FACTORS AFFECTING STUDENTS' KENYA CERTIFICATE OF SECONDARY EDUCATION PERFORMANCE IN ART AND DESIGN, IN SECONDARY SCHOOLS OF NAIROBI COUNTY, KENYA

BY

OTATI MARY N.

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DECLARATION

This thesis is my original work and has not been presented for a degree in any other University.

Signature ---------- Date ----------

Otati Mary N.

E55/CE/11989/2007.

We confirm that the work presented in this thesis was carried out by the candidate under our supervision.

Signature ---------- Date----------

Dr. Oludhe David
Department of Educational Communication and Technology.

Signature ---------- Date----------

Dr. Ndichu Gitau
Department of Educational Communication and Technology.

DEDICATION

This Thesis is a dedication to my dear children West and Wal. To my beloved mama and heroine Sorofina, for her many years of endurance and support.

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First of all, I thank the Almighty God who has brought me this far since I began this work. I take this opportunity to thank Prof. Gathumbi, the former chairperson department of Educational Communication and Technology for her guidance. My sincere appreciation goes to my supervisors; Dr. Oludhe David and Dr. Ndichu Gitau who patiently guided and helped me improve this study from its initial form to the final stage. My gratitude also goes to Prof. Ayot Henry,Dr. Kiio Mueni, Dr. Mary Nasibi and Dr. Samson Ondigi who read through and corrected my work.

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TABLE OF CONTENTS

	PAGE
Title …….	i
Declaration……	ii
Dedication……	iii
Acknowledgement……	iv
List of Tables…….	xi
List of Figures ……..	xii
Abbreviations and Acronyms.....	xiii
Abstract……	xiv
CHAPTER ONE: INTRODUCTION ……	**1**
1.0 Introduction ……	1
1.1 Background to the Study ……	1
1.2 Statement of the Problem ……	9
1.3 Purpose of the Study ……	11
1.4 Research Objectives ……	12
1.5 Research Questions ……	12
1.6 Significance of the study ……	13
1.7 Delimitations and Limitations ……	13
1.8 Assumptions ……	14
1.9 Theoretical Framework ……..	15
1.10 Conceptual Framework ……	17

1.11 Operational Definition of Terms…….. 20

CHAPTER TWO: REVIEW OF RELATED LITERATURE …..... 22

2.0 Introduction ……. 22

2.1 School-Related Factors …… 22

2.1.1 Art and Design Resources and Facilities…… 23

2.1.2 Teacher-Related Factors …… 25

2.1.3 Student-Related Factors …… 26

2.2 Student's Attitudes towards Art and Design …… 28

2.3 Challenges Facing Art and Design …….. 29

2.4 Measures to Enhance Students' Performance in Art and Design ……. 33

2.5 Summary …….. 38

CHAPTER THREE: METHODOLOGY…… 40

3.0 Introduction ……. 40

3.1 Research Design ……. 40

3.2 Location of the Study ……. 42

3.3 Target Population ……. 43

3.4 Sampling Techniques and Sample Size ……. 45

3.5 Research Instruments ……. 49

3.6 Pilot study ……. 52

3.7 Data Collection Techniques …… 54

3.8 Data Analysis Procedures …… 54

3.9 Logistical and Ethical considerations …… 55

CHAPTER FOUR: DATA PRESENTATION AND DISCUSSION OF FINDINGS ……... 57

4.0 Introduction …… 57

4.1 Demographic Information of the Study Respondents …… 58

4.1.1 Demographic Information of the Art & Design Teachers…. 58

4.1.2 Number of Art and Design Teachers in each School …… 60

4.1.3 Teaching Workload …… 61

4.1.4 Demographic Information of the Art & Design Students … 61

4.1.5 Student Adequacy…… 62

4.1.6 Art and Design KCSE Mean Scores in each School …… 63

4.2 Findings by Research Objectives/Questions …… 64

4.2.1 School-Related Factors Affecting Students' Performance in Art and Design …… 64

4.3 Student's Attitudes towards Art and Design …… 73

4.4 Challenges Facing Art and Design Student's in Preparation for KCSE 74

4.4.1 Teachers' Views on Challenges Facing Art and Design Student's in Preparation for KCSE …….. 75

4.4.2 Student's Views on Challenges they face in Preparation for KCSE …… 78

4.5 Measures to Enhance Students KCSE Performance in Art and Design 81

4.5.1 Teachers Suggestions of Measures to Enhance Student's KCSE Performance in Art and Design ……. 81

4.5.2 Students Suggestions on how to Enhance KCSE Performance in Art and Design …… 85

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS …… 88

5.0 Introduction ……. 88

5.1 Summary of the Findings …… 88

5.1.1 The School-Related Factors Effect on Students' Performance in Art and Design…… 89

5.1.2 The Extent to which Student's Attitudes towards Art and Design Affect their Performance …… 90

5.1.3 The Challenges which Art and Design Student's Face in Preparation for KCSE …… 91

5.1.4 The Measures that can be put in place to Enhance Students' KCSE Performance in Art and Design ……. 92

5.2 Conclusions of the Study ……. 93

5.3 Recommendations of the Study …… 94

5.4 Suggestions for Further Study …… 97

REFERENCES ……. 98

APPENDICES ……. 104

APPENDIX I Questionnaire for Art and Design Teachers…… 104

APPENDIX II Interview Guide for Art and Design Teachers …… 108

APPENDIX III Focus Group Discussion (FGD) Guide …… 111

APPENDIX IV Observation Guide …… 116

APPENDIX V Secondary Schools Offering Art & Design in Nairobi County ……. 117

APPENDIXVI Map Showing the Position of Nairobi County in Kenya ……... 118

LIST OF TABLES

Table 1.1: Nairobi County Sampled Art and Design KCSE Results …… 10

Table 3.1: Categories of Secondary Schools in Nairobi County ……. 45

Table 3.2: Distribution of Schools in Nairobi County by Category… 47

Table 3.3: Distribution of Schools in Nairobi County by Gender…… 47

Table 3.4: Sampling Matrix ……..…… 48

Table 4.0: Response Rate of Respondents ……..... 57

Table 4.1: Distribution of Demographic Information of Teachers …… 59

Table 4.2: Number of Art and Design Teachers per School ……. 60

Table 4.3: Teaching Workload …… 61

Table 4.4: Distribution of Student's in each School …… 62

Table 4.5: Student Adequacy ……63

Table 4.6: School KCSE Mean Scores in Art and Design (2008-2010) ……. 63

Table 4.7: School-Related Factors Affecting Students'Performance in Art and Design…… 66

Table 4.8: Availability, Adequacy and Utilization of Art and Design Resources …… 70

Table 4.9: Teachers' Responses on Students Attitudes towards Art and Design ……. 73

Table 5.0: Teachers' Views on Challenges Facing Student's in Preparation for KCSE …… 75

Table 5.1: Student's Views on Challenges they face in Preparation for KCSE …….. 78

Table 5.2: Teacher's Suggestions on Measures to Enhance Students' KCSE Performance in Art and Design …… 81

Table 5.3: Student's Views on Measures to Enhance KCSE Performance in Art and Design …….85

LIST OF FIGURES

Figure 1.1: The Cone of Experience …… 16

Figure 1.2: The Concept of the Study …….. 17

Figure 3.1: Variables to the Study …… 42

ABBREVIATIONS AND ACRONYMS

B.ED	: Bachelor of Education
BOG	: Board of Governors
CDF	: Constituency Development Fund
FGD	: Focus Group Discussion
IATO	: International Art Therapy Organization
IBP	: Institution Based Program
IQ	: Intelligent Quotient
KCSE	: Kenya Certificate of Secondary Education
KIE	: Kenya Institute of Education
KNEC	: Kenya National Examinations Council
MBA	: Master of Business Administration
M.ED	: Master of Education
MOE	: Ministry of Education
MOEST	: Ministry of Education Science and Technology
PDE	: Provincial Director of Education
PTA	: Parents Teachers Association
PTE	: Primary Teacher Education
SPSS	: Statistical Package for Social Sciences

Abstract

Students' performance in Art and Design subject in Nairobi county is not impressive. This is reflected in the Kenya Certificate of Secondary Education (KCSE) sampled results of the county from the year 2006–2009. The results show an average means score performance of 53%. Above average performance is expected in the subject; this is particularly so because Art and Design is an elective subject done by few students. This study is therefore necessary in order to investigate the factors affecting students' performance in Art and Design in secondary schools in Nairobi county. The study sought to fulfill the following research objectives; to investigate the effect of school-related factors on students' performance in Art and Design, to analyze the effect of student's attitudes on their performance in Art and Design, to establish the challenges that face Art and Design student's in preparation for KCSE in secondary schools, and to establish measures that can enhance student's KCSE performance in the subject in secondary schools of Nairobi county. The reviewed literature was organized according to the research objectives/questions as follows; school-related factors, student's attitudes towards Art and Design, challenges facing Art and Design, and measures to enhance students' performance in the subject. The reviewed related literature found that no study had been done on factors affecting students' performance in Art and Design in secondary schools in Nairobi county and therefore this research was necessary to fill the gap. The study used a combination of descriptive survey research design and naturalistic designs. The study used a sample of nine secondary schools and 45 respondents who consisted of nine teachers and 36 students from the sampled public and private secondary schools in the county.Stratified random and systematic random techniques were used to select the samples. The instruments for data collection were: questionnaires, interview guides, focused group discussion (FGD) guides and observation guide. The Statistical Package for Social Sciences (SPSS) software for windows was used to process the collected data. Frequencies and percentages were used to summarize the data. Qualitative data from the interview guides and FGD's were organized into themes from which descriptive narratives and interpretive report were written. On the basis of the findings, the study concluded that; teacher-related factors, student-related factors, and availability, adequacy and utilization of Art and Design resources and facilities in schools significantly influence students' performance in Art and Design. The study recommends among others that basic Art and Design resources and facilities such as; art room, materials, tools, equipment and textbooks should be made available in schools for teaching/learning of the subject.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

This study was carried out to investigate the factors affecting students' KCSE performance in Art and Design subject, in secondary schools in Nairobi county. This chapter contains: background to the study, statement of the problem, purpose of the study, research objectives, research questions, significance of the study, delimitations and limitations, assumptions, theoretical framework, conceptual framework and operational definition of terms.

1.1 Background to the Study

Barret (1982) states that, Art and Design is concerned with the development of the senses as our way of receiving the world, and the process that we use to symbolize, externalize, understand, order, express, communicate and solve its problems. He further identifies three main facets of Art and design as a discipline. They are: conception (idea, impulse and feeling), operation (media/material and technique), and synthesis (perception of visual form). Media and technique are the means through which our concepts are transmitted and expressed. Seidel and Palmer (2005) advices that, media and techniques should be selected and used to form a personal imagery that gives significance to their use. They continue to explain that; media and techniques must be related to the whole artistic experience for

them to play a significant function in learning. Synthesis is the means by which media and technique are organized in order to convey concepts in a visual manner.

Art and Design has a role to play in the lives of individuals and in national development worldwide. Eisner (1972) is passionate about what the subject has to offer, he articulates that; learning Art and Design has a unique contribution to the learner, to education and to human experience. He states that this contribution is only indigenous to Art and Design and cannot be substituted by any other disciplines offered in learning institutions. He further explains that such contribution is among others; aesthetic and expressive production of visual form, development of powers of aesthetic perception, and appreciation of Art and Design as a cultural/historical phenomenon.

Gaitskell (1958) asserts that Art and Design is so important in general education that no child is truly educated until they participate in a vigorous Art and Design program. He sees the role of Art and Design as a means to educate the individual. He continues to state that, the subject is about development of each individual's reality within their natural and social environment. He also adds that Art and Design as a discipline recognizes that individuals or artists are unique and different yet they all contribute to the wellbeing of the other to bring about social unity. He therefore advises that; courses in Art and Design should be designed to take into account the idiosyncratic, different and unique nature of Art and artists. Elliot

(1966) states that; the diversity of the learners should be matched with the flexibility of the teacher who is guided by the syllabus. Without this divergence of approach, an essential element of Art and Design would be lost.

Generally, people's knowledge on the role/contribution of Art and Design to the wellbeing of society is so limited. Below are some highlights of these roles/contributions to increase understanding and broaden societal view of what Art and Design can offer.

1. Art and Design contributes educationally to the development of learners. This is by making them aware of their environment, stimulating their imagination, sharpening their senses, providing learners with opportunities and subject matter through which their human potentiality, experiences, ideas, fears, dreams, emotions and recollections can be expressed (Jameson, 1973). Such contributions are educationally valid and essential to the all-round development of the learner as a member in any society.
2. Art and Design making is used as therapy to improve/maintain psychological, mental and emotional needs of individuals. According to the International Art Therapy Organization - IATO (2005), Art has the potential to change lives in profound ways. The organization records that, "when words are not enough, we turn to images and symbols to tell our stories. In telling our stories through art works, we can find a path to health and wellness, emotional reparation, recovery and ultimately

transformation." Art and Design therapy generally utilizes; drawing, painting, sculpture, photography and other forms of visual art expressions.

3. Art and Design is used to embody and maintain societal culture, values, history and promote a sense of belonging from one generation to another through its works (Mbuga, 1986). Good examples are Kenyan artifacts which most often represent the culture and daily life of its people. This is evident in handicrafts like *kiondos*, jewelry, clothing such as *kikoi*, paintings, wood and soapstone carvings. According to Payne (1999), Egypt is perhaps the most fascinating of the ancient civilizations and also the foundation in the history of western Art; this is symbolized by the pyramids, tombs, rock paintings and sphinxes. The capital city of Egypt, Cairo is also renowned for centuries as a center of Art, learning, culture and commerce.
4. Art and Design forms serves as a means of expression in religion as well as objects in the process of worship. Eisner (1972) states that, "visual art has been used to give expression to man's most sublime visions. Through the ages, Art and Design has served as a means of making the spiritual especially in religion visual, through the image". Traditional art works throughout Africa were basically for religious purpose apart from a few used for utilitarian purpose, such works included; sculptures, rock paintings, pottery and textile (Olaomo, 2006).

5. Art and Design is a channel for individual expression. It provides all learners with tools and opportunities to engage in and appreciate expressive experiences depicted through visual forms. Such forms are a means for communication far and beyond the boundaries of verbal and written language (Seidel and Palmer, 2005). When one draws, paints, carves, or creates in any way they engage in self-expression. When one produces Art and Design forms, they also develop virtues such as; patience, cooperation, self-organization, time management, self-confidence, personal expression, and working towards goals.
6. Knowledge in Art and Design develops good taste among citizens. Most students from schools that offer Art and Design programs might never produce art works as a livelihood. Majority of them because of the exposure, belong to the rank of art buyers and appreciators. Gilbert and McCarter (1984) record that, "whether we know it or not, all of us make choices every day, every minute with respect to Art and Design. We choose one product over another, one garment over another, one way to walk from place to place basing our decisions largely on the visual attractiveness of the preferred option." They also add that, knowledge in Art and Design heightens our appreciation of forms around us, enables us to learn to see and take active interest in the visual world around us. When we yield to see, we are only following a basic aesthetic impulse in response to that which we find beautiful.

7. Art and Design forms in most cases depict the social character of the world and society in which we live. Artists through the ages have used Art and Design to express the values they cherish; like family and to make pungent statements about the condition of man, such as poverty and corruption. According to Matarasso (2007), art works such as drawings, paintings, sculptures, advertisements and other types of graphics, frequently presents to our senses a set of values; either positive or negative. The message praises or condemns, it comments on the world and makes one feel toward the object it depicts. In this sense, the artist functions as a social critic and visionary, art works enables us to learn to see what was initially unseen.

According to Digolo (1986), Art and Design had a deep-rooted sacred meaning among Kenyan communities; it served specific functional roles during festivals, rituals and ceremonies. He adds that, Art and Design was a way of life, community patrons sponsored its practice and the skill was passed on from the older to the younger generation through apprenticeship. Art and Design subject has its roots in the Kenyan education system since pre -colonial era. In independent Kenya since 1963, Art and Design (also referred to as craft or creative arts) is offered in primary schools as one of the basic subjects. It is offered in secondary schools as an elective subject among a cluster of other industrial/technical subjects (Republic of Kenya, 2002).

Art and Design as intended in the secondary school syllabus (Republic of Kenya, 2002), embodies the spirit of the discussed roles/contributions of Art to human experience. It seeks to: promote individual expression, imagination, sensitivity, analytical abilities, powers of observation, problem solving skills, conceptual and intuitive thinking through production of art works. Because of the nature of Art and Design activities, it forms a good base for every subject in the curriculum. It compliments literary, mathematical, scientific and factual subjects by offering more opportunity that awakens creativity in an individual that is useful in all dimensions of life.

The contributions of Art and Design outlined above coupled with intentions articulated in the Kenya secondary syllabus, makes one curious to find out how the subject is performing in our schools. Unfortunately, there isn't much to show because Art and Design is currently a non-examinable subject in primary schools since the review of the syllabus in 2005. Very few secondary schools offer the subject nationwide. Besides, it's an optional subject done by few students and KCSE examination results record an average performance of 53% (MOE, 2010).

Student's performance in examinations is generally viewed as an indicator of educational effectiveness (MOEST, 1997). The ministry further states that, examinations allow education stakeholders to assess whether performance of a school or individual subject is declining or improving. Students performance is

often measured using standard parameters like examinations. In the case of this study, a national examination, KCSE that is done after four years of study in secondary school was used to rate student's performance in Art and Design subject. Muola (1990) records that in Kenya; examinations are used as the main basis for judging a learner's ability and as a means of selecting students for higher education and employment. Poor performance in KCSE examinations undermines student's chances therefore limiting their contribution to national development. According to Eshiwani (1983), poor performance leads to undesirable wastage through dropouts and repeating classes. It also denies the learner the continuation of schooling through the formal system of education. He continues to explain that; quality education forms the window of hope for poverty eradication and combating other social evils in the society. It also contributes to equity, economic growth and expansion of employment opportunities. MOEST (2000), states that the maintenance of standards and assurance of quality is the key to the maintenance of a sustainable and competitive education system both nationally and globally.

Adesoji and Olatunbosun (2008), in a study on determinants of achievement in secondary schools in Nigeria, established that the school administration and teacher - related factors exert potent and positive influence on student's achievement in whatever subject of study. They concluded that in any teaching/learning situation, the learner, the teacher, the curriculum and the learning environment are the four pivots of performance. Simmons and Alexander (1978)

established that factors or determinants of learner achievement appear to be basically the same in both developing and developed countries. They however placed more emphasis on the school environment as a major determinant with significant impact on cognitive development of a learner. Other factors like student's family background, student IQ and peer group influences were rated to have minor impact on a learner's academic achievement. Eshiwani (1983), in his study on performance, yielded three major factors as the most significant variables to performance; school resources, teacher characteristics and student traits. Other researchers like Mwai (2007), Gakunga (2004), Gumo (2003) and Litunya (2006) also established the school, the teacher and the student as significant variables to a student's performance in examinations. It is against this background that this study sought to investigate how factors within the school affect student's academic performance in Art and Design in secondary schools.

1.2 Statement of the Problem

Art and Design in Nairobi county secondary schools posted an average performance of 6.4 out of 12 points which is 53%. This was from a random sample of KCSE county results of four years from 2006 to 2009 as tabulated on table 1.1 (MOE, 2010). During the four years, the subject also posted the lowest mean of 2.5 out of 12 points (21%) in one of the schools in the county.

Table 1. 1 Nairobi County Sampled Art and Design KCSE Results (2006-2009)

YEAR	County mean score	Lowest attained mean score

2006	6.5	3.6
2007	6.8	3.0
2008	6.1	2.5
2009	6.0	2.8
Average	**6.4**	**3.0**

***Source**: MOE (2010)*

The above reflected KCSE county performance in Art and Design is average and not impressive. It also shows a decline in the year 2008 and 2009. Student performance in Art and Design ought to be much better because it is an optional subject in schools done by few students out of volition. It has great potential to compare favorably among other subjects in the curriculum than its 15th rank out of 21 subjects examined at KCSE in the year 2009 (MOE, 2010). There is also very high expectation for better student performance in Art and Design coming from school administrators, teachers, parents and even Art and Design students in both internal and national examinations. On the other hand, Art and Design is a practical subject that utilizes diverse resources and each year schools incur substantial expenditure to facilitate its operations. School administrators and managers might be skeptical to continue spending on an optional subject that does not seem to show value for money. Another alarming concern, are the statistics of schools that have dropped the subject in the country in the last fifteen years. In 1995, 220 secondary schools registered candidates for KCSE in Art and Design, in the year 2010 only 120 schools registered candidates in the subject (KNEC, 2010). Such declining numbers are worrying to Art and Design educators. Therefore this study is critical because; if impediments in the subject especially those that affect

student's performance are not promptly addressed, the subject is bound to suffer and more critically the learner. Improved students' performance in Art and Design examinations might just be one of the platforms that may convince education stakeholders to give the subject a chance to thrive in our schools to the benefit of more learners.

1.3 Purpose of the Study

This study sought to investigate how factors within the school affect students' KCSE performance in Art and Design subject in secondary schools in Nairobi county. The study used KCSE mean scores of former Art and Design student's to rate performance in the subject. This is because it's a standardized examination that reflects the achievement of the learning process gathered over four years in secondary school. For this study however, the current form IV Art and Design students were used as a sample group because they have almost gone through the whole course and so they have an understanding of factors affecting their performance in examinations. Other closely related issues examined by the study include; the effect of student's attitudes on their performance, challenges facing the subject in schools and measures that can enhance student's KCSE performance in Art and Design.

1.4 Research Objectives

The study sought to fulfill the following objectives:

1. To investigate the effect of school-related factors on students' performance in Art and Design in secondary schools in Nairobi county.
2. To analyze the effect of students' attitudes on their performance in Art and Design in secondary schools in Nairobi county.
3. To establish the challenges that face Art and Design student's in preparation for KCSE in secondary schools in Nairobi county.
4. To establish measures that can enhance students' KCSE performance in Art and Design in secondary schools in Nairobi county.

1.5 Research Questions

The study was guided by the following research questions:

1. What school-related factors affect students' performance in Art and Design in secondary schools in Nairobi county?
2. To what extent do student's attitudes towards Art and Design affect their performance in secondary schools in Nairobi county?
3. What challenges face Art and Design student's in preparation for KCSE in secondary schools in Nairobi county?
4. What measures can be put in place to enhance students' KCSE performance in Art and Design in secondary schools in Nairobi county?

1.6 Significance of the Study

The study aims at providing information on how various factors within the school set up affect students' performance in Art and Design in secondary schools. The research findings are intended to benefit the learner in the following ways: Curriculum developers can use the information for reference when revising the Art and Design syllabus in order to make it more learners friendly. The study findings are also useful to education policy makers and school administrators in guiding to formulate, improve and implement policies which are instrumental for improvement of students' performance in Art and Design. This is so because, decisions related to the subject should be based on facts and happenings in schools and not opinions from the periphery. The findings will also enlighten Art and Design teachers on how different factors within the school can affect students' performance in the subject. Such information is intended to empower the teachers in order to effectively address similar situations in their respective schools to the benefit of the subject and most ultimately the learner. The study also adds to the body of knowledge in the field of Art and Design.

1.7 Delimitations and Limitations of the Study

1.7.1 Delimitations

The study was delimited to school-related factors and their effect on students' performance in Art and Design in secondary schools in Nairobi county. Within the school, a number of variables interact to influence students' performance in Art

and design. The school-related factors include; resources and facilities for teaching Art and Design, teacher-related factors, and student-related factors. Other extraneous factors outside the school which could possibly affect students' performance in the subject did not form part of this study. They include; student's family background, government policy guidelines related to Art and Design subject, media influence, student's prior knowledge in the subject and societal value of Art and Design. The study was carried out in Nairobi county of Kenya. This was because of its variety in the type of secondary schools. The schools included both public and private learning institutions. It focused on a representative sample of nine secondary schools that offer Art and Design in the county, nine Art and Design teachers and 36 form IV Art and Design student's from the nine schools.

1.7.2 Limitation

The findings of this study may be limited in application to Nairobi county and other metropolitan counties with similar characteristics such as Mombasa, Nakuru, and Kisumu.

1.8 Assumptions

The assumptions of the study were:

1. Those students who enrolled for Art and Design did so out of volition.

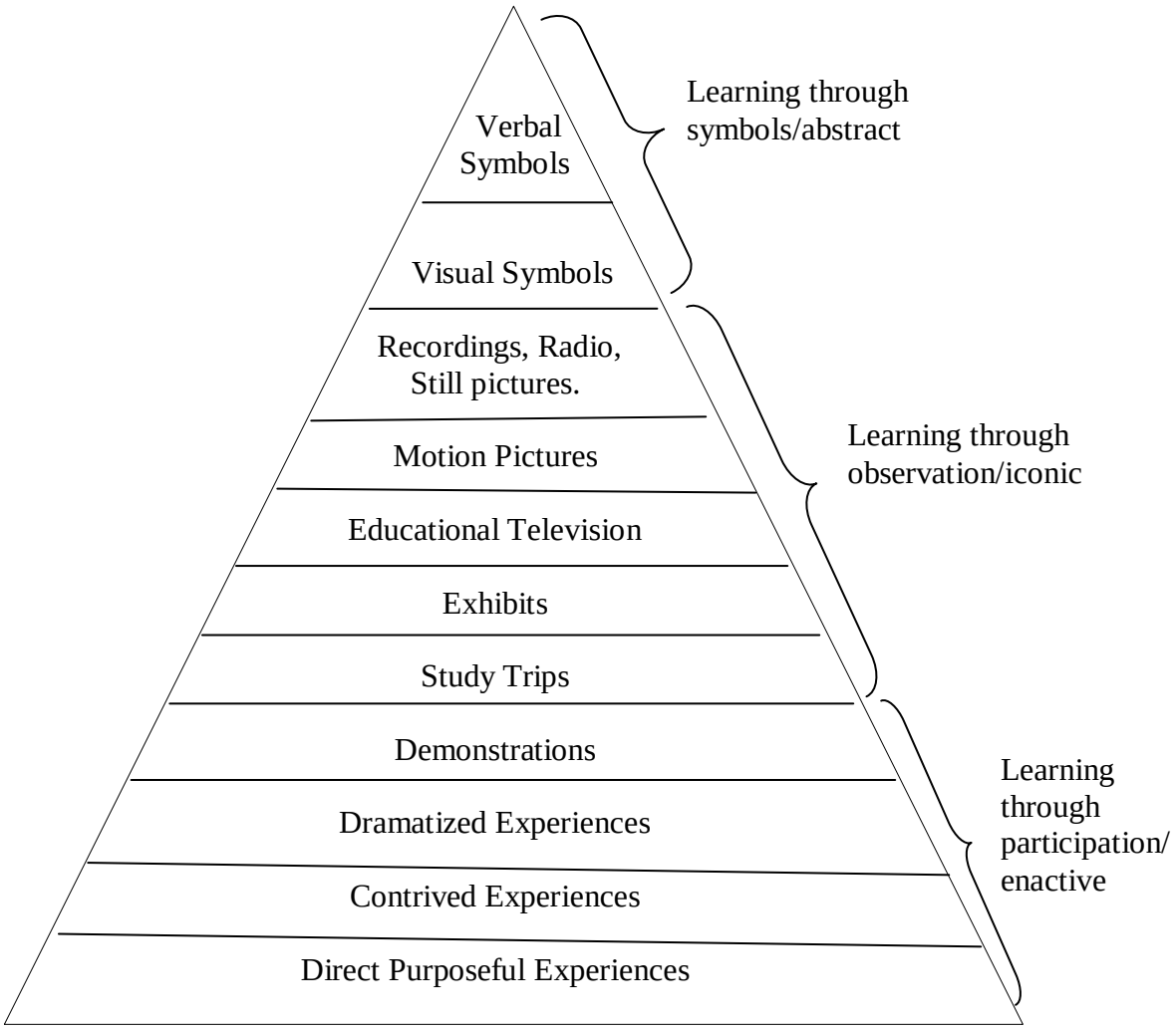
2. Art and Design students might not be performing to their expected levels because of different limiting factors in schools.

1.9 Theoretical Framework

This study borrowed from the Cone of Experience Theory (Dale, 1969). It is a visual model/pictorial device that can help an Art and Design teacher to teach concepts by linking them to learners' direct experiences as a form of stimulus. Direct experience or participation, which is the first level of the Cone, involves learners physically in the use of muscles to carry out an action. In the case of Art and Design subject matter, direct experience can be such as tying a knot. Iconic/pictorial experience is the second level; it is where the learner looks at pictures/films/drawings and learns to tie knots that s/he had never tied before. The third level of the Cone is symbolic level, it involves abstract experiences. At this stage, learners read or hear the word "knot" and match it to their mental image of a knot, or to their actual experience of tying a knot. These three levels of experience are an interaction of concrete classroom activities, pictorial representations and abstract ideas that can make learning in the subject dynamic, continuous, interesting, and meaningful. The Cone demonstrates that learning in Art and Design is stronger and meaningful when students carry out practical activities when learning concepts. Such activities are only possible when resources and facilities such as; teachers, materials, tools and equipment for learning Art and Design are available in schools. Students and teachers interact with the resources

within a conducive learning environment for learning to take place. When basic concepts in Art and Design are understood by students well, application of such knowledge is made possible leading to improved student performance in examinations. Next is the Cone of Experience diagram showing how various experiences flow from the direct ones at the bottom of the pyramid to the most abstract at the top of the cone.

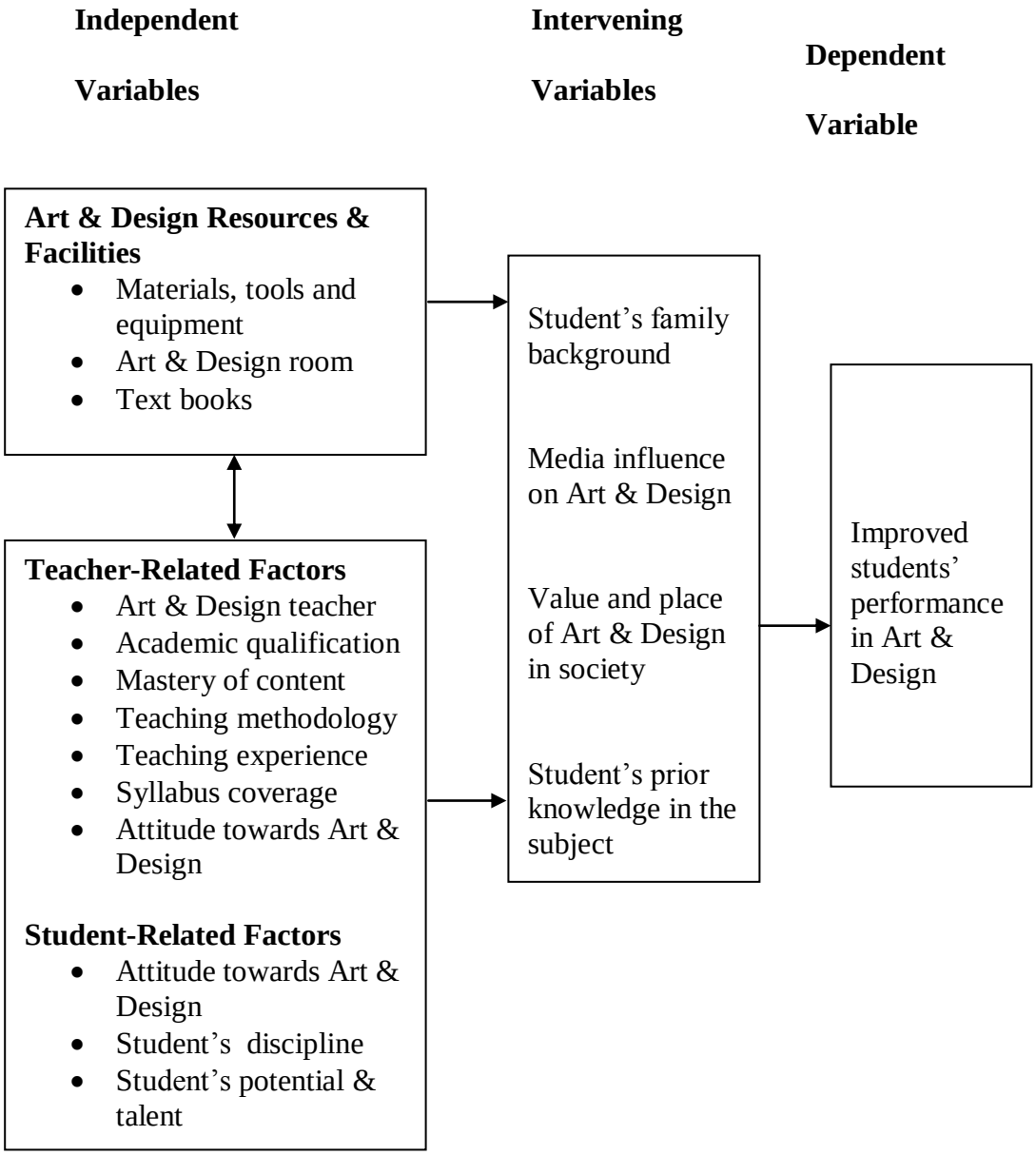
Figure 1. 1 The Cone of Experience



Source: *Dale (1969).*

1.10 Conceptual Framework

Figure 1. 2 The Concept of the Study



Source: *Researcher (2011)*

The conceptual framework shows factors within the school environment that interact to influence the learning of Art and Design and its final outcome in

examinations. These factors constitute the different variables to the study. The independent variables comprise of; Art and Design resources and facilities, teacher-related factors and student-related factors. Resources and facilities are at the center of Art and design learning/teaching because it is a practical oriented subject and therefore there availability and utilization in schools is crucial to students' performance in the subject. Barret (1982) identifies materials as one of the three facets of Art and Design learning, besides ideas and organization of the visual form. Art and Design resources and facilities include; materials, tools and equipment for learning/teaching, art room, and text books. The teacher and the student use the resources and facilities in the process of learning Art and Design. Teacher-related factors such as mastery of content, determines how s/he uses the resources and facilities to teach. Student-related factors like attitude towards the subject, determines how the student relates with the resources and the teacher in the process of learning. If the three variables interact optimally, students' performance in Art and design is expected to improve in secondary schools.

The framework also highlights intervening variables which are found outside the school environment. They might have an influence on students' performance in Art and Design; however, the school does not have control over such factors. Therefore they did not form part of this studies investigation. They include; student's family background, mass media's influence, societal value of Art and Design, and student's prior knowledge in the subject before joining secondary

school. Mbuga (1986) records that; attitudes towards a particular subject among learners are influenced by their social environment way before they join secondary school. Such social environment include among others; family, friends, peers, the community, the church and the mass media. He continues to explain that acquired attitudes from all these quarters influence the minds of learners more than the art department can ever hope to exert. In most cases, Art and Design students require their families support to purchase supplementary materials and tools to enable them carry out various exercises. If for one reason or the other the family does not purchase the required materials and tools, the students work is greatly affected and so are the expected results. The society's value of Art and Design can motivate students to work hard in the subject or discourage them. Such value can be demonstrated in different ways such as; purchase of art works, sponsorship/patronage of artists and art institutions, the media featuring Art and Design programs, and agitation for the subject to be made compulsory in schools.

1.11 Operational Definition of Terms

The highlighted terms have operational meanings in this study as follows:

Art and Design – It is the technique of creatively producing aesthetic visual forms using a variety of media. It is one of the curricular based subjects offered in Kenyan secondary schools as an elective subject in the category of technical subjects. It is referred to as Art and Craft at primary level and Fine Art or Design in tertiary institutions. In this study, the following terms are used interchangeably; Art, and Art and Design.

Attitude – opinion or way of thinking. Generalized feeling towards a particular object, subject or situation. It can either be favorable, neutral or unfavorable towards the object, subject or situation.

Curriculum – a sequence of systematic activities designed to engage the learner in some content that is intended to have educational consequences within a specified period.

Factors – a circumstance, fact or influence that contributes to a result.

"Kikoi" – a Kenyan handmade, woven piece of cloth used to cover the body.

"Kiondo" – a Kenyan traditional, hand woven basket.

"Nyayo" philosophy – a Kenyan political party slogan used to mean peace, love and unity.

Materials – source and media of visual expression used in Art and Design, they include items like; paper, pencils, paint, brushes, inks, dyes, fabric, clay, canvas, boards, wood and stone.

Motivation – the process of satisfying the needs of an individual in order to inspire them to work efficiently, willingly and enthusiastically towards the achievement of desired goals.

Performance – refers to one's academic accomplishment in terms of skills, marks/grades, interest and attitudes. Good performance implies successfully attaining set cut-off marks/grades in examinations of a subject. Poor performance means attaining marks deemed to be far below a designed cut-off point. In KCSE, attaining grade 'A' (12 points) is considered peak performance while grade 'E' (1 point) is dismal performance.

Resources – anything human or non-human that facilitates teaching/learning of Art. Human resources include: teachers, instructors, resource persons. Non-human resources include: materials, tools, equipment, art room, furniture, and textbooks.

Tools – objects that help an artist work on the materials in order to produce an art work. They include; pens, brushes, rollers, squeegee, buckets, chisel, knives, hammer, and pliers.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.0 Introduction

This chapter contains reviewed related literature highlighting opinions, observations, findings and recommendations on varied issues that concern student's academic performance in schools and particularly to do with Art and Design subject. The reviewed literature has been organized according to the research objectives/questions. They are as follows; school-related factors, student's attitudes towards Art and Design, challenges facing Art and Design and measures to enhance student's performance in Art and Design.

2.1 School-Related Factors

As illustrated in the conceptual framework of this study, the focus is on factors within the school that affect student's academic performance in Art and Design. Within the school, there is the school administration that ought to provide leadership and a conducive learning environment. There are teachers and students who interact in the process of learning Art and Design. Teachers and students require Art and Design resources and facilities for effective learning to take place in the subject. School-related factors are therefore discussed below under the following sub-headings: Art and Design resources and facilities, teacher-related factors and student-related factors.

2.1.1 Art and Design Resources and Facilities

Duignan in Gakunga (2004) observes that, the administration style of a school is a crucial component to the academic performance of that school. Effective leadership by the school heads sets an atmosphere of order, creates a climate of high expectation for staff and students, encourages and builds commitment among students to the school goals. Litunya (2006) agrees that, the school administration plays a crucial role in a student's academic performance in school. She argues that, school administrators have a direct bearing on the achievement of the learners because they have the key role of coordinating, directing and facilitating the learning process. Among the key responsibilities of school administrators, is to ensure availability of Art and Design resources and facilities in the school. They include; materials, tools and equipment for learning Art and Design, Art and Design room, Art and Design teacher and text books/reference books.

Materials and tools are an integral part of learning Art and Design because it is a practical oriented subject. Barret (1982) asserts that materials combined with technique are the means through which our impulses, feelings, ideas are transmitted and expressed. Materials oscillate between being the medium for expression and the source of that expression. As such, materials are basic and should be availed in schools to provide opportunity for exploration and manipulation. They include; clay, wood, paper, paint, brushes, boards, pencils, pens, dyes and textiles. Gaitskell (1958) adds that, indeed, lack or limited materials

in each form of artistic expression and the variety of the same tends to inhibit expression in Art and Design. Availability of such basic materials and tools in schools also contribute directly to learner motivation because they provide a favorable environment for learning. Gakunga (2004) records that, teaching resources make a difference in the student's achievement across categories of schools. Distribution of resources such as textbooks is also a major factor that accounts for scholastic difference in academic performance among schools.

The school administration also has the responsibility of ensuring there is an Art and Design teacher in the school to teach the students. A teacher is the implementer of the curriculum without which the learning process in school will not be complete. Bennett (1963) acknowledges the significant role of an Art and Design teacher to the success of the program. He states that; "there is no other person, no group, no amount of materials, no physical facility, no community, exceeds in importance the Art and Design teacher as the single element of greatest potential value in the field of Art and Design". Prentice (1995) asserts that, when learners are left alone without guidance, facilitation, stimulation and motivation, they slowly drift to boredom and lack of interest in Art and Design activities. She insists that, an Art and Design teacher is crucial in the school for artistic development of learners, otherwise a laissez-faire kind of environment will emerge and no worthwhile learning will take place.

2.1.2 Teacher-Related Factors

Eshiwani (1993) indicates that, teacher characteristics such as; qualification, experience, job satisfaction, professional development and teaching methods have a strong co-relation to student's performance. Gumo (2003) found out that teacher factors have an influence on how they grasp content in their subject area and how they teach, hence student's performance posted in examinations. Such factors include; teacher's academic level, teaching experience, knowledge in the subject and attitude of the teacher towards the subject. Goodlad in Gakunga (2004) noted that, a teacher's job satisfaction and a teacher's attitude to their subject area, had an influence on the students' attitude towards the subject and consequently to how they perform in that subject.

Gaitskell (1958) recommends that, a successful Art and Design teacher should have sufficient knowledge in skills, processes and techniques associated with the subject. This however should be grounded on general pedagogy of teaching for good learning outcomes. Teaching of Art and Design should therefore combine good mastery of content with methodology to guide students to be in control of media and tools for expression. Being able to motivate learners by using their own existing interesting experiences combined with new ones. Matarasso (2007) adds that, the value of Art and Design to learners is in large measure the teaching method employed. He explains that faulty teaching can create in learners a dislike for the subject, which may remain with them for the rest of their lives. It can also

generate negative attitudes such as; a feeling that any artistic activity is wasted effort, resentment against original thought in all forms of artistic endeavor and a sense of insecurity when called upon to make choices involving aesthetic judgment or taste. Lowenfeld and Brittain (1987) add that, faulty teaching practices in Art and Design, lead to stifling of the artistic development in learners. Such can be ineffective and even harmful to growing children. They also highlight some faulty teaching practices in Art and design as follows: The teacher who advocates copying and extreme neatness, the effective teacher who lacks an understanding of Art and Design, the artistic teacher who lacks an understanding of pedagogy and the teacher who has developed a formula.

2.1.3 Student-Related Factors

Elliot (1966) states that, what students learn in the classroom is influenced by: the subject matter of instruction, intellectual characteristics of the student and teacher outcome as a model. In relation to Art and Design, he states that in a large measure, a child's artistic ability is a function of that which he has learned. This can be in various ways: learning through perception development - that's learning to see aesthetic qualities that normally escape our attention from the things around us. Learning through expressive content of visual form and learning how to produce such forms. Lowenfeld and Brittain (1987) support by stating that, production of visual form is through the effective use of materials and appropriate techniques as learners respond to ideas, impulses and feelings.

Good student discipline is known to contribute positively to academic performance. Art and Design students who are disciplined take initiative and tend to be self-driven in their work. They avail themselves in class to learn; they carry out and finish their assignments and projects on time. Gakunga (2004) found out that discipline is a factor that influences student's performance. Students who are self-disciplined tend to do well without so much supervision from parents and teachers. Eshiwani (1993) stresses that discipline cannot be divorced from education. This is because discipline enables students to concentrate on their studies and nurture certain values demanded by the society in which they live. Litunya (2006) adds that, discipline helps students to do those activities that enhance their education while limiting those behaviors that are self-defeating. She further states that students require discipline for positive social development and for adequate educational process. If a school has disciplinary problems, it is likely that its academic results will be affected negatively. It also affects the morale of the teaching personnel. Bennett (1963) qualifies that; Art and Design activities require a good measure of discipline from the artist in order to transform the private idea and feeling into a complete public image that can be experienced by others.

2.2 Student's Attitudes towards Art and Design

Students/learners are at the center as recipients of the teaching/learning process. Attitudes that they hold either positive or negative, affect how they receive what is taught. Digolo (1986), states that after independence, Kenyans were reluctant to accept practical education which appeared to be advocated through Art and Design. This attitude was shaped largely by the colonial education system for the Africans which was practical oriented. Art and Design was classified under industrial education together with other subjects with an aim to retain the indigenous African in their communities. Kant (2008) comments that, learners' attitudes towards a subject, can be influenced by the curriculum and motivated by social forces inside and outside the school. Mbuga (1986) is in agreement, he records that; attitudes towards Art and Design among learners are influenced by their social environment way before they join secondary schools. Such social environment include among others; teachers, family, friends, peers, the community, the church and the mass media. He continues to explain that, the acquired attitudes from all these quarters influence the minds of learners more than the Art and Design department can ever hope to exert. They include opinions like; Art and Design is for academically less gifted, the subject has no career prospects, it is a waste of time and is for unfocused people. Students therefore come to the Art and Design class with these previously acquired attitudes towards the subject; not only will they resist dropping them but they will actually seek to reinforce them when the slightest opportunity arises.

Barret (1982) raises concern that a learner with a poor attitude towards English is seen as a very serious problem, but such a deficiency in Art and Design hardly worries anyone in the school. He therefore suggests to Art and Design teachers that it's upon them to work to enhance the positive attitudes or counteract the negative ones towards the subject at the very first opportunity using the classroom.

2.3 Challenges Facing Art and Design

Despite resources being an integral part of the Art and Design teaching/learning process, research reveals that the challenge of resources in schools is critical, persistent and frustrating to both teachers and learners. Gituiku (2006) found out that most schools that offer Art and Design have to do with merger or improvised resources, which are hardly sufficient to the student population. Such a situation forces teachers to most often change methodology to lean heavily towards lecture method and demonstration as opposed to hands-on experiences. Gombe (1990) during her research and also while on supervision of teaching practice of university students, observed lack of basic requirements for teaching Art and Design in secondary schools. These were such as; art rooms, papers, drawing pencils, pens, brushes, paints, dyes, clay and textbooks. To explain the scenario, a number of school heads felt that Art and Design was an expensive subject for schools to maintain. She continues to reveal that, some school heads were even contemplating dropping the subject all together because schools have a choice to either offer Art and Design or not. Mambo (1975), also observed that the greatest

constraint in connection with teaching the subject in Kenyan schools back then was the lack of adequate financial resources. This was coupled with the fact that, Art and Design then was not considered vital to the economy of the country and therefore not accorded as much support and respect as other subjects like the sciences.

Digolo (1986) records that; the constraint of basic Art and Design resources and facilities has been a major challenge to the implementation of Art and Design curriculum in Kenyan schools. He continues to explain that, the challenge of access to basic and adequate resources and facilities to do the work right and well is directly related to the quality of students output. This can either be in form of the quality of art works produced or academic grades attained at the end of the course.

Prentice (1995), looks at the issue of Art and Design resources and facilites differently, she is of the opinion that limited resources should not cripple learners in their quest for quality. She adds that, artists are quite used to working in less than ideal conditions thus making them resourceful. She also advices that, while the effort to increase and improve resources is constant, artists should recognize that excellent Art and Design teaching/learning can be and is done all the time with less than adequate resources. Educators who succeed with less are those who focus their paramount attention on how best to use what they have got because, more often than not the resources of time, space and money are infinite.

The implementation of the Art and Design curriculum in Kenyan schools has suffered chronically from an order of events that informed deeply engrained attitudes that the subject continues to crumble with (Digolo, 1986). He continues to highlight some of the events as; internal disagreements among Art and Design educators on common theories, aims and desired outcomes in the subject, classifying Art and Design under industrial education which was meant to provide a docile and uncomplaining working class for the European community during the colonial era. Industrial education intentions caused dissatisfaction among Africans; this led to rejection of all forms of education that was designed to keep them in low social status in the society. Gombe (1990) also explains that Art and Design suffered most because it was lumped together with all sorts of industrial subjects at the time and as a result, today Kenyans are reluctant to fully accept practical education which appears to be advocated through the subject. Such deep historical background informs attitudes held by the society and directly or indirectly influences learner's attitudes towards Art and Design as a subject in the schools. Bosire (1984), points at the influential reports from education commissions that have informed education policies in Kenya since independence. He states that these reports have made Art and Design to assume a low profile in the school curriculum because of lack of emphasis it received. Some subjects like the sciences were ranked as critical in the development of professions required by the Kenyan economy, while practical oriented ones like Art and Design were ranked

lower in the commission reports. It is evident that the education commission's reports have advised education policies and subjects classification in the current school curriculum (Digolo, 1986).

The school can bear attitudes that negatively influence Art and Design education. Barret (1982) notes that, the understanding of many head teachers and staff from other disciplines of the function of Art and Design in education is based upon very limited personal experience. Most of them were probably obliged to give up the subject at an early age. Their view of Art and Design is bound to be far more limited than the Art and Design teacher's view of say Mathematics or History. It's because the experience of these subjects at school is seen as crucial whereas Art and Design tends to be optional. Art and Design teachers should therefore be alert not to succumb to the temptation of conforming to the wishes of the unenlightened by selling their subject as a support activity. Gombe (1990) reiterates that, activities like making of costumes for drama, painting scenery for school plays, posters, and sign posts during events, are all healthy in regard to Art and Design benefiting the school community. However, they should not be over emphasized at the expense of the real purpose of the subject as guided by the secondary school syllabus (Republic of Kenya, 2002).

Gaitskell (1970) was concerned about the negative trends towards Art and Design. He observed that during the 1930's, leaders in public education in America were

reluctant to recognize the importance of Art and Design or support it as a serious part of the school curriculum. He also noted that Spencer, a renowned American scholar held the attitude that Art and Design should be considered as a leisure time activity rather than an academic discipline in the curriculum. Such negative minds towards the subject, significantly contributes to academic resistance towards Art and Design in the general education program. The influence of negative attitudes towards Art and Design may manifest in ways such as; limited budgetary allocation to the subject, limited trained teaching personnel, discouraging students from studying the subject or leaving the decision to offer Art and Design in secondary schools at the discretion of school administrators.

2.4 Measures to Enhance Student's Performance in Art and Design

For an Art and Design course to be successful, it must have some basis for evaluation. This should be done both by the learner and by the teacher, in order to moderate change, renewal and wastage (Matarasso, 2007). Eisner (1972) argues that assessment helps teachers adjust their teaching for better learning outcomes. It also ensures that what matters in Art and Design is central to the curriculum and it's carried out not only by teachers but also by the students who engage in self–assessment. Prentice (1995), states that assessment of consequences, is a moral responsibility in teaching. She explains that in Art and Design it's important to have two types of evaluation; evaluation of the learner's development and the assessment of the learner's ability to produce art work at the level of the learning

task defined in the lesson. This means that teacher's should carry out continues assessments focusing on the developmental characteristics of the learner being promoted through the subject, and practical tests that requires application of artistic knowledge and skills already acquired in the term or year.

On the challenge of Art and Design materials and tools, (Mbuga, 1986) recommends improvising. He advices teachers and learners to utilize local materials from the immediate environment of the child, in order to cushion purchased ones from art stores and ease the pressure on the demand for school finances. This venture requires planning so that the local materials can be identified, collected, prepared in readiness for the lesson to avoid producing low standard work. Schools however ought to supplement improvised materials with purchased ones because improvisation is only limited to a number of items. A log of wood from the school yard requires a bought chisel or adze to shape it and varnish to polish the product. Schools in urban areas have to buy the very basic of local materials because of their set up, examples include; clay, sisal fiber, gourds, making the concept of improvisation rather relative. Eisner (1972), states that Art and Design educators are certainly justified in longing and fighting for more educational Art and Design resources and facilities in schools. However, he cautions that they must be able to identify both what is optimal as a goal and what is acceptable as a bar, below which it might be impossible to provide a reasonably quality learning experience.

Eisner (1972) advises Art and Design teachers on what to be aware of to become more effective in their teaching. He states the following: A teacher needs to develop a rapport and relationship with learners that breed trust and openness. S/he should encourage learners to participate in some of the curriculum decision-making procedures. A teacher needs to utilize maturity and professional skill in making educational decisions. These is by balancing the act of maintaining a warm relationship in class that listens to learners' ideas and at the same time keep the professional expertise in place to avoid diluting educational experiences. He continues to explain that, an Art and Design teacher should have the ability to be ecstatic over a visual work of art whether done by the learners or by a professional. S/he should be able to instruct through direct engagement by making of Art and Design forms together with the learners and carrying out criticism on both learners and professional work. A teacher should also be in a position to analyze art works and relate them historically to fit in the cultural realm.

The field of Art and Design places high priority on encouraging student specific learning. Swift (1988) states that, diversity that is based on each student's experiences, interests and abilities should be prized though emanating from one common taught content. Prentice (1995), calls it experiential learning; which is learning from ones' experiences. She explains that; this is the type of learning where knowledge is not divorced from knower's, where personal feeling, spontaneity and intuitive responses are encouraged, where a teacher and a student

exchange ideas in a relaxed environment. She continues to explain that, experiential learning involves four aspects, which are: integration (linking classroom experiences to what learners personally know), personal learning (learners taking Art and Design personally), evaluative stance (stepping back from the curriculum in order to judge it), and reflection (need for learners to think for themselves deeply and personally about what they hear, see and do).

Seidel & Palmer (2005) advises that, the learner's experiences should be tapped to facilitate expression. The teacher should not impose his/her experiences on the learner. They advise the Art and Design teacher to; suggest, facilitate, stimulate, expose, guide, coach and challenge the learner, among many other roles that move the child emotionally and stimulate the intellect to bring out the best artistic expression. Experiences refer not only to the subject matter, but also to the tools and materials employed in an expressive act. The learner should be allowed to experiment freely with tools and materials.

Gaitskell (1958) summarizes that, an Art and Design program should assess itself by looking out for the following qualities: if the work of the students varies from one individual to another, if design is well related to expression, if a variety of media are put to a disciplined use, if more than one point of view is heard in classrooms, lectures, discussions and projects about the theory and practice of Art and Design.

Elliot (1966) recommends that, any teacher worth of the name should desire to improve professionally. An Art and Design teacher should long for greater insight into the nature of learners, for additional knowledge of subject matter and skill to use it. Teachers should also learn how to get along with colleagues and the whole school fraternity. An Art and Design teacher can grow professionally; by engaging in vigorous actual classroom teaching, through in-service courses at a university, college or other recognized Art and Design tertiary institutions. Digolo (1986) suggests that, implementation of the Art and Design curriculum can improve a lot if long serving teachers can be in-serviced from time to time. He however adds that, such in-service courses should be carried out to bridge the gap between what is and what is desired in terms of knowledge, skills and personal attributes.

Art and Design educators should not under estimate the implication of negative attitudes from learners, other teachers, the school administration and other social forces towards Art and Design subject. According to (Barret, 1982), such attitudes shape the larger societal perspective about the subject. Sooner or later, they find their way to the classroom consequently affecting the students output in form of academic performance. Therefore there should be a concerted effort on the part of the Art and Design educators to demonstrate the value of their subject through what they do in the classroom. Gombe (1990) reiterates that, the Art and Design

teachers have the duty to use the classroom to fight hard to retain important values, judgments and attitudes in Art and Design from a tender age of every learner. She radically proposes compulsory teaching of Art and Design in every school at the three basic levels of education; namely pre-school, primary and secondary. This will give all learners an opportunity to proper understanding and fair judgment of Art and Design. When the learner's attitude is positively influenced towards Art and Design, their parents and the society at large will have no choice but to support them.

Seidel and Palmer (2005) advises Art and Design teachers that, learner's attitudes towards the subject can be improved by building a positive and open relationship with their students. They also add that student's attitudes can be improved through discussions on the value and place of Art and Design in day to day living, and the career prospects in the field. Teaching methods applied by teachers also matter a lot in influencing positive attitudes and discouraging negative ones.

2.5 Summary

Various research carried out in Kenya in the discipline of Art and Design have addressed diverse issues, they include: An examination into the implementation of Art and Design syllabus (Wang'ombe, 1987), The status of Art in the Kenya secondary curriculum (Gombe, 1990), Constraints affecting teaching of Fine Art in secondary schools (Gituiku, 2006), Art and Design in the Kenyan secondary schools: Problems and suggested solutions (Mbuga, 1986). It is evident that there

has been no research done to specifically look into the issue of student's performance in Art and Design as one of the subjects in the Kenyan secondary school curriculum.

The reviewed related literature strongly indicate that, for excellent student performance to be registered in schools and individual subjects, various factors within the school, especially about the teacher and the student have to collectively and optimally work together towards achieving this goal. While these aspects have been established through research as significant and of crucial influence to student's academic performance in other subjects, no research has been done to show their effect on students' performance in Art and Design subject. It is therefore, the intention of this study to fill the gap by setting out to investigate the factors that affect students' performance in Art and Design in secondary schools in Nairobi county.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter presents a detailed description of methodology and design adopted for the study. It describes the following areas: research design, variables, location of

the study, target population, sampling techniques and sample size used, the research instruments, pilot study, data collection techniques, data analysis procedures, logistical and ethical considerations.

3.1 Research Design

This study was conducted using a combination of descriptive survey and naturalistic designs, specifically phenomenology. It specifically intended to investigate the factors affecting students' KCSE performance in Art and Design in secondary schools within Nairobi county. Such issues are best investigated through descriptive survey. The design enables a researcher to gather systematically factual information necessary for decision making (Ogula, 1998). Ogula also goes on to say that it is the best to use when collecting descriptive data regarding the characteristics of a population and the current needs and conditions. The descriptive survey was used because "it is appropriate in establishing relationships between variables and in facilitating the collection of information to determine the population parameters" (McMillan and Schumacher, 2001:33). They go on to say that it entails describing an existing phenomenon by using numbers to characterize individuals or a group and assess the nature of existing conditions.

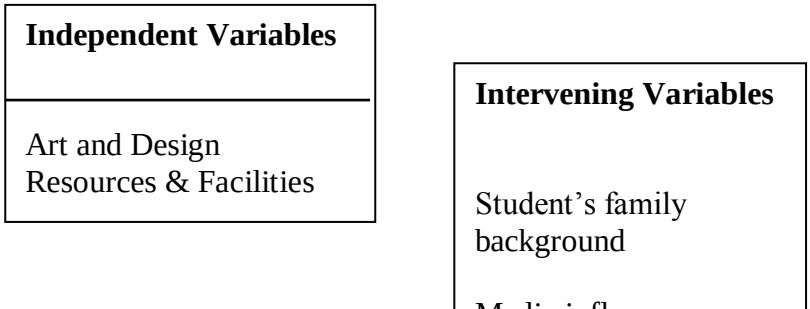
The main naturalistic design that was used in the study was phenomenological, where interview guide, focus group discussion (FGD) guide and observation guide were used. Their purpose was to collect first-hand and in-depth information to supplement data gathered using the descriptive survey design. For purposes of this

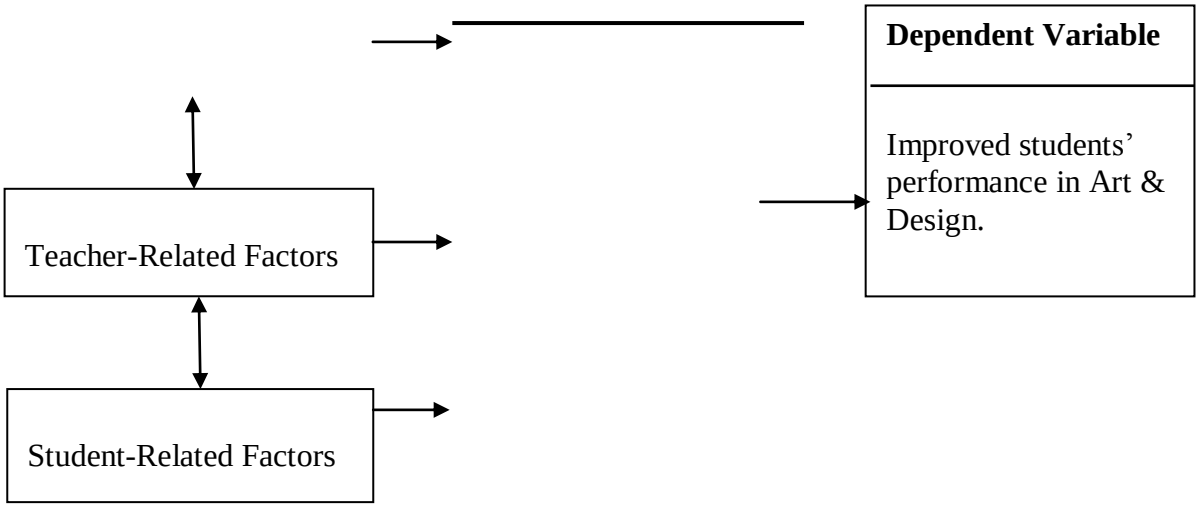
study, the descriptive survey and naturalistic design looked at factors affecting students' performance in Art and Design in secondary schools in Nairobi county.

3.1.1 Variables

In this study, the dependent variable is; improved students' performance in Art and Design. For this to happen, it is determined by independent variables in the study. They include; availability of Art and Design resources in the school such as materials and tools. Teacher characteristics which include; mastery of content and teaching methodologies applied while using the materials and tools to facilitate learning. It also depends on student-related factors such as; favorable attitude towards Art and Design to enable a student interact with the teacher, the materials, and tools for learning to take place. The study specifically focused on factors within the school that can influence student's performance in Art and Design. Factors outside the school environment which may influence student's performance in the subject were not considered in this study. They are considered as intervening variables, they include; the student's family background in terms of support and student's prior knowledge in Art and Design before joining secondary school. An illustration of the variables and how they relate is shown in figure 3.1.

Figure 3. 1 Variables to the Study





***Source**: Conceptual Framework (Fig 1.2)*

3.2 Location of the Study

The study covered both public and private secondary schools in Nairobi county. The choice of the county was arrived at after a preliminary random check of KCSE student's performance in Art and Design subject. It involved four schools in no particular order; the outcome revealed KCSE means sores in Art and Design ranging from 2.5 to 8.3 out of 12.0 points. Summary of this information is provided in Table 1.1. The trend displayed from the randomly picked schools was that, KCSE performance in the subject was not outstanding but rather average. The county was also picked because it is in an urban set up and so most schools here are likely to do all the subjects offered in the secondary schools curriculum including Art and Design. Being an urban set up also means that, the schools are likely to have the Art and Design facilities to assist in the teaching/learning of the subject. There are also all types of secondary schools ranging from day and

boarding, boys' and girls', national schools, county schools and private schools. The county also has high poverty and unemployment regions and at the same time regions of affluence. All these factors put together informed the final choice of Nairobi county as the location of this study.

3.3 Target Population

According to Ogula (1998) a target population is the population to which the researcher hopes to generalize findings of the research. He goes on to say that it refers to the entire group of persons or elements that have at least one characteristic in common. This study targeted 21 public and private secondary schools currently offering Art and Design subject in Nairobi county. These schools were chosen because the current study has not been carried out in the area. The researcher also saw Nairobi county schools being of educational significance because the performance of the schools in KCSE Art and Design has not been impressive as shown on Table 1.1 at 53%. The researcher wanted to find out if this performance is in any way a reflection of the effects of different factors within the school. The target population also consisted of all the Art and Design teachers in the 21 schools and all the form IV students doing the subject in these schools. The Art and Design teachers were included because of their inherent rich information related to performance in the subject as they directly interact with the learners. The Art and Design students were included in the study because they are involved as learners and so they understand the challenges they face in the process of learning.

Specifically, the form IV students were picked because they have almost gone through the whole course and so they have a better understanding and feel of factors affecting their performance in Art and Design examinations.

Secondary schools are categorized by the Ministry of Education as; National, County, Constituency Development Fund (CDF) and Private schools (MOE, 2010). The 21 schools offering Art and Design in Nairobi county have therefore been categorized accordingly as shown on Table 3.1 below. None of the CDF schools was offering Art and Design at the time of the study.

Table 3. 1 Categories of Secondary Schools offering Art & Design in Nairobi County

National Schools	County Schools	Private Schools
1. Lenana School	1. Eastleigh Secondary	1. Loreto Convent Valley Road
2.MoiForces Academy	2. Highway Secondary	2. Loreto Convent Msongari
3. Nairobi School	3. Mutuini Secondary	3. Sunshine Secondary
4. The Kenya High	4. Ngara Girls'	4. Makini School
	5. Our Lady of Mercy	5. Riara Springs Academy
	6. Pumwani Secondary	6. St. Mary's School - Nairobi
	7. St. Teresa's Boys'	
	8. Dagoretti Boys'	
	9. Jamhuri High	

	10. St. George's Girls'	
	11. State House Girls'	
Group A = 4	**Group B = 11**	**Group C = 6**

***Source**: MOE (2010).*

3.4 Sampling Techniques and Sample Size

3.4.1 Sampling Techniques

A sample is made up of individuals who participate in the study and it is from them that data are collected (McMillan and Schumacher, 2001). A sample is part of the target population that is procedurally selected to represent it. The sample for this study consisted of Art and Design teachers and form IV students doing Art and Design, selected from the sampled public and private secondary schools in Nairobi county. The sample of 45 participants was selected; it was made up of nine Art and Design teachers and 36 Art and Design students. This number of 45 participants was selected using a combination of sampling techniques. Stratified random sampling was used to select the schools while ensuring that all the main groups in the population were involved. This technique involves dividing the population into sub-groups or strata, on the basis of a variable the researcher has chosen, such as gender, age or level of education (McMillan and Schumacher, 2001).

In this study the category strata was used to ensure all the key groups in the population were involved, that is; national, county and private as shown on Table 3.1. Once the population was divided, samples were drawn randomly from each sub-group. Therefore, using stratified random sampling technique, the researcher used the school category variable to come up with strata of four national schools, 11 county schools and six private schools, totaling to 21 schools. From each stratum, 43% of the target schools were randomly selected to represent all the schools. The high percentage (43%) of selected schools was arrived at because only few secondary schools (21) offer Art and Design subject in the county. The selection was as follows; five boy's schools, three girl's schools, one mixed school, one private boy's school, and one private mixed school. The selection of the specific schools for the study was arrived at using simple random sampling technique. Small pieces of paper were rubbed, put in a bowl, and randomly picked one by one until the required number of 50% of each classification of schools was achieved. Therefore the number of sampled schools for the study by category, type and gender are over the 43% which is the total target sampled schools. This information is represented on the tables below.

Table 3.2 Distribution of Schools in Nairobi County by Category

Schools	**Number of schools**	**Sample**	**Type of School**	**Percentage (%)**
National schools	4	2	1 boy, 1 girl	50%
County schools	11	5	3 boy's, 2 girl's	45%
Private schools	6	2	1 boy, 1 mixed	33%
Total	**21**	**9**		**43%**

Source: MOE (2010)

Table 3.3 Distribution of Schools in Nairobi County by Gender

Schools	Number	Sample	School Category	Percentage (%)
Boys only	11	5	1 national, 3 county and 1 private	45%
Girls only	7	3	1 national and 2 county	43%
Mixed schools	3	1	1 private	33
Total	**21**	**9**		**40%**

Source: MOE (2010)

All the teachers teaching Art and Design from the sampled schools were sampled to participate in the study. Therefore a teacher was selected from each of the sampled schools making a total of nine teachers. The teachers were used because by virtue of being Art and design teachers, they regularly teach the students and therefore they know the challenges they face when teaching the subject. The teachers also possibly know the factors affecting student's academic performance in the subject.

The students studying Art and Design from the selected schools were sampled using systematic random sampling. In this sampling technique, every n^{th} participant was selected from a list of all elements in the population beginning with a randomly selected element. The researcher obtained a list of form IV students from the sampled schools arranged in an ascending order using student's

admission numbers. Since a sample of 36 students was required from a list of 102 students, the population was first divided by the number required for the study, that's 102 divided by 36 to get three. Starting with a randomly selected name, every 3rd name from the list of the students was selected. In the mixed school, strata were created to have some of the students as boys and some as girls depending on their representation on pro-rata basis. This sample was quite representative of the total population. A total of 36 students were picked, four from each school. A summary of sampled schools and participants is shown on the table below. Four students were selected from each school because Art and Design is an optional subject among many other technical subjects therefore only a limited number of students do the subject in a school.

Table 3.4 Sampling Matrix

Respondents	**Sampling Design**	**Target Population**	**Sample Size**	**Percentage (%)**
Schools	Stratified random	21	9	43%
Teachers		12	9	75%
Students	Stratified & systematic random	102	36	35%

Source: Research Data (2011)

3.5 Research Instruments

This study was conducted using questionnaire, interview guide, focus group discussion guide and Observation guide, as the main tools for collecting data. The four instruments are provided in appendix 1, 1I, III and IV respectively. These tools were selected on the basis of the nature of data to be collected, the objectives

of the study as well as the time available for the study. The combination of the four instruments was expected to yield rich and reliable data.

3.5.1 Questionnaire for Art and Design Teachers

A questionnaire is a set of questions or statements that assess attitudes, opinions, beliefs and biographical information (McMillan & Schumacher, 2001). Mugenda and Mugenda (1999), state that questionnaires ensure anonymity, permit use of standardized questions, have uniform procedures, provide time for the participant to think about the responses and are easy to score. This study used a questionnaire because the population under study was literate and therefore able to read the items and write down their responses. The questionnaires were directly administered by the researcher to the Art and Design teachers. It was made up of five sections namely A, B, C, D and E.

Section A contained items on the biographical data of the participants. Section B sought information on school-related factors that affect students' performance in Art and Design. Section C sought information on the extent to which the student's attitudes towards Art and Design affect their performance in the subject. Section D, looked for information on the challenges facing Art and Design students in preparation for KCSE in schools. Section E sought information on the measures that can be put in place to enhance students KCSE performance in Art and Design (See Appendix I).

3.5.2 Interview guide for Art and Design Teachers

An interview is an oral administration of questions. They are person to person verbal communications where one person asks the others questions intended to illicit information or opinions. An interview guide is a set of questions that an interviewer asks participants when interviewing (Mugenda and Mugenda, 1999). It was used in order to obtain in-depth information and to meet specific objectives of the study. The interview guide was semi structured with some questions structured, while others were open-ended. The interview guide was used on the nine Art and Design teachers from the sampled schools, who consented to the interview. The researcher used a notebook containing interview items during the interviews where the responses were recorded (See Appendix II).

2.5.3 Focused Group Discussion (FGD) guide for students

Focused group discussion guide is a special type of group interview in terms of its purpose, size, composition and procedures. The discussion is carefully planned, and is designed to obtain information on participants' beliefs and perceptions on a defined area of interest (Orodho, 2009). FGD's were conducted with groups of four form IV Art and Design students from each of the nine sampled schools. The discussions were guided by the FGD guide prepared by the researcher. The questions sought information on school-related factors affecting students' performance in Art and Design, the effect of students' attitude on performance in

the subject, the challenges facing Art and Design student's in preparation for KCSE and the possible measures that can be put in place to enhance student's KCSE performance in Art and Design (See Appendix III). The researcher recorded the responses by taking notes in the process of discussions.

3.5.4 Observation Guide

An observation guide is a form that is utilized to record what a researcher anticipates observing during data collection (Orodho, 2009). He continues to explain that; observation guide provides information about actual behavior. The research can either be a participant observer or a mere on-looker. An observation guide was used; it contained information relating to the school, availability, adequacy and utilization of Art and design resources in each school. The researcher checked and confirmed information relating to each sampled school by looking at the relevant documents and filling in the spaces left in the observation guide. The researcher also ticked the relevant variables given as to whether the Art and Design resources were available, adequate and were being utilized in an Art and Design lesson (See Appendix IV).

3.6 Pilot Study

A pilot study is concerned with pre-testing of instruments to ensure that items in the instruments are stated clearly, there is ease during administration, time taken to administer items is regulated and have the same meaning to all respondents (Mugenda and Mugenda, 1999). They further explain that during pre-testing of

instruments, the respondents on which the instruments are pre-tested should not be part of the selected sample. A pilot study was carried out in one school in Nairobi county out of the 12 remaining schools after the nine had been sampled for the study. In the selected school, one Art and Design teacher and four form IV students were used as participants for the pilot study. All the four instruments were tested, that is; questionnaire, interview guide, FGD guide and observation guide.

3.6.1 Validity of Instruments

Validity is very important in developing and evaluating measuring instruments. It refers to the extent to which an instrument measures what it is designed to measure (Ary, Cheser, Jacobs, Razarieh & Sorensen, 2006). According to McMillan & Schumacher (2001), validity is assessed depending on the purpose, population and environmental characteristics in which measurement takes place.

The instruments validity was ensured by reviewing them with peers and experts in validating research instruments from the School of Education at Kenyatta University. The pilot testing reinforced the validity of the instruments. The respondents were asked to comment on the clarity of instructions and relevance of items in the instruments. This enabled the researcher to identify and rectify deficiencies in the instruments such as unclear instructions, inadequate space to write responses, wrong phrasing of some questions and wrong numbering of

questions. This helped to determine the extent to which the instruments were useful in collecting data from the field.

3.6.2 Reliability of Instruments

Reliability of a measuring instrument is the consistency with which an instrument measures whatever it is measuring (Ary, et al. 2006). According to McMillan & Schumacher (2001), reliability is the extent to which results are similar over different forms of the same instrument or occasions of data collection. It is also the extent to which measures are free from error.

The instruments were piloted in one school, one Art and Design teacher and four form IV Art and Design students within Nairobi county. These participants were not included in the sample for the main study. The researcher used the test-retest method in the pilot study, where the exercise was repeated after one week. The reliability coefficient was calculated between the two sets of scores using Cronbach Alpha to assess the internal consistency of the instruments. A reliability coefficient of 0.742 was found. A reliability coefficient of a minimum of 0.6 is satisfactory for any research (Berthoud, 2000). A coefficient of 0.742 is more than 0.6, which enabled the decision that the instruments were reliable for use.

3.7 Data Collection Techniques

Data was collected using the four instruments; questionnaires, interview guides, FGD guides and observation guides. The questionnaires and interview guides were administered to teachers, FGD guides to students while observation guides were used to check the availability and utilization of various Art and Design resources and facilities in the study schools. Appointments were booked in advance over the phone with the respective teachers through their school offices. A schedule of activities was designed in such a way that each school was allocated a day in order to make it convenient for the respondents. On the material day, the researcher first familiarized with the respondents by explaining who she was, the nature and reason of the study. This helped create a rapport and understanding before the instruments were administered. Data was recorded by note-taking during interviews with teachers and discussions with students. Questionnaires were filled in by the teachers while the researcher waited. Observation guide was filled in by the researcher after observations were made according to the pre-defined items.

3.8 Data Analysis Procedures

Data analysis involves organization of data into constituent parts or examining data to distinguish its component parts or elements separately or in relation to the whole (Mugenda and Mugenda, 1999). Data from the questionnaires was analyzed using descriptive and inferential statistics.

Quantitative data from questionnaires was summarized in frequencies and percentages. The findings were presented using tables, charts and graphs with accompanying explanations. Inferential statistics was used to draw conclusions concerning the relations and differences found in the research results. The researcher used the sample statistics to draw conclusions about the population from which the sample was drawn.

Qualitative data from the interview guides and FGD's was transcribed verbatim. The observed documents and situations were also translated by the researcher. Data was edited, ambiguities removed and categories created using codes. The data in each category was summarized and the findings presented using narratives. Finally, the results of the study were interpreted, conclusions drawn and recommendations made.

3.9 Logistical and Ethical Considerations

This study investigated factors affecting students' performance in Art and Design in secondary schools in Nairobi county. Ethical issues to consider include; privacy, confidentiality, sensitivity to cultural differences, gender and anonymity (Kitchin & Kate, 2000). Ethical research does not harm, it gains informed consent from participants and respects the right of the participant. The researcher disclosed the purpose of the research and gave all the required facts so that the participants make

informed decisions about participating or not. The given information also made them confident to participate in the study.

An authorization letter was obtained from the department of Educational Communication and Technology of Kenyatta University as well as permission sought from the MOE to conduct the research in Nairobi county. Permission was also sought from the head teachers of the sampled schools to allow the study to be conducted in their schools. The respondents participated in the study after being furnished with adequate information of its purpose and significance. The respondents were further assured of privacy and confidentiality of the information they gave and that it was only to be used for the purpose of the research. They remained anonymous, as they were not required to write their names or names of their schools on the questionnaire or FGD guides.

CHAPTER FOUR

DATA PRESENTATION AND DISCUSSION OF FINDINGS

4.0 Introduction

This chapter presents the data and discussion of the findings on factors affecting students' KCSE performance in Art and Design, in secondary schools in Nairobi county. The study targeted Art and Design teachers and students. Data were obtained using questionnaires, interview guides, FGD guides and observation guide. The findings were presented in frequency distribution tables, graphs and pie charts. They were presented following the research objectives in chapter one. Each research objective was analyzed considering different question items of the instruments that gave relevant data. The summaries of these findings are given in frequencies and percentages.

The respondents consisted of teachers teaching Art and Design and students taking Art and Design subject. All the respondents in the nine study schools participated in the study, and therefore data collection in the study was 100%. The actual response rate of the respondents is shown on Table 4.0.

Table 4.0 Response rate of respondents

Response Rate	**Expected**	**Actual**	**Response rate %**
Teachers	36	9	100
Students	36	36	100
Total	**45**	**45**	**100**

Source: Research Data (2011)

The reason for the 100% response rate was due to the fact that the Art and Design teachers' were few and so every effort was made to access them and convince

them to respond to the questionnaire items. The students also fully participated because it was easy to organize them through their teachers, since the schools involved were only nine.

4.1 Demographic Information of the Study Respondents

This section describes the demographic characteristics of the respondents. The aspects of interest were job group, teaching experience, type of school and school category.

4.1.1 Demographic Information of the Art and Design Teachers

This section presents information on teachers' job group, academic qualification, teaching experience, type of school and school category. This enabled the researcher to know the kind of respondents she was dealing with. Data were collected, analyzed and presented on the Table 4.1.

Table 4.1 Distribution of demographic information of teachers

Variable		Frequency	Percentage %

Job group	L	2	22.2
	M	3	33.3
	N	1	11.1
	Not indicated	3	33.3
TOTAL		**9**	**100**
Academic qualification	Diploma	3	33.3
	Degree in Education	2	22.2
	Masters of Education	2	22.2
	Others	2	22.2
TOTAL		**9**	**100**
Gender	Female	6	66.7
	Male	3	33.3
TOTAL		**9**	**100**
Teaching experience	6-10 years	2	22.2
	11-20 years	3	33.3
	21 and above	4	44.4
TOTAL		**9**	**100**
Type of school	Boy's boarding	3	33.3
	Girl's boarding	2	22.2
	Boy's day	2	22.2
	Girl's day	1	11.1
	Mixed day	1	11.1
TOTAL		**9**	**100**
School category	National	2	22.2
	County	5	55.6
	Private	2	22.2
TOTAL		**9**	**100**

Source: Research Data (2011)

The data presented on Table 4.1 above shows that by job group; (33.3%) belonged to job group M, 22.2% were in job group L, while 11.1% was in Job group N. Quite a number of teachers (33.3%) did not respond to this item. Concerning academic qualification, it was established that 33.3% of the teachers had a Diploma in Education, while a degree in Education (B.ED) and Masters of

Education (M.ED) were 22.2% respectively. Another 22.2% of the teachers did not indicate their academic qualifications.

In terms of teaching experience, a bigger percentage of teachers 44.4% had taught for more than 21years, while 33.3% had taught for 11-20 years. Another 22.2% of the teachers had taught for between 6-10 years. This was expected because the government froze the employment of teachers, and that is why most of the teachers in the profession are mainly those with many years of experience. Concerning type of school, it has been shown on Table 4.1 that 33.3% of the schools were boy's boarding, 22.2% were girl's boarding and boy's day respectively, while 11.1% of the schools were girl's day and mixed respectively. This distribution represented the schools quite well. In terms of school category, majority (55.6%) of the participating schools were county, while 22.2% of the schools were national and private respectively.

4.1.2 Number of Art and Design Teachers in each school

The researcher sought information on the number of Art and Design teachers in each of the schools. A question was posed to the teachers and the analysis of the responses showed that a majority of the schools (77.8%) had one Art and Design teacher, while 11.1% of the schools had two and three Art and Design teachers each. These results are shown on Table 4.2.

Table 4.2 Number of Art and Design teachers per school

Number	Frequency	Percentage %
1 teacher	7	77.8
2 teachers	1	11.1
3 teachers	1	11.1
Total	**9**	**100.0**

Source: Research data (2011)

4.1.3 Teaching Workload

The researcher sought information on the number of lessons per teacher per week. A question was asked to the teachers and the analysis of the responses was as follows. The Table shows that 77.8% had between 16-20 lessons, 11.1% of the teachers had between 21-25 lessons while another 11.1% had more than 25 lessons per week. These results are shown on Table 4.3.

Table 4.3 Teaching Workload

Lessons	Frequency	Percentage %
16-20 lessons	7	77.8
21-25 lessons	1	11.1
26 lessons & above	1	11.1
Total	**9**	**100.0**

Source: Research data (2011)

4.1.4 Demographic Information of the Art and Design Students

This section provides information on Art and Design students' numbers in each school. Data were collected, analyzed and presented as shown on Table 4.4.

Table 4.4 Distribution of student's information by numbers in each school

Variable	Numbers	Frequency	Percentage %
Form 1	1-20	1	11.1
	21-40	4	44.4
	Over 40	4	44.4
Total		**9**	**100**
Form II	1-20	2	22.2
	21-40	5	55.6
	Over 40	2	22.2
Total		**9**	**100**
Form III	1-20	9	100
Total		**9**	**100**
Form IV	1-20	9	100
Total		**9**	**100**

Source: Research Data (2011)

The data presented on Table 4.4 above shows that 44.4% of the schools had more than 40 students in form 1, another 44.4% of the schools had between 21-40 students in form 1 while 11.1% of the schools had between 1-20 students. Concerning form II's, 55.6% of the schools had between 21-40 students, while 22.2% of the schools had over 40 Art and Design students and 22.2% had less than 20 students. The form III and IV's had less than 20 Art and Design students in all the schools.

4.1.5 Student's Adequacy

The researcher looked for information on whether the number of Art and Design student's in each class was adequate. A question was posed to the teachers and the analysis of their responses is shown on Table 4.5.

Table 4.5 Student Adequacy

Teachers	Frequency	Percentage %
Yes	8	88.9
No	1	11.1
Total	**9**	**100.0**

Source: Research Data (2011)

The data presented on Table 4.5 above shows that 88.9% of the teachers were of the opinion that the number of Art and Design students they had were adequate, while 11.1% of the teachers felt that their number was not adequate.

4.1.6 Art and Design KCSE Mean Scores in each School

The researcher sought information on KCSE mean scores in Art and Design of each school. A question was posed to the teachers and the analysis of the responses is shown on Table 4.6.

Table 4.6 School KCSE mean scores in Art and Design (2008-2010)

Year	Mean Score	Frequency	Percentage %
2008	0.1 – 4.0	2	22.2
	4.1 – 8.0	6	66.7
	8.1- 12.0	1	11.1
	Total	**9**	**100.0**
2009	0.1 – 4.0	2	22.2
	4.1 – 8.0	5	55.6
	8.1- 12.0	2	22.2
	Total	**9**	**100.0**
2010	0.1 – 4.0	2	22.2
	4.1 – 8.0	4	44.4
	8.1- 12.0	3	33.3
	Total	**9**	**100.0**

Source: Research Data (2011)

The data presented on Table 4.6 above shows that in 2008, a majority of the schools (66.7%) attained a mean score of between 4.1 - 8.0, while one school (11.1%) scored between 8.1–12.0 points. In 2009, 22.2% of the schools attained a mean score of between 8.1-12.0, while another 55.6% of the schools had a mean score of between 4.1- 8.0 points. In 2010, 33.3% of the schools had a mean score of between 8.1-12.0, while 22.2% had a mean score of less than 4.0. When asked a question on the overall school mean score performance in 2010, most schools (57%) had a mean score performance of between 8.1–12.0, while (42.9%) of the schools had a mean score performance of between 4.1 - 8.0 points.

The data presented on Table 4.6 also shows that there is a relationship between category of school and students' performance in Art and Design. This is supported by the fact that within the three years, five out six schools that scored a mean score of between 8.0-12.0 points were national schools.

4.2 Findings by Research Objectives/Questions

This section gives the findings by research objectives/questions in the study.

4.2.1 School-Related Factors Affecting Students' Performance in Art and Design

The researcher sought information on the school-related factors and their influence on students' performance in Art and Design. Questions was posed to the teachers and rated on a scale of strongly agree to strongly disagree, regarding a number of

school-related factors in relation to performance in Art and Design in their respective schools. Data were collected, analyzed and presented as shown on Table 4.7.

Table 4.7 School-related factors affecting students' performance in Art and Design

Statement	SA	A	NS	D	SD
	f %	f %	f %	f %	f %
a) The school administration supports and facilitates Art & Design teaching/learning activities in the school	5 (55.6)	2 (22.2)	1 (11.1)	1 (11.1)	-
b) Poor performance in Art & Design is a threat to its survival in your school	1 (11.1)	2 (22.2)	1 (11.1)	1 (11.1)	4(44.4)
c) The school avails materials, tools and equipment for teaching/learning of Art & Design	2(22.2)	3 (33.3)	-	3(33.3)	1(11.1)
d) Your school has an art room/classroom for Art & Design lessons	5 (55.6)	3 (33.3)	-	-	1(11.1)
e) Your school provides textbooks and reference materials for Art & Design	4 (44.4)	4 (44.4)	-	-	1(11.1)
f) Job satisfaction from promotions, improved salary scheme and recognition does influence your quality of teaching	3(33.3)	3(33.3)	-	2(22.2)	1(11.1)
g) An Art & Design teachers' academic qualification determines the quality of teaching	3(33.3)	4(44.4)	2 (22.2)	-	-
h) Many years of teaching Art & Design improves the teachers' quality of teaching	7(77.8)	1(11.1)	1(11.1)	-	-
i) Lack/limited Art & Design resources does affect how a teacher teaches the subject	1(11.1)	7(77.8)	-	-	1(11.1)
j) Inadequate Art & Design syllabus coverage affects student's performance negatively	6(66.7)	3(33.3)	-	-	-
k) Student indiscipline is a threat to good performance in the subject in your school	2(22.2)	-	-	6(66.7)	1(11.1)
l) Parental involvement and support has a relationship with good student performance in Art & Design	3(33.3)	6(66.7)	-	-	-
m) Frequent assignments homework and projects in Art & Design contribute to improved student performance	8(88.9)	1(11.1)	-	-	-
n) Information on careers related to Art & Design can motivate students to work hard in the subject	4(44.4)	4(44.4)	-	1(11.1)	-
o) Low enrollment of Art & Design students in your school is a threat to its survival	1(11.1)	-	-	5(55.6)	2(22.2)

Key: Strongly Agree (SA), Agree (A), Not Sure (NS), Disagree (D), Strongly Disagree (SD)

Source: Research Data (2011)

Table 4.7 has clearly displayed school-related factors and their influence on students' performance in Art and Design according to the teachers. Majority of the teachers (77.8%) said that the school administration generally supports and facilitates Art and Design teaching/learning activities in the school, while a minority of the teachers (11.1%) disagreed. This is supported by Eshiwani (1993) who explains that, schools have a direct bearing on the achievement of learner's, this is because; they have a key role of coordinating, directing, facilitating and setting a stage for a conducive and motivating learning environment.

Concerning poor performance in Art and Design being a threat to its survival in schools; (55.6%) of the teachers disagreed. A small number of teachers (11.1%) however indicated that they were not sure whether poor performance is a threat in their schools or not. Majority of the teachers (55.6%) agreed that the schools directly or through students avail materials, tools and equipment for teaching/learning of Art and Design, while some of the teachers (44.4%) disagreed on the same. An overwhelming number of teachers (88.9%) agreed that their schools at least provide textbooks and reference materials for Art and Design, while a minority (11.1%) disagreed. At the same time, an overwhelming majority (88.9%) agreed that their schools have an art room/classroom for Art and Design lessons, while a minority (11.1%) strongly disagreed on the same. A sizeable number of teachers (66.7%) agreed that job satisfaction from promotions, improved salary scheme and recognition, influence their quality of teaching,

however, a few teachers (33.3%) disagreed on the matter. A majority of teachers (77.8%) were in agreement that Art and Design teachers' academic qualification determines the quality of teaching, while a minority of teachers (22.2%) were undecided as to whether Art and Design teachers' academic qualification determines the quality of teaching or not. An overwhelming majority (88.9%) of teachers agreed that many years of teaching Art and Design improves the teachers' quality of teaching, while a minority (11.1%) was not sure on the matter. An overwhelming majority (88.9%) of teachers were in agreement that lack/limited Art and Design resources affect the teaching of the subject while a minority (11.1%) disagreed that lack/limited Art and Design resources affect the teaching of the subject. All the teachers (100%) were in agreement that inadequate Art and Design syllabus coverage affects student's performance negatively.

A majority (77.8%) of the teachers disagreed that student indiscipline is a threat to good performance in Art and Design in their schools, while a small number (22.2%) of teachers strongly agreed that student indiscipline is indeed a threat to good performance in the subject in their schools. All the teachers (100%) were in agreement that parental involvement and support has a positive relationship with good student performance in Art and Design. All the teachers (100%) also agreed that frequent assignments, homework and projects in Art and Design contribute to improved student performance. An overwhelming majority (88.9%) of the teachers agreed that information on careers related to Art and Design motivates students to

work hard in the subject, however, a minority (11.1%) of the teachers disagreed on the same. A majority (77.8%) of teachers refuted that the small number of Art and Design students is a threat to the subjects' survival in their schools, while a minority (11.1%) agreed that indeed the small number of students is a threat to the subjects' survival in the respective school.

In conclusion, the findings tend to indicate that teachers agree to most of the statements made. The statements they agreed to mostly were those of schools being required to avail Art and Design resources for teaching/learning such as; materials, tools, equipment, art rooms/classrooms and textbooks/reference materials. Gaitskell (1958) in in agreement with the teachers opinions, he states that; lack/limited materials in each form of artistic expression and the variety of the same tends to inhibit expression in Art and Design. He explains that availability of such basic materials and tools in schools contribute directly to learner motivation because they provide a favorable environment for learning. Other agreed upon statements include; teachers experience improves quality of teaching, inadequate syllabus coverage affects student's performance, student indiscipline threatens good performance, parental involvement and support is a recipe for good student performance, frequent assignments and information on careers contribute to good student performance in Art and Design. However, a good number of the teachers (55.5%) were in disagreement that poor performance in Art and Design was a threat to the subject's survival in their respective schools.

Observation was made using an observation guide on the availability, adequacy, and utilization of Art and Design resources and facilities in schools. On a scale of excellent to poor, the results are shown on the Table 4.8.

Table 4.8 Availability, adequacy & utilization of Art & Design resources & facilities

Statement	**E**	**VG**	**G**	**F**	**P**
a) State and organization of Art & Design room	1	2	2	3	1
b) Availability of Art & Design textbooks and reference materials	-	5	1	2	1
c) Number of Art & Design lessons per week	-	1	3	5	-
d) Availability and use of Art & Design materials, tools and equipment during lessons	2	2	3	1	1
e) Syllabus coverage	3	3	1	1	1
f) Availability of students sketch books and notebooks	2	3	1	1	2
g) Done assignments and Art and Design projects	2	1	1	4	1

Key: Excellent (E), Very Good (VG), Good (G), Fair (F), Poor (P)

Source: Research Data (2011)

According to Table 4.8, observations made found out the following:-

a. That Art and Design rooms for lessons were available in eight schools, while one school did not have an Art and Design room. Instead, they used any available room for their lessons.

b. The Art and Design rooms differed in organization, from excellent to poor disorganized states. One school had two Art and Design rooms (Junior and Senior), it was rated as excellent.

c. In terms of Art and Design textbooks/reference materials, five schools were rated as very good because they had a ratio of one book to one student; one school was rated poor because apart from the teachers' copies, only two other books were available in the school library for student's reference, not borrowing.

d. The number of Art and Design lessons allocated in a week was rated as very good and good in four schools while it was rated as fair in five schools, because the number of lessons was lower in those schools.

e. Two schools were excellently equipped with Art and Design materials, tools and equipment and students used them in their lessons, two other schools were very well equipped, three were well equipped, one was fairly equipped while one was poorly equipped. In the poorly equipped school, some students managed to avail a few materials and tools as the school did not provide. The limited available materials and tools were shared among many students and as a result quality of work was largely compromised.

f. Syllabus coverage was rated between poor and excellent in all the schools covered, with three of the schools being rated as excellent. Three of the schools were rated as very good, while two were rated as fair and poor respectively because syllabus coverage was way behind schedule. A

majority of the schools were rated between good and excellent in terms of students sketch books and notebooks. However, in three schools the presence of student's sketchbooks and notebooks was scanty. The same was reflected in their usage with notes, assignments and projects poorly done. Art and Design assignments and projects were well done in four schools which were rated as excellent, very good and good respectively.

Conclusively, it was noted that schools which had excellent and very good Art and Design rooms that were equipped attained mean scores of above 6.0 out of 12.0 points in Art and Design in KCSE examinations. Schools whose Art and Design rooms were rated as fair, poor and no Art room, exhibited a performance of below the mean score of 6.0 out of 12.0 points. It became very clear that there was a positive relationship between availability, adequacy and utilization of Art and Design materials, tools and equipment in schools and good grades attained at KCSE. Gakunga (2004) concurs with the position by recording that teaching/learning resources and facilities make a difference in the student's achievement; distribution of such resources is a major factor that accounts for scholastic difference in performance among schools.

4.3 Student's Attitudes towards Art and Design

In objective two, the study was interested in knowing the attitudes of students towards Art and Design. A question on the same was posed and responses from the field were analyzed. The findings are as shown on the following Table 4.9.

Table 4.9 Teachers' responses on student's attitudes towards Art & Design

Statement	SA	A	NS	D	SD
a) My students like the Art & Design subject	5(55.6%)	3(33.3%)	-	-	-
b) The students perform well in Art & Design	2(22.2%)	3(33.3%)	-	3(33.3%)	1(11.1%)
c) The students like staying longer in the art room	3(33.3%)	4(44.4%)	1(11.1%)	1(11.1%)	-
d) Students do their Art & Design assignments and projects	2(22.2%)	3(33.3%)	-	3(33.3%)	1(11.1%)
e) Students come for extra Art & Design work	1(11.1%)	3(33.3%)	-	3(33.3%)	2(22.2%)
f) Students buy extra Art & Design materials and tools	3(33.3%)	1(11.1%)	-	3(33.3%)	2(22.2%)
g) My students willingly chose Art & Design subject	3(33.3%)	4(44.4%)	1(11.1%)	-	1(11.1%)

Key: Strongly Agree (SA), Agree (A), Not Sure (NS), Disagree (D), Strongly Disagree (SD)

Source: Research Data (2011)

According to Table 4.9, all the teachers (100%) agreed that their students liked the Art and Design subject. A majority (55.6%) of the teachers agreed that their students perform fairly well in Art and Design. Most of the teachers (77.8%) were in agreement that their students like staying longer in the art room. Majority of the teachers (55.6%) agreed that their students do their Art and Design assignments and projects; however 44.4% disagreed on the same. A sizeable number of teachers (55.6%) disagreed that their students come for extra work, while a

number of teachers (44.4%) agreed that their students come for extra work in Art and Design. A majority of teachers (55.6%) disagreed that their students buy extra Art and Design materials and tools while a minority (44.4%) agreed that their students buy extra Art and Design materials and tools. A sizeable number of teachers (77.8%) also agreed that their students willingly chose Art and Design subject while (11.1%) strongly disagreed on the same, but (11.1%) was not sure.

Conclusively, most teachers agreed to the statements made that positively indicate that their students have a good attitude towards the subject Art and Design. This fact should mean that the students should actually be doing much better in the subject in terms of performance. Unfortunately, the students don't do their best in the subject for reasons that are yet to be established.

4.4 Challenges Facing Art and Design Students in Preparation for KCSE

In this research objective, the study sought information from respondents on their views concerning the challenges facing Art and Design students in preparation for KCSE examinations.

4.4.1 Teachers' Views on Challenges Facing Art and Design Student's in Preparation for KCSE

A question was posed to the teachers on the same. Data were collected, statistically analyzed and the findings are shown on Table 5.0.

Table 5.0 Teachers views on challenges facing Student's in preparation for KCSE

Challenges	Frequency	Percentage %
a) Time constraint as a result of few Art & Design lessons and tight school programs	9	100
b) Expensive Art & Design materials, tools and equipment	7	77.8
c) Teachers' failure to guide students well because of lack of exposure and further training after college	7	77.8
d) Dependency on one Art and Design teacher	7	77.8
e) Lack of balance between theory and practical sections of the subject	6	66.7
f) Lack/limited Art & Design materials, tools & equipment	6	66.7
g) Lack/limited support from the school administration	5	55.6
h) Uncooperative parents	5	55.6
i) Lack/limited Art & Design Educational trips	5	55.6
j) Inadequate syllabus coverage	5	55.6
k) Lack of sufficient revision and knowledge on exam techniques	5	55.6
l) Small and ill equipped art rooms/classrooms	4	44.4
m) Truancy, absenteeism and lack of self-drive in some students	3	33.3
n) Some teachers over-bearing influence on students ideas	3	33.3
o) Negative criticism that discourages students especially the weak ones	2	22.2
p) Negative attitude among some Art & Design students	2	22.2

Source: Research Data (2011)

Table 5.0 shows that all the teachers (100%) were in agreement that the most serious challenge to Art and Design students in schools was time constraint. It is followed by expensive Art and Design materials and tools (77.8%). At the same rating is teachers' failure to guide students well in the subject because of lack of exposure and further training after college. Dependency on one teacher to teach and prepare the students for examinations also got a rating of (77.8%). In an interview with the teachers, there were clear sentiments that the workload in Art and Design was heavy for one teacher and that the monopoly of ideas that come with one teacher is not healthy for the students. Inability by students to balance between theory and practical aspects of the subject (66.7%) was also seen by teachers as a major challenge to performance in Art and Design examinations. Most students exhibited bias towards either theory or practical therefore affecting the student's overall score. Tight school programs as a challenge was pointed out by the teachers (66.7%) as a major challenge for Art and Design students. This is because students lack extra time to carry out practical assignments and projects for skill development which is a prerequisite for good performance in Art and Design.

Lack or limited Art and Design materials, tools and equipment (66.7%) pose a sizeable challenge to student's performance especially in schools that don't provide. Most schools require the students to purchase materials and tools for their daily classroom use, but are provided for during examinations. Therefore students who cannot afford get disadvantaged because they are unable to practice in order

to develop their skills. Digolo (1986) agrees that the challenge does exist; he states that the constraint of basic Art and Design resources is a major challenge to the implementation of the subject's curriculum in Kenyan schools. He continues to explain that, the challenge of access to basic and adequate resources to do the work right and well is directly related to the quality of students output. This can either be in form of the quality of art works produced or academic grades attained at the end of the course. This situation was confirmed by Gombe (1990) during her research and also while on supervision of teaching practice of university students. She observed the lack/limitation of basic requirements for teaching Art and Design in secondary schools. These were such as; art rooms, papers, drawing pencils, pens, brushes, paints, dyes, clay and textbooks.

Limited or sometimes lack of Art and Design educational trips (55.5%) was cited as a challenge to student performance because; it limits their exposure to broader ideas in the subject. A sizeable number of teachers (55.6%) felt that other challenges include; in adequate syllabus coverage, un-cooperative parents who do not support their children's choice of subject or purchase required Art and Design materials and tools for them. other challenges are such as; small and ill equipped art rooms/classrooms (44.4%), truancy, absenteeism and lack of self-drive (33.3%), few Art and Design lessons per week (33.3%), teachers overlooking students ideas (33.3%), lack of sufficient revision and poor exam techniques (33.3%). Negative attitudes among some students towards Art and Design and

negative criticism that discourage weak students were rated at (22.2%). Interviews held by the researcher with the teachers on the challenges, confirmed the same points that arose in the questionnaire.

4.4.2 Student's Views on Challenges they face in Preparation for KCSE

FGD's were conducted with Art and Design students and their opinions were sought on different matters including challenges facing them in preparation for KCSE examinations. Data were collected, analyzed and the findings shown on Table 5.1.

Table 5.1 Student's views on challenges they face in preparation for KCSE

Challenges	**Frequency**	**Percentage %**
a) Limited time for Art and Design assignments and practice because of congested school programs	7	77.8
b) In adequate revision and discussion on exam techniques	5	55.6
c) Negative attitudes among some students	5	55.6
d) Lack/small and ill-equipped Art & Design rooms	4	44.4
e)Indiscipline among some students (absenteeism, failure to do assignments, stealing)	3	33.3
f) Lack/limited Art & Design educational trips	3	33.3
g) Inability to purchase Art & Design materials and tools	3	33.3
h) Lack of peer support among students	3	33.3
i) Art & Design subject not accorded the seriousness it deserves in schools	3	33.3
j) Influence by teachers on students in subject choice, style and technique in Art & Design assignments and projects	2	22.2

Source: Research Data (2011)

Table 5.1 on student's views shows that majority of the students (77.8%) emphasized on limitation of time as a major challenge in schools that affect their performance in KCSE examinations. This is attributed to school programs they termed as tight and congested and also day school set up for those in day schools. The limitation of time affects them because they are not able to carry out regular practice by doing assignments and projects as is required of the subject. As a result, their practical skills don't develop to the required levels to enable them handle KCSE examinations effectively. A sizeable number of students (55.6%) felt that they do minimal revision and discussion on exam techniques. This is most probably why they don't perform so well in Art and Design subject. Another sizeable number of students (55.6%) voiced that some of their colleagues have negative attitudes towards the subject. This is in agreement with Barret (1982) who records that Art and Design educators should not under estimate the implication of negative attitudes from learners, other teachers, the school administration and other social forces towards the subject. He continues to explain that such attitudes shape the larger societal perspective about Art. Sooner or later, they find their way to the classroom consequently affecting the students output in form of academic performance. Therefore there should be a concerted effort on the part of the educators to demonstrate the value of their subject through what they do in the classroom. Gombe (1990) reiterates that, the Art and Design teachers have the duty to use the classroom to fight hard to retain important values, judgments and attitudes in Art and Design from a tender age of every learner.

A good number of students (44.4%) complained about their Art and Design rooms being either small, old, make-shift or not equipped with basic facilities like tables and sink. Another number of students (33.3%), highlighted other challenges they face as; indiscipline among some students such as absenteeism, failure to do assignments and stealing each other's materials and tools. Other challenges voiced by (33.3%) of students include; lack/limited Art and Design educational trips, inability to purchase materials and tools, lack of peer support among students and the subject not being accorded the seriousness it deserves in schools. A small number (22.2%) felt that they face a challenge of teachers having an upper hand on student's subject choices, style and techniques to be used in Art and Design assignments and projects.

Conclusively, many students felt that the most serious problem is limited time in schools to carry out Art and Design assignments and projects. It is followed by minimal revision and discussions on exam techniques, and negative attitudes towards the subject. These are core attributes in the good performance of the subject. If they are a problem, most likely they largely contribute to the not so outstanding performance in the KCSE Art and Design results in secondary schools in Nairobi county.

4.5 Measures to Enhance Students KCSE Performance in Art and Design

In the fourth objective, all the participants (teachers and students) were asked to suggest measures that can be put in place to enhance student's KCSE performance in Art and Design.

4.5.1 Teachers' Suggestions on Measures to Enhance Student's KCSE Performance in Art and Design

The study sought information on the teachers views on what can be done to enhance student's KCSE performance in Art and Design. Responses from the field were analyzed and the findings are shown on Table 5.2.

Table 5.2 Teachers' suggestions on measures to enhance student's KCSE performance in Art & Design

Measures	Frequency	Percentage %
a) Start Art and Design projects early	9	100
b) Employment of more than one Art & Design teacher in schools	7	77.8
c) Teachers to research widely on content and share ideas with their colleagues	7	77.8
d) Allocate bigger rooms for Art & Design equipped with basic materials, tools and equipment	6	66.7
e) Support from school administration in; educational trips, more Art & Design lessons per week and minimizing indiscipline among students	6	66.7
f) Students to put more effort in their work through extensive revision and practice	6	66.7
g) Schools to appreciate the position of skill-based subjects like Art & Design because of its role	6	66.7
h) students to develop positive attitude towards Art & Design, to work in groups, to uplift one another and constantly consult teachers	5	55.6
i) Encourage parents to support their children	5	55.7
j) Teachers and students to be resourceful and improvise Art and Design tools & materials where appropriate	5	55.6
k) Teachers to be guided by the syllabus when teaching	4	44.4
l) Teachers to be available to guide and motivate students	4	44.4

Source: Research Data (2011)

Interviews were conducted with Art and Design teachers. They made various suggestions on what can be done to improve performance in the subject. These are explained below as follows:

a. Start of Art and Design projects early. The projects include internal assignments and KCSE examination paper three projects. Beginning projects early gives students ample time to research and execute the work well as opposed to last minute rush which leads to poor quality work and as a result low scores.

b. Teachers to carry out extensive research on content and share ideas with colleagues. This will enable them know how to expose their students through interactive activities which allow for creativity and diversity of ideas.

c. They suggested employment of more than one Art and Design teacher per school and allocation of more lessons for Art and Design subject per week per class.

d. Allocate bigger rooms/classrooms for Art and Design lessons and equip them with basic materials, tools and equipment for working. Prentice (1995) has the following advice to Art and Design teachers and students. She is of the opinion that limited resources in the subject should not cripple learners in their quest for quality. She adds that, artists are quite used to working in less than ideal conditions thus making them creative and resourceful. She also advices that, while the effort to increase and improve

resources is constant, teachers should recognize that excellent Art and Design teaching and learning can be and is done all the time with less than adequate resources. Educators who succeed with less are those who focus their paramount attention on how best to use what they have got because, more often than not the resources of time, space and money are infinite.

e. Support from school administration to minimize indiscipline among students.

f. Support and organize trips for Art and Design students to exhibitions, symposiums and other relevant areas to expose and motivate them.

g. Students to put more effort in their work through extensive revision and practice to perform well in theory and practical sections of the subject.

h. Schools to appreciate the position of skill-based subjects like Art and Design. This is because the subject has a special role to play in education and in the lives of individuals.

i. Students to; cultivate positive attitude towards Art and Design, work in groups in order to uplift one another, do regular timed exercises to improve on speed, be observant of mature artists work and constantly consult teachers. Such attributes will help them improve skills in Art and Design.

j. Students to plan in advance, involve their parents in purchasing Art and Design materials and tools, purchase needed items in groups and share whenever there is need.

k. Teachers and students to be resourceful and improvise Art and Design materials, tools and equipment where it is appropriate, to reduce on cost. This is in agreement with (Mbuga, 1986) who is a proponent of improvisation of Art and Design resources. He advices teachers and learners to utilize local materials from the immediate environment of the child, in order to cushion purchased ones from art stores and ease the pressure on the demand for school finances. This venture requires planning so that the local materials can be identified, collected and prepared in readiness for the lesson to avoid production of low standard work. Schools however ought to supplement improvised resources with purchased ones because improvisation can only limited to a number of items.

l. Teachers to be guided by the syllabus when teaching and to balance the teaching of the theory and practical sections of the subject.

m. Teachers to be available to guide and motivate students and to make positive criticism as a way of learning. Prentice (1995) agrees by stating that, when learners are left alone without guidance, facilitation, stimulation and motivation, they slowly drift to boredom and lack of interest in Art and design activities

4.5.2 Students Suggestions on how to Enhance KCSE Performance in Art and Design

The study sought information on the students views on what can be done to enhance their KCSE performance in Art and Design. Responses from the field indicated the following suggestions as illustrated on Table 5.3.

Table 5.3 Student's views on measures to enhance KSCE performance in Art & Design

Measures	Frequency	Percentage %
a) Decongesting term activities to allow more time to do assignments and project work	7	77.8
b) Organize for more revision and invite external speakers to discuss exam techniques	5	55.6
c) More student commitment and seriousness in their work	5	55.6
d) Allocate bigger rooms for Art and Design lessons and equip them with basic facilities for working	4	44.4
e) Schools to provide some materials in case a student is unable to purchase their own	3	33.3
f) Teachers to plan for more Art and Design educational trips and activities (internal and external) for exchange of ideas and exposure of students	3	33.3
g) Carry out constant practice in order to develop learnt skills	3	33.3
h) Work in groups in order to encourage, share ideas and build each other	3	33.3
i) Be disciplined and direct their energies towards their work	3	33.3
j) Have supervised access to computer for research in Art and Design	2	22.2
k) Be allowed to make choices about their work and techniques but with guidance from teachers	2	22.2

Source: Research Data (2011)

From Table 5.3, a majority of the students (77.8%) felt that the congested school calendar of activities deny them enough time to do Art and Design assignments and projects and so they suggest decongestion of term activities. These would

allow them time to do their Art and Design work efficiently in preparation for KCSE examinations. More than half of the students (55.6%) felt they needed more revision and requested for invitation of external examiners to discuss on exam techniques. Another sizeable number of students (55.6%) felt that they need to be more committed and serious in their work if their KCSE performance in Art and Design has to improve.

Quite a number of students (33.3%) suggested that if the following can be done, it can improve their performance in Art and Design. These are: provision of materials and tools in case a student is unable to purchase, exposure and exchange of ideas among students internally and externally in educational trips and related activities, constant practice to develop learnt skills, working in groups to encourage and build each other, and being disciplined by directing their energies towards Art and Design activities. A small number of students (22.2%) felt that Art and Design students should be allowed supervised access to computers for research. They should also be allowed to make choices about their work and techniques to use (22.2%) but with guidance from the teachers. This is in agreement with Seidel & Palmer (2005) who advise that, the learner's experiences should be tapped to facilitate expression. The teacher should not impose his/her experiences on the learner. They advise the teacher to; suggest, facilitate, stimulate, expose, guide, coach and challenge the learner, among many other roles

that move the child emotionally and stimulate the intellect to bring out the best artistic expression

Most students emphasized on three things as most important and if implemented may improve students' performance in Art and Design. These are; decongesting school term activities to allow students more time to do Art and Design assignments and project work, organize for more revision and discussion on exam techniques, and students to be more committed and serious in their work.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

The purpose of this study was to investigate the factors affecting students' KCSE performance in Art and Design in secondary schools of Nairobi county. This chapter presents a summary of the research findings, conclusions, recommendations and finally suggestions for further research.

The research was guided by the following objectives; to investigate the effect of school-related factors on students' performance in Art and Design, to analyze the effect of student's attitudes on their performance in Art and Design, to establish the challenges that face Art and Design student's in preparation for KCSE, and to establish measures that can enhance student's KCSE performance in Art and Design in secondary schools in Nairobi county.

5.1 Summary of the Findings

The analysis of the data enabled the researcher to come up with findings based on the four major research objectives/questions. The study findings on the demographic information of the respondents indicated that most teachers (66.7%) were female compared to male teachers (33.3%). It was further established that three teachers (33.3%) were in job group "M" while another (33.3%) did not indicate which job group they belonged to. The study found out that most of the

teachers (44.4%) had bachelor's degrees and masters in education. It was also established that most teachers (44.4%) had taught for more than 21 years in terms of teaching experience.

In regard to the student's demographic information, it was established that most of the schools had more Art and Design students in form I and the numbers kept on decreasing as students progressed from form I to form IV. All the form III's and IV's had less than 20 students in all the schools. This could be for the reason that Art and Design is among the cluster of technical subjects which are optional in those schools. Therefore at entry point in form I, a student is required to select Art and Design against other technical subjects, this trend continues until form III when one finally settles on the total number of eight subjects to register for at KCSE level.

The analysis of the data enabled the researcher to come up with major findings based on the four research objectives/questions. The findings are summarized below.

5.1.1 The school-related factors effect on students' performance in Art and Design

The study established that most of the schools (77.8%) had one Art and Design teacher, teaching between 16 and 20 lessons at most per week. It was also

established that most teachers felt that the number of students they had per class was adequate. Further, it was established that the Art and Design KCSE mean scores of most schools were less than 8.0 out of 12.0. It was found out that most teachers felt the schools need to support and facilitate Art and Design teaching/learning activities by; availing basic materials, tools and equipment, avail sufficient and equipped art rooms, provide textbooks and reference materials for teaching/learning Art and design in schools.

Generally, the teachers also felt that if the following are done in schools, performance in Art and Design can improve. These include; employment of qualified and experienced teachers, consideration of promotions and salaries of teachers, ensure adequate syllabus coverage, work on student discipline, encourage parents to support and be involved in the lives of students, and teachers to give frequent Art and Design assignments and projects. It was further observed that there was a positive relationship between availability, adequacy and utilization of Art and Design materials, tools and equipment in schools and good grades in the subject attained in KCSE examinations.

5.1.2 The extent to which student's attitudes towards Art and Design affect their performance

The research established that; most students like Art and Design as a subject, perform fairly well in Art and Design examinations, like staying longer in the art

room, do their assignments and willingly chose Art and Design subject among other options. However, it was found out that; most students neither do nor seek for extra Art and Design work from their teachers to improve their knowledge and skills, and that they do not make an effort to buy extra Art and Design materials and tools for practice.

5.1.3 The challenges which Art and Design students face in preparation for KCSE

The research established that the most common challenges facing students in preparation for KCSE include; expensive Art and Design materials, tools and equipment, time constraints, teachers' failure to guide student's well because of lack of exposure and lack of in-service courses after college, dependency of students on one Art and Design teacher, lack of balance between theory and practical aspects of the subject, and limited materials, tools and equipment in the subject. There were also issues of; limited support from the school administration, uncooperative and un-supporting parents, lack/limited educational trips, inadequate syllabus coverage, inadequate revision and knowledge on exam techniques and negative attitudes by some students towards Art and Design.

5.1.4 The measures that can be put in place to enhance students' KCSE performance in Art and Design

The teachers suggested that; Art and Design projects should be started early, employment of more than one Art and Design teacher in a school, teachers to research widely on content and share ideas with colleagues in order to cope with emerging issues in the subject, student's to put more effort through extensive revision and practice to improve on skills, the parents to be encouraged to support their children, the school administration to support Art and Design and its activities such as allocating a bigger room for lessons and equipping it with basic facilities for working. Other suggestions made included; an appeal to schools to appreciate Art and Design and its role at the same level as other subjects, students to be resourceful and improvise Art and Design materials and tools where appropriate, teachers to balance the teaching of theory and practical sections of the subject, and teachers to be available to guide and motivate students.

The students suggested that; the schools term activities should be decongested to allow more time for Art and Design assignments and project work, more revision and discussions on exam techniques, more student commitment and seriousness in their work, and allocation of bigger and equipped art rooms with basic facilities for working. Other suggestions made by students include; schools to provide some materials for students who are unable to purchase their own, teachers to organize for interaction and exposure of students through educational trips, students to carry

out constant practice to develop learnt skills, students to work in groups to share ideas, and to be disciplined in order to improve their performance.

5.2 Conclusions of the Study

On the basis of the findings of the study, various conclusions were drawn:

According to objective number one which was about the school-related factors effect on students' performance in Art and Design, the study made the following conclusion. That the teacher-related factors significantly influence student's performance in Art and Design. This is followed by the student-related factors and finally the availability, adequacy and utilization of Art and Design resources and facilities in schools.

Objective number two looked at the student's attitudes towards Art and Design and its effect on their performance. The study concluded that as much as the students chose and like the Art and Design subject, they do not put in much effort to do extra work to improve their knowledge and skills nor buy extra Art and Design materials and tools.

According to objective number three which addressed the challenges facing Art and Design students in preparation for KCSE, the study concluded as follows: That time constraint in schools for Art and Design work was a serious challenge followed by expensive Art and Design materials, tools and equipment.

Objective number four explored measures that can be put in place to enhance students' KCSE performance. The study concluded among others that; Art and Design projects should be started early, more than one Art and Design teacher should be employed in each school, teachers should research widely on subject content and share ideas with colleagues, and that the school term's activities should be decongested to allow more time for assignments and revision in the subject.

5.3 Recommendations of the Study

The study established that a number of factors need to be taken into consideration if students' performance in Art and Design in secondary schools in Nairobi county has to improve. It makes the following recommendations to guide policy and practice in Art and Design education in secondary schools:

1. Art and Design teachers should ensure that the subject syllabus is adequately covered and in time to allow for revision and consultation before onset of KCSE examinations. They should also purposely interact among themselves and with other experts in the subject, in order to share and exchange ideas on emerging issues in Art and Design.
2. The teachers to plan for frequent assignments, projects and intensive revision both in theory and practical areas of the subject so as to build confidence in the students and assist them to apply and develop the learnt knowledge and skills in Art and Design in preparation for examinations.

3. Art and Design teachers in conjunction with the school administration, to organize for regular interactive Art and Design activities such as educational trips, symposiums across schools, art days and career days for exposure and motivation of students.
4. Student discipline should be addressed by all education stakeholders since it is a critical component of academic performance. This is because acts of indiscipline among students such as; truancy, absenteeism, drug abuse, failure to do assignments, affects student's performance in Art and Design. This is in agreement with Eshiwani (1993) who has stressed that discipline cannot be divorced from education because it enables students to concentrate in their studies.
5. Schools should put measures in place to ensure that basic Art and Design resources and facilities for teaching/learning such as; art room, materials, tools, equipment and textbooks are available. Barret (1982) agrees by stating that such resources are the source and medium of expression in the subject, they are therefore basic and should be availed in schools to facilitate teaching/learning.
6. Schools should revise their day/term programs to decongest the number of activities to create more study time for students.
7. Schools should ensure that they have more than one Art and Design teacher for better service to be given to students.

8. Schools to recognize and appreciate the position of skill-based subjects like Art and Design; this is by giving it equal treatment with other subjects in the school because it has its role/contribution in education and to human development. This is supported by Gaitskell (1958) who states that, Art and Design is so important in the program of general education that no child is truly educated until s/he has participated in a vigorous program in the field of Art and Design.
9. The MOE and other stakeholders through the schools should organize for in-service seminars and workshops for Art and Design teachers and school heads. This is for purposes of sensitizing and educating them on the role of Art and Design in national development, current trends in the subject and Art and Design curriculum requirements. This will serve to bring all the concerned on board and influence their attitudes positively for purposes of supporting the student towards better performance in the subject. On in-service courses, Digolo (1986) suggests that, implementation of the Art and Design curriculum can improve a lot if long serving teachers can be in-serviced from time to time.
10. The study finally recommended that; parents through the PTA (Parents Teachers' Association) and the BOG (Board of Governors) should be sensitized on their role towards good student performance in Art and Design. They should be made aware of the need to purchase supplementary Art and Design materials and tools for their children's regular use. The

parents should also be encouraged to be involved in the construction and equipping of Art and Design rooms. This is supported by Otula (2007) who said that parents should be allowed to participate in school activities without being viewed as interfering. Their participation will ensure that certain standards that govern good practice of students are maintained as cited by Berthoud (2002).

5.4 Suggestions for Further Study

The following issues emerged from the research and were suggested for further investigation.

a. An investigation of non-examination of Art and Design at primary school level and its effect on students' performance in secondary school.
b. An investigation into the societal value of Art and Design and its influence on student's selection and performance in the subject at secondary school level and beyond.

Future studies could also widen its scope by using a diverse sample of schools to include those outside of Nairobi county especially those in rural set ups for purposes of comparison of findings.

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APPENDICES

Appendix I: Questionnaire for Art and Design Teachers

Dear Teacher,
I am a postgraduate student at Kenyatta University, undertaking research on students' performance in Art and Design in secondary schools. I kindly request you to assist by filling in this questionnaire. Please answer the questions given as honestly as possible to reflect the situation in your school following the instructions given. Your responses will strictly be confidential and will only be used for purposes of this research. You are not required to write your name or name of your school on the questionnaire.
Thank you for your cooperation.

SECTION A: BACKGROUND INFORMATION

Please tick [√] in the appropriate ellipse.

1) Please indicate your current job group.
   L [ ], M [ ], N [ ], Any other [ ]

2) What is your highest academic qualification?
   (i) Diploma in Education [ ]
   (ii) Degree in Education [ ]
   (iii) Masters in Education [ ]
   (iv) Any other (specify)……

3) How many years have you taught Art in Secondary school?
   (i) 0-5 [ ]
   (ii) 6-10 [ ]
   (iii) 11-20 [ ]
   (iv) 21 and above [ ]

4) What type is your school?
   (i) Boys' school (boarding) [ ]
   (ii) Girls' school (boarding) [ ]
   (iii) Boys' school (day) [ ]
   (iv) Girls' school (day) [ ]
   (v) Mixed (day) [ ]
   (vi) Mixed (boarding) [ ]
   (vii) Mixed (day and boarding). [ ]

5) What is the category of your school?
   (i) National [ ]
   (ii) Provincial [ ]
   (iv) Private. [ ]

SECTION B: School-related factors affecting students' performance in Art and Design

Please tick [√] or write your responses in the spaces provided.

6. How many Art and Design teachers does your school have currently?

1 ☐ 2 ☐ 3 ☐ more ☐

7. What is your current workload (lessons) per week?

[5-10] [11-15] [16-20] [21-25] [26 and above]

8. (i) How many Art and Design students do you have currently in?

Form 1 ☐ Form 2 ☐ Form 3 ☐ Form 4 ☐

ii) Are the numbers of Art and Design students adequate in each form?

YES ☐ NO ☐

9. (i) What was your school KCSE mean score performance in Art and Design in?

2010 ☐

2009 ☐

2008 ☐

(ii) What was the overall school KCSE mean score in?

2010 ☐

10. Please put a tick [√], in the space which most likely represents the situation in your school, using the key?

Key: Strongly Agree (SA), Agree (A), Not Sure (NS), Disagree (D), Strongly Disagree (SD)

		SA	**A**	**NS**	**D**	**SD**
a)	The school administration supports and facilitates Art & Design teaching/learning activities in the school					
b)	Poor performance in Art & Design is a threat to its survival in your school					
c)	The school avails materials, tools and equipment for teaching/learning of Art & Design.					
d)	Your school has an art room/classroom for lessons					
e)	Your school provides textbooks and reference materials for Art & Design					
f)	Job satisfaction from promotions, improved salary scheme and recognition does influence your quality of teaching					
g)	An Art & Design teacher's academic qualification determines the quality of teaching					
h)	Many years of teaching Art & Design improves the teacher's quality of teaching					
i)	Lack/limited Art & Design resources does affect how a teacher teaches the subject					
j)	Inadequate Art & Design syllabus coverage affects student's performance negatively					
k)	Student indiscipline is a threat to good performance in Art & Design in your school					
l)	Parental involvement and support has a relationship with good student performance in Art & Design					
m)	Frequent assignments, homework and projects in Art & Design contribute to improved student performance					
n)	Information on careers related to Art & Design can motivate students to work hard in the subject					
p)	The small number of Art & Design students in your school is a threat to its survival.					

SECTION C: Students attitudes towards Art and Design

11. Please indicate whether you: Strongly Agree (SA), Agree (A), Not Sure (NS), Disagree (D) or Strongly Disagree (SD)

		SA	**A**	**NS**	**D**	**SD**
a)	My students like the Art and Design subject					
b)	My students perform well in Art and Design					
c)	Art & Design students like staying in the art room					
d)	Art & Design students do their assignments					
e)	Students come for extra work in the subject					
f)	Students buy extra Art and design materials and tools					
g)	My students willingly chose Art and Design subject					

SECTION D: Challenges facing Art and Design students in preparation for KCSE

12. As the Art and Design teacher in the school, what challenges do your students face in preparation for KCSE?

SECTION E: Measures for enhancing students KCSE performance in Art & Design

13. What measures do you think can be put in place to enhance Art and Design student's performance in KCSE?

Thank you so much for your participation

Appendix II: Interview Guide for Art and Design Teachers

Please respond appropriately according to the situation in your school.

1 (i) Using either yes or no, state whether you enjoy teaching Art and Design in your school?

Yes ☐ No ☐

(ii) What are the reason(s) for your answer?

3. What do you think is the motivation behind student's choice to do Art and Design?

3. (a) Based on whether fair, good or excellent; what is the general Art and Design students' performance in both internal examinations and KCSE?

Fair ☐ Good ☐ Excellent ☐

(b) What are your student's strengths in relation to performance?

(c) What are their weaknesses in relation to performance?

(d) What role should students play in improving their performance in Art and Design?

5. (i) Based on; good (G), not sure (NS) or poor (P), how do you rate the attitudes of the following groups of people in your school towards Art and Design?

a) The school administration

b) Other teachers

c) Art & Design students

e) Non-Art & Design students

(ii) Whose attitude do you think pose the highest threat to good performance in Art and Design?

(iii)Why do you think so?

6. What are the strengths of your school administration in relation to supporting the subject?

7. (a) What challenges does the school administration pose that hinders good student's performance in Art in Design?

(b) What do you think the administration can do to help improve students performance in the subject?

8. (a) How do you think Art and Design teachers can be a hindrance to good student's performance in the subject?

(b) What do you suggest can be done by Art and Design teachers to improve student's performance in the subject?

9. Assessing yourself, what are your strengths as an Art and Design teacher in relation to students performance?

10. Art and Design is a subject of choice, talent and among those with the least candidature; it should therefore be on top of the chart in KCSE performance in schools. How is the situation in your school, and why?

11. Why do you think there is a decline in the number of secondary schools offering Art and Design in Nairobi county and the country at large?

Appendix III: Focus Group Discussion (FGD) guide

(Guided discussions with form IV Art and Design students in groups of four)

1) Are you proud to be in this school? Why?

2) Does your school have an art room/classroom for Art and Design lessons?

3) Does the school provide materials, tools and equipment for teaching/learning of Art and Design?

4) Does the school provide Art and Design textbooks and other reference materials?

5) How do the following people in the school support Art and Design students towards good performance in the subject?
    a) The school administration

    b) Other teachers

    c) Non-Art and Design students

6) i. How many Art and Design teachers does your school have currently?

   ii. Do you think the number is adequate?

7) i. Is your Art and Design teacher impressed with your current performance in the subject?

ii. If not why?

8) Are you regularly given Art and Design assignments /homework /projects to do?

9) i. Do you finish your assignments/homework/projects within given datelines?

ii. If not why?

10) How does your Art and Design teacher support you to achieve good performance in the subject?

11) What is your comment on syllabus coverage in Art and Design?

12) i. Do you love Art and Design?

ii. Why?

13) How do you rate your performance in Art and Design as a form IV class? (Excellent, Good, Fair, Poor).

14) Which factors do you think promote good student performance in Art and Design in this school?

15) Which factors do you think contribute to poor student performance in Art and Design in this school?

16) As an Art and Design student, what do you think you need to do to improve your performance from its current position?

17) i. Which careers are related to Art and Design?

ii. Do you aspire to join any after your secondary education?

18) i. How do you rate the general student body discipline of your school? (Excellent, Good, Poor).

ii. Is there any relationship between discipline and good performance in Art and Design?

19) What is the opinion of your friends and parents towards your choice of Art and Design?

20) How many Art and Design students are you in Form IV?

21) What challenges do you face as Art and Design students that could affect your performance in the subject in relation to:

a) The school administration

b) Art and Design teacher

c) Other teachers

d) Other Art and Design students

22) What are your suggestions in relation to the challenges for improvement of student's performance in Art and Design, than it is now?

a) The school administration

b) Art and Design teacher

c) Other teachers

c) Other Art and Design students

Thank you so much for participating.

Appendix IV: Observation Guide

SECTION A: Background Information

Name of School _____

Type of school _____

Number of Art & Design teachers _____

Availability of art room Yes ☐ No ☐

Number of Art & Design students per class:

F1 ☐ F2 ☐ F3 ☐ F4 ☐

Art and Design KCSE mean score in: 2010 _____ 2009 _____ 2008 ___

2010 school mean score in KCSE _____

SECTION B: Availability, Adequacy and Utilization of Art & Design Resources & Facilities in Schools

Art and Design Resources & Facilities		**Frequency**				
		E	**VG**	**G**	**F**	**P**
1.	State and organization of the Art & Design room					
2.	Availability of Art & Design textbooks and reference materials					
3.	Number of Art & Design lessons per week					
4.	Availability of Art & Design materials, tools and equipment					
5.	Use of materials, tools and equipment in Art & Design lessons					
6.	Syllabus coverage					
7.	Availability of students sketchbooks and note books					
8.	Done Art & Design assignments and projects.					

Key: Excellent (E), Very Good (VG), Good (G), Fair (F), Poor (P)

Appendix V: Secondary Schools Offering Art and Design in Nairobi County

1. Dagoretti High School
2. Eastleigh High School
3. Highway Secondary School
4. Jamhuri High School
5. Lenana School
6. Loreto Convent - Valley Road
7. Loreto Convent Msongari
8. Makini School
9. Moi Forces Academy
10. Mutuini Secondary School
11. Nairobi School
12. Ngara Girls'
13. Our Lady of Mercy Secondary School – South B
14. Pumwani Secondary School
15. Riara Springs Academy
16. St. George's Girls' Secondary School
17. St. Mary's School – Nairobi
18. St. Teresa's Boys' Secondary School
19. State House Girls'
20. Sunshine Secondary School
21. The Kenya High School.

Source: MOE, (2010).