especially in terms of academic achievement.

2.3.6 *Attitudes and Perceptions Relevant to Children's Drawing*

In international studies, it was observed that the subjects investigated included matters, such as children's perceptions of classrooms (Farmer, et al., 2018), children's perceptions of the use of digital media in preschool education (Mertala, 2016), children's perceptions of determining their own learning processes (Ligorio et al., 2017), children's perceptions of the use of digital media in preschool education (Mertala, 2016), children's perceptions of the use of digital media in preschool education (Hsieh & Tsai, 2018) or determining children's understanding of learning science by the drawing method (Hsieh & Tsai, 2017). Almost all of these studies demonstrated the value of drawing in exploring children's perspectives of different situations of children's drawings in school (Blaauw, 2016; Hall, 2017; Pearce & Wood, 2019). The number of national and international studies focused on children's drawings has been increasing, according to these numerous studies.

Children were asked to compare and depict school situations with opposing valence by some scholars (Maxwell, 2015; Pinto & Di Prospero, 2000). Pinto and Di Prospero (2000) requested 100 children (ages 6 to 10) to create two drawings, one portraying "harmony" and the other mimicking "disharmony" between themselves and one of their teachers. PAIR (Bombi et al., 2007), a system of research dedicated to evaluating different qualities of illustrated interpersonal relationships, were used to score the drawings. In disharmony contexts, Pinto and Di Prospero (2000) discovered a substantial discrepancy between drawings in terms of a higher number of pictorial indices of psychological width, presumably signaling a defensive need for more personal space. Maxwell (2015) asked 72 children (ages 9 and 10) to portray themselves in two different school situations, one "happy" and the other "unhappy". In this vein, the author used a phenomenological framework of analysis to generate categories of themes that are most representative of drawing contents; in this vein, he did not include a statistical analysis, but one can discern clear variations in each of the four categories identified from the raw frequencies reported: scene environment (happy scenes are mainly outside; sad scenes are mostly inside); subject's behavior (happy: equal frequency of active and passive; unhappy: mainly passive); participation of other people (happy: mostly informal; unhappy: mostly formal); environment (happy: mostly informal; unhappy: mostly formal); presence of other people (happy: mostly informal; unhappy: mostly formal); (typically peers in both situations, with teachers very rarely represented in the happy situations, and a little more frequent in the unhappy situations).

Pupils' perceptions on their relationships with teachers, in particular, can differ from those expressed by teachers, providing valuable insights to those concerned about

children's well-being. Maxwell (2015) explores how children use pictures to represent positive and negative school situations. According to Burkitt (2017), the richness of information obtained from children's drawings are enhanced by clarity of communication. As Burkitt (2017) writes:

> When communicating how they feel about themselves and other people, children alter the literal and abstract aspects of their drawings when they are explicitly instructed that an audience will need to understand whether they feel positively or negatively towards a drawn figure (p. 221).

Children are expected to draw situations in which positivity and negativity are dependent solely on teachers' behavior toward the pupil, or the reverse, or both, and to change their perception of school as they progress from lower to upper grades, because subjects to be studied become more difficult (Bennett, 2019), requiring increased commitment, which inevitably modifies the balance between a positively and negatively attitude toward school (Schwinger et al., 2016). Teachers' relationships change as well, particularly as children reach puberty and the resulting changes in emotional needs in the upper grades of primary school (Heatly & Votruba-Drzal, 2019).

Gender is a source of differences in children's perspectives, according to some scholars (Spinath et al., 2014; Siddiq & Scherer, 2019). Girls are now generally more successful in school (Spinath et al., 2014), and their intellectual superiority spreads to predominantly male fields such as informatics, according to a new meta-analysis (Siddiq & Scherer, 2019). This difference seems to be at least in part due to gendered achievement goals: boys tend to be more interested in comparing their results to those of their peers, whereas girls appear to be more intrinsically motivated (Jones & Mueller, 2017). Boys in Italy have higher dropout rates than girls (Colombo, 2015), as well as poorer relationships with teachers, characterized by lower affection and higher conflict

(Molinari, 2009). Furthermore, Italian schools have been "feminized" for nearly a century, with a growing number of female teachers (Pak, 2012; Ministero della Pubblica Istruzione, 2007). This is a world-wide phenomenon which has promoted a variety of studies on the differential effect of the teacher's gender on boys' and girls' school performance, with uncertain results: in general some studies found an advantage of gender-match, at least for girls (Lim & Mee, 2017), while other studies on the contrary did not confirm this advantage (Spilt et al., 2012; Puhani, 2018).

2.3.7 *The Value of Art in Environmental Education*

In early childhood education, the arts are significant. They are an effective means of communication, especially when words are inadequate or unavailable (Wright, 2007). They are considered important for helping children participate in concepts of making and creating as they explore the world through their senses. The essence of the meaning of young children is a combination of thought, body and emotion (Wright, 2007). Many signs, words, graphic devices, onomatopoeia, drawing, and gestures/postures that stand for or represent other things are used in children's rich and integrated creations (Wright, 2007). It is also not enough, according to McArdle and Wong (2010), to observe children from afar and plan learning programs based on assumptions of what they are doing and thinking. Pramling Samuelsson et al., (2009, p. 133) suggest "children are creative and masters of play, but in order to become aware of distinctions, variation and invariance of the phenomena of the arts, children must be challenged by the teacher in order to clarify and develop their thought".

Environmental Education (EE) programmes help children acquire essential knowledge and skills through a range of fields by fostering connections between children

and nature, nurturing healthy environmental attitudes and awareness, and assisting them in developing important knowledge and skills (Paterson, 2010). To ensure that EE programs are meeting these objectives, effective evaluation methods and materials are also needed (Inwood 2008a). Art also inspires emotional attachments and affective relations to things and environments, enhancing the personal, exciting, and memorable nature of experiences (Song, 2012). Artists, musicians, dancers, and playwrights have been inspired by the natural world to raise awareness of environmental challenges by inventing creative, aesthetic, and ecological alternatives to environmental problems (Inwood, 2012). Given the importance of art and environmental education in today's culture, it is no surprise that the merging of these two fields has been dubbed "environmental art education" (EAE) or "eco-art education" (Inwood, 2012).

Preservation, conservation, restoration, and biodiversity are only a few of the environmental concepts and topics that EAE integrates knowledge, pedagogy, and narrative from these fields to develop awareness of and interaction with (Inwood, 2012). EAE has been characterized as "purposeful creativity" aimed at reuniting children with their environment through positive, restorative, and spiritual methods, resulting in changes in environmental attitudes and behaviors (Inwood, 2012). EE helps to offer people the knowledge, skills and experience necessary to conserve and preserve the ecosystem for all living beings and future generations (Moseley, 2010). According to studies, incorporating EE into the school curriculum increases student performance on standardized examinations and enriches science courses, leading to increased student interest and participation (Paterson, 2010). Larson, Green, and Castleberry (2010) compared pre- and post-test scores between children (ages 6-13) in the EE summer

programme and those in a non-EE after-school programme to examine how one-week EE graduate assistantships at the State Botanical Gardens of Georgia affected children's environmental orientations and knowledge.

Pre-test scores indicated that both classes had equal environmental awareness at the beginning, although post-test scores revealed that children participating in the EE summer program significantly improved across environmental orientations and knowledge (Larson et al., 2010). Non-formal outdoor programmes, according to the findings, were suitable opportunities for stimulating positive environmental orientations in a number of children (Larson et al., 2010). While still being multi-dimensional through the 'teaching-and-learning' process, this and other studies point to the advantages of informal EE as a way to make environmental learning more engaging, fun, and enjoyable (Larson et al., 2010).

2.3.8 *Other Similar Studies conducted*

Debates within art education have much in common with those within the other arts. Tensions can be observed between child and subject centred approaches, and between advocates of education in art and education through art (Hickman, 2005). A number of related works have been done on environmental influence on drawings of children. The researcher hereby presents some of these empirical studies as follows;

In the academic year 2015-2016 in Ahvaz, et al. (2016) investigated the effect of educational space colour on learning and academic performance of elementary school students. A total of 210 students were randomly selected as study participants in a cross-sectional study. Cluster sampling was carried out using appropriate allocation, and questionnaires were given to students at random. Hermance's achievement motivation

questionnaire and a researcher-created questionnaire (observation checklist to examine the physical parameters of learning environment colouring) were used to collect data, as well as interviews with students. The SPSS-21 software was used to analyze the study's data. The findings revealed that the colour of the educational environment has an influence on the learning and academic achievement of Ahvaz elementary school pupils.

Noorbakhsh's (2005) examined the impact of indoor lighting on students' learning performance in learning environments from the perspective of knowledge internalization. This research was a comprehensive review of the literature on the impact of indoor lighting on student's productivity and performance, especially students' learning and drawing ability. The findings of this study indicated that enhancing lighting in learning environments is essential to improving pupils' learning performance and motivating them to learn more. The researcher assessed the effect of lighting on students' learning performance in this study using the Pulay (2010) survey. In a Malaysian Alpha course, data was gathered from a survey of 150 respondents. Lighting quality had a major effect on students' learning performance, according to this study, which is substantiated by interviews experts. The research by Safak (2014) focused on the role of daylight in preschools and its social and cognitive effects on children. The research study consisted of a correlation study assessing psychological and emotional developments of children and daylight for drawing in pre-school classrooms.

In Van, Turkey, 69 children, 30 boys and 39 girls, aged 4-5 years, participated in a two-way early childhood school (Yacan, 2014). In the preschool schools, social and cognitive abilities of preschoolers were believed to be associated with daylight. According to Yacan (2014), the results indicate that in pre-school classrooms a decisive

link occurs between social activity of pre-school students and cognitive abilities and daylight. The findings indicate that the social behaviour of students with daylight at classrooms and the drawings were significantly correlated. It was also hypothesized that, social skills of students correlate with daylight conditions.

Using the descriptive survey method, Ahmadi et al. (2014) conducted a literature review on factors necessary for creating a happy environment at schools in order to investigate research questions. Data was collected from 200 people using a standardized questionnaire. According to the findings, education facilities focused on building open spaces within schools have the greatest influence on creating a happy environment at schools in the minds of both instructors and female students. As a result, the study's main achievement was proposing do's and don'ts in planning school environments given the existing limitations and facilities to modify improper approaches and move toward an optimal approach to create a happier environment.

The article by Malone and Tranter (2003) examined school grounds as areas to play and learn about the environment. 50 children aged eight to ten years old from five Australian primary schools took part in a three-year project. Children's play map was analyzed, interviews with children and teachers were conducted, and children's drawings of their school grounds were examined. Especially in the forms of play and environmental learning that children participate in, the results revealed significant differences between the schools. Variations in the physical qualities of the school grounds accounted for these variations.

One of the few opportunities during the year that children are free to engage in free play and physical activity outside school is vacation. In this regard, Barros, et al.

(2009) compared the classroom behaviour of children who receive and do not receive regular vacation in the United States. In both public and private schools across the country, the researchers looked at data from over 10,000 third-graders. A wide range of data, including interviews with children and surveys of parents, teachers and school administrators, were obtained as part of the study. Barros, Silver and Stein (2009) discovered that, 30% of children had no recess or had less than a 15-minute daily break after analyzing the data. Children who had less than 15 minutes of recess a day were more likely to be black or Hispanic, live in a big or medium-sized city, live in the South, attend public school, and come from families with lower income according to the researchers. Teachers' ratings of overall classroom behaviour were higher for children who had some recess relative to those who had none/minimal recess, according to Barros, et al. (2009). Though the frequency and amount of recess were not significant, data from teachers may be biased due to their feelings about recess, this study offered useful information about the amount of recess obtained by 8- to 9-year-old children and its correlation with classroom drawing behaviour.

Dyment (2005) presented findings from a 2003 study she undertook at 45 elementary, middle, and high schools in the Toronto District School Board on the consequences of green school ground initiatives. Dyment surveyed approximately 150 parents, teachers, and principals on the effect of greening initiatives on a number of outcomes, including curriculum delivery, student learning and academic achievement, teaching practices, and student behaviour, as part of this research. In addition, the author undertook in-depth interviews with 21 respondents from five different schools. Dyment discovered a variety of common greening benefits, despite the large variety of schools

surveyed. About 70% for example, said that teaching on green school grounds increased their motivation for teaching and 90% of respondents stated that teaching on green school grounds improved student interest and involvement in learning relative to teaching indoors.

In terms of green school ground initiatives, Dyment (2005) also asked participants about major challenges and areas for change. The lack of resources, as well as sufficient logistical and human resources, was cited as barriers. Professional development and training opportunities, assistance with physical planning, and additional financial resources for construction and maintenance of the school environments were among the recommendations made by respondents. Importantly, this study indicates that the advantages of school ground greening initiatives are various and varying, and that different schools may benefit from a range of greening projects. To help Ontario schools successfully implement and reap the full benefits of school ground greening initiatives, Dyment wrapped up the study with a series of high-level policy recommendations.

In the United States, Blair (2009) also reviewed studies on school gardening and its effect on children's learning and behaviour. Including providing children with opportunities to interact with natural environments, improving their knowledge of food systems, assisting children in developing environmental attitudes and behaviours, and acting as a foundation for experiential learning, Blair realized that, school gardens operate for a variety of purposes. On the effects of school gardening on children's learning and behaviour, Blair continued to look out for more quantitative and qualitative findings. She discovered that 9 of the 12 quantitative studies she analyzed find significant and positive impacts of gardening on research indicators such as children's science

achievement and food intake behaviour. Blair uncovered a variety of commonalities in the findings of the seven qualitative studies she studied, including that gardening enhanced student bonding, teamwork, and learning opportunities, students enjoyed and were highly motivated by gardening; students demonstrated improved school attitude and pride in the garden.

Blair (2009) likewise looked at research that looked at how principals and teachers felt about school gardens. Blair determined that, overall, recent evidence shows that gardening may have a positive impact on student performance and behaviour based on her study of the literature Greening school grounds to diversify children's play experiences, such as through the planting of trees, the creation of ponds, and the development of vegetable gardens, has been increasingly popular in recent years. By submitting questionnaires to a number of Canadian schools that had greened their school grounds, Dyment and Bell (2008) studied how green school grounds influence the physical activity of elementary school children. 105 respondents from 59 schools who were involved with their school's greening initiative filled out questionnaires. Dyment and Bell discovered that green areas were an important place for physical activity when they analyzed the research data: 66% percent of students said they used green areas for active play. Green areas, in contrast to traditional turf and asphalt areas, tended to support more moderate to light activity. According to Dyment and Bell, about half of the respondents said that greening their school grounds encourages more vigorous activity, while about 70% said it encourages more moderate and/or light physical activity.

The researchers furthermore discovered after greening that, 85% said their school grounds now promote a wider range of play activities; 84% said their school grounds now

facilitate more exploration of the natural environment and 90% of respondents said their school grounds appeal to a broader range of student interests. Although the study's limitations stem from its focus on retrospective self-report, it gives valuable insight into the advantages of green school grounds and their possible role in improving the amount and standard of elementary school children's physical activity and complementing more traditional school grounds. With a focus on studies involving children's drawings, Muoz (2009), on the other hand, reviewed the literature on the correlation between spending time outside and wellbeing. Before delving further into issues related to children's use of the outdoors and their health, she studied literature and policy relating to outdoor use and health in general. Research relating children's time spent outside to greater physical activity, balanced development, and general well-being were among the specific topics Muoz examined. She also studied research into access to natural surroundings, factors which constrain children's outdoor play and how it enables it to be played, children's playground design and the use of the open air in children's education and research on people. Finally, Muoz identified methodological considerations, research gaps, and recommendations for furthering knowledge in this area as she wrapped up her literature review. A correlation between outdoor time spending, drawing and health was found through Muñoz (2009) study.

Lester and Maudsley (2006) provided a comprehensive review in their report of literature concerning the natural play of drawing of children. The authors first studied the relation of human beings to the natural world, the importance of playing and direct interaction with the physical environment in the drawing of children. The major opportunities that natural play offers, such as creation of special places and the numerous

documented and possible benefits of children's play in natural environments, including developing sense of self and independence, were reviewed by Lester and Maudsley. The authors discussed evidence suggesting a variety of recommendations for enhancing children's opportunities to play in natural settings, ensuring adequate access to parks and nature reserves, a reduction in children's proximity to and opportunities to play in natural spaces, as well as the construction of appropriate playgrounds, school grounds, and outdoor play projects.

Learning and Teaching Scotland (LTS) commissioned Dan Daviesa (2013) to conduct a systematic review of 210 pieces of educational research, policy, and professional literature pertaining to creative learning environments in schools. The reviewers discovered only a few observational studies conducted between 2005 and 2011 that included results related to the review objectives despite the abundance of scholarly literature in this area. However, in supporting the development of creative skills in children and young people, there was a reasonable weight of research evidence to support the importance of the following factors such as: working outside of the classroom/school; flexible use of space and time; availability of appropriate materials; respectful relationships between teachers and students and 'playful' or 'games-based' approaches with a degree of learner autonomy. There was also evidence of the effect of creative environments on pupil achievement and the development of teacher professionalism, according to the study. The review was intended to use by LTS to make proposals to Scottish schools on how to encourage innovation as part of the Programme for Excellence. The review's findings, as well as the methodological gaps in the studies examined, have international implications for policy, practice, and research.

Involvement in the visual arts is often stated as a way to promote general artistic development in emerging creative thinking skills. Moga, Burger, Hetland, and Winner (2000) looked into this topic by reviewing ten studies that were found after a thorough search. The first meta-analysis, which was based on four correlation analyses, found a small correlation (r = 0.28) between learning the arts and creative thought. Nevertheless, students chose to study the arts for themselves, so it was possible that those with "better" creative thinking chose to study the arts in three of the studies included. When analyzing the experimental experiments on arts engagement and figural creative thinking (r=.15), there was some evidence for a causal relationship. On verbal/conceptual creative thinking, no substantial difference was found between those who participated in visual arts programmes and those who did not (r=.003). As a result, when a more comprehensive research design is used, no evidence for this premise is found, though correlation studies suggest that there could be some transference from art experiences to artistic thought, and the direction of such transference, if it exists, is also unclear. The use of only pencil and paper tests to determine creative thinking was another limitation of this field of study. More qualitative measures of creative thinking could yield different results such as open-ended problem solving, according to the authors.

Watts (2005) concentrated on primary schools that used the National Curriculum in Australian schools. About their views on the importance of art, Watts asked 316 children aged 6 to 7 years. By themes of communication (23%) and aesthetics (21%), personal development (25%), enjoyment (6%), reasons related to money (7%), the children's responses were dominated. However, Watts also asked the children why they thought that they, children, made art and why adults made art. The study came out that,

because it was fun whereas adults made art because it made them money (23%), was fun (19%) or for personal development (17%), majority of pupils (57%) suggested that they made art.

Burkitt, et al. (2010) conducted a large-scale study to examine the perceptions and behaviors of teachers, parents, and children toward drawing in Australian National Curriculum Schools. Two hundred and seventy children and 44 of their teachers were questioned, and their parents returned 146 self-completed questionnaires (Burkitt, Jolley & Rose, 2010). Including the value and advantages of drawing, the survey inquired about a number of topics relating to children's drawing. Questions were either open-ended or required a Likert scale response. Teachers and parents were asked to rank the importance of children's art education in the context of their education quality on a scale of a ten-14-point (ten being "extremely important"). According to the findings, whereas children recognize drawing for these benefits but also acknowledge that drawing is essential in and of itself, i.e. to learn drawing skills, parents and teachers consider drawing mainly for the benefits it provides in other domains, such as cognitive, emotional, and personal development. As the majority of pupils reported that they enjoyed drawing 'a lot' and the majority of teachers reported that 'almost all the pupils in their class enjoyed drawing', further support for children's enjoyment of drawing came from this survey study (Burkitt, Jolley & Rose, 2010, p.261).

These results are similar to those of Richards (2003), who used questionnaires, interviews, and observations to study 136 4- to 9-year-olds and discovered that their comments were mostly based on visual realism or the size and content of the drawing, colouring correctly, staying within the lines, drawing things the 'proper way,' and

making ‘mistakes’. Furthermore, several children commented that scribbling is a bad drawing, and schoolchildren commented on the importance of effort, ability, and persistence for successful drawing (Richards, 2003). To give more comprehensive responses, Hoffman (1992) conducted a survey of open-ended questions that encouraged parents. The questions based on their views of their child’s artistic endeavours, the art experiences available to their children, their perspectives on the role of art activities in young children’s learning as well as the assistance given. These were completed by 82 parents of 4-year-old children in the United States on their own. The findings indicate that, they expect childcare centres can support their children’s art efforts and learning and that, parents’ value their children’s art activities and they enjoy their children’s art creations.

Potter and Eden (2001) found no signs of any age-related variations in children’s demonstrated enjoyment of drawing in questionnaires completed by 48 5- to 10-year-old children. Similarly, Potter and Eden did discover, though, that younger children reported being good at drawing more frequently than older children and there were no age-related disparities in children’s drawing mastery (focusing on self-improvement and skill development) versus performance goals (achieving to impress others).

Further research by Bonoti and Metallidou, (2010) and Flannery and Watson, (1991) also affirmed these findings, which are seen as a decrease in drawing competence with age. The bulk of these reports concentrated on children under the age of ten, while older children’s experiences and behaviours must be addressed in order to gain a more complete and consistent understanding of any age-related reduction. Wetton and McWhirter’s (1998) early work, which looked at the emotional literacy of children, aged

7 - 8 by participatory drawing, found that children could not express emotionally or in writing but were able to express emotions visually. Wetton and McWhirter concluded that, "The children differed only from adults in that they did not have the vocabulary to express themselves" (p. 273). Wetton and McWhirter did note, however, that there are substantial variations in the drawing abilities of children of different ages when it comes to expressing themselves through drawing.

Merriman (2004) used drawings to investigate the career aspirations of children living "on the street" and "off the street" (i.e., in religious institutions) in Kolkata. Participants were divided into two groups: orphaned children in urban boarding schools and street children enrolled in an educational programme. The latter project takes in orphaned street children who are still living on the streets with the intention of incorporating them into mainstream education. There were 85 girls (56.3%) and 66 boys (43.7 %) among the 151 participants in this study. They were between the ages of eight and fifteen (M = 11.34, SD = 1.4). The directors of the orphanages and the education programme, which would be called the legal guardians of the children under their care, provided their written consent. In addition, the importance of voluntary participation was emphasized and the children were invited to participate. All the children participated. Participants were asked the following questions: (a) draw them doing something; (b) write a little about who the person is, what they are like, and why you chose them and (c) draw a picture of the sort of person you would like to be when you grow up. These instructions were written in English on a sheet of A4 paper that served as research material. The first author initiated the study in English, the organizations' main language, and the instructions were translated into Bangla (Bengali) by a staff member for the

benefit of some of the younger participants. All participants had access to a selection of coloured pencils and crayons (provided by the organizations). The time limit was one hour, but the study did not take this into account completion time.

At the end of the day, White Collar and Professional occupations with a requirement for third-level education dominated (39.9%, 28.7% and 67.6%) respectively. Doctor was a popular profession, with 60% of the drawings featuring it. Another 11-year-old boy showed a drawing of a bus with the boy himself as the driver, reflecting a professional manual occupation that does not require any formal education or training. Lambert, Coad, Hicks, and Glacken (2014) described arts therapy as a key component of helping children deal with illness or difficult personal situations. Lambert et al., (2014) used Arts Based Educational Research (ABER) to help children with their research. Lambert et al. (2014) explained how arts-based expression and methods could contribute to potentially powerful research questions and findings.

Children's perspectives on the best physical layout for hospital-built environments were investigated in this study. A total of 55 children were enrolled in the study, all of whom were in the hospital. The children in this sample were all between the ages of 5 and 8. There were 24 boys and 31 girls of various cultural backgrounds, including chronic and acute illnesses, along with different health conditions. The children were requested to draw and describe the look of their preferred hospital bed, including physical, but also social aspects of the room. The study's goal was to use the information to help design a new children's hospital in Ireland. Some of the children could not draw because of their illness but could talk about their desired place of residence. Other children participated in groups to create their "perfect" hospital room with creative and

arts materials while supporting an artist through an art and health company or completing individual drawings with a hospital researcher on their bed.

Study findings showed that children knew very well the conditions in which they choose to stay whilst in hospital. In general, many aspects of the design of children's hospital rooms have been underestimated in many instances. In regard to the physical environment the children, according to the researchers, showed that they valued a "colourful, creative, comfortable interior environment which had easy access to the external environment" (Lambert et. al., 2014, p. 63). In conclusion, the children tended to make imaginative use of the space, including imaginative décor and bringing elements of the outside natural environment inside.

2. 4 Gaps in existing literature

A significant number of studies have been carried out on the impart of the environment on children's drawing, however, beyond the formal educational setting, a child's environment also includes their interactions with their home environment, cultural artifacts, and activities that take place away from the school (Acquah, 2018, Allen, Kelly & National Research Council, 2015). In many developing nations, children's drawing abilities are significantly influenced by a variety of external environmental factors. In Ghana, the sixteen (16) regions and more than two hundred (200) districts differ in terms of tangible environmental and cultural elements like technology, architecture, and art as well as intangible elements like knowledge, beliefs, laws, conventions, and habits (Anquandah, 2013). There is potential for a greater environmental influence on children

due to the enormous variations in social, cultural, and environmental contexts that affect how children are nurtured, but this issue has not yet been thoroughly explored.

Furthermore, the current study is anticipated to contribute in a novel way to academic understanding of how children's environments and educational capabilities develop. The precise impact of socio-cultural and environmental factors on children's drawing capabilities have not been sufficiently examined, despite numerous research on socio-cultural and environmental influences on students' performance in Ghana and elsewhere. By using a more inclusive and thorough technique, the study is anticipated to not only add new knowledge but also improve the process for examining children's performance. Nonetheless, the study is anticipated to be excavating resources and manual that offers baseline data on how Ghanaian children's drawing abilities are influenced by the environment.

2.5 Conceptual Framework for the Study

Conceptual framework according to Jabareen (2009) consists of a network of interconnected concepts that altogether provides a comprehensive explanation of the phenomenon being studied. Conceptual frameworks are born out of the researcher's idea of the nature of reality (ontological) or how things really are (epistemological assumptions) and what framework explains the phenomenon (methodological assumptions). In qualitative research, conceptual frameworks are derived from discipline-based theories that become data for analysis and in some cases offer better understanding than theoretical explanation. The main focus for conceptual framework for qualitative research is to analyse many different discipline-based theories to generate new

explanation, interpretation and understanding a particular phenomenon or phenomena (Collins & Stockton, 2018).

In this study, the conceptual framework was derived from the theoretical underpinning the study, and an extant of literature that includes industry reports and academic research articles on children drawing and learning abilities development in general. In the first place, children drawing is influenced by their environment represented by the four realities of children described by Wilson and Wilson (1982) as the common reality, projected/anticipated reality, normative reality and prophetic reality. In addition, the social cognitive and self-efficacy theory also proposed that the drawing abilities are also reflection of the past experience, facilitation and evaluative feedback as well as the Physiological and emotional status of the child. The outcome of the interaction of the child between his/her environmental factors and self-efficacy give rise to drawings that take the form of narrative, borrowed, factual, fictional, self-generated and separate objects according to Duncum (1992). The outcome of the child's drawing regarded as narrative/Separate object by Duncum (1992) refers to drawings is a story created around the child (Narrative}, or object with no narrative dimension (Separate object). The Factual/Fictional is based on real events (factual) or invented by the child (Fictional) while the Self-Generated/Borrowed drawings are drawings generated by the child or copied from another source (Borrowed). A diagrammatical representation of the conceptual framework of the study is presented in Figure 1:

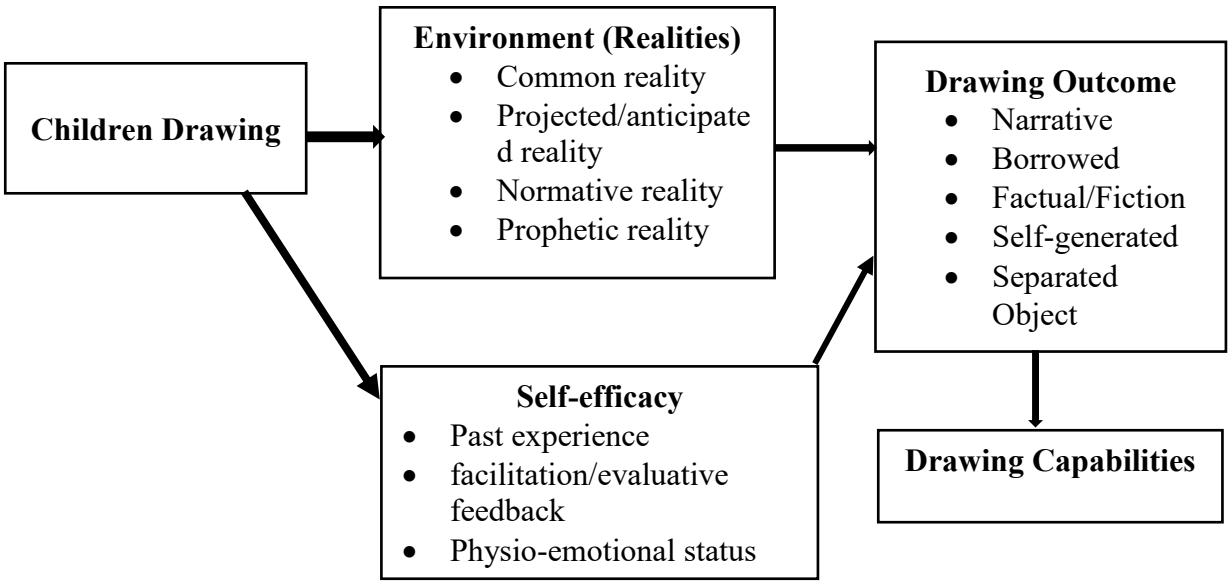

Fig. 2: Conceptual Framework
Source: Author's Construct (2022)

CHAPTER THREE

METHODOLOGY

3.0 Overview

This chapter presents the methodology employed in conducting the study. The chapter outlines the philosophical assumptions and paradigm that underpin the study, the approach and design employed in conducting the study, sampling and data collection process as well as how data collected were analysed.

3.1 Study area

The study was conducted in four different districts in Ghana which include Bia West (Sefwi Debiso) District in the Western North Region, Kumasi Metropolis (Asafo) in the Asante Region, Keta Municapal (Anlo-Afiadenyigba) in the Volta Region, and Tempane Municipal in the Upper East Region.

The Bia West District is one of the 9 MMDAs in the Western North Region of Ghana and was established by LI 2013 in the year, 2012. It is located between Latitude 6°6'N and 7°0'N and Longitude 2°40'W and 3°15'W with total surface area of 1,287.26559 km2. The Bia West District is richly endowed with human and natural resources stretching from great pool of labour, rich soil, good climate, tropical rainforest with variety of timber species, cash crops, livestock and all that is desirable or necessary for generating a high quality of life. Presently, Essam serve as capital of the Bia West District. The District has a total population of 115, 881 according to the 2021 population and housing census (Ghana Statistical Service [GSS], 2021). The Educational Directorate of the Bia West District is divided into nine (9) Educational Circuits.

These are Papaase, Essam, Sukusuku - Toya, Adjoafua, Elluokrom, Yawmatwa, Oseikojokrom, Asanteman and Kwamebikrom (96 Basic Schools) (GES, 2021) and 1 College of Education at Debiso. Two government Assisted Senior High School at Debiso and Adjoafua and one Community School Senior High School at Elluokrom.

The second place for the research was at Asafo in Kumasi Metropolis. Kumasi Metropolis is the largest District in the Ashanti Region and second most urbanized district in the country with a total population of about 5,440,463 in the 2021 population and housing census (GSS, 2021). The Kumasi Metropolis is located between Latitude 6.35^{o}N and 6.40^{o}S and Longitude 1.30^{o}W and 1.35^{o}E and elevated 250 to 300 meters above sea level. The metropolis has surface area of approximately 214.3 square kilometres which is about 0.9 percentage of the region's land area but accommodates about 36.2 percent of the region's population. The dominant ethnic group in the Kumasi Metropolis is the Akan and therefore the Asante's cultural artefacts and practices dominate in the Metropolis. The largest communities by population include Old Tafo, Bremang, Atonsu and Pankrono. The Kumasi Metropolis is an important educational centre, boasting 649 public pre-primaries, primary and junior high schools, two top public universities, one of the nation's premiere medical schools and a polytechnic.

The third place which was in the Volta Region centered on Anlo-Afiadenyigba in the Keta Municipal. Keta Municipal is one of the 261 Metropolitan, Municipal and District Assemblies (MMDAs) in Ghana, and forms part of the 18 of Municipalities and Districts in the Volta Region. It was carved out of the former Anlo District, which also comprised Akatsi and Ketu Districts. The Municipality lies within Longitudes 0.30E and 1.05E and Latitudes 5.45N and 6.005N. It is located east of the Volta estuary, about

160km to the east of Accra, off the Accra-Aflao main road. Keta Municipal, with Keta the Administrative has a total surface area of 1,086km2, approximately 362km2 (about 30 per cent) is covered by water bodies. The largest of these is Keta Lagoon, which is about 12 km at its widest section and 32km long. Hence, the remaining land area is only 446 km2 a situation which creates severe constraints on access to land for development in the municipality. However, fishing and water transportation potentials exist. It shares common borders with Akatsi South Municipal to the north, Ketu South Municipal to the east, South Tongu District to the west and the Gulf of Guinea to the south. The population of the Municipality according to 2021 population and housing census stands at 78,862 with 36,986 males and 41,876 females (GSS, 2021).

Keta Municipality has various educational institutions. There are 320 schools in the Municipality which is made up of 126 Pre-schools (84 public and 42 private), 103 primary schools (90 public and 13 private), 77 Junior High Schools (73 public and 4 private), 12 Senior High/Technical Schools (10 public and 2 private) and 4 Technical/Vocational (1 public and 3 private) (GSS, 2021).

The fourth District which is also selected from Northern Ghana is the Tempane Municipal. The Tempane Municipal is one of the 261 Metropolitan, Municipal and District Assemblies (MMDAs) in Ghana, and forms part of the 15 of Municipalities and Districts in the Upper East Region. The Tempane Municipal Assembly is carved out of the Tempane Municipal Assembly as one of the 38 newly created and upgraded District Assemblies in 2018. Created with Legislative Instrument (LI) 2352 the Tempane Municipal Assembly has its capital as Tempane. It was inaugurated on March 15, 2018 alongside other 37 newly created districts. The Tempane Municipal is located to the

south-eastern corner of the Upper East Region of Ghana. It covers an area of 1,230 Km2 and lies approximately on latitude 10o 38lN and 110N and longitude 0o 06l E and 00 23l E. The Tempane Municipal shares boundaries with Garu District to the north, Pusiga District to north-east, Bunkpurugu Nyankpanduri District to south-east, and the Republic of Togo to the east. The population of the District according to 2021 population and housing census stands at 86,993 with 41,268 males and 45,725 females (GSS, 2021).

The District has 162 educational institutions. These are 2 Senior High Schools, 36 Junior High Schools, 62 Primary Schools and 62 Kindergartens.

3.2 Research Philosophy

As Creswell and Creswell (2017) noted, although philosophical ideas remain largely hidden in research, they nevertheless influence the practice of research and choice of study approach and designs. In this study, the choice of study methods and design and the research view of what constitute factual knowledge is inspired and underpinned by the social constructivism research philosophy/worldview. McKinley (2015) defined social constructivism as a sociological theory of knowledge which explained that human development is socially situated and knowledge is constructed through interaction with others. The four fundamental elements of the social constructivism worldview include understanding, application of multiple participant meanings, social and historical construction as well as theory generation (McKinley, 2015). The Social Constructivists view is that individuals seek understanding of the world in which they live and work by developing subjective meanings of their experiences directed toward certain objects or things (Creswell, 2014). Thus, factual knowledge varies and reflects the multiplicity of

individuals' experience rather than narrow meanings drawn by few individuals or category of experiences.

The goal of research from social constructivists' perspective is to rely as much as possible on different participants' views of a situation being studied. In this study, therefore, the approach involved relying on the meaning that was constructed by the different participants of the study regarding the influence of environment on the drawing capabilities of children. The aim was to rely on subjective meanings negotiated socially and historically and formed the study participants through interaction with others (hence social constructivism) and through historical and cultural norms that operate in individuals' lives. The assumptions of the social constructivism worldview that guide the present study include meaning that are constructed by human beings as they engage with the world they are interpreting and therefore through open-ended qualitative research approach participants can adequately share their views. Also, humans' engagement with their environment helps them make sense of it based on their historical and social perspectives. Based on the second assumption, it is expected that through qualitative research the context and setting of study participants can be understood and applied in interpreting their experience and opinion. It is also assumed that generation of meaning is social; arising in and out of interaction with a human community and therefore the research approach must be inductive and also involve interaction directly with the study subjects or participants.

3.3 Research Approach

The research approach employed in a study to a large extent determines the nature and types of data collected, levels of measurement and methods of analysis. Qualitative approach was employed to enable the researcher study and do analysis of visual representations concerning the problem under investigation. As noted by Wynn Jr and Williams, (2012) the choice of research design is dependent on the philosophical assumptions of the researcher, the nature of the research problem, the procedures of inquiry and specific research methods of data collection, analysis, and interpretation. In this study, the qualitative research paradigm was adopted in line with the social constructivism worldview employed in the study. According to Kothari (2004), the choice of research approach significantly influences the integrity of a study finding and the overall success of a research endeavour. A careful consideration of the three distinctive research approaches namely qualitative approach, quantitative approach and the hybrid or mixed method approaches was undertaken before the choice of research approach for this study was made.

As noted by Yilmaz (2013), the quantitative research approach is concerned with objectivity and generalization of findings, while qualitative approach suitable when interested in understanding the experiences of a phenomena and be able dig deeper into obtaining in-depth information specific to each phenomenon rather than make general prediction. A stereotypical quantitative researcher tends to have functional views of the world and sees the real world as a lab where phenomenon can be manipulated, measured, calculated to establish causal relationships using statistics. This view is however not suitable for various social construct especially experiential construct which often has no

quantitative magnitude. The qualitative approach on the other hand as pointed by Yin (2017) focuses on unearthing meaning from experience, opinions and ideas in a qualitative and non-numeric fashion. The qualitative approach requires immersing oneself into a phenomenon under study to be able to understand it better. In the qualitative approach, the researcher listens, asks questions, observes phenomenon and gathers the material and data on the phenomenon, analyzed them to obtain findings.

Unlike the quantitative approach where there is constancy of reality, in the qualitative approach, there is the notion of "multiple realities" that are always changing and undergoing transitions. Therefore, for qualitative approaches or view point, it is the context of the phenomenon or subject under study that matters, and findings can only be tentatively generalized to situations with similar context and circumstances. Yilmaz (2013) have stated two questions as answers to them decides whether one decides to use qualitative or quantitative approaches which are; "*Are you interested in causal relationships and want to explore correlations between different variables? Or* "*Are you interested in people's subjective experiences and the meaning they attribute to what happens in their daily lives?"* Affirmative answer to the former question necessitates the use of quantitative approach while the latter also give ground to the use of qualitative approach. In this study, none of the objectives sought to established cause and effect but rather explore association between children environment and their drawing capabilities. Against this backdrop, the qualitative approach is more favorable and suitable for the study than its quantitative counterpart. The use of the qualitative approach enabled the researcher to collect and use use words, narrative and other non-numeric measures as means of data collection for the study.

3.4 Research Design

The descriptive case study research design was employed to investigate the influence of environment on the drawing capabilities of children in selected Districts in Ghana. As Yin (2003) stated, case study design provides an all-encompassing procedure for systematically studying and describing a phenomenon, in this case, the influence of the child's environment on their drawing abilities within a real-life context. Descriptive case study designs involve a focused and detailed process in which propositions and questions about a phenomenon are carefully scrutinized and articulated at the outset (Yazan, 2015). The outcome of descriptive case study consists of the people involved in the situation, their thoughts and opinions, relevant background history, and qualitative or quantitative information about the situation.

Furthermore, the use of descriptive case study is informed by the fact that it provides an empirical framework for collecting, analyzing, and triangulating multiple sources of evidence, including documents, interviews, observations, and surveys that a comprehensive and holistic understanding of a phenomenon can be revealed. The use of the case study design also enabled the researcher to expand and draw conclusions on theoretical propositions of child's learning based on Bandura's theory of social cognizance within the specific context of Ghana. One of the justifications for using any form of case study design according to Hew and Hara (2007) is that the study must be exploring a phenomenon in context, using one or more data collection methods, describing in depth a case or cases or intended to answer "why", "how" and "what" questions. In this study, children's drawing capabilities are being explored within the context of their immediate environment including their school, home and sociocultural

settings. The use of descriptive (multiple) case study enables theory building by creating theoretical constructs, propositions, and/or mid range theory from case based on empirical evidence (Eisenhardt, 2007). Thus, the multiple case study approach considering each district as a case for analysis is employed to build theories that explain the influence of a child's environment on their drawings.

3.5 Population of the Study

The population consists of all school children between ages 7 and 10 in four districts in Ghana, considered for this study as well as the cultural coordinator, teachers that teach children of the above age groups and their parents or adult caretakers. The accessible population consists of people in the above-mentioned categories in selected basic schools in northern and southern parts of Ghana, as well as head teachers, teachers and parents that the researcher was interview.

3.6 Sampling and Sample Size

In this study, the selection of schools was based on simple random sampling technique with a focus on selected districts in Ghana. Regarding sampling process in survey research, Glasow (2005) cautioned that the selecting of the sample size and sampling technique should be guided by the type of study design (qualitative or quantitative), the population size of the target participants, the homogeneity of the study elements and the degree to which a researcher get access to the study subjects. The present study as a qualitative research sought to obtain detailed information on drawing capabilities of children and how their environment influences the drawing capabilities of children in

selected districts in Ghana. In all, four districts were purposively selected and placed in four categories - northern, middle, western and southern sector of Ghana and knowledge of the identified districts. The northern, western and southern sectors were selected based on closeness to neighbouring countries, Togo and La Cote D'Ivoire. The middle belt was selected based on the numerous of research on children's drawing done within the Metropolis. However, learners' selection for the study was done according to the willingness of the child to draw and take part in the exercise. Those include basic one to three learners whose ages range from seven (7) to ten (10) years. Also, cultural coordinators, teachers and parents of the above-mentioned learners were included in the study.

The key informants were also selected using purposive sampling technique. The key informants selected include people who were directly involved in designing/implementing of the curriculum and the training of the children at the selected districts. They included cultural coordinators, teachers and parents or adult caretakers. The use of purposive sampling technique was considered desirable because it allows the researcher to carefully select the sample to reflect the purpose of the investigation (Bernard, 2002). The use of purposive sample was also necessary to ensure that only individuals that know a lot about the issue under investigation were selected. The children (pupils) were also simple randomly selected from each of the classes under investigation.

With regard to the sample size, Anderson (2010) suggested that for qualitative research, small sample is ideal to enable the collection of comprehensive and rigorous information. The approach use in this study was to continuously select children from each

school until saturation occurs with regards to the information obtained. Stebbins (2001) described saturation as the point when no new information is produced from additional cases. There is no threshold point for achieving saturation and therefore the researcher's own judgment determines when saturation occurs. However, in this study determination of the point of saturation was informed by conventional approach described by Saunders *et al*. (2018) and Mason (2010) and employed many past qualitative studies.

3.7 Data Collection Instruments

Four main methods were employed in the collection of data for the study. These methods include drawing activities, interviews, field notes and personal observation. The drawing activities that were undertaken were the most important data for the study.

3.7.1 *Drawing Activities*

The drawing activities were spontaneous as much as possible to reveal the drawing capabilities as well as the influence of their environment on their drawing as the main purpose of this study. Anecdotal notes were taken by the researcher as the children were engaged in the drawing activities in order to capture the character and attitude during the drawing process. Both spontaneous drawings and directed drawings were made by the children. With the spontaneous drawings, children were asked to draw anything of their choice. The item that each child drew and how they drew were recorded in field observation note books and used to analyse the influence of the children environment on what they choose to draw and how they drew it. The drawing that each child created was rated based on the Duncum's (1992) model of spontaneous drawing types into borrowed, factual, fiction, narrative, self-generated or separated object. Each drawing was given

three scores (from one to six), based on the following criteria; how well the drawing is factual/fiction, Narrative/Separate Object; and borrowed or self-generated based on the Duncum's (1992) model scale.

According to Stolley (2012), children's spontaneous drawings are the most credible measure of their interest in drawing and their own creative abilities. Thus, analysis of spontaneous drawings made by children reveals their appreciation of their environment and their skills in drawing and art in general (Hsu, 2014). Against this backdrop, drawings made by children spontaneously in the schools in the selected districts were expected to reflect a pattern and scheme consistent with the environment they were exposed to. In addition to the spontaneous drawings, each child was presented with two images to draw: one being an artifact common in the Northern part of the country and other a common artifact in the southern part of the country. Three art teachers from the school were made to judge and score each child on how they drew each of the two images. Analysis of the drawing and the score each learner get on each of the different images determined whether there is association between the child's environment and the kind of artifact they drew well.

3.7.2 *Interviews*

In addition to the drawing, interviews were conducted with the children, teachers, arts and culture coordinators and parents on the drawings produced by each child. The purpose of the interview was to supplement the drawings with additional information on what informed the children's drawing and how their environment influences their drawings, interview with teachers also further revealed how much teaching and learning of drawing in the selected schools in terms of the structure and content are reflected by

the environmental settings of children. The interview was semi-structured in nature and conducted with an interview guide to ensure that all the appropriate information needed is asked. With the children, the interview elicited information on what influence their drawings either by peers (or others), in-school experiences, out of school personal experiences or by popular culture among others.

3.7.3 *Personal Observation*

Another data collection method that was employed in the study is personal observation. With this method the researcher sat in classes at the selected basic schools in the selected districts to make observation about their style of facilitating and the drawing activities ongoing. The observations were aided by an observational sheet. The use of observation was necessary for the researcher to have first-hand information on how facilitation and evaluative feedback are carried out by teachers at the lower primary and to make sound analysis of the approaches teachers use during drawing activities with pupil.

During the observation, particular attention was placed on how the teachers use their knowledge and skills to coach pupil in during drawing activities. Also attention was placed on how evaluative feedback was rendered to promote the learning of art with respect to both the practical and theoretical aspects of drawing. The researcher also made efforts to see the relationship between the teaching style employed to pupil at the lower primary during drawing activities and how the pupils at the lower primary response to it. Efforts were made to capture vividly and accurately the behaviours of teachers and the reactions of pupils in the classrooms.

According to Kawulich (2005), observation enables the researcher to gather data on physical setting, human setting and programme of study. An advantage of observation

that made it suitable for the study was the fact that the researcher saw things as they occurred in their natural setting. This enabled the researcher to have first-hand information concerning what happened with no adulteration.

3.8 Reflexivity and Positionality

As qualitative research, the reflexivity and positionality of the researcher are key phenomenon that must be addressed. With qualitative research, the researcher becomes part of the research engaging with the respondents through various methods of data collection and analysis. As a result of this, there is always the possibility of probable element of bias being introduced into the study as a result of the sampling technique when purposive or assumptions that may infiltrate the data collection or data analysis activities. According to Hardy *et al.* (2001) reflexivity must be an integral part of qualitative research as it gives an account of how the processes of doing research shape its outcomes. Reflexivity means the researcher need to continually critique and make critical reflection of decisions about the study (Mao *et al*., 2016). The positionality on the other hand is about how the researcher identity construction, cultural background and experience influence the way the real world is perceived and portrayed in the study (Temple & Young, 2004).

In order to address the possibility of bias been introduced into the study due to positionality or reflexivity of the researcher, a number of considerations were made. The main approach to elimination of biases was the use of bracketing technique. In this study, the approach to bracketing included keeping notes during data collection and data analysis to facilitate engagement with the data, conducting interview using outside

sources to allow the researcher to uncover and bring to awareness any biases or pre-conceived assumptions and then the practice of keeping a reflexive journal. The use of reflexive journal enables the researcher to be self-aware and record his /her own feelings and biases at any point of the data collection to ensure efforts are made not to influence the interpretation of responses, recording and analysis of information gathered. During the analysis stage, self-introspection and continuous critique of any biases or predisposition toward the phenomenon of digital transformation was employed.

3.9 Data Analysis

The analysis, interpretation, and discussion of the findings were done using an inductive analysis strategy. The analysis process, therefore, started with the identification of themes and patterns derived from similarities, differences, and sequences in the study. There were done after the data collection. In the process of the analyses, the researcher was guided by the research questions, the overall design of the research and the nature of the data collected. The data was therefore analyzed with the thoughtful balance between generating themes from within the data based on responses to the research questions. The data was analyzed with the NVivo data analysis software program (Version 12), which offer opportunity for the researcher to recognize themes, discover trends, and derive conclusions (Wong, 2008). The Gioia, Corley, and Hamilton (2013) approach to qualitative data analysis, which allows iteration between data and theories through three main steps was adopted. The three steps are described below.

In the first step, the researcher repeatedly read through the interview transcripts to capture the informants' meanings while comparing them with the codes from the

software to confirm if they reflected the content of the transcript. The focus at this point was to elicit a set of first-order concepts that represent the views of the respondents on drawing of children and the influence of their environment. At the same time the NVivo analysis was performed to obtain an initial coding table. The codes were therefore re-examined by re-reading the transcript to confirm if the codes generated reflected the content of the transcript.

A second-order analysis was used in the second step to find theoretical interpretations that underpin the first-order concepts derived from the previous step. This involved oscillating around the concepts generated in the previous step and child's drawing theories from literature to aggregate the identified themes into distinct dimensions. In this step, the analysis transition from inductive to adductive, in that data and existing theory or concepts were now considered in tandem (Gioia *et al*., 2013). At this stage, the researcher gain understanding of both the concepts identified from the first-order analysis and the preponderance of literature review and is now able to aggregate the themes identified into distinct dimensions.

The third step in the analysis process involves addressing the specific objectives regarding the drawing capabilities of the children the influence of their environment. This step involves building a process model to explain the dynamic interrelationships between the second-order themes and aggregated dimensions, which provided a comprehensive storyline that explains the influence of the environment. The information and analysis at this stage provided answer(s) to the research question(s).

3.10 Ethical Consideration

To ensure ethics, a pilot study was first conducted with similar but small population of the research participants to identify ethical concerns that participants had with the study. Informed consent was sought from all research participants before they participated in the study. Participation in the study was made voluntary for participants so that selected participants who were not comfortable with the study could opt out. Also, personal identifiers such as names, contact numbers and addresses were not demanded. This was done to ensure that respondents' comments are not traceable to them personally so that their confidentially could be assured. Pseudonyms were therefore used.

3.11 Ensuring Trustworthiness

Qualitative research is trustworthy when it accurately represents the experiences of the participants. To ensure that data collected remain trustworthy during and after collection, the researcher discussed the data collection instruments with the supervisor before it was administered. The suggestions from the supervisor helped the researcher to modify the data collection instruments. Not to skew the interpretation given by the participants, the researcher maintained a degree of neutrality in the findings. Four criteria proposed by Lincoln and Guba (1985) employed to measure the trustworthiness of the quality data in this are: credibility, transferability, dependability, and confirmability.

3.11.1 *Credibility*

This qualitative study sought to identify an authentic understanding of a specific phenomenon (LeCompte & Geotz, 1982). Thus, the credibility of the human experience, explained in categories, reflects an assurance that the phenomenon exists. Triangulation

as noted by Lincoln and Guba (1985) is a validity measure that makes use of different sources, theories, and methods to analyse the same information. In this study, the use of triangulation was demonstrated by using drawings, audio-recordings and field notes as part of the data collection. To further enhance the validity of the study, the researcher once again carried out member checking. Member checking in the study refers to an examination of interpretations, categories, and conclusions with the stake-holding groups from which data were originally collected. These processes were carried out to ensure clarity and accuracy while collecting qualitative data.

3.11.2 *Transferability*

Transferability is equivalent to generalisability of findings in qualitative study (Kusi, 2012). This refers tote degree to which the results of the qualitative research can be generalised or transfer to other context (Bhattacherjee, 2012). The researcher achieved this in his study by extensively and thoroughly describing the process that was adopted for others to follow and replicate. Thus, the researcher kept all relevant information and documents regarding the study. Again, the research context, and methodological processes was provided. These could enable other researchers to apply the findings of this study to similar settings of their choice thereby regarding the findings in this study as answers in their chosen context. Furthermore, there was adequate background information about the respondents; the research context and setting that allow others to assess how transferable the finding is. The researcher kept accurate records of all the activities while carrying out the study. These include the raw data (transcripts of the interviews) as well as details of the data analysis.

3.11.3 *Dependability*

Dependability corresponds to reliability of findings in qualitative research (Merrian & Associates as cited in Kusi, 2012). Guba and Lincoln (1985), admit there could be no credibility without dependability in qualitative research. Also, it is concerned with whether we would obtain the same results if we could observe the same thing twice (Trochim & Donnelly, 2006). Dependability in this study was related to consistency and it was done by making sure that the researcher checked whether the analysis process was in line with accepted standards for the design of the study. An extensive and detailed evidence of the process in which the research is conducted was documented in order that others can replicate and ascertain the level of dependability. To ensure dependability, interpretive researchers must provide adequate details about their phenomenon of interest and the social context in which it is embedded in order to allow readers to independently authenticate their interpretive inferences (Bhattacherjee, 2012).

In this study, dependability was established through the establishment of appropriate enquiry decision. This included review of interviewer bias to resist early closure and at the same time prevent the provision of unreliable data due to boredom on the part of the respondents because of prolonged interview sessions. In addition, information from literature assisted the researcher to develop questions that elicit appropriate responses to answer the research questions that are formulated to guide the study. There was a systematic data collection procedure that reached the point of saturation, the extensive documentation of the data (transcriptions of interview narratives), methods and decisions in the memo are steps in proving the dependability of

the data. Thesis supervisors assessed the work to find out whether or not the findings, interpretations and conclusions are supported by the data.

3.11.4 *Confirmability*

Trochim and Donnelly (2006) declare confirmability to mean the degree to which the results could be confirmed or corroborated by others. Also, confirmability refers to the extent to which the findings reported in interpretive research can be independently confirmed by others, typically, participants. This is similar to the notion of objectivity in functionalistic research. Since interpretive research rejects the notion of an objective reality, confirmability is demonstrated in terms of "inter-subjectivity", that is, if the study's participants agree with the inferences derived by the researcher. In order to establish confirmability, the researcher after coding and transcribing the audiotapes, interview questions, and all other relevant information and documents regarding the study, it was given back to the participants to confirm the responses. The researcher effected changes where necessary and give the transcribed data back to the participants again for them to authenticate the inferences derived by the researcher. The researcher then took the final transcribed data from the participants as a true record of what the respondents factually provided. Confirmability was also achieved through neutrality. The purpose of the above was to ensure that the interpretation of the data would not be based on the researcher's own particular preferences and viewpoints but rather to be fully grounded in the data collected.

CHAPTER FOUR

RESULTS

4.0 Overview

This chapter presents the results and discussion from data collected for this study. The results present in this chapter addresses four specific objectives viz. the drawing capabilities of children in lower primary in selected districts in Ghana; the influence of children's environment on their drawing outcomes; how self-efficacy (Past experience, facilitation/evaluative feedback and Physio-emotional status) influence the outcome and drawing capabilities of children in Ghana and the role educators can play to provide the environment to enhance drawing capabilities of children. The results are based on data collected from school pupil in lower primary (Basic School 1 to 3), their parents and teachers as well as key informants that included District Coordinators for art and culture.

4.1 Drawing capabilities of children in lower primary in selected districts in Ghana

Drawing capability of children is a multidimensional concept that embody skills/knowledge, imagination, recall/memory and their interests (Siry, 2014). Analysing children's drawing capabilities must be comprehensive enough to cover all the domains that relates to what children draw and how they draw it. To achieve this, this study involve analysis of both directed drawings and spontaneous drawing of the study participants. Directed drawings are effective in establishing children's ability to understand concepts, follow instructions, and pay attention to details. Directed drawing helps in the coordination of skills acquisition and planning of learning to enable

progressive development in various elements, creative and intellectual skills. Spontaneous drawing on the other hand represents the child's memory and interest more than their abilities or skills. Duncum (1992) also indicated that spontaneous drawing reveal innate feelings and expression of uncommunicated observation and passion. Thus, examining both directed drawings and spontaneous drawing provides a robust and comprehensive view of the drawing abilities of the children.

4.1.1 *Directed drawing Capacity*

A directed drawing exercise was conducted for the children in the selected schools across the Southern, Middle and Northern zones of Ghana and the findings presented in Table 4.1. The objects used in the directed drawing were the sun and a family of five while house was added to be painted (Appendix I). The choice of the objects was such that they represent objects common to children across the different zones from which the children in the study were sampled. The rating scale (Appendix XI) was adopted from Chevallier et al. (2012) with average of children in each zone. The results show that, overall, the children drawing capabilities were rated from fairly good to very good. The major deficiency in the children drawings were inability to accurately represent the details of the drawings given to them, addition of extra features not in the drawing and omitting some specific aspect of the drawings. Nearly all the drawings however could easily be recognised as the object they intended to draw. This show moderate to good drawing capabilities of the children.

An important observation made from the results was that differences exist in the terms of the children capability to draw the two different objects (sun and family) and the painting and these difference also show patterns across the different zones. It was quite

clear across board that the easiest object the children could draw was the sun whereas the family of 5 was the areas where many of the drawings have deficiencies. The result show that among the children in the Northern zone, the best drawn object was the sun with the drawing of children in the Tempane Municipal District rated from good to very good. In both districts in the Northen and Southern Zones, the Sun was drawn by the children to near perfection with some children clearly showing all features in the image given to them with the exception of few cases where extra features were added to the drawing by the children. In the middle zone, the best score of the children's drawing was in the area of painting of housings. Many of the children exhibited good capabilities in the choice of colours for roofing and walls of the house. In the Western Zone also, the best performance was on the area of painting of housing and drawing of sun with limitation also in the drawing of the family of 5. Many of the children drew family of three (3) as opposed to the 5-member family they were asked to draw.

It was generally recognised that limitation with respect of the painting was with respect to the colour choice and combination. Among many of the children in the Northern and Southern Zones the houses were coloured with extreme bright colours that did not reflect painting of houses around them. The problem associated with choice of colour was answered by a teacher who said:

> "The children are often unable to choose the natural colours of the objects. Most of them are excited with bright colours such as yellow. They kept asking this colour to colour their objects even though the object does not have the yellow colour in reality. [*Interview with Teacher, Tempane Municipal, February 5, 2022*]

The major limitation of directed drawings of children in the middle zone was missing features in the drawing of the sun and of family. In the drawing of the sun, the missing feature generally were the face on the sun and serrated edge while the family

drawing was usually fewer than the number five (5) in the drawing. This observation indicates inability to pay attention to details or follow detailed instructions. While the absence of some details may be considered as evidence of low drawing capabilities or poor attention to details, this may as well represent the children's ideas of what the object under consideration should be. According to interview with the one of the district cultural coordinator, he corroborated with the teachers stating that children sometimes draw objects the way they expect them to look like, but not necessarily based on the way the object is seen by others or directed by a teacher.

It was observed also that the drawing of the family of five by children in the Northern Zone was appreciated but in some cases extra details and changing of the order was observed. Extra details in this scenario were inclusion of handbags to the drawing which is not the case of the original and adding of design to dresses, pockets among other details. Omissions in the drawing include having fewer than the five people in the family. The lowest area of drawing abilities in the Northern zone was the painting. Many of the children's choice of colours was "poor", obscuring important features of the house. There is however few cases of children producing good painting of the house especially in the Tempane Municipal with realistic depiction of common roof colours in the area. The relatively moderate performance of the children drawing capabilities was corroborated by one of the school teachers interviewed who said: "Most of them are able to represent the objects they were asked to draw". Cultural coordinator on children drawing abilities also said:

> The drawing capability of the lower primary children is not so much like the upper primary. The lower primary because of the handling of the tools finds it difficult but they are some of them who are talented, they are naturally talented and are able to do the work you give them. Most children like to draw because it is the medium

> of communication to them. The things they cannot explain in words they put it into drawing. This why there are pictorial readings, and it creates pictures in their minds to be able to express them. [Interview with Cultural Coordinator at Tempane Municipal, February 23, 2022].

4.1.2 *Spontaneous Drawing capacity*

With regards to the spontaneous drawings, the children were asked to draw any objects of their interest or what they are able to draw. After the drawings were collected, the Duncum's (1992) model of spontaneous drawing types was used to classify the objects into borrowed, factual, fiction, narrative, self-generated or separated object before rating was applied. Based on the Duncum's (1992) model each drawing was given three scores (from one to six), based on the following criteria; how well the drawing is factual/fiction, Narrative/Separate Object; and borrowed or self-generated based on the Duncum's (1992) model scale. The results of the drawing classifications are presented in Table 4.1.

The results show both similarities and differences with regard to the spontaneous drawing of the children individually and from region to region. The common objects drawn by most of the children include trees, houses, people, cars, animals, fruits and some simple farm tools. In terms of the animals and fruits, some differences and similarities were observed. Animals such as goat, sheep and cattle were common but children from the Southern zone have fish and other aquatic animals in their drawings but none of the children from the Northern zone drew fish. Baobab fruits were found in the drawing by children from the Northern Zone but none in the Southern, Middle and Western zones. Spontaneous drawings common to the Northern and Middle Zones alone were drums specifically the talking drum.

Spontaneous drawings that were unique to the Northern Zone include the Baobab tree and its fruits, Xylophone and cattle. Also the way people were drawn appear unique,

most especially, in their dressing. In most cases, women were drawn wearing hijab by some of the children from the Northern Zone but not seen among drawings produced by children in the middle and southern zone. There were lots of coastal images and objects in the spontaneous drawings that were unique to drawings by children in the Southern Zones. Some of these objects include fish and cowries.

Table 4.1 Spontaneous Objects drawn by Children across Different Zones in Ghana

Northern and Southern Zones	Middle Zone	Western Zone
Tree by house, Chicken, Car, Cattle, Drums (6), Xylophone, Flag, Clay pot, Aeroplane, Mosque, Classroom (Makaranta), Mango tree, Baobab, tree, Fish, River Canoe, Women, with hair covered by hijab, Bicycle, Baobab fruit, Borehole pipe, Talking drum	Tree, House , Car, Talking drum, Aeroplane, Cocoa pod, farm tools (cutlass)	Tree, Car, Kitchen Cocoa pod, Bowl, Fruits (Mango, orange, apple, pear) Church.

Source: Field survey (2022)

Through observation and interview with key informants including the pupils, the drawings were classified under the six classes of children drawings based on Duncum's (1992) model factual/fiction, Narrative/Separate Object; and borrowed or self-generated based. The results of the classification across the different zones are presented in Figure 4.2. The results show that the drawings have elements of factual and fiction imageries, borrowed and self-generated representation and then narrative and separate objects. This

observation also demonstrates the wide heterogeneity of the representations made by the spontaneous drawings of the children. It is important to note that some classes of drawings were more dominant than others. As seen in Figure 4.2, the dominant classes across the types of drawings were narrative, factual and borrowed drawings. These observations gives an inkling of the potential of the environment in the objects children draw and their drawing capabilities.

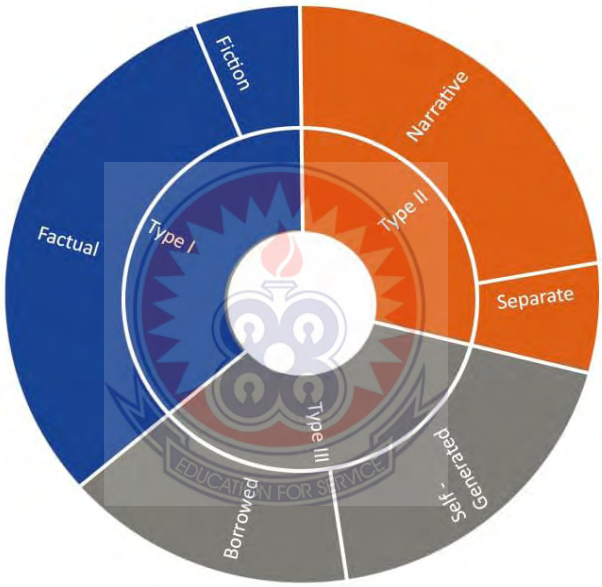

Figure 4.1: Classification of Spontaneous Drawings of Children
Source: Adapted from Duncum's Model (1992)

4.2 Influence of children's environment on their drawing outcomes and capabilities

Under this section, the focus was on examining the influence of the environment on what children draw and how they draw it. The analysis under this section was informed by a number of empirical literature that outlined the importance of the physical environment, social and cultural environment on children draw and more specifically underpinned by

the theory of realities proposed by Wilson and Wilson (1982). Guided by this theory, the analysis looks at the influence of common, projected/anticipated, normative, and prophetic realities on their drawing outcome and capabilities. The common reality based on this theory represent the immediate environment consisting of people and tangible objects, while projected/anticipated reality is a reconstruction of the many ways that one could be such as superheroes, dancers, fighters etc. The normative reality represents the child's reinvention of good and bad, people or things; appropriate and inappropriate behaviour while the prophetic reality represents the child depiction of the future of themselves or the world as a whole.

The spontaneous drawings of the children were examined to identify patterns that relate to either the common reality (tangible environment), projected/anticipated reality, normative reality or prophetic realities. The analysis reveals that each of the different realities of the children's environment have some influence on their drawings. The most obvious of the factors was the common reality as the drawing of the children were mainly tangible objects in their schools, home and physical environment. For instance, the majority of the common items drawn by the children included houses, cars and people. These objects are common reality components of the environment of each child. Some of the items were not immediately visible to them but their frequent encounter with them in the school or their community influence their selection as choice of object to draw. Some others were influence by things they see on television such as aeroplane and police. One of the objects that was common especially among schools in the Norther Zone were borehole pump/pipe (Figure 4.2.) Interview with the children and parents revealed that the children go to fetch water from borehole pump/pipe everyday so it is easier for that to

visualise them into their mind. This indicates that the objects the children are exposed to frequently become things of interest to them in drawing.

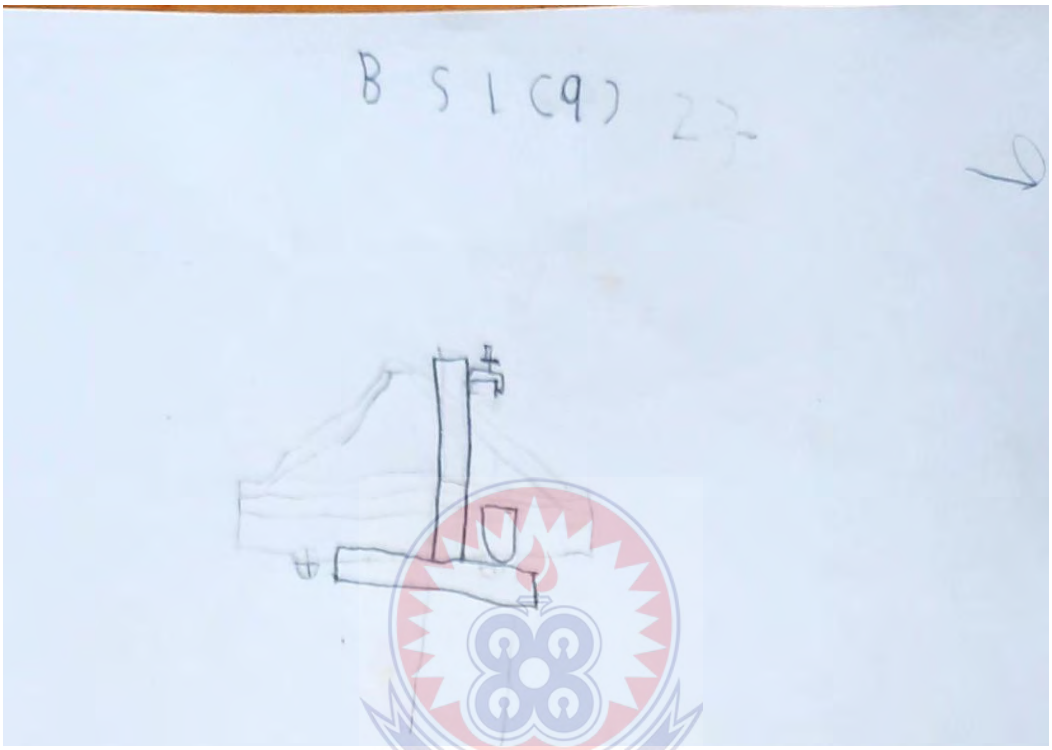

Figure 4.2: Drawing of Borehole by Basic School 1 pupil
Source: Field work (2022)

In some cases, the common reality influence on children drawing is limited to their present or immediate environment and may even include narration of an ongoing events. With reference to the Duncum (1992) classification of children drawings the children's drawing are either narrative of an ongoing activity or feelings in their life. These types of drawing may also be considered as 'factual' drawings since they represent things they saw at the time of drawing. For instance, one of the children under the spontaneous drawing exercise drew his class teacher who was then sitting in a swivel chair in the classroom (Figure 4.3). In another instance, one of the children drew the

happening in their bedroom and when interrogated the child confidently narrated that he has drawn *this incident* before, which he showed to his father who told him not to draw that scene again. The boy added that he was confused but he stated that he was happy to draw it again because he was not restricted in drawing his experiences (figure 4.4). This is an indication of the influence of the immediate environment or common reality on children drawing outcome. Similar observation was made when one of the pupils drew a snake and after interrogating her it was found that there was a snake in the classroom wall which was not seen by anyone else until her drawing. Given this observation, children's drawing outcome may be a reflection of the physical environment they experience at a time that they had to respond to it.

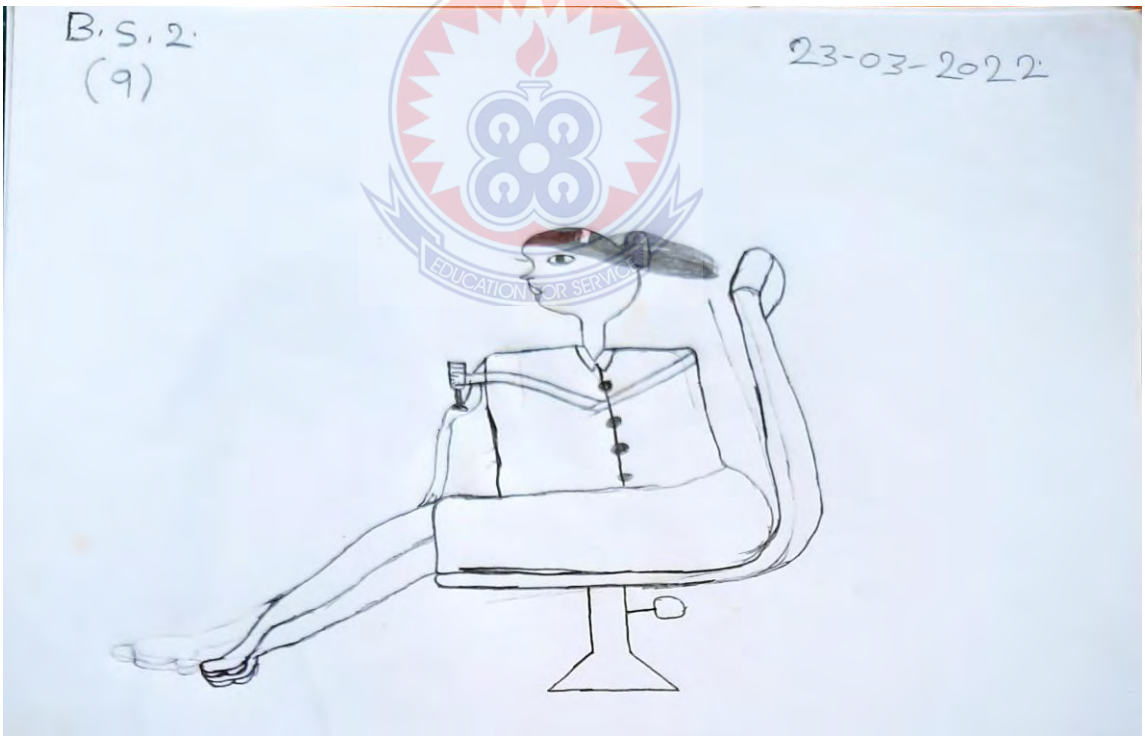

Figure 4.3: Drawing of a Basic School 2 pupil at Lamplighter Community Academy
Source: Field work (2022)

Figure 4.4: Drawing of a Basic School 2 pupil at Asem primary
Source: Field work (2022)

Evidence of projected/anticipated reality influence on the children drawing outcome was also evident from the spontaneous drawings that the children made. Clearly many of the children identified themselves with many things they could be such common superheroes such as spiderman, superman, batman among others. Quite interestingly, some of the projected/anticipated images presented by the children drawing include being policeman, ambulance driver, pilot of fighter jet among others. This observation also demonstrate that the children drawing was influenced by their projected/anticipated

reality of the social environment and not the immediate physical environment or common reality they experienced. Usually, representation of projected/anticipated reality often falls under the fictions classes of drawings according to the Duncum's (1992) classifications. The difficulty in examining such drawings is that they are difficult to understand without the involvement of the children.

Very little to no evidence of normative reality dimension of the environment influence on the children's drawings was observed. Normative reality encompasses an expression of judgment of right and wrong or bad and good. The absence of evidence of normative reality dimension in the children's drawing means the children were less interested in expressing moral value-judgment. There were however subtly indications of normative realities but was generally an expressing of religious and cultural values rather than moral values. For instance, children in the Northern zone who drew women often add hijab covering their head as it is the practices of women in some part of Northern Ghana to have their hair covered at all times. This was even noted in directed drawings where the image given to the children have no hijab, but the children went ahead to add it perhaps because they expect that image of a woman should have a hijab. This observation also means that the children's environment influences the way they expect certain images to be portrayed and therefore use their drawing to demonstrate that.

The results also show the influence of prophetic reality, that is what they expect to see of themselves or the world in the future in their drawing. The drawing types that were generally produced depicting prophetic reality were fictions in nature, representing things that were not in their immediate surroundings but in the future. The evidence supporting this was also found after further interrogating with the pupil. For instance, some children

drew aeroplane and when interrogated indicated they can see themselves traveling with aeroplane in the future. Others drew bicycles and assigned their names to it as their property which is an indication of their future state or prophetic realities. The influence of prophetic reality was most of the times not immediately obvious in the drawing until further interrogation with the children. For instance, one of the children drew someone riding a bicycle which could easily be a depiction of his common reality as people were riding bicycle around his immediate environment. But when asked what that was he said it was him riding a bicycle his father promise to buy for him. This indicate the child prophetic reality rather than common reality.

Evidence from the interview confirm the importance of the various environmental realities on children's drawings. Many of the parents' belief the things their children draw were influence by what they see around their vicinity. Responses from some of the children confirm this. For instances one of the Basic 3 pupil interviewed and asked why she drew the objects we see in her spontaneous drawings, and she said "*I draw some of the things because I can see them around. Also my love for some of the things like bicycle, aeroplanes, and people makes me to draw them. I love bicycle a lot and I want my dad to buy one for me*". The Cultural Coordinator of in one of the Districts of the Northern Zone in an interview also buttress this point with the statement below when asked about the influence of children environment on their drawing:

> Let's say for example the objects they see in the environment, community, and activities in the society (e.g., drumming and dancing, playing of football and the market). These activities influence their drawings because it reflects on their minds anytime they are asking to draw something. (*Interview with Cultural Coordinator, Tempane Municipal, February 24, 2022*).

A parent who is craftsman believe the drawing of his children were influence by his craft activities as most of what they choose to draw and draw well were ceramic works. When asked about the influence of environment on children drawing, one of the parent said:

> I think my children's drawing is influenced by what they see. I used to engage in craft activities until I travelled. During this time and until now if you ask my children and others who live near me to draw anything, they will draw clay pots and some of my crafts. I think they do so because that is something they can easily relate with or familiarise with. Since I travelled and have not been doing a lot the craft I can see their drawings are shifting to something else within the home and may be schools. (*Interview with parents at Anlo Afianyigba, March 13, 2022*).

One of the cultural coordinators indicated that creative and cultural environment were the key factors influencing children drawing. When the cultural coordinator for Keta Municipal was asked about the value of the children cultural environment on their drawings, this is what was said:

> Since culture is a way of living of the people, especially most of the types of works their parents and indigenous people engage in make them to relate themselves to it. For example this community is a fishing community so a child easily relate to the boat, nets, yes through drawing since they cannot spell it, they easily express it through drawing to express themselves. In our cultural competitions, we see children drawing boats, nets, are easily seen in their drawings than other things from outside (*Cultural Coordinator, Keta Municipal, March 15, 2022*).

4.3 How self-efficacy influences the outcome and drawing capabilities of children in Ghana

Underpinned by the Bandura's Social Cognitive Theory and Self-efficacy (Bandura, 1989) and preponderance of empirical literature, the study examined how self-efficacy of the children influence their drawing outcomes and capabilities. Operationally, self-efficacy as applied in this study was conceptualised with three measures viz past

experience of the child, facilitation and evaluative feedback from teachers and parents as well as physio-emotional states of the child. No observation was made on the physio-emotive state influence on drawing but the other components of self-efficacy were prominent. The influence of these components of self-efficacy were widely observed from the directed drawings and spontaneous drawings produced by the children, as well as responses from interview with the pupil, teachers, parents and cultural coordinators of the studied districts.

One of the most obvious ways and pathway through which self-efficacy influence the drawing outcomes and drawing capabilities of the children was through experience. The results generally reveal two forms of past experience that influence drawing abilities of the pupil which included practice experience which relates to experience of ever drawing the object at hand; and observational experience which relates to the child ever seeing or observing the object at hand personally. Both of these dimensions of past experience shown unique and important influence on the drawing outcomes and drawing abilities of the children. Analysis of the spontaneous drawing outcome of the children revealed that many of the children were good at drawing objects like flower, box, and some domestic animals which were also the objects the teachers mentioned as things they have taught the pupil how to draw. In this case, both the interest in these objects and the capability to drawn them were influence by the fact that the pupil have past practice experience in drawing them.

The above observation was also made with regards to drawings made at home as well. It was noted from the spontaneous drawings, the choice of objects and the drawing abilities were equally influence by past experience of drawings they have done either by

themselves or through the guidance of a family member at home. This was evident from the fact that many of the objects mentioned by the parents as things their children have drawn back at home before were seen in the choice of spontaneous drawings, they made and reflected in how they draw these objects. Interview with parent equally reveal that past experience of practice was important in the drawing capabilities. One of parent said concerning her child whose drawing was rated as good;

"*She started drawing at younger age and I think her past experience of learning to draw at a younger age has major influence on her when growing up. That actually made her to develop passion for drawing"*. From similar observation it was deduced from these observations that the children ability to draw these objects quite well was a result of their past experience in drawing these objects at school and/or at home.

Besides, past experience of practices at school and home, there is also experience from observation that also influence children drawing outcome and capabilities. Fox and Lee (2013) have described observational experience as the most subtly but intriguing determinants of children drawing. The outcome of the directed drawing given in this research depicted several instances of the influence of the children personal observation on their drawing outcome and capabilities. The directed drawing exercise in this study involve two objects, the sun with a human face and a family of five. It was realised during this exercise that some of the children barely looked at the objects as drawn and given to them to draw but went ahead with their own expression of the objects. That is instead of looking at the drawing of the 'Sun' for instance as presented to them to draw, some went ahead with their own version of the drawing of the sun because they know what the sun is like. As a result of this, it was realised that a good number of the children

did not accurately depict the drawing given them and most commonly did not include the human face on the sun perhaps because that is not their observational experience of how the sun look like.

Similarly, in drawing the family of five given to the children it was realised that majority of the children deviated from the specific drawings given to them. For instance some of the children drew a family of three, some four and others six or more even though in the drawing given to them the number is five. It was also observed that many of the children added details that were not in the picture given to them, such as adding handbag to the "mother" in the family, putting hut (taqiyah) on the "father" and "males" and many other detail on their dressing and accessories. This observation is explained by the fact that these other different drawings represent their observational experience of what a family look like or in some cases the family of the children. This is buttress by the fact that one of the child actually gave names to the family members which presupposed it is either their own family or a known family to them. An example of situation where a child added names to the family members and deviated from the family of five is presented in Figure 4.4

Figure 4.4: Drawing of BS2 pupil
Source: Field work (2022)

The above observation was also supported by response given by the Cultural Coordinator of the Keta Municipal who said:

> *"Sometimes children draw objects slightly different from what is presented to them because they rather try to depict what they know especially if the object is something they see often or have seen before. So, for instance in our area as fishing community if you draw a fishing boat for children to copy it is likely that instead of following your drawings, they will try to recollect their own experience with of what a fishing boat look like and draw which may not accurately reflect the drawing given to them. This is the way they draw to represent their natural expression of their observational experience".*

Another factor of self-efficacy that influence drawing outcome and drawing capabilities was the facilitation and evaluative feedback**.** A number of the children indicated that they like to draw more when they receive feedback from their teachers at school or parents at home. The observation from their response was that the children feel happy to have the attention of their teachers or parents on them and what they do. To maximise this experience, the children draw often in order to continually hold the attention and interest of their teachers or parents on them. One of the responses of a child interviewed at Afiadenyigba in the Keta Municipal that support this observation is as follows:

> *My teacher always guides me to draw in class. She supervises my drawings to make sure I am on the right track. At home, my mother helps me too. In the house, my mother shows me some of the objects in her phone and would ask me to draw them. My mother always encourages me to draw and praises me every time I draw something. When they talk about my drawing I feel happy and I like to draw things so I can show to them again. (Interview with primary 3 pupil, 4th February 2022 at Afiadenyigba, Volta Region*)

One of the children whose drawing was rated highly when asked what influence their drawing capabilities simply said, "*My teacher guides me to draw by watching me and also directs me to do it this way or that way*". This statement also demonstrates how self-efficacy achieved through facilitation and evaluative feedback influence drawing abilities of children. One of the teachers corroborate this account and stated that "*My facilitation or evaluative feedback helps in bringing the children's mind on what they draw, and it enables them to better their drawing skills".* This observation is also consistent with that noted by the parents. Some parents noted that their participation in guiding and facilitation their children helped elevate the interest and capability of their

children in drawing. From the parents' perspective, facilitation and evaluative feedback also encourage to bring out their creative talent. One parent succinctly noted this by saying; "*By educating the children to know that drawing is not only about special objects but also includes invents, activities or occasions. It helps in developing their drawing skills and bring out their creative talents*".

4.4 Role educators can play to providing the needed environment and self-efficacy for Children's drawing

The study also sought to find out the role that educators (teachers), parent, etc can play to create the needed environment and build self-efficacy of children to improve children drawings. The analysis of the responses obtained reveal patterns and themes on the roles that educators need to play to enhance children's drawing outcomes and capabilities. The major roles identified including providing facilitation and guidance; portraying and promoting the positive value of art and culture; creating an environment rich of our culture; motivation and provision of needed tools and materials for drawing. Brief description of the evidence supporting each roles are as follows;

4.4.1 *Facilitation and Provision of Guidance*

The most commonly indicated role that the respondents indicated for educators to play to enhance children drawing outcomes and capabilities within their environmental and cultural context was facilitation and guidance. Facilitation and guidance involve the art of decision support, direction and corrections done in a way that empower people to become the best version of themselves in what they do (Stacey et al., 2013). Many of the respondents believe that children drawing capability development deserved dedicated and deliberate facilitation and guidance. This was though necessary because children often

lack focus, ignore details which influence the quality of their drawings. Through facilitation and guidance, it is believe by many of the study participants that the children's drawing outcome and capabilities will improve. It was noted from the responses and supported by the drawings that the children often lack direction and deliberateness in their drawing which influence their ability to accurately portray the image they have with their drawings.

One of the educators (teacher) interview underscore not only the importance of facilitation and guidance but also the timeliness of facilitation and guidance as underpinned by their development stages. When asked about the role educator can play, he said:

> I think facilitation is one of the most important role educators can play to enhance children drawing. Facilitation children at early stages of their drawings will imbibe passion and love for the art. Educators should monitor and evaluate children drawing and give feedback that goes a long way to encourage children to enhance their capabilities. It is important that the facilitation and guidance reflect the development stage of the children to enable them effectively receive and utilise them. (Interview with Teacher at Bia West District, February 21, 2022).

The Cultural Coordinator of the Keta Municipal also supported the idea of facilitation and enable children to have experience of their culture in promoting their creativity, drawing outcome and capabilities. His response suggests that proper facilitation and guidance at home makes facilitation and teaching at school easier and therefore both (teachers and parents) should see themselves working synergistically in the facilitation and guiding of children in art, culture and drawing. Specifically, below is what he had to say when asked about the role educators should play in children drawing capabilities enhancement.

> …. by facilitation, since these children are taken to fishing at early age, let us take it from the parents first before we go to the school. Those who cannot go to fishing help their parents when they return from fishing by picking the fishes, so by that they are already tuned with that kind of life and being in tuned with that kind of life makes the work of the teacher easier. So, when the teacher makes mention of it he says oh, how many of you know about boat they immediately raise their hands. How many of you see this fish before and how many of you know this, so it makes the work of the teacher easier from the training they have had from their parents. In terms of drawing, the teacher draws on the board and asks them to draw and since they have been associated with the real thing before and not now that they are going to imagining it, it is very easy for them to pick up. (Key Informant Interview, Cultural Coordinator of Keta Municipal, February 21, 2022).

Many of the respondents believe that effective facilitation and guidance should address socioemotional needs and motivate children not only to be improve their drawing capabilities but also arose their interest in drawing. Some of the respondents indicated that praising the drawing of children motivates them to draw a lot. Educators' roles should therefore including deliberate efforts to applaud and motivate children as forms of facilitation and guidance. It is also important to give feedback to children and encourage them to make correction and improve in areas of drawing they are weak at.

4.4.2 *Portraying and Promoting the positive value of art and culture*

The results also reveal that the teachers should portray positive image of culture, art and drawing to enable children develop interest and build their skills in drawing. It was widely acknowledge and hammered by the respondents that the way that teachers view art, culture and drawing influence children interest and capabilities in drawing. Children take clues from their teachers and other educators as well. This means that once the educator portray art, culture and drawing as positive, the pupil will show interest and build their capacity to draw and the vice versa is also true to. This means the teachers (educator) value of culture and drawing and how well he/she inculcate in the children

determines their success in drawing. Displaying work of art in classroom and other areas children visits subconsciously arouse the child's curiosity, intrigue and interest in culture and drawing. Thus, central among the roles educators need to play is to be the lens through which children see art and culture as valuable.

A number of points made by the study participants buttress the point above. During an interview with the cultural coordinator of one of the districts in the middle zone, it was realised that the teacher and parents (educator) is the major source through which children build interest and capabilities in drawing. Supporting this claim below is what one of the district cultural coordinator said:

> I will relate [children drawing capabilities and culture] to how the class teacher sees the cultural activities within the environment, how the teacher values it, and how the teacher treat it in general will have impart on the child. When the teacher thinks that these are outmoded issues, the teacher might not have interest or when the teacher thinks that these are things the child needs to know, these are issues that remain the real part of the child and tries to model the child out of it, the child develop interest out of it. Until the teacher places value or put a place value on what the child is drawing, it makes the child to develop interest in whatever he/she does. At times the culture the child finds himself also helps the child to develop interest. If the environment has negative effects on the culture, if the culture activities are being despised by elderly people, "tin gods" as outmoded like artifacts, they do not value it again. So when the child finds those artifacts it turns to have negative effects on the child. It is not only teacher who have much contact with the child. The parents have more influence on the child too. When the child gets home the child does drawings and it is not only in the school that the child does drawing. So I see he teacher as the first coach and the parents as the second coach and the environment as the third coach. In drawing, the teacher guides and leads the child by giving him/her object in the first place or giving a scenario for the child to draw. (*Key informants' interview, Cultural Coordinator of Kumasi Metropolis, April 13, 2022*)

Portraying and placing valued legacy on the artifacts. Some of the respondents noted that in Ghana most artifacts we see as worshiped by our forefathers. And because of this, these artifact are associated with idol worship which then lead them being seen as

taboo in the belief and ideologies of Christians and Muslim who are the majority in Ghana. The effect of this circumstance is that in the typical Muslim or Christian home, cultural artifacts are not displayed and therefore obliterate their influence on the children view of their environment, culture and drawings. To promote and enhance the role of environment and self-efficacy on children drawing therefore require educators including parents to promote the positive value of their culture, artifacts and craft to children.

4.4.3 *Create an environment of our culture*

One of the points that represent roles for educators in enhancing the influence of environment and self-efficacy on children drawing outcome and capabilities involve creating an environment of the culture of the children. Children by nature are attracted towards what is within their environment and therefore the environment become the starting point of their creativity, innovation and reality about life. Children needs to be expose to an environment of the cultural activities and elements of society in order to appreciate them. One the teachers' interview acknowledges this and therefore pointed out that:

> Children are attracted to what they see in their communities and surroundings (environment) and therefore the environment become starting point for developing in drawing abilities and interest. Let's say for example the objects they see in the environment, community, and activities in the society (e.g., drumming and dancing, playing of football and the market). These activities influence their drawings because it reflects on their minds anytime they are asking to draw something. [*Key Informant Interview, Basic School teacher at Kumasi Metropolis, April 15, 2022*].

This means that to build on the environment and self-efficacy as factors for improving children drawing, creating the environment that reflects their experience is an important role for educators. There are many suggested ways to achieving this. Common among the response include taking the children out to visit places of cultural importance.

This is believed to have the potential of enable the children create memory of them and bring back to the classroom. These kinds of visits also enhance the children experience of their culture and art to build interest, intrigue and self-efficacy for drawing. As a parent interview said:

> When they visit these places they register these things they see there and when they come back to the home/classroom it will be easy for them to bring it out. So the things they see are captured on their minds and when they come to the classroom and ask them to express it they easily give it out because the eyes have seen it and recognized it" And since the eyes see it the memory captures it. So they easily represent it when you ask them to bring it out. So visitation to places should be a thing of interest in the schools, which something that we are now having problem with. If you want to take the children out now, you will have to write letter from headmaster to the board, from the board to the directorate. How can the teacher be encouraged to take the child out for these children to see? Students should be allowed to visit places, so that it does not limit the learning to only the classroom. [*Key informants interview, Parent, Kumasi Metropolis, April15, 2022*].

4.4.4 *Provides the needed policies, tools and materials for drawing*

The other role that has been identify role that educators (teachers), parent, etc can play to create the needed environment and build self-efficacy of children to improve children drawings is to provide the policies, tools and materials necessary to children's artist development. Like all other skills, drawing skills are developed through practices and for practice to take place the needs tools and materials needs to be available and accessible. Thus, educators need to play key roles in ensuring tools and materials for drawing including the objects are made available and accessible to children at their convenience. Analysis of the responses obtained from this study support this assertion. Many of the respondents indicated that better policies that motivate/encourage diverse cultural activities in schools and home such traditional festivals and artifacts is a starting point to enhancing drawing capabilities of children.

Besides policies, schools need to be equipped with drawing materials (colours, drawing sheets etc.) and age-appropriate creative art books that depict the people living in the geographical area of the people are needed to ensure development of drawing skills within the unique cultural experience and self-efficacy of the children. The educators have an important roles to play in all these. Even more important is the role of parents as educators supplementing the availability of tools and materials for drawing. One parent acknowledges the importance of this role of parents in children drawing capability with observation that the availability of drawing boards at home that encourage his children to engage in drawing after school.

CHAPTER FIVE

DISCUSSIONS

5.0 Overview

This chapter present discussions of the results obtained from analysis of the data collected for this study. The discussions involve situating the findings within the underpinning theories, the state-of-the-art and the existing literature. The chapter is organised under four sub-themes that reflect the specific objectives of the study. The sub-themes include drawing abilities of children, influence of environment on children's drawing outcome and capabilities, the influence of self-efficacy on children drawing outcomes and the role of educators in developing children's drawing capabilities through their environment and self-efficacy.

5.1 Drawing capabilities of children in lower primary in selected districts in Ghana

The earliest expression of children's creativity and their level of mental development are manifested in the kind of drawings they are able to create and the pictures they paint (Farokhi & Hashemi, 2011). Drawing is one of the first skills that children learn, and it has implication for the development of other intellectual skills, innovation and creativity (Gu et al., 2019). For this reason, analysing the drawing outcomes and capabilities of children is an important first step for enhancing their learning and development. Analysing children's abilities to draw must consolidated to assist learners and educators to understand how their capability to draw affects other areas of their studies (Ozsoy & Ahi, 2014). Analysing children's drawing capabilities must be comprehensive enough to

cover all the domains that relate to what children draw and how they draw it. Analysis of the drawing capabilities of children was underpinned by the competence/effectance theory (White, 1959). This theory holds that individuals are attracted to participate in activities at which they feel competent or capable of doing. Informed by this theory it was assumed that the items children draw on their own are the very objects they believe they have the capacity to draw. In this case, the children drawings from different parts and culture of the country draw and draw it well were analysed to determine their capabilities in creating certain drawings.

In this study the children drawing outcome were examine based on their rating of their directed drawing capabilities using the Chevallier et al. (2012) 7-point drawing capability rating and then assessment of the outcome of their spontaneous drawing outcome and classification. The results show that there are differences among the children in terms of their drawing capabilities but the overall scores were generally from average (Fairly good) to very good. This observation corroborate with Hosny et al. (2020) account that children's drawing capabilities in Ghana are not that great but most of them do not do bad either. There are theoretical and empirical literature basis and support for the drawing capabilities observed in the study.

According to Martikainen and Hakokõngäs (2022) drawing capabilities assessment often look at the drawer's ability to effectively use drawings tools and materials, extent to which they pay attention to details and the proximity of the object drawn compared to what was intended. The rating developed by Chevallier et al. (2012) and used in this study is also influence by the above dimension of drawing capabilities. The difficulty however is that children at lower basic schools often careless about details

and being accurate enough but rather focus on the self-expression potential in drawing. For this reason many children drawing assessment score are often lower than expected. A study by Acquah (2018) in Kumasi - Ghana on children drawing capabilities found that collectively the drawings of children are usually much more expression of their feelings, mood, behaviour and personality traits rather than accurate depicting of any object given to them.

The results also noted that there are differences in the score of the children on objects they were directed to draw with some objects such as the "Sun" appearing much easier to draw than the family of five by many of the respondents. Not only in the directed drawings but also in the spontaneous drawings similar observation were made. These observations are also indication of the fact that children drawings ability vary from objects to objects with some objects appearing easy to draw than others. Children are often to draw close to perfection objects in the environment they are commonly exposed to. According to Yu and Nagai (2020) familiarity with objects is an important determinants of children capability in drawing it. Thus, the different capabilities scores demonstrate the importance of past experience and environment dictates children drawing capabilities.

The choice of objects spontaneously drawn also gives an indication of not only what they can draw but also interest and creative ability of the pupil. The spontaneous drawing also allows children to use their own perceptions in developing and demonstrating their imagination and drawing skills (Longobardi et al., 2015). The results of this study reveal that there are common objects all the children drew in the spontaneous drawings which were basically household items and objects within their

immediate background. Unique items in the environment of the children were also feature in their spontaneous drawing also indicating that children choice of drawing may represent the environment they found themselves. According to Stolley (2012), children's spontaneous drawings are the most credible measure of their interest in drawing and their own creative abilities.

These observations also indicate that children develop and demonstrate their drawing abilities through drawing of objects within their own surrounding. The observation above confirms Okada and Ishibashi (2017) and Rose (2014) claims that both directed drawings and spontaneous drawings are needed to understand children drawing outcome/interest and their drawing capabilities**.** Overall the directed drawings outcome effective establish the children's ability to understand concepts, follow instructions, and pay attention to details. This according to Rudd et al. (2020) such drawings help in the coordination of skills acquisition and planning of learning to enable progressive development in various elements creative and intellectual skills. Spontaneous drawing on the hand offers an opportunity for the children to recall objects in their memory, experience, and interest, reveal their innate feelings and expression of their observation and passion (Longobardi et al., 2015). An assessment of the drawing capabilities reveals the major deficiency in the children's drawings to be some inability to accurately represent the details of the drawings given to them, addition of extra features not in the drawing and omitting some specific aspect of the drawings. This observation are in tandem with that made by Amos and Abigail (2019) concerning the drawing of basic school pupil in Ghana. Since drawing capabilities are learnable skills, the deficiency in

drawings are indication of inadequate or ineffective teaching of drawings within the country.

5.2 Influence of children's environment on their drawing outcomes and capabilities

The environment that a child grows have various physiological and psychosocial implication for the child (Grazuleviciene et al., 2017). Not only does the child's environment influence their perspective of society and life in general but it also influences their creative ability and drawing skills. Unlike adults, children's activities and overall development is determined by their sensory experience and observation of their environment. Broadly the physical environment and psychosocial environment (social and cultural environment) of the children are the fundamental lens through which they view and represent the world around them (Schmeer and Yoon, 2016). For this reason, various studies have examine the influence of children environment on their drawing outcome and drawing abilities. Various theories have also been propounded to deduce meaning into how the environment is factor in the drawing of children. Among these theories, this study was underpin by the theory of realities proposed by Wilson and Wilson (1982) that indicates that children's drawings are influenced by their common, projected/anticipated, normative, and prophetic realities.

The findings from this research reveal how the children's physical environment, social and cultural environment were at the centre of their drawing capabilities and outcome. Observation of the children directed drawing indicated a pattern that show the children drew the objects given based on how it appears to them in their environment.

This is to say that the first point of influence for children drawing is the appearance of the object in the environment they find themselves before paying attention to the details of the object as presented to them. An analysis of the spontaneous drawings demonstrated much more clearly the influence of the children environment on their drawing as only what is conceived from their environment were drawn by them. This supports Hsu (2014) claim that spontaneous drawings made by children reveals their appreciation of their environment and their skills in drawing and art in general.

The environment of a child according to the Wilson and Wilson (1982) theory of reality is not only the immediate physical environment refer to as common reality but also include their projected/anticipated reality (imaginative creations), normative reality (judgment) and prophetic reality (prediction of their future or the world). Most analysis of children environment focus on only the physical environment or common reality of the child's environment. This perhaps is because adult often presume children's environment is all about the immediate tangible objects they see (Tyler, 2020).). Unlike adults, children are often unable to effectively filter their sensory memory to eliminate things that are not apparently reality (Stein et al., 2014). This was everything conceived in their memory from real observation to imaginary observation stay with them. Studies by Lane et al. (2016) have shown that to children, their imagination appear to them as real as the physical environment and therefore exert influence on their life.

The above observation means it is not only the skills and talent of the child nor the physical environmental features that influence their drawings but their imaginations, which create projected/anticipated reality, normative reality and prophetic reality as well. Underpin by this assumption, children's drawing are perceived to be influence by what

they feel and what they want to say to others about their environment, their personal life and style, their worldview and representation of the future. This also means that every child level of consciousness of all the different dimension of their environmental realities, the breadth of their vision of the world influence the content of their drawing (Agarwal et al., 2021). The results support this claim as major difference were witness among the children in one zone and across zone on their spontaneous drawings. These differences reflect each child vision of their environment from either common, projected/anticipanted reality, normative reality and prophetic reality perspective.

The results generally shown patterns that relate to the common reality (tangible environment), projected/anticipated reality, normative reality, or prophetic realities of the children. Children in the Southern Zone (Coastal areas) drew sea objects such as cowries among other things within their unique common reality dimension of their environment not found in the drawings of the children from other zones. Likewise, baobab fruits common only in Northern Ghana was found only in the drawing of children in the Northern Zone. This means that the unique drawing from the different zones were informed by the unique common reality of the environment they are exposed to. Generally the common reality (physical environment) was the common aspect of the environment that influence the drawings of the children. This observation supports Li et al. (2021) claim that children's normative reality is the most crucial in their drawing. Hall (2015) also noted that objects within the common reality have stability in the children's memory than other imaginative reality of the child. For these reasons, it is not surprising that the common reality dimension of the children environment influence their drawing the most.

There have also been evidence of projected/anticipated reality, normative reality and prophetic reality influence on the children drawing outcome. This included identification, imagining and depicting themselves as superheroes such as spiderman, Jack, among others. Normative reality subtly witnesses in terms of their expression of religious and cultural values rather than moral values while the prophetic reality were witness in terms of what the children drew as things they already see themselves having in the future such as bicycle, car etc. Representation of these kind of realities were mostly in the form of fiction during the spontaneous drawing exercise.

5.3 How self-efficacy influence the outcome and drawing capabilities of children in Ghana

Underpinned by the Bandura's Social Cognitive Theory and Self-efficacy (Bandura, 1989) and preponderance of empirical literature, the study examined the influence of self-efficacy on children drawing outcomes and capabilities. Self-efficacy according to Artino (2012) is an educational psychological concepts that represent a person belief in their capability to act in certain way or accomplish a given task. According to Bandura (1977), self-efficacy determines how active and persistent an individual can be towards an issue or subject. From the Self-efficacy theoretical framework, individual's motivation to undertake a certain task is informed by their confidence or their ability to execute the task or behaviour (Ein-Gar & Steinhart, 2017). In this study, two pathways are conceptualised for achieving self-efficacy for drawing by children viz. past experience of the child and facilitation and evaluative feedback from teachers and parents. According to Krpan et al. (2021) past experience in undertaking an activity is major determinants of their self-efficacy in undertaking the activity. Likewise, facilitation and evaluative

feedback have also been found to enhance confidence in undertaking different activities (Goe et al., 2012).

Informed by the above the theoretical foundation, the study explore how the past experience and facilitation influence their drawing outcome and capabilities. Past experience is utilised in this study from two dimension, past experience of practice and observation. The results from the study as demonstrated by the directed drawings and spontaneous drawings produced by the children, show element of the influence of past experience as well as the facilitation in developing self-efficacy for drawing. As Allen et al. (2015) have noted, children choice of what to drawn and their ability to accurately represent these objects are influence by past experience of encounter with the object either through practice or observation. It results reveal that many of the children chose to draw only things they have drawn before or seen before during the spontaneous drawing exercise. The above observation is influence by the fact that by ever drawing or observing these objects, the children build their self-efficacy in drawing them and the self-efficacy influence their choice to draw them and their capability in drawing these objects well. In some cases, the influence of self-efficacy leads to neglecting of some details by the children as they paid little attention to the drawing given to them to concentrate on what they know to be the drawing of the object in question.

Analysis of the spontaneous drawing outcome of the children revealed that many of the children were good at drawing objects like flower, box, and some domestic animals which were also the objects the teachers mentioned as things they have taught the pupil how to draw. This mean that the choice and ability to draw these objects well was because they have past experience of practice drawing them which enhance their self-

efficacy in drawing them. According to Quillin and Thomas (2015), when children practice drawing an object over time, they build their self-efficacy in drawing them which influence their interest and capacity in drawing these objects. In this case, the interest in the objects the children drew and their capabilities were influence by their self-efficacy developed through past practice.

In some cases, the past experience is not in the form of practice but through observation. According to Fox and Lee (2013) observational experience of children is an important pathway to the development of interest and self-efficacy in drawing. When children observe object of interest the develop intrigue and keep memory of them which they may express by drawing (Saunders & Wong, 2020). This analogy was confirm in this study as many of the objects the children produce were things they have observational experience of either in school, home or elsewhere. Overall the outcome of the spontaneous drawing and directed drawing given in this study depicted several instances of the influence of the children personal observation on their drawing outcome and capabilities. Interview with the children, their parents and teachers reveal that observational experience were reflected in developing the children's self-efficacy for drawing.

The other pathway of self-efficacy that influence the drawing outcome and capabilities was facilitation and evaluative feedback. It was discovered that facilitation and evaluative feedback assist children to develop their artist knowledge in terms of their drawing capabilities. According to Akkuzu (2014), when children receive facilitation and positive evaluative feedback on their drawing, they feel confident of their drawing (self-efficacy) which motivates them to draw even more and well. The observation from

responses of children that frequently receive facilitation and evaluative feedback from their teachers and parent is that such feedback makes them feel happy, motivate and so they keep on drawing to maximise this experience

5.4 Role educators play in providing the needed environment and self-efficacy for Children drawing

With the realisation of the influence of environment and self-efficacy on children drawing, opportunity has been created for educators to employ various roles to enhance children drawing. According to Rose et al. (2006) educators which include both parents and teachers play primary roles fundamental to developing the drawing skills and capabilities of children. Informed by this, the study examine the roles that educators (Parent, Teachers etc) can play to create the needed environment and build self-efficacy of children to improve children drawings. The results show four fundamental roles which include providing facilitation and guidance; portraying and promoting the positive value of art and culture; creating an environment rich of our culture; motivation and provision of needed tools and materials for drawing. These roles were recognised by many of the stakeholders as critical to the development and enhancement of children drawing abilities.

The role of facilitation and provision of guidance on improving children drawing outcome and capabilities cannot be overemphasized. According to Stacey et al. (2013) facilitation and guidance is about providing decision, support, direction and corrections in a way that empower people to become the best version of themselves in what they do. Reddan (2015), has acknowledge that facilitation and provision of guidance enhance children's self-efficacy in any activity assigned to them. Thus, by offering children with

facilitation and guidance in drawing the children are expected to develop high self-efficacy in drawing which will lead them to draw better. The role of the educator is therefore to be a constant source of facilitation and guidance for children drawing. Studies such as that of Twigg et al. (2013) and Remesh (2013), have also acknowledge facilitation and guidance as key role for educators to enhance children drawing capabilities. According to Yu and Nagai (2020) facilitation and guidance is the difference between children who develop their drawing talents and creativity as compared to those who do not.

One other role that educations are expected to play based on the findings of this study is portray positive image of culture, art and drawing to enable children to develop interest and build their skills in drawing. According to Myers (2013), the image of drawing, art and culture that educators paint to children determines their interest and self-efficacy in drawing. This claim was observed in this study as many of the participants hammered the fact that the way that educators' view art, culture and drawing influence children interest and capabilities in drawing. Generally children take clues from adults on what is good, important and should be pursued. This means that in an environment where educators treat art, culture and drawing as unimportant, children are unlikely to have interest and develop their skills in these areas. The role of the educators in this is to create an environment that portray art, culture and drawing positively to children. This according to the findings of this study can be achieved by displaying work of art in classroom and other areas children visits to subconsciously arouse the child's curiosity, intrigue and interest in culture and drawing.

The study also found that one of the points that represent roles for educators in enhancing the influence of environment and self-efficacy on children drawing outcome and capabilities involve creating an environment of the culture of the children. Children by nature are attracted towards what is within their environment and therefore the environment become the starting point of their creativity, innovation and reality about life (Ponticorvo et al., 2022). Children needs to be expose to an environment of the cultural activities (dancing, singing, festivals, etc) and other artistic elements of society in order for them to appreciate them. To build on the environment and self-efficacy as factors for improving children drawing, creating the environment that reflects their experience is an important role for educators. This can be achieved by taking the children out to visit places of cultural importance. This is believed to have the potential of enable the children create memory of them and bring back to the classroom.

One other basic role that educators are expected to play to create the needed environment and build self-efficacy of children to improve children's drawings is to provide the policies, tools and materials necessary to children's artwork. Drawing like any other skills require constant practice but constant practice is not possible if needed tools and materials are not available (Heideman et al., 2017). At both home and school, educators are expected to provide children with relevant tools that will instill interest and self-efficacy for drawing. According Frimpong (2021), one of the bottleneck that prevent children in Ghana from fully developing their drawing capabilities is the lack of basic tools and materials for children to constantly practice drawing developed through practices and for practice to take place the needs tools and materials needs to be available and accessible. Thus, educators need to play key roles in ensuring tools and materials for

drawing including the objects are made available and accessible to children at their convenience. Analysis of the responses obtained from this study support this assertion. Many of the respondents indicated that better policies that motivate/encourage diverse.

CHAPTER SIX

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.0 Overview

This chapter presents a summary of the main findings of the study, conclusions drawn and recommendations made as well as limitations and suggestions for future studies. The entire study was conducted to examine the environmental influence on drawings of children in selected districts in Ghana. The main findings thus addressed the objectives of the study which were to examine the drawing capabilities of children in lower primary in selected districts in Ghana with a focus on the influence of the children's environment on their drawing outcomes. Again, emphasis was on the role educators can play to provide a convenient environment to enhance drawing capabilities of children.

6.1 Summary of main findings

The main findings of the study under the various objectives are presented below;

6.1.1 *Drawing capabilities of children in lower primary in selected districts in Ghana*

Drawing capability of children were examined as a multidimensional concept that embody skills/knowledge, imagination, recall/memory, and their interests. Analysis of both directed drawings and spontaneous drawings of the study participants were used. The findings revealed that overall drawing capabilities of the children were rated from fairly good to very good. The major deficiency in some of the children's drawings were inability to accurately represent the details of the drawings given to them, addition of extra features not in the drawing and omitting some specific aspect of the drawings. With

the spontaneous drawings it is noted that both similarities and differences with regards to the spontaneous drawing of the children individually and from region to region. Objects draw reflect the things in the locality of the children and how the objects were drawn were influence by their familiarity with the object in real life.

6.1.2 *Influence of children's environment on their drawing outcomes*

The study examines the influence of the children's environment on what children draw and how they draw it. The findings reveal that the (tangible environment), projected/anticipated reality, normative reality or prophetic realities of the children were environment dimensions that influence the drawing outcome and capabilities of children. The analysis reveals that each of the different realities of the children's environment have some influence on their drawings with the most obvious being the common reality as the drawing of the children were mainly tangible objects in their schools, home and physical environment.

6.1.3 *How self-efficacy influence the outcome and drawing capabilities of children in Ghana*

The study also examine how self-efficacy influence the drawing outcome and drawing capabilities of children. The study conceptualised self-efficacy in terms of past experience of the child, facilitation and evaluative feedback from teachers and parents as well as physio-emotional states of the child. No observation was made on the physio-emotive state influence on drawing but the other components, that is past experience of the child, facilitation and evaluative feedback from teachers and parents' influence of drawing capabilities and drawing outcome of the children were observed. Two forms of past experience influence drawing capabilities and outcome, which include practice

experience which relates to experience of ever drawing the object at hand; and observational experience which relates to the child ever seeing or observing the object at hand personally. Facilitation and evaluative feedback influence were also through motivation, creation of interest, attention and appreciation.

6.1.4 *Role educators in providing the environment and self-efficacy for Children drawing*

The study also sought to find out the role that educators (Parent, Teachers, etc) can play to create the needed environment and build self-efficacy of children to improve children drawings. The analysis of the responses obtained reveal patterns and themes on the roles that educators need to play to enhance children's drawing outcomes and capabilities. The major roles identified including providing facilitation and guidance; portraying and promoting the positive value of art and culture; creating an environment rich of our culture; motivation and provision of needed tools and materials for drawing.

6.2 Conclusions

The importance of drawing to the development of children academic, social skills, creativity and innovation is widely recognised and supported by empirical studies and theories. There is general school of thought that the earliest expression of children's creativity and their level of mental development are manifested in the kind of drawings. This means the drawing outcomes and capabilities are essential to understanding the development of children. Even more important is the influence of children's environment on their drawing and the role that self-efficacy play in advancing the development of children drawing capabilities. There is also the need to understand what role educators'

play in enhancing drawing outcomes by creating the needed environment and building children self-efficacy for drawing.

This study established the drawing outcomes and capabilities of children from lower primary schools in the Northern, Western, Middle and Southern zones of Ghana through directed drawing and spontaneous drawing exercises. The results show that the capabilities of children drawing were largely rated from moderate (fairly good) to good with difference in competences in the different objects. The children capabilities and competence in drawing some household items were very high compare to others and this also vary across the zones and indication that children in different part of Ghana have different capabilities in what they are able to draw. This means that children location should be considered in terms of the items they are trained taught to draw. Children are able to draw items that are within their immediate environment that those distance to them. This was established further by the influence of environmental realities (common, projected/anticipated, normative, and prophetic) on their children drawing.

The above observation inures the conclusion that the difference in tangible environmental and cultural components of the children environment in Ghana, norms, knowledge, beliefs, laws, customs, and habits vary dictates their drawing outcomes and capabilities.

The study findings also lead to conclusion that self-efficacy acquired through past experience of practices or observation as well as facilitation and evaluative feedback are critical to the development of children drawing capabilities in Ghana.

There are roles found from this study for educators that can be played to realise the benefits of the influence of environment and self-efficacy on children drawing. These

roles include providing facilitation and guidance; portraying and promoting the positive value of art and culture; creating an environment rich of our culture; motivation and provision of needed tools and materials for drawing. The study thus conclude that given the important roles of children environment and self-efficacy on their drawings, educators needs policies and programmes to continually transform the environment of the children in favour of the learning of art, culture and drawing and enhancement of interest and self-efficacy on drawings.

6.3 Recommendations

6.3.1 *Recommendation for the Organisation of Refresher Course Training for Art and Culture Cordinators and Teachers teaching Art at the Basic Level*

Art is dynamic and subjects its continued development and studies are evolving. Art and Culture coordinators in charge of Creative Arts at the lower level must ensure that regular workshops are organized for teachers teaching art at the basic level to constantly update their knowledge on the subject. These will regular update their teaching pedagogy and also enhance the skills of teachers for effective teaching and learning of art subjects in school. It would also ensure that teachers are up to date with art studies and its related development.

6.3.2 *Recommendation for Policy Makers*

The influence of environment on children's drawing outcome and capabilities bring about the realisation that there is no need for all-side fit policies and curricula for improving children drawing. There is the need for flexibility and desegregation of policy action point, curricular and teaching materials to reflect the heterogeneity of children environment across the country. It is also recommended that the national cultural policy

of Ghana should aligned with the teaching of art, culture and drawing and serve as the foundation for teaching guidance and development of materials for teaching drawings in school in ways that reflect the unique environment of areas children study.

6.3.3 *Provision of TLMs/Teaching Aids*

Based on the conclusions drawn to the findings from research question three, the researcher recommends that the provision of adequate teaching and learning materials should receive much attention - more should be provided. There is the need for flexibility and desegregation of policy decisions, curricular and teaching materials to reflect the heterogeneity of children environment across the country. Heads of institutions must ensure that teaching and learning materials necessary for the teaching of drawings at the various basic schools especially, early grade to facilitate teaching activities.

6.3.4 *Recommendation for Educators (teachers and parents)*

Given that teachers and parents spend the most time with children, there is the need for conscious efforts from them to coach and guide drawings of children. It is important that educators show interest in the drawing of children by providing evaluative feedbacks which encourages and build self-efficacy of children for drawing. It is recommended that teachers of pupil should seek to understand children motivation in drawing and align this with their environment to advance their skills and capabilities in drawing. Parents as well as co-educators of pupils should augment teaching in school with supports at home and create home environment friendly of art, culture and artistic expression to encourage drawing capability development of children.

6.3.5 *Recommendation for Future Research*

There are opportunities for future research reveal by this study. One of the key area for future research opportunity is understanding of the role of drawing in revealing the emotional state of children. While the concept of emotional state is difficult to measure especially for children as it varies quite often, a pattern may be established over time. This kind of study is expected to be useful for understanding children mental health status, and determination of therapeutics intervention to enhance children concentration and interest in school. Further research should also compare the contribution of role of home and school environment as unique factors of drawing of children and their interaction effects as well. This study should demonstrate the difference in the extent and direction of influence of these separate environments on children drawings. There is the possibility of antagonism in their influence as inkling shown in this study and therefore through such studies better understanding of collaboration between home and school for children development could be achieve.

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APPENDICES

APPENDIX I

OBSERVATION GUIDE FOR CHILDREN'S DRAWING

ENVIRONMENTAL INFLUENCE ON DRAWINGS OF CHILDREN IN LOWER PRIMARY: A STUDY OF SELECTED DISTRICTS IN GHANA

INSTRUCTION:

The observation will be conducted by the researcher, the Art teacher of each class and an outsider with expertise in art/drawing;

Spontaneous Drawings

(Children are asked to draw any object of their choice for 30 to 45 minutes)

1. Name of object children draw _____
2. Reason for choice of object _____
3. How well does the drawing represent what each child intended to draw? (comment)

   _____

   _____

   _____

   _____

4. How will you describe the competent the child in the use of art tools (pencil, paper, eraser etc.)

_____

_____

_____

_____

5. What is the mood of the child throughout the drawing process? (excited, stressed, nervous, uninterested, frighten, etc.?

   _____

   _____

   _____

   _____

6. Rate drawings of each child in a scale of 1 to 6 to indicate how well the drawing is factual/fiction, Narrative/Separate Object; and borrowed or self-generated. 1 in row 1 if factual and 6 if fiction. From 2 to 5 if partly fiction depending on proportion

7.

	Type	Rating						Type
1	Factual	1	2	3	4	5	6	fiction
2	Narrative	1	2	3	4	5	6	Separate Object
3	Borrowed	1	2	3	4	5	6	Self-Generated

   other general observation

   _____

   _____

   _____

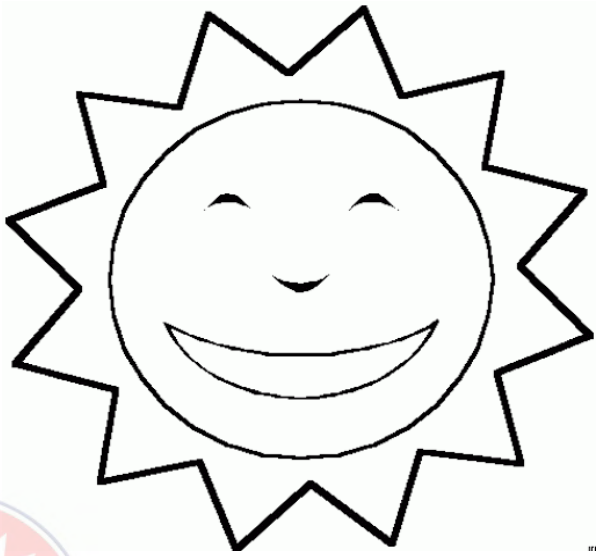
   _____

Directed drawing

(Children directed to draw object 'b' and 'c' and paint object 'a' in 30 to 45 minutes)

a. *House (for painting)*

b. *Sun*



c. *Family of Five (5)*

8. Are the children able to draw the selected objects? (yes/no)

9. How will you describe the painting of object 'a'?

_____

_____

_____

_____

10. How easy was it for each child to draw the selected objects?

11. Comment on drawing skills and capabilities based on object draw?

12. In your observation, how will you describe the children feeling towards the drawing task?

_____

_____

_____

_____

13. What is the mood of the child throughout the drawing process? (excited, stressed, nervous, uninterested, frighten, etc.?

_____

_____

_____

_____

14. Any other general observation

_____

_____

_____

_____

APPENDIX II

INTERVIEW GUIDE

ENVIRONMENTAL INFLUENCE ON DRAWINGS OF CHILDREN IN LOWER PRIMARY: A STUDY OF SELECTED DISTRICTS IN GHANA

INTERVIEW GUIDE FOR CHILDREN

1. Do you like to draw? Yes [ ] No [ ]
2. If answer is yes to question 1, what makes you like to draw?

_____

_____

_____

_____

_____

3. If answer to question 1 is no, why don't you like to draw?

_____

_____

_____

_____

_____

4. How many times do you draw in a day?

_____

_____

_____

_____

_____

5. What are some of the things you draw?

_____

_____

_____

_____

_____

6. What makes you draw some of the things you draw? (*probe for physio-emotional factors*)

_____

_____

_____

_____

_____

_____

7. What are some of the things that you often draw (e.g. cars, stool, houses, people etc.)?

_____

_____

_____

_____

_____

8. Do you think your drawings are getting better with time? Yes [ ] No [ ]
9. If yes, explain why?

_____

_____

_____

_____

_____

10. Do you seen the things you draw most often around you? Yes [ ] No [ ]
11. Are there some things that you draw that you do not see at home or school?

Yes [ ] No [ ]

12. How are you able to draw things that are not near you? (imaginations, see picture, receive facilitation etc.)

_____

_____

_____

_____

13. Do you find it easier draw things not in your surrounding as much as those in your surroundings? Yes [ ] No [ ]
14. Do you believe you are good at drawing? Yes [ ] No [ ]
15. If yes to question 13, what make you think so?

_____

_____

_____

_____

16. If no to question 13, why is it so?

_____

_____

_____

_____

_____

_____

17. Do you have someone who guides you to draw? Yes [ ] No [ ]
18. If yes to question 16, how does the person help you?

_____

_____

_____

_____

_____

APPENDIX III

INTERVIEW GUIDE

ENVIRONMENTAL INFLUENCE ON DRAWINGS OF CHILDREN IN LOWER PRIMARY: A STUDY OF SELECTED DISTRICTS IN GHANA

INTERVIEW GUIDE FOR TEACHERS

1. Are you interested in drawing?

_____

_____

_____

_____

2. How often do you observe your child drawing?

_____

_____

_____

_____

3. How will you describe the drawing capabilities of your children in lower primary?

_____

_____

_____

_____

4. In your observation, if you were to ask the children to draw anything of their choice, what are some of the things you think they will draw?

_____

_____

5. Why will they draw the items you mentioned in question 3 above?

6. Do the school, home physical or cultural environment influence the child in his/her drawing? Yes [ ] No [ ]
7. If yes to question 8, explain why?

8. How does each of the following influence the drawings of children in your opinion?

a. Past experience

b. facilitation/evaluative feedback

c. Physio-emotional status

9. What do you think educators can do to enhance drawing capabilities of children?

10. Any other relevant comments?

11. What are the benefits of drawing?

APPENDIX IV

INTERVIEW GUIDE

ENVIRONMENTAL INFLUENCE ON DRAWINGS OF CHILDREN IN LOWER PRIMARY: A STUDY OF SELECTED DISTRICTS IN GHANA

INTERVIEW GUIDE FOR PARENTS

1. Are you interested in drawing?

_____

_____

_____

_____

2. Do you draw at home?

_____

_____

_____

_____

3. How often do you observe your child drawing?

_____

_____

_____

_____

4. Are you involved in any visual art activity?

_____

_____

_____

_____

5. How will you describe the drawing capabilities of your children in lower primary?

_____

_____

_____

_____

6. In your observation, if you were to ask the children to draw anything of their choice, what are some of the things you think they will draw?

_____

_____

_____

7. Why will they draw the items you mentioned in question 3 above?

_____

_____

_____

_____

8. Do the school, home physical or cultural environment influence the child in his/her drawing? Yes [ ] No [ ]
9. If yes to question 8, explain why?

_____

_____

_____

_____

_____

10. How does each of the following influence the drawings of children in your opinion?

a. Past experience

b. facilitation/evaluative feedback

c. Physio-emotional status

11. What do you think educators can do to provide the environment and needed self-efficacy to enhance drawing capabilities of children?

12. Any other relevant comments?

_____

_____

_____

_____

_____

_____

13. What are the benefits of drawing?

_____

_____

_____

_____

_____

_____

APPENDIX V

INTERVIEW GUIDE

ENVIRONMENTAL INFLUENCE ON DRAWINGS OF CHILDREN IN LOWER PRIMARY: A STUDY OF SELECTED DISTRICTS IN GHANA

INTERVIEW GUIDE FOR CULTURE COORDINATOR

1. What is your general observation regarding the drawing capabilities of lower primary school children in your district?

   _____

   _____

   _____

   _____

2. What do you think are some of the factors influencing the drawing capabilities of children lower primary school children in your district?

   _____

   _____

   _____

   _____

3. How does culture influence what children draw and how they draw them?

   _____

   _____

   _____

   _____

4. How does each of the following influence the drawings of children lower primary school children in your district?
   b. Past experience

   _____

   _____

   _____

   _____

   b. facilitation/evaluative feedback

   _____

_____

_____

_____

c. Physio-emotional status

_____

_____

_____

_____

5. What cultural element do you think educators can utilized to provide the environment and needed self-efficacy to enhance drawing capabilities of children?

_____

_____

_____

_____

6. What are the benefits of drawings?

_____

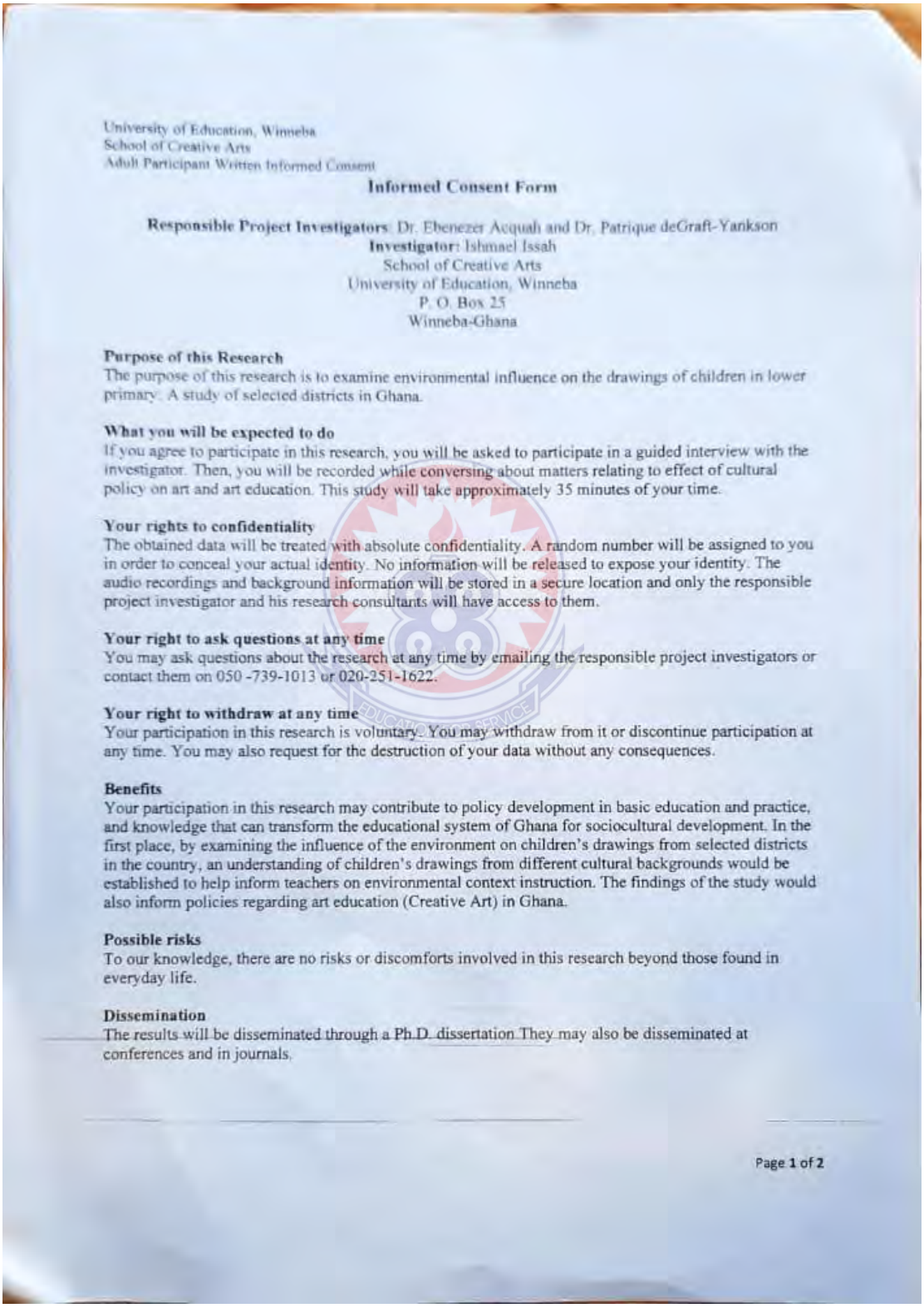
_____

_____

_____

APPENDIX VI

INFORMEM CONSENT FORM



University of Education, Winneba
School of Creative Arts
Adult Participant Written Informed Consent

Informed Consent Form

Responsible Project Investigators: Dr. Ebenezer Acquah and Dr. Patrique deGraft-Yankson
Investigator: Ishmael Issah
School of Creative Arts
University of Education, Winneba
P. O. Box 25
Winneba-Ghana

Purpose of this Research
The purpose of this research is to examine environmental influence on the drawings of children in lower primary: A study of selected districts in Ghana.

What you will be expected to do
If you agree to participate in this research, you will be asked to participate in a guided interview with the investigator. Then, you will be recorded while conversing about matters relating to effect of cultural policy on art and art education. This study will take approximately 35 minutes of your time.

Your rights to confidentiality
The obtained data will be treated with absolute confidentiality. A random number will be assigned to you in order to conceal your actual identity. No information will be released to expose your identity. The audio recordings and background information will be stored in a secure location and only the responsible project investigator and his research consultants will have access to them.

Your right to ask questions at any time
You may ask questions about the research at any time by emailing the responsible project investigators or contact them on 050 -739-1013 or 020-251-1622.

Your right to withdraw at any time
Your participation in this research is voluntary. You may withdraw from it or discontinue participation at any time. You may also request for the destruction of your data without any consequences.

Benefits
Your participation in this research may contribute to policy development in basic education and practice, and knowledge that can transform the educational system of Ghana for sociocultural development. In the first place, by examining the influence of the environment on children's drawings from selected districts in the country, an understanding of children's drawings from different cultural backgrounds would be established to help inform teachers on environmental context instruction. The findings of the study would also inform policies regarding art education (Creative Art) in Ghana.

Possible risks
To our knowledge, there are no risks or discomforts involved in this research beyond those found in everyday life.

Dissemination
The results will be disseminated through a Ph.D. dissertation. They may also be disseminated at conferences and in journals.

Page 1 of 2

University of Education, Winneba
School of Creative Arts
Adult Participant Written Informed Consent

Giving consent to participate
By signing the consent form:

- You certify that you are 18 years of age or older, that you have read, and understand the above, that you have been given satisfactory answers to questions concerning the research, that you are aware that you are free to withdraw your consent and to discontinue participation in the research any time, without any prejudice.
- In case of persons below 18 years, the headteacher/class teacher can consent to the child's participation in the drawing exercise, acting *in loco parentis* (in the place of a parent).
- If you cannot obtain satisfactory answers to your questions, or have comments or complaints about your participation in this research, you may contact: Dr. Ebenezer Acquah on 0507391013 or Email: ekacquah@uew.edu.gh or dr. Patrique deGraft-Yankson on 020-251-1622 or Email: p.degraftyankson@gmail.com

Participant: I have read and understand the above information and voluntarily agree to participate in this research.

Moses Mills Toppah
Name

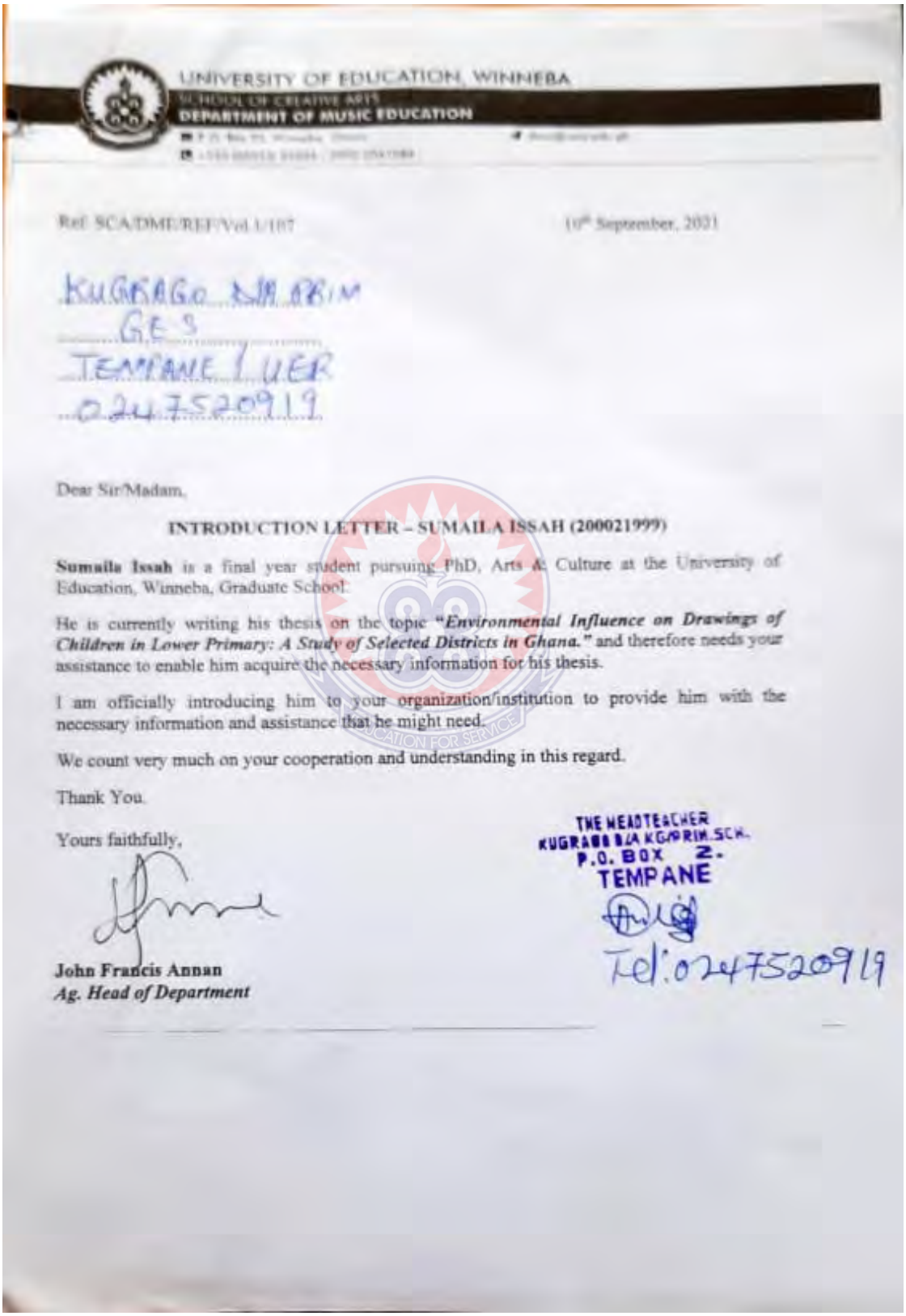
Signature Date 04/04/2022

Please keep a copy of this consent form for your records.

HEADMASTER
R·C·BASIC SCHOOLS
ANLO-AFIADENYIGBA-V/R
0243364089

APPENDIX VII

INTRODUCTION LETTER



UNIVERSITY OF EDUCATION, WINNEBA
SCHOOL OF CREATIVE ARTS
DEPARTMENT OF MUSIC EDUCATION

Ref: SCA/DME/REF/Vol.1/187 10th September, 2021

KUGRAGO SDA BASIC
GES
TEMPANE / UER
0247520919

Dear Sir/Madam,

INTRODUCTION LETTER – SUMAILA ISSAH (200021999)

Sumaila Issah is a final year student pursuing PhD, Arts & Culture at the University of Education, Winneba, Graduate School.

He is currently writing his thesis on the topic ***"Environmental Influence on Drawings of Children in Lower Primary: A Study of Selected Districts in Ghana."*** and therefore needs your assistance to enable him acquire the necessary information for his thesis.

I am officially introducing him to your organization/institution to provide him with the necessary information and assistance that he might need.

We count very much on your cooperation and understanding in this regard.

Thank You.

Yours faithfully,

John Francis Annan
Ag. Head of Department

THE HEADTEACHER
KUGRAGO D/A KG/PRIM.SCH.
P.O. BOX 2.
TEMPANE
Tel: 0247520919

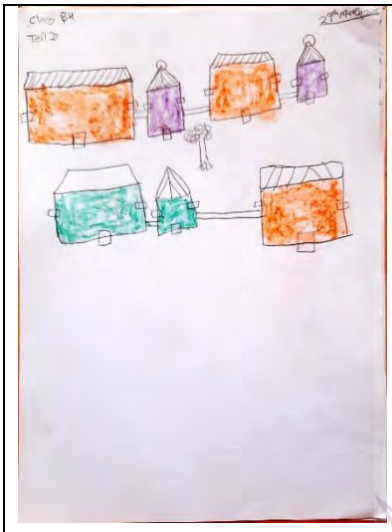
APPENDIX VIII

DRAWINGS BY THE PUPIL FROM ZONES
DRAWINGS ARRANGEMENTS ARE MADE IN ACCORDANCE WITH ENVIRONMENTAL REALITIES AND DRAWING OUTCOMES.

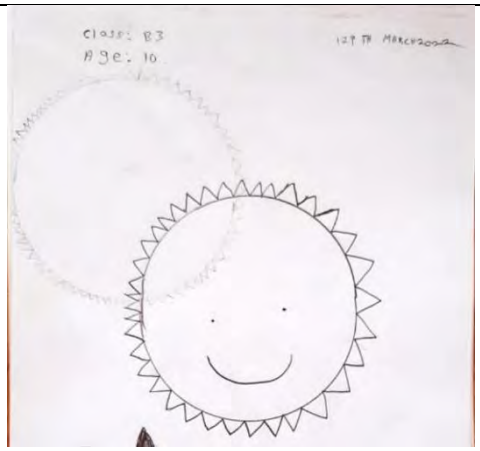
NORTHER ZONE

1. DIRECT DRAWINGS

a. House

		
Common reality - factual/narrative - Painted house with Baobab tree	Common reality - factual - Painted house with fence	Common reality - factual/narrative - A house with Baobab tree

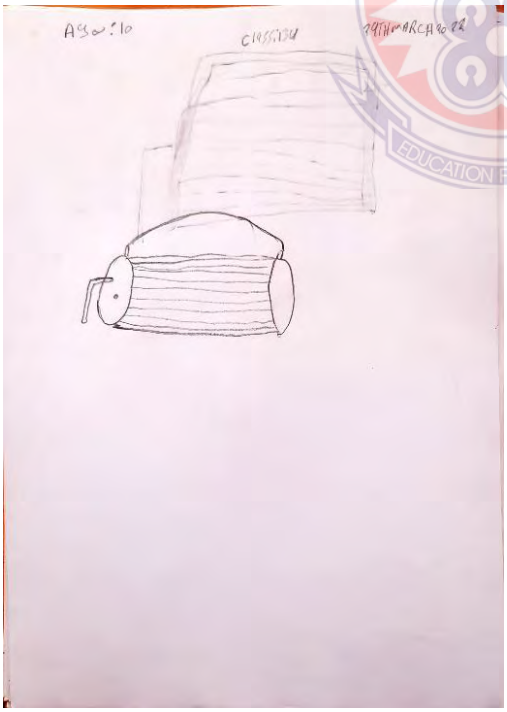
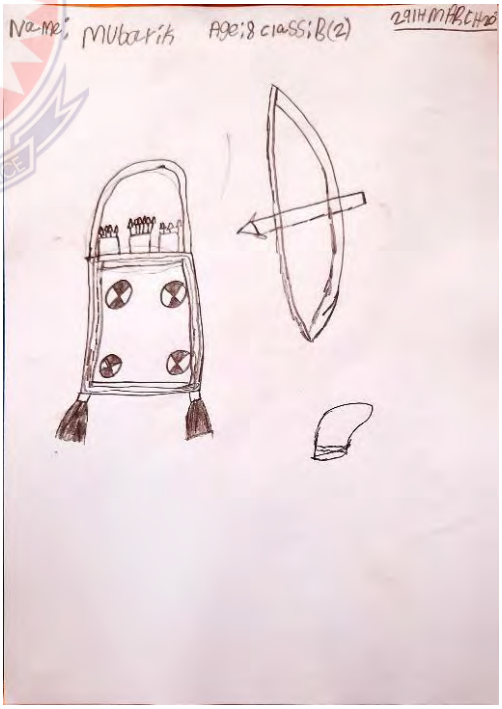
b. Sun

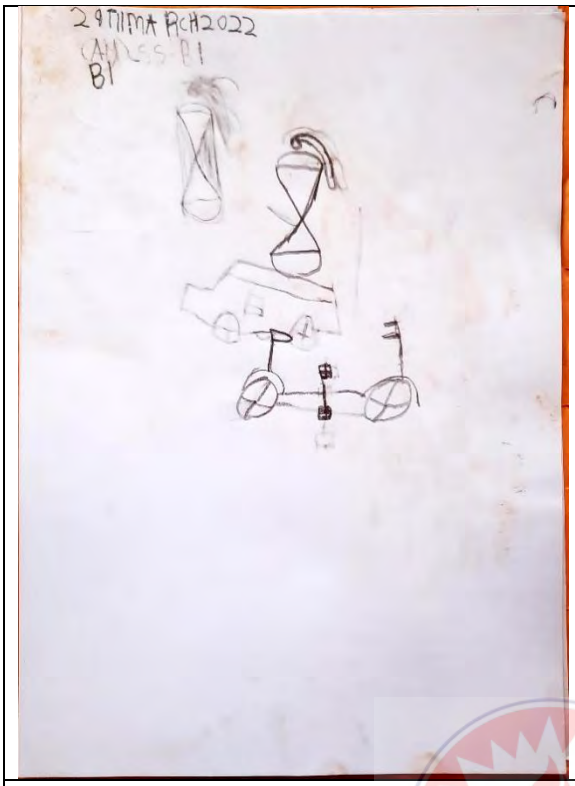
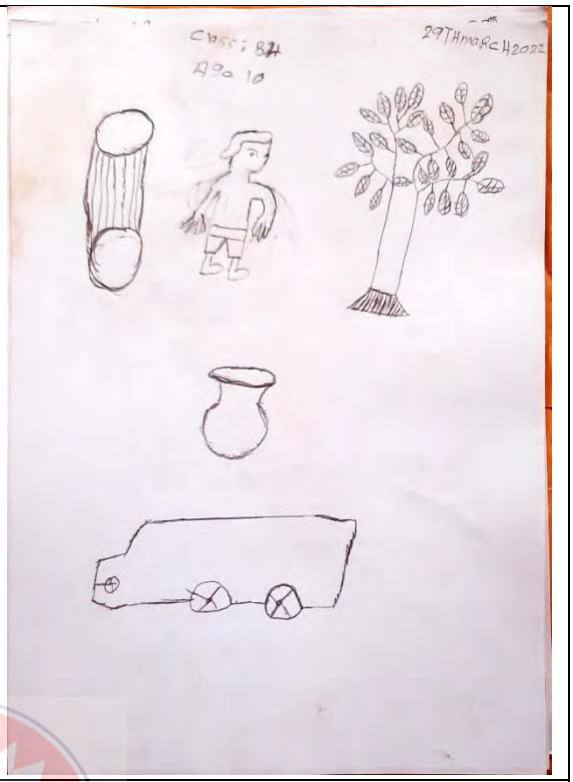
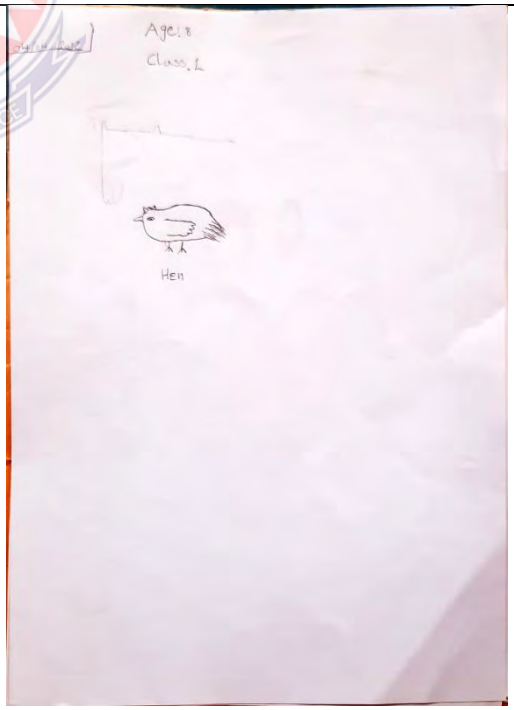
	
Common reality - factual - Sun with serrated edge with face	Common reality - factual - Sun with serrated edge with face

c. Family of five

		
Common/normative reality - narrated outcomes (family of four with hijab and taqiyah)	Common/normative reality - narrated outcomes (family of four with hijab and taqiyah)	Common reality - narrated outcomes (family of three)

2. **SPONTANEOUS DRAWINGS**

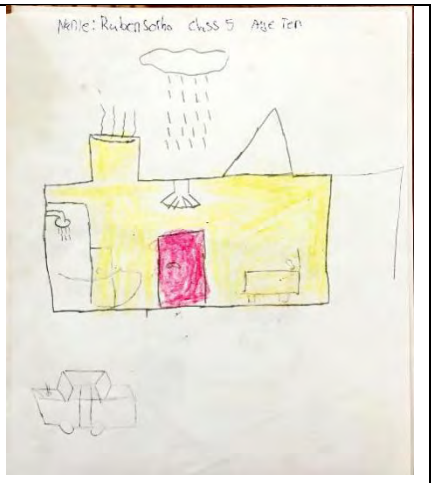
	
Common reality - factual - physical environment (Gourd drums and stake)	Common reality - factual - physical environment (Bow, arrow and arrow bag)

	
Prophetic reality - fiction - Envisaged bicycle	Common reality - factual - Physical environment
	
Common reality - factual/narrative - social environment	Common reality - factual/narrative - social environment

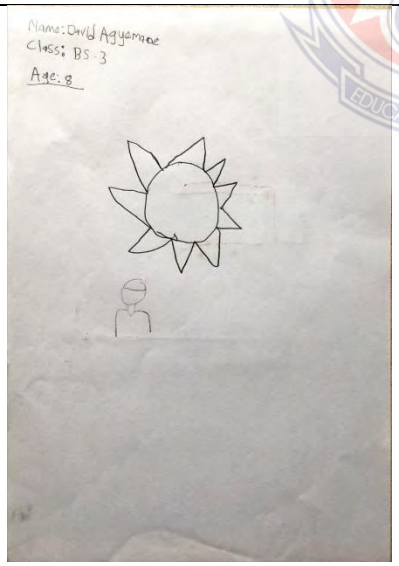
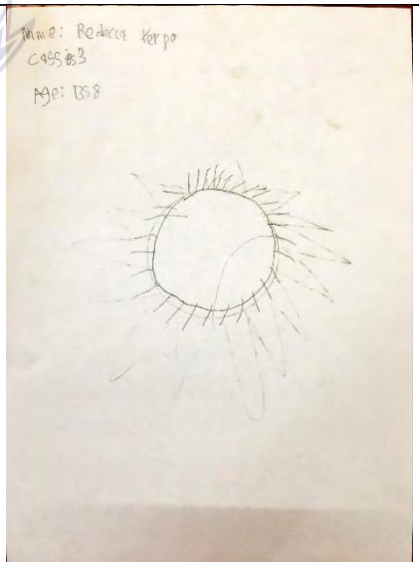
MIDDLE ZONE

1. DIRECT DRAWINGS

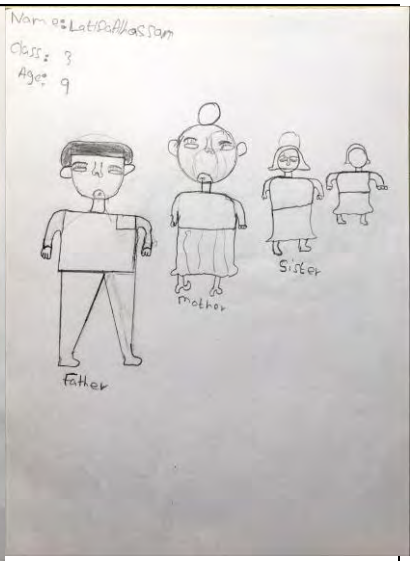
a. House

		
Common reality - factual - home environment	Common reality - factual - home environment	Prophetic reality - fiction - home environment

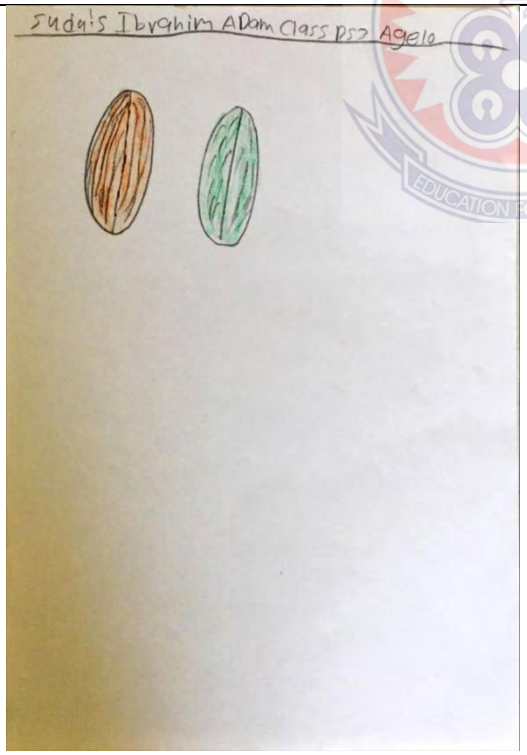
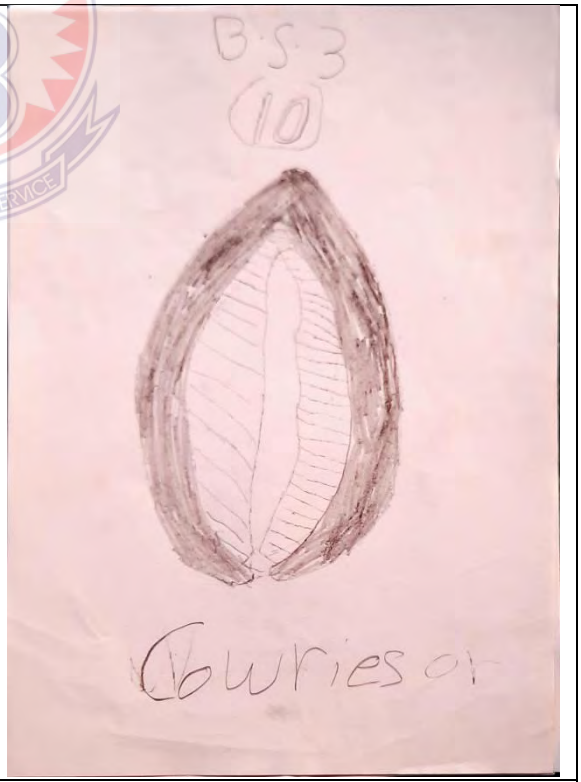
b. Sun

	
Common reality - factual - Sun with serrated edge without face	Common reality - factual - Sun with serrated edge without face

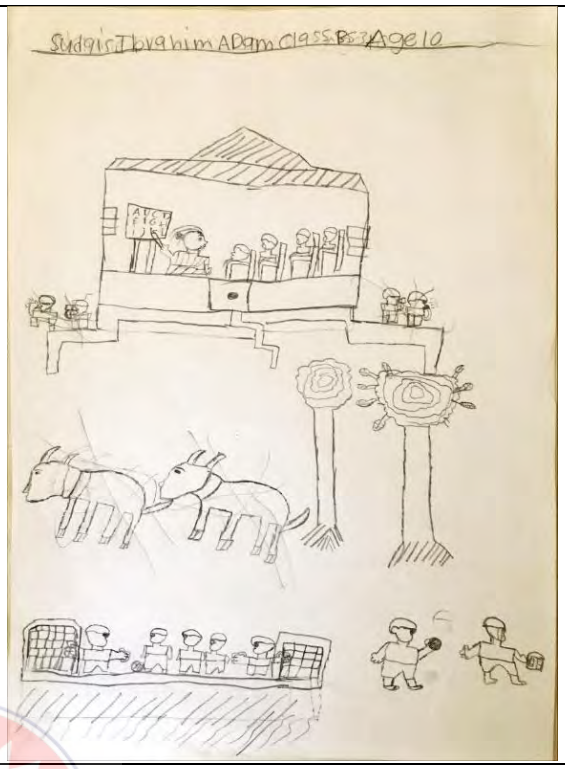
c. Family of five

		
Common reality - factual - home environment (family of six)	Common reality - factual - home environment (family of six)	Common reality - factual - home environment (family of four drawn hierarchical)

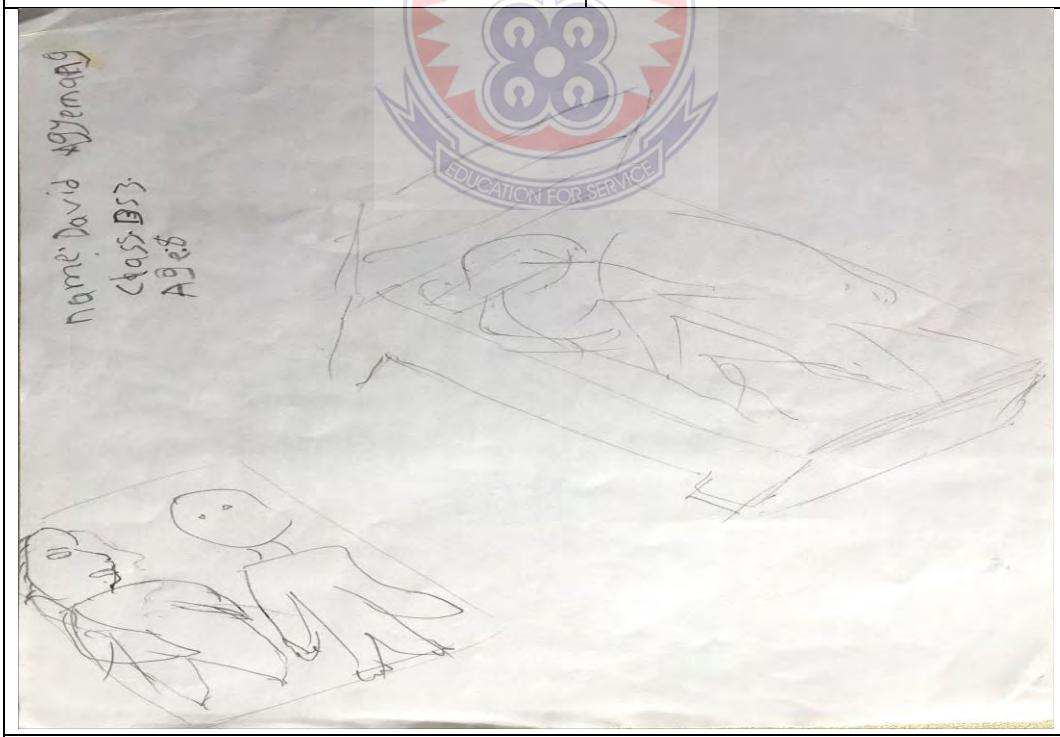
2. SPONTANEOUS DRAWINGS

	
Common reality - factual - home environment	Common reality - Borrowed - aquatic

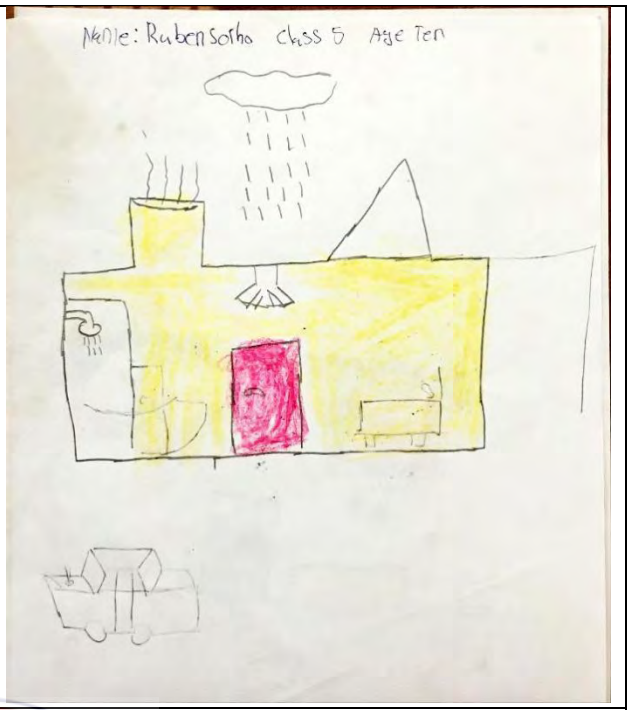
Projected/anticipated - narrative - Dancer



Common reality - factual/narrative - school environment



Common reality - factual/narrative - home environment (bedroom incident)

	
Common reality - factual/narrative - home environment	Common reality - factual - home environment

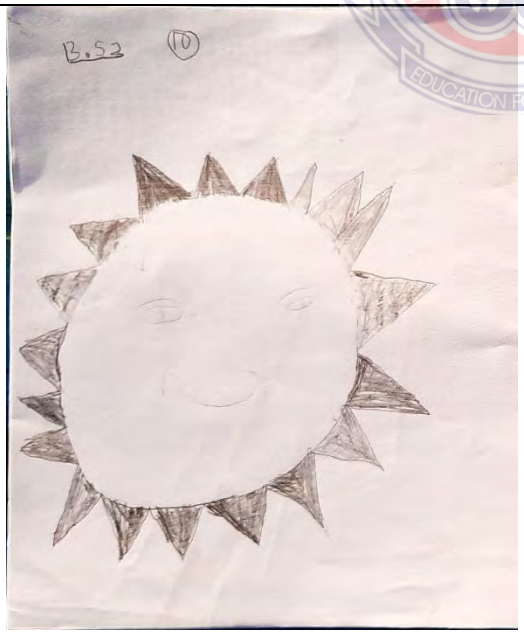
WESTERN ZONE

1. DIRECT DRAWINGS

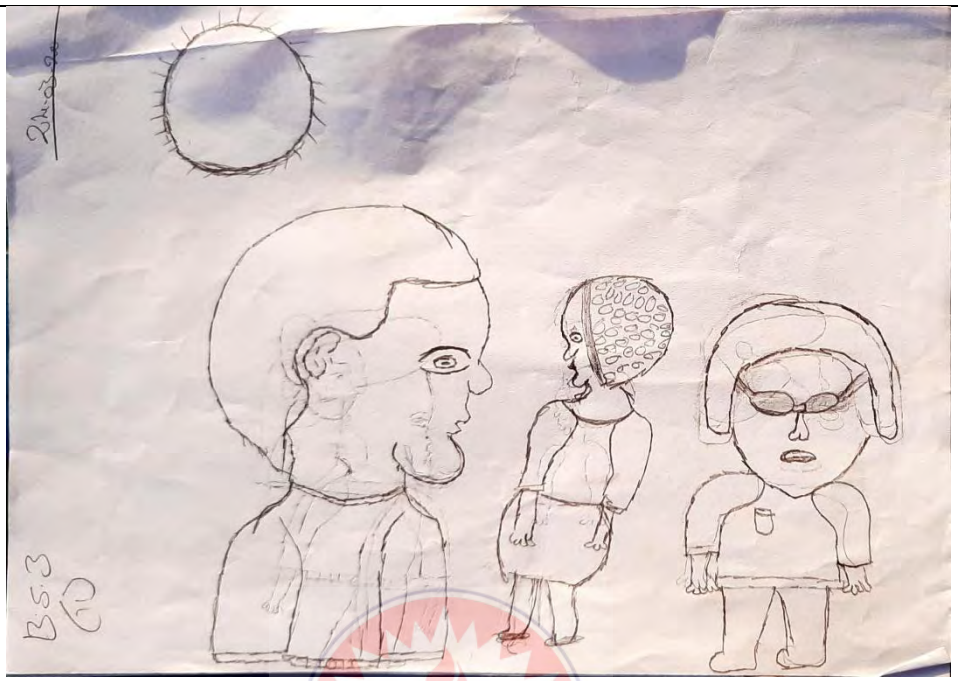
a. House

	
Common reality - factual - home environment	Common reality - narrative - school environment

b. Sun

	
Common reality - factual - Sun with serrated edge with face	Common reality - factual - Sun with serrated edge with face

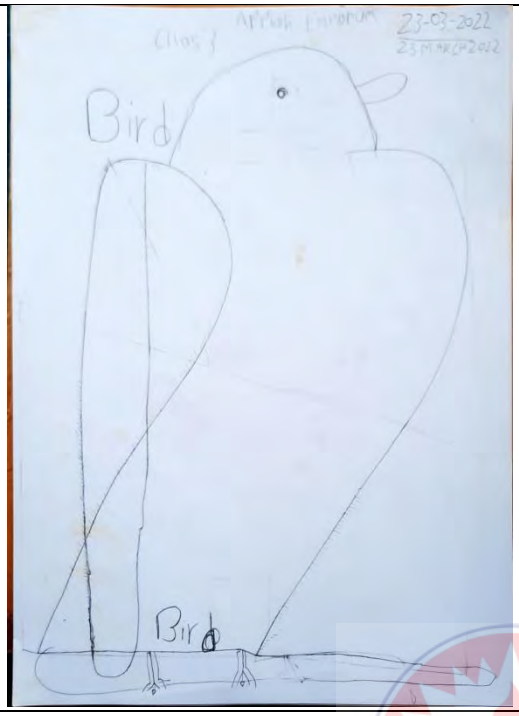
c. Family of five

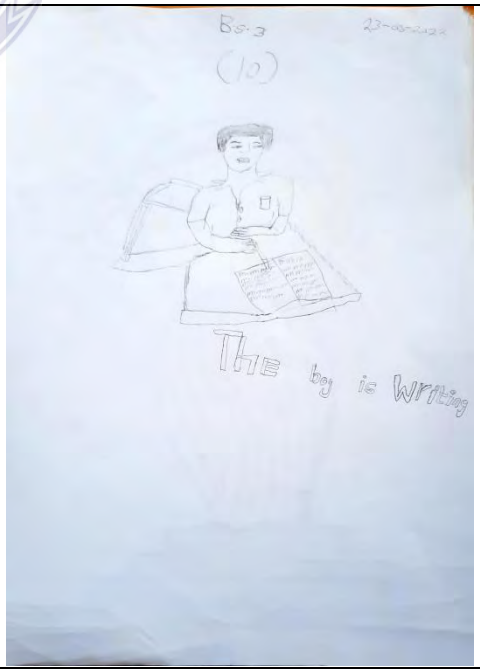


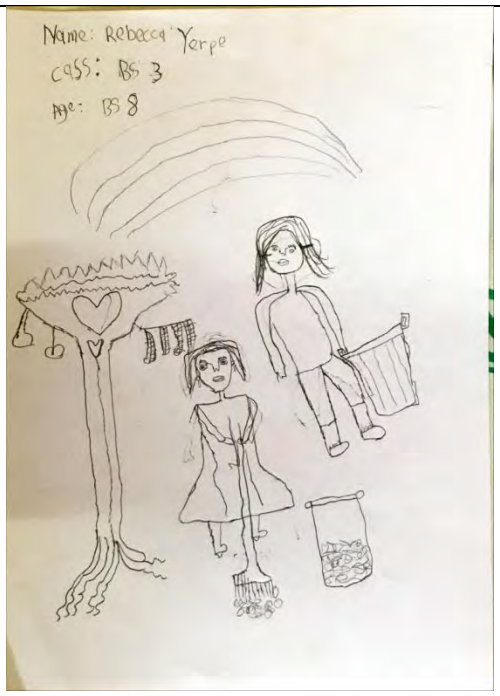
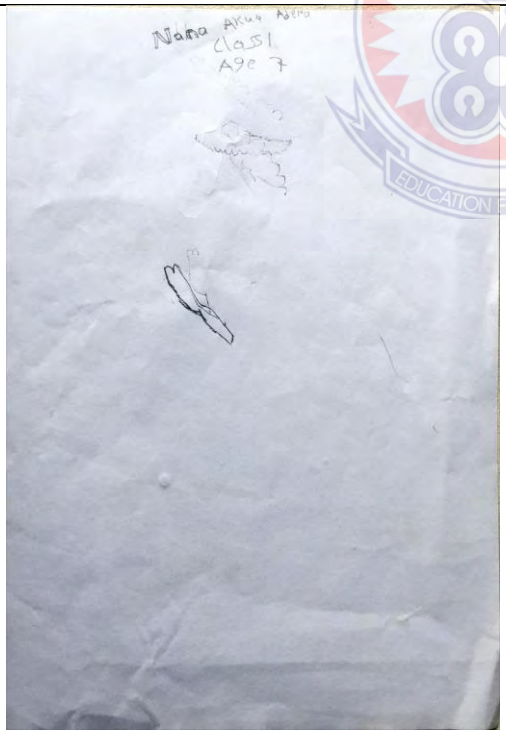
Common reality - factual - family of three with extra details

Common reality - factual - family of three with extra details

2. SPONTANEOUS DRAWING

	
Common reality - narrative - physical environment	Common reality - factual - physical environment

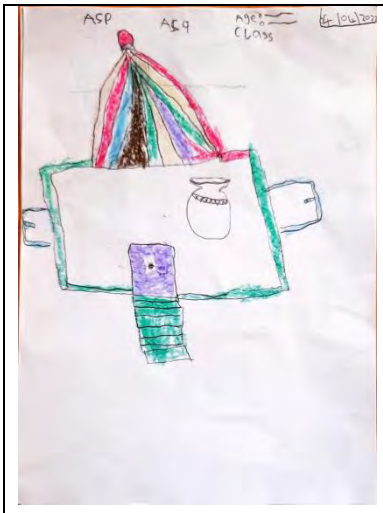
	
Common reality - narrative - classroom environment	Common reality - factual/narrative - classroom environment

	
Common reality - factual - classroom teacher in a swivel chair	Common reality - factual - cleaning up the school environment
	
Common reality - narrated - classroom environment (snake in the classroom)	Common reality - factual - physical environment (snail)

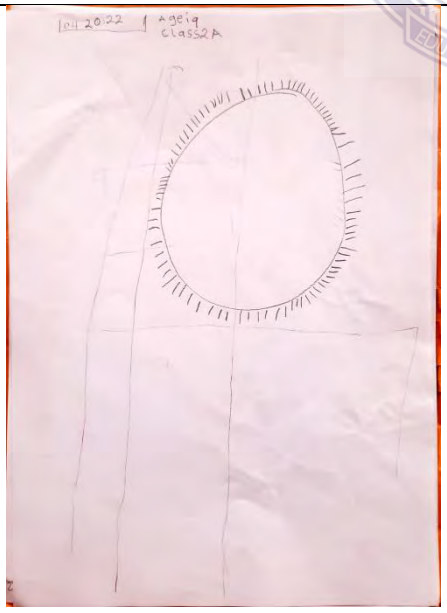
SOUTHERN ZONE

1. DIRECT DRAWINGS

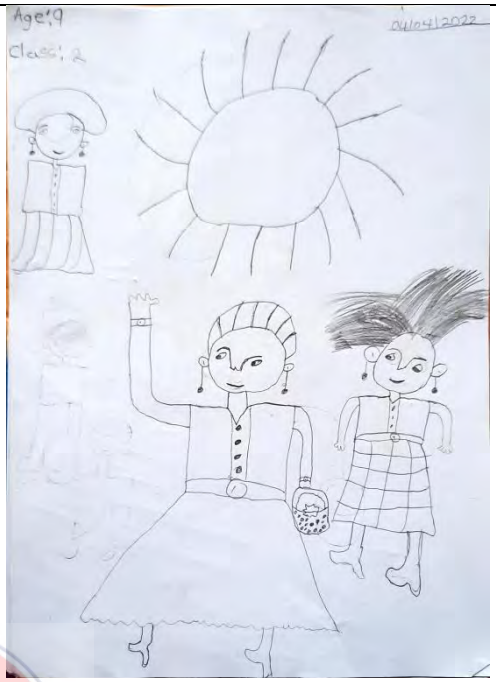
a. House

		
Common reality - factual - painted house	Common reality - narrated - painted house	Common reality - narrated - painted house

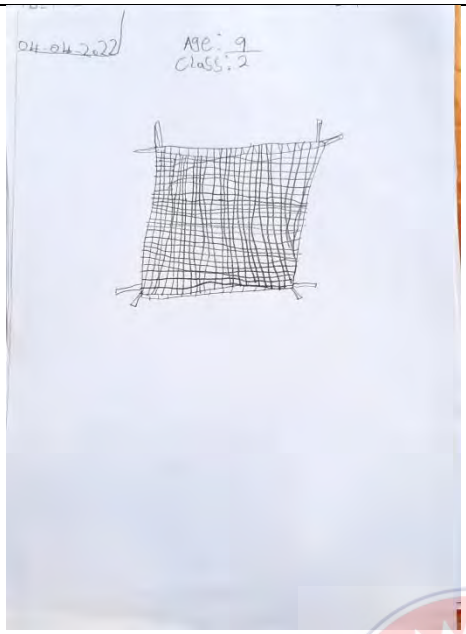
b. Sun

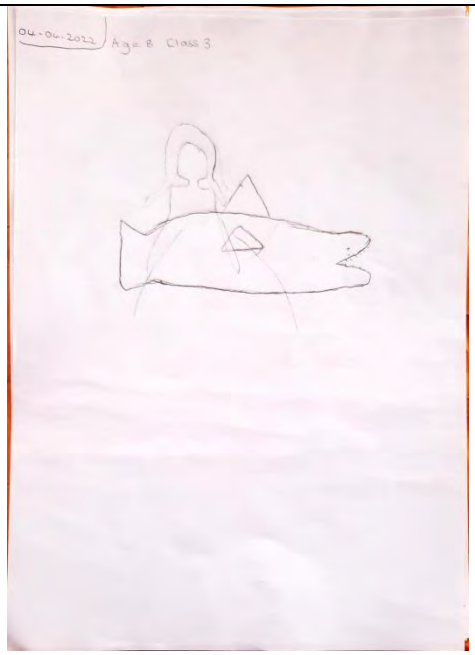
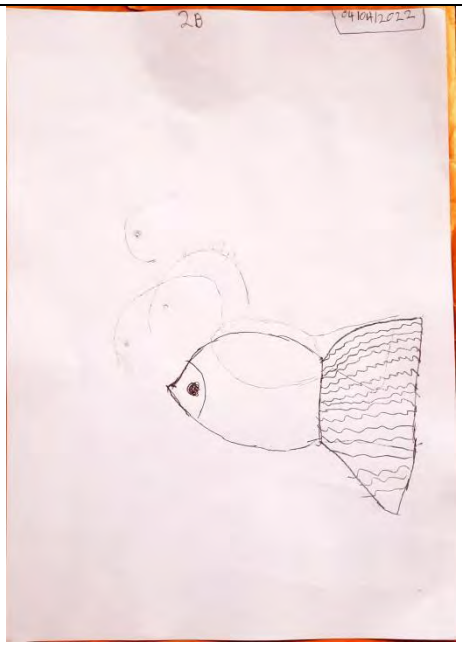
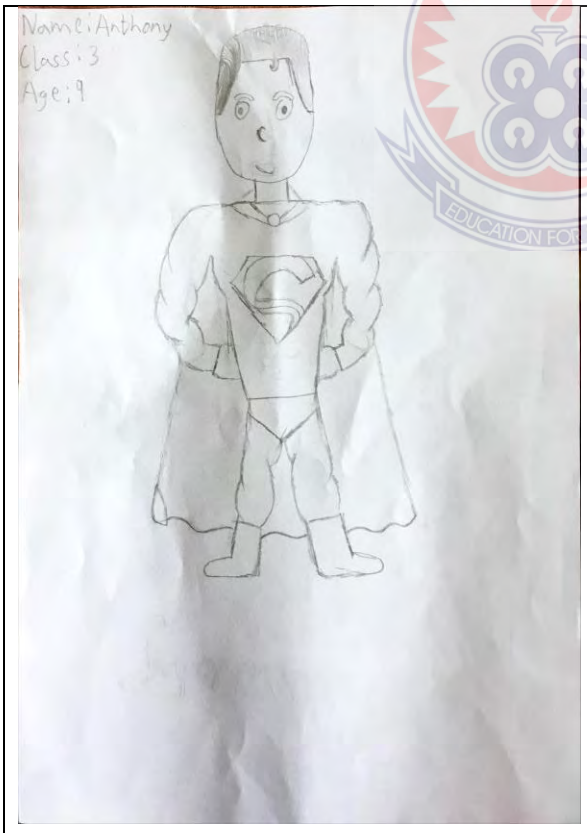
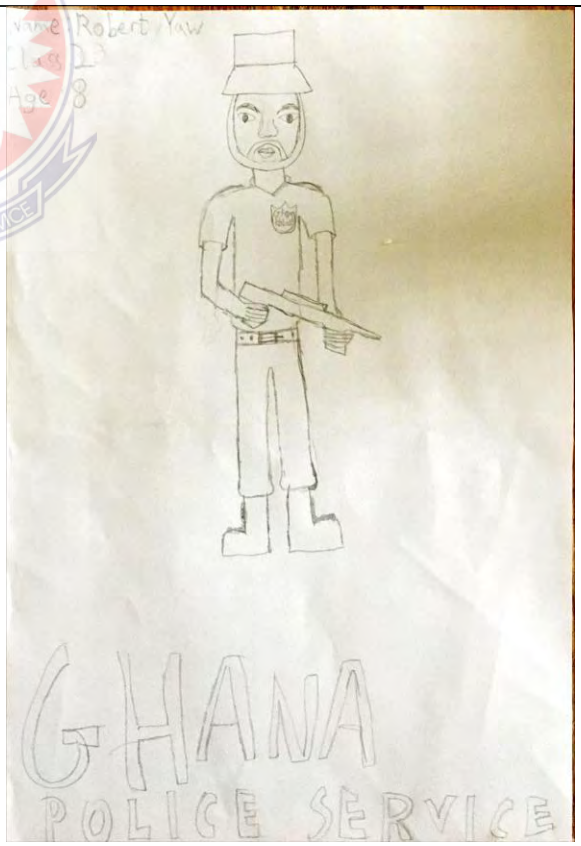
	
Common reality - factual - Sun with serrated edge without face	Common reality - factual - Sun with serrated edge without face

c. Family of five

	
Common reality - narrative - family of six with extra details	Common reality - narrative - family of five with extra details
	
Common reality - Factual - Sick father	Common reality - factual - Grand parents caretakers

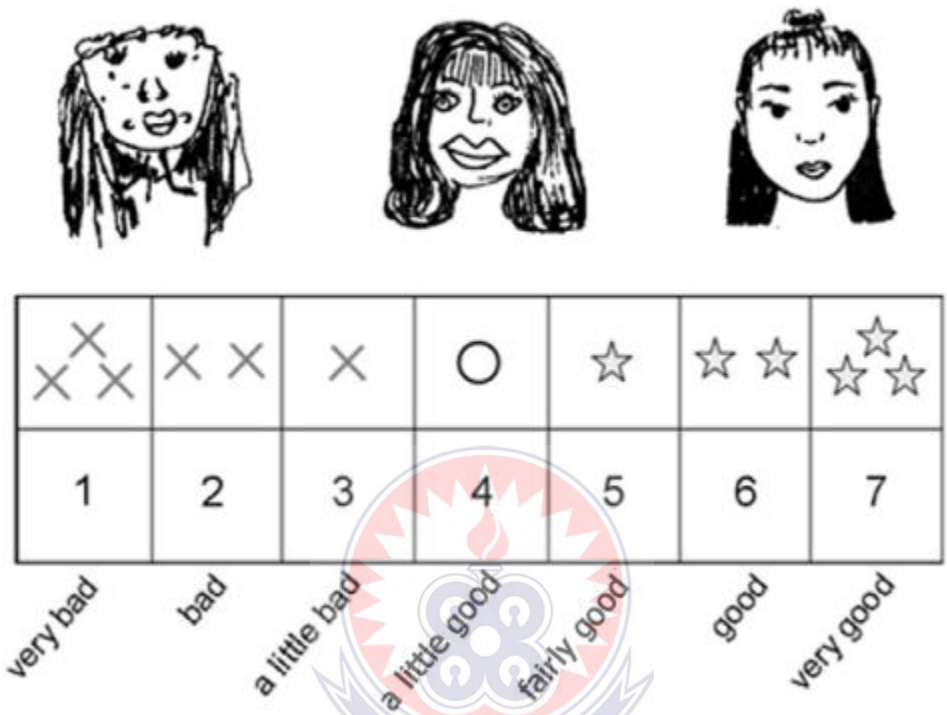
2. SPONTANEOUS DRAWINGS

	
Common reality - factual - sieve	Common reality - factual - okoro
	
Common reality - factual - aquatic	Prophetic reality - fiction - expectant mother

	
Common reality - factual/narrated (aquatic)	Common reality - factual/narrated (aquatic)
	
Projected/anticipated reality - fiction (Superman)	Projected/anticipated reality - fiction (Policeman)

APPENDIX VI

RATING SCALE



Seven-point Likert scale used to guide children's ratings by Chevallier et al. (2012)