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EFFECTS OF EDUCATIONAL RESOURCES ON TEACHING AND LEARNING OF GENERAL KNOWLEDGE IN ART AT EFFIDUASI SENIOR HIGH SCHOOL, ASHANTI REGION

BY

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DECLARATION

While acknowledging the use of information from various sources, I state with honesty that this research is entirely mine. This project is the result of my own effort that has never been published or copyright. I am solely responsible for any shortcoming in this work.

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DEDICATION

I dedicate this project work to my family, especially my wife Mrs. Abigail Opoku Ameyaw, my children Nana Amponsah Ameyaw, Kwadwo Kissi Ameyaw and Kwadwo Nyarko Ameyaw for their maximum support in seeing me through my education.

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ABSTRACT

The education system in Ghana is steadily developing even as it is confronted with a number of defects which include inadequate educational resources in Senior High Schools owing to poor planning and improper management. The study aims to examine the effects of educational resources on the teaching and learning of General Knowledge in Art at Effiduasi Senior High School and also seek to document the types and nature of educational resources available, the effects of educational resources on students' academic performance as well as proposing innovative strategies to manage educational resources for the teaching and learning of GKA at Effiduasi Senior High School. The study espoused the mixed method research design and the descriptive research design with a total of 68 population including 62 (sixty-two) Form Three Visual Art students in the school offering GKA, the headmistress, Head of Department for Visual Art, and 4 (four) Visual Art teachers. The research sought to find the types and nature of physical facilities, material and human resources available at Effiduasi Senior High. The study adopted the Ordinary Least Squares (OLS) regression model in analyzing the data. The study found that the educational resources have significantly positive effects on students' performance at 1% level. This means that improvement in the educational resources increase students' academic performance. The study further revealed that students' level of punctuality and teacher motivation have positive while project undertaken by student has negative but all statistically insignificant relationship with students' academic performance. The general conclusion of this study is that educational resources are scientifically related to student academic performance and that their relations are so important that they cannot be overlooked. The study therefore recommended that regular maintenance and replacement of existing resources, teachers' motivation, frequent monitoring and evaluation of teachers, and student projects and good storage facilities are factors that the government and other stakeholders should ensure in order to improve performance in GKA.

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INTRODUCTION

1.1 Overview

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1.1.1 Background to the Study

The educational system of any country is a mirror through which the image of the country can be realized, reflected, formed and also likely to be formed. Education, according to Siaw (2009), has been and will continue to remain the possible cause of change in any society. It increases the efficiency and productivity of people and breeds a crop of trained manpower that is capable of championing economic growth and development in the country. This is because economic growth and development is driven by the quality and the productivity of a nation's workforce, whereas productivity of any workforce is dependent on the quality of its education (Rasheed, Aslam and Sarwar, 2010). In addition, a comprehensive educational structure leads to an enlightened citizenry and manpower development, which is able to lead a campaign for social change and economic advancement (Asare, 2011). As a result, the developed human is competent enough to champion the cause of societal advancement by using the skills learned to better the lot of mankind.

Education in Ghanaian schools, takes place within a formal organizational framework from kindergarten, primary, junior high, senior high to the tertiary level. One's ability to move from the kindergarten stage to the junior high school requires that he/she passes the end of term examinations. On the other hand, a learner's qualification into senior high school in Ghana depends on good performance in BECE Examination in order to become fit for consideration for admission and placement in the elective programmes of study such as Science, General Arts, Visual Art, Home Economics and Business (Hayford, 2007; Asihene, 2009; Dorleku, 2013). Unfortunately, majority of students after completing senior high school are not able to advance to the tertiary level simply because of poor academic performance in the West African Senior Secondary School Certificate (WASSCE).

General Knowledge in Art (GKA) is offered to Visual Arts and Home Economics students only. The Visual Arts Programme comprises GKA, Ceramics, Basketry, Graphic design, Jewellery, Leatherworks, Textiles Picture Making, and Sculpture. A student is required to study two vocational courses in addition to GKA. The objective of the programme is to foster creativity, appreciation and criticism of artefacts, mass production, and promotion of artifacts by the student at the end of the programme (Curriculum Research & Development Division, 2010).

Visual Arts education revolves around resources and systems to effect maximum impact, resources such as teachers with the right expertise are required; so are systems such as culture, learning environment and availability of tools and materials (Siaw and Nortey, 2011).

1.2 Statement of the Problem

The most trending news about education all over the county is the problem of falling standards in students' academic performance as captured in the national newspapers, on radio, on the official Ghana website, in government reports and chief examiners' reports of the West African Examinations Council (WAEC, 2017). In these reports and other publications, the problem is attributed mainly to lack of physical facilities such as logistics in our schools, inadequate government funding, poor learning environments, insufficient number of teachers, over-loaded curriculum, deficiencies in educational reforms, wholesale promotion of students, adoption of western-world policies of education, among others (Ghana News Agency, 2004; 2008; 2009).

Even though these findings vary from school to school, no such study has been conducted, specifically, at Effiduasi Senior High School which has been in existence for 74 years and it is therefore, the oldest school and the most populated in the Sekyere East District to ascertain the cause of poor academic performance in G.K.A., left alone knowing which solution to prescribe for its treatment. This research therefore investigated the types of educational resources that are available at the Effiduasi senior high school, especially, for the teaching and learning of General Knowledge in Art, so as to assess their effect on students' academic performance at Effiduasi Senior High School and recommend strategies to improve their academic achievement.

1.3 Objective of the Study

1. To document the types and nature of educational resources available for the teaching and learning of GKA at Effiduasi Senior High/Comm. School.
2. To analyse the effects of the available educational resources for teaching GKA on students' academic performance at Effiduasi Senior High/Comm. School.
3. To propose innovative strategies to manage educational resources to the teaching and learning of GKA at Effiduasi Senior High/Comm. School.

1.4 Research Questions

1. What are the types and nature of educational resources available for teaching and learning of GKA at Effiduasi Senior High/Comm. School?
2. What are the effects of the available educational resources for teaching GKA on the students' academic performance at Effiduasi Senior High/Comm. School?
3. How will innovative strategies be used to manage the educational resources for the teaching and learning of GKA at Effiduasi Senior High/Comm School?

1.5 Scope of the Study

The study was limited to the availability, types and nature of educational resources with the purpose of examining the effects on Year Three Visual Art students' academic performance in GKA at Effiduasi Senior High/Comm. School in the Sekyere East District of Ashanti Region, Ghana. The educational resources were

limited to only teaching and learning materials, physical infrastructure and availability of professional teachers.

1.6 Abbreviations/Acronyms

- GKA - General Knowledge in Art
- JHS - Junior High School
- SHS - Senior High School
- WASSCE - West African Senior Secondary School Certificate
- WACE - West Africa Certificate Examination
- HOD - Head of Department
- OLS - Ordinary Least Squares

1.7 Definition of Terms

The operational terms as used in the study are defined below:

- **Educational Resources:** resources in the school which include teaching and learning materials, physical infrastructure and availability of professional teachers that help the students in their academic endeavours, consolidating on their performance in examinations.
- **Academic Performance:** How well or badly individual student scores in each specific examinable subject as indicated by scores and grades by WAEC.

1.8 Significance of the Study

The findings of the research study will have significant implications for the future of SHS Visual Arts education in Sekyere East District and Ghana as a whole. The findings will enlighten the Board of Governors on the existing educational resources in their schools and how they affect education, particularly, General Knowledge in Art (GKA**)** which is the core subject in Visual Arts education. It will further inform the Board of Governors on the need to ensure adequate educational resources in the subject. The findings of the study can be employed by curriculum developers to ensure that educational resources recommended for GKA in the senior high school are those that definitely help to improve students' understanding of the curriculum leading to enhanced academic performance.

The report will also serve as a reference material for teachers, guidance and counselling officers and GKA teachers. In addition, the Ghana Art Teachers Association can use the outcome of this study to organize workshops to upgrade the skills of its members for effective and efficient teaching and learning of GKA at the senior high school level of schooling.

1.9 Organisation of the rest of Text

The Chapter Two of the research covers the review of literature related to the subject. Chapter Three concerns with the methodologies adopted in data collection such as research design, research methods, population, sample and sampling techniques, research tools, organization of research tools and data analysis. Chapter Four presents the analysis and interpretation of the main results whereas Chapter Five presents the

findings, conclusions drawn from the research and recommendations for improving the availability of educational resources and their effects on students' academic performance in GKA.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Overview

The chapter focuses on the review of the related literature to the study, the chapter covers literature on:

- Education in Ghana
- Secondary Education
- Visual Arts Programme in the Senior High Schools
- Challenges faced by the Visual Arts Programme
- General Knowledge in Art
- General Aims of General Knowledge in Art
- Scope of Content
- The Organisation of the Syllabus
- Time Allocation
- Teaching
- Teaching Theories
- Learning
- Educational Resources
- Physical Facilities

- Material
- Resources
- Human Resources
- Management of Educational Resources
- Management of Material Resources
- Concept of Academic Performance
- Factors that Affect Academic Performance
- Academic Performance and Academic Resources
- Academic Performance and Punctuality to Class
- Academic Performance and Project Assignment
- Academic Performance and Teachers' Motivation

2.1.1 Education

The word 'education' is very common and popular term that is articulated by lots of people but well understood by a couple of them in its right perspective. Etymologically, the term 'education' has been derived from the Latin word 'educare' which means to raise, and to bring up (Craft, 1984). According to few others, the word 'education' was devised from a Latin term 'Educere' which infers 'to lead forth' or 'to come out'. These indicates that education seek out to promote an individual's qualities. Education also develops the inherent or the innate capabilities of human beings. According to Education Dictionary (edited by Good, 1973), education is defined as "the collection of all the procedures by which one develops skills, attitudes

and other forms of behaviour of practical values in the society in which s/he lives; the social process by which people are subjected to the influence of selected and controlled environment (especially that of the school), so that they may obtain social competence and optimum individual development". The idea of education has been used in a range of contexts with varied meanings.

2.2 Education in Ghana

The earliest history of formal, western-styled education in Ghana could be traced directly to the European activities in the Gold Coast. Western education started in the form of castle schools. The earliest attempts at establishing schools were made by the Portuguese in 1952 after settling in Elmina in 1482 and it was basically based on reading and writing (Graham, 1971). Other Europeans such as the Danes, Dutch and English also followed. The castle schools that were established were not meant to educate all children but to educate the numerous mulatto children, their offspring with African women who got married to the western traders. Although the castle schools at Accra exclusively admitted mulattos, cape coast castle schools embraced also children of some important chiefs and wealthy merchants (McWilliams, 1962; Graham, 1971). Since then Ghana's education has gone through a lot of transformation up to its present state. In spite of this checked historical background, Ghana's educational system is seen as one of the effective educational systems in the sub-Saharan Africa.

2.3 Organisation of Education in Ghana

The Ministry of Education is responsible for education in Ghana. The affairs of the Ghana Education Service, the Bureau of Ghana Languages, the National Service

Secretariat, the Ghana Library Board, the National Commission for UNESCO, the Ghana Book Development Council, the National Council for Tertiary Education and National Accreditation Board-both in charge of higher education is supervised by the Ministry of Education. The Ghana Education Service is mandated to supervise policy relating to primary and secondary (general and vocational) education, as proposed by the Ministry of Education. Curriculum Research and Development Division, responsible for implementing and assessing the developed national curriculum with regard to pre-university education is also supervised by the Ghana Education Service. The Ghana office of the West African Examinations Council is charged with conducting examinations for senior secondary education whereas the Council for Technical and Vocational Education and Training (COTVET) coordinates the Technical and secondary vocational education (Curriculum Research and Development Division, 2010).

According to the documents from the Sekyere East District Education planning Unit (2011), Ghana's higher education system has universities and polytechnics as the main twofold structure. The 1987 reforms, equipped the education system with the 6+3+3+4 structure. The numbers represent the duration of the education. The first 6 represents the primary, followed by 3years junior secondary education, 3years senior secondary then finally 4 year higher education in this case(bachelor's degree programmes). Master's degree programmes have a nominal duration of 1 or 2 years.

The Sekyere East District Education document also indicated that there are 23,487 primary schools, 15,804 junior secondary schools, 927 senior secondary schools, 39

technical institutions, 26 nurse training colleges, 3 theological colleges, 52 university colleges, 14 tutorial colleges, 10 polytechnics, 9 public universities and 3 chartered private universities, the majority of Ghanaians have relatively easy access to education. Education is compulsory between the ages of 6 and 15. The official language of instruction in Ghanaian education is English, except for in the first 3 years of primary education when the most common indigenous language in each region is used as the language of instruction. The academic year last 45 weeks. (Sekyere East District Planning Co-coordinating Unite, 2011).

2.4 Secondary Education

According to Curriculum Research and Development Division (2010), secondary school education in Ghana lasts 3 years for both junior and senior High Schools. At by 15 years children might have completed the junior secondary level. During this level the subject of interest to teachers are Mathematics, English, Social Studies and Integrated Science and also Basic Design and Technology, Religious and Moral education, French and ICT. Basic Education Certificate Examination is used to test their knowledge on the subjects they have studied. An academic year last 45 weeks in this level.

At Senior High School level, students are taught Mathematics, English, Social Studies and Integrated Science as core subjects. In addition to these subjects they can select from a number of electives courses which include: General Arts, Visual Arts, Home Economics, Business and Science. Senior High School education is climaxed West African Senior Secondary School Certificate (WASSCE). The WASSCE has replaced the Senior Secondary School Certificate (SSSCE) since 2007. At the senior high level,

students sit for the four core subjects' examination and in addition to three (3) or four (4) electives. The academic year in Senior High School lasts 40 weeks. During the reform in 2007, secondary education duration was increased by one year, creating a 4-year Senior High School. This reform was later reversed by a new government in 2009, bringing the SHS duration back to three years. The short-lived reform has not affected the assessment of the Senior Secondary School Certificate. At the end of their secondary education, students sit examinations for the West African Senior Secondary School Certificate. In order to gain admission into undergraduate programmes at Ghanaian universities, candidates must in principle have obtained a pass (grade A1 to E8) – in at least six subjects (three core subjects and three electives) for the West African Senior Secondary School Certificate with a maximum aggregate score of 24, or grade A1 to C6 in at least three core and three elective subjects with an aggregate not exceeding 36. Subject to the selected field of study, additional requirements may be imposed with regard to the electives for which the candidate must have passed the examinations (Anamuah Mensah Committee Report, 2007; Education Sector Performance Report, 2013).

2.5 Visual Arts Programme in the Senior High Schools

Visual Arts education in Ghana is taught at secondary and tertiary levels. In the SHS, Home Economics is another option to Visual Arts, both subjects constitute the Vocational Skills programme. There are eight specialized elective subjects in Visual Arts

The curriculum comprises; Leatherwork, Sculpture, Textiles, Picture Making, Basketry, Ceramics, Graphic Design, Jewellery, and General Knowledge in Art,

which is an obligatory subject (Evans-Solomon, 2004; Asihene, 2009). According to the Visual Art (2008) Teaching Syllabus, the structure of the programme has been made to offer adequate foundation skills and knowledge for additional education in the related elective subjects and also for students terminating their SHS education to learn a trade.

Again, the elective subjects of the Teaching Syllabus has been grouped into two dimensional(2-D) or three - dimensional (3-D) Art forms. 2-Ds Subjects comprise Picture Making, Textiles and Graphic Design, while Ceramics, Basketry, Jewellery, Sculpture, and Leatherwork form the 3-Ds. Siaw (2009) says that every student is expected to study one subject from the 3-D group and three electives: two from the 2-D group, including G.K.A, which is a core subject for all Visual Arts students and therefore makes it compulsory. The three year duration of the study of these subjects leads to the West African Senior Secondary School Certificate Examination (WASSCE), which paves way for the job market and access to higher education. Though schools offering Visual Arts are mandated to offer at least, two elective subjects, fulfilling this requirement depends largely on availability of specialist teachers, requisite studio facilities, tools, equipment and relevant raw materials Owusu-Afriyie (2009). It is also important to emphasize that the subjects that students choose to study in their senior secondary years have a major effect on their educational and career options after they leave school.

The compulsory General Knowledge in Art (GKA) is a peculiar subject with its own challenges. The 2010 Teaching Syllabus describes GKA as a composite subject that

was teased out from all the Visual Arts subjects studied at the SHS level and intended to provide information in the history of art, creativity and appreciation, the elements and principles of art, and skills in their application to various practical art processes. Like the elective subjects, GKA comprises both theory and practical topics. The theory is meant to widen the students' scope of art vocabulary in order to equip them with the requisite communication skills that would enable them to talk knowledgeably on art. The practical components are to reinforce what is learned in the individual subject areas (Curriculum Research and Development Division, 2010).

Unlike the elective Visual Arts subjects, however, this composite subject has no specialist teachers (Opoku-Asare, 2008), implying that all Visual Arts teachers are competent enough to teach all aspects of GKA very effectively. Besides, the teaching of GKA is also directed by a single textbook (General Knowledge in Art for Senior Secondary Schools) that has not been revised since being published by Amenuke et al (1999). Although Visual Arts has the ability to directly translate secondary education into a consistently economic return (Rihani, 2006), Ghana cannot fully benefit from the creativity of its citizens as long as Visual Arts and the technical / vocational sub-sector of the state's public educational system is abysmally resourced and therefore cannot positively affect human capital development for economic growth (The President's Education Reform Review Committee, 2002).

The various disciplines or subjects which come under the Visual Art programme have been explained below:

General Knowledge in Art: It is one of the Visual Art subjects that provides broad-based information in the history of art, creativity, and appreciation, and teaches basic elements and principles of art as well as skills in their application to various practical art processes.

Basketry: It is the art of making baskets and other articles such as mats, trays, etc; with Materials such as canes, palm leaves, bamboo, raffia, rattan etc. by way of weaving, plaiting, knotting, coiling and looping.

Ceramics: Ceramics is concerned with objects made of clay such as tiles, vases, pots, which are made hard by firing at a very high temperature.

Graphic Design: It is one of the components of visual art that uses drawing, paintings, printmaking, and typographic designs as a means of visual communication. Examples of Graphic art products are poster, banner, billboard, label etc.

Leatherwork: It involves the art of turning animal skin into leather for the production of variety of products such as footwear, bags, belts, book covers among others. Leather comes in the form of natural and artificial ones known as Leatherette.

Picture Making: Is the art of arranging images or elements of design on two dimensional surfaces for the purpose of having aesthetic value. It comes in the form of drawing, painting, collage, mosaic, montage and printmaking.

Sculpture: Is the art of creating forms in three dimensions or relief. Sculpture has two basic techniques. These are modeling and carving. Sculpture can be divided into three major forms; intaglio, relief, and sculpture in the round.

Textiles: It is a general term for fibers, yarns and other materials that can be made into fabrics and for fabrics produced by interlacing or any method of decorating fabrics.

2.5.1 Challenges faced by the Visual Arts Programme

The study of Visual Art in Senior High Schools in Ghana does not only provide opportunities but also challenges to the success of the programme. Many factors may have accounted for this. One of these factors is the attitude of some parents. Most of them prefer their wards opting for programmes that in their view are more challenging and lucrative such as Law, Medicine, Engineering, among others, which to them, Visual Art does not provide. They therefore do everything possible to discourage their wards from perusing career in visual arts. Closely related to the above factor is the wrong notion that Visual Art is for the less intelligent students because of its practical nature. As a result, right from Junior High School level, students with high grades are made to choose the Sciences and those with low grades are also made to opt for Visual Arts, which they claim does not require the higher-order thinking required of the Sciences (Owusu- Afriyie, 2009; Evans-Solomon & Opoku-Asare, 2011; Osei-Mensah, 2012; Curriculum Research and Development Division, 2010).

Again, CRDD (2010) stresses that attitude of some non-visual arts teachers especially those in the core subjects need mentioning. Some see the programme as non-academic suitable for only the unintelligent students so not much attention is given to them as compared to the Sciences. This attitude makes the visual arts students inferior that affect their academic progress and subsequently their future. Additionally, most visual

art teachers do not pay enough attention to the students during practical lessons where teachers' expertise is very much needed. Others go about with certain utterances on students' works, which make them to lose interest when their efforts are not rewarded.

Lack of studios is another challenge faced by the programme in various schools. In most schools, the studios are not there, so classrooms are used as studios where the furniture is not suitable for practical artwork. Where the conditions are good, only few works are kept there leaving the rest to the mercy of the weather. Students seeing these are discouraged from working hard to come out with quality works. Where students are even motivated to work, there is lack of tools and materials to work with.

2.6 General Knowledge in Art

General Knowledge in Art (GKA) is a combination subject comprised Art History, Appreciation and General Art concepts. These subjects are obtained out from all the Visual Arts subjects studied at the Senior High School (SHS) level (Agbenatoe, 2011). It is a compulsory subject for Visual Arts students but elective for non-Art students particularly those in Home Economics; it has no specialist teachers so its teaching varies according to the strengths of the teachers who teach it; curriculum delivery of GKA is guided by a single official textbook; and not all aspects of the subject is taught efficiently by every teacher (Evans-Solomon, 2004; Opoku-Asare, 2008; Owusu- Afriyie, 2009; Evans-Solomon & Opoku-Asare, 2011; Osei-Mensah, 2012).The rationale is to provide the student of visual art broad based knowledge and skills in the theory and practice of visual art. The theory section of GKA is to develop the students' scope of vocabulary and to provide him/her with the necessary communication skills that would allow him / her to talk

knowledgeably in the subject. The practical constituent has been designed to strengthen the skills that the visual art student studies in the individual elective subjects of study (Siaw, 2009). Collectively, the object is to incline the senior high school student to develop love for the appreciation of the cultural and artistic values of Ghanaian arts.

Affection for the cultural and aesthetic principles has the ability to reinforce the development of the affective domains of learning and to inspire development of patriotism, national pride and self-confidence in students. In the socio-economic development of Ghana, there is the need to study artistic development of particular societies and the role that art played in their development. Developments in Visual Arts have made an influence on the economic development of states and better the quality of life in most parts of the world. A major concern for teachers is to help students to improve their skills and competences to contribute meaningfully to the development, preservation and promotion of Ghanaian art forms through their education and training (CRDD, 2008).

2.6.1 General Aims of G.K.A.

The syllabus is designed to help the student to:

1. Appreciate art as an integral part of life.
2. Develop pride, confidence and patriotism through appreciation of their art creations.
3. Develop the capacity for creativity through exposure to variety of art activities using traditional and contemporary tools and materials.
4. Be visually literate in skills, competencies and in modes of art appreciation and criticism.

5. Be exposed to the philosophical, anthropological and religious values of art.
6. Acquire perceptual and analytical skills through art experience and the processes of self-expression and communication.
7. Develop the ability to harmonize opposing ideas, contradictions and inconsistencies to design and make art works
8. Be aware of the variety of vocations available in the field of art and opt to choose a career in the field of art.
9. Acquire basic entrepreneurial skills for self-employment
10. Develop skills in the use of the computer to design and make artworks.

2.6.2 Scope of Content of G.K.A.

This course covers the history, principles and practice of Visual Art as a vocation. The domain of Visual Arts has been planned to provide sufficient grounds for students who will pursue advance education in art. Again, it offers adequate knowledge and skills to students ending their education at the end of Senior High School (Curriculum Research and Development Division, 2010). .

2.6.3 The Organisation of the Syllabus

A look at the syllabus shows that it is organized under four main themes namely: Introduction and Appreciation of Art Works; Art History; Principles and Practical Skills; and, Entrepreneurial Skills. Much content has been allotted to Principles and Practices and Art History but very little content is given to Entrepreneurial Skills. This means that the scope of the content (of the syllabus) has been built according to the importance attached to the various components of GKA (Curriculum Research and Development Division, 2010). .

2.6.4 Time Allocation

A school may offer as many Visual Arts subject as likely for which teachers and resources are available. This will offer the student with a better diversity of Art subjects to select from. Selection of subjects should be within the approved Scope of Content. Each student of Visual Art is anticipated to choose three art subjects: General Knowledge (compulsory) and two other Art subjects. One from group A‟ and one from group B‟. Each of the three subjects must be allotted six periods per week. For the (compulsory) General Knowledge in Art, it is recommended that two periods per week be given to Art History, Appreciation and General Concepts in Art, while three periods per week be allotted to the practical constituent, and one period for 'School Based Assessment (SBA) Tasks'. Still Life drawing and imaginative/memory composition must be given special consideration during the practical lessons to help improve the drawing skills and abilities of the visual arts student. Each year's task should be planned according to three terms, but retaining the logical arrangement of topics (Curriculum Research and Development Division, 2010). .

2.7 Teaching of G.K.A.

In every educational set up, teaching serves as a central core. Teaching unlike other occupations cannot be undertaken anyhow because it is always directed towards a learner. As such teaching is seen as a complex, multidimensional activity, often necessitating teachers to manipulate numerous tasks and goals concurrently (Eberly as cited in Agyenim-Boateng, 2011). According to Amenuke (1999), teaching is the organization of appropriate teaching experiences, tools and resources and making sure that the learner understands what is taught. The value of teaching is seen in terms of what students actually do as a result of the teacher's efforts. This implies that the

outcome of teaching is always seen in the learner just as supported by James and Pollard (2006) who argues that for the promotion of learning and achievement in pupils, teaching is the best means.

Diaz as cited in Santrock (2004) says because of individual differences and the complex nature of teaching among students, teaching is not like a "one-size-fits-all socks" but rather teachers must master a variety of perspectives and strategies and be flexible in their application. This means that teachers need to possess and exhibit certain qualities including what Arend (2000) enumerates as follows:

- The teacher should be knowledgeable or well-grounded in the subject matter.
- The teacher should be able to utilize varied methods, techniques and strategies of teaching during lesson delivery.
- The teacher should continuously evaluate their teaching in totality. This implies that they should be reflective to assess the teaching process to know their strengths and weakness. This provides them with an opportunity to make amendments.
- The teacher should uphold the principle of education as lifelong processes and therefore endeavor to deliver what is qualitative to learners than quantity.

2.7.1 Theories of Intelligence

According to Pal et al., (2004), many theories of intelligence exist; for example, Faculty theory, One factor theory, Spearman's two – factor theory, Thorndike's multifactor theory, Anderson's theory (Cognitive development), Gardener's theory of multiple intelligences but for the purpose of this study, only three theories from

Multiple Intelligences will be considered. These include teaching through Verbal-Linguistic Intelligence, Visual-Spatial Intelligence and Bodily-Kinesthetic Intelligence.

2.7.1.1Teaching through Multiple Intelligences

Gardner (1999) believes that the nine intelligences identified are independent but closely related to one another. These intelligences develop at different times and to different degrees in different individuals. It is also established that when students have the opportunity to exercise all their intelligences they may become more successful learning many subjects (Dickinson, Campbell & Campbell, 1996). The following are some characteristics of the different intelligences along with ways to exercise them.

- **Teaching through Verbal-Linguistic Intelligence**

According to Giles et al. (2003), the Verbal-Linguistic Intelligence refers to the ability to understand and manipulate words and languages. Every individual is thought to possess this intelligence type at some level. This involves writing, reading, speaking and conversing in one's own or foreign languages. It may be exercised through reading interesting books, playing word board or card games, listening to recordings, using various kinds of computer technology and participating in conversations and discussions (Dickinson et al., 1996). People with strong rhetorical and oratory skills such as authors, poets and attorneys depict strong linguistic intelligence. Some examples are T.S. Elliot, Maya Angelou, and Martin Luther King Jr. According to Giles et al. (2003), linguistic intelligence and logical mathematical intelligence have been highly valued in education and learning environments.

- **Teaching Techniques and Ideas using Verbal-Linguistics Intelligence**

The following list provides varieties of techniques and unique experiences that can be employed in teaching through the Multiple Intelligences (Armstrong, 1994) writing letters, poems, stories, descriptions, Leading an oral discussion or debate. Creating audio tapes, giving an oral presentation, Writing or giving a news report, developing questions for and conducting an interview, doing Storytelling or writing all types of Humour or Jokes.

- **Teaching through Visual-Spatial Intelligence**

According to Dickinson et al, (1996), Visual-Spatial Intelligence is the ability to have visual perception of the environment, the ability to create and manipulate mental images, and the orientation of the body in space. Giles et al (2003) state that people with this kind of intelligence tend to learn most readily from visual presentations such as movies, pictures, videos, and demonstrations using models and props. These individuals often daydream, imagine and pretend. This intelligence can be characterised as right-brain activity. Pablo Picasso, Bobby Fischer, and Georgia O'Keefe are some examples of people gifted with this intelligence.

- **Teaching Techniques for Visual-Spatial Intelligence**

According to Dickinson et al. (1996), teachers can foster this intelligence by using charts, posters, graphs, or diagrams, creating a web page or power point project, making a videotape or film, creating pie charts, bar graphs, etc; making a photo album, creating a collage, making a mobile or sculpture, designing a mind map, making a map, using colour and shape.

Some of the project ideas to affect Visual-Spatial Intelligences are:

Draw a map or chart, Outline and build a web page, Make a video or visual collage, Make a project cube, Use multi-media equipment to present information, Use clay to

create a sculpture, Write a guided visual imagery as well as Write a picture book on a topic.

Listed below are some of the ideas and techniques by which Visual-Spatial Intelligence can be used in teaching Art.

a. Watch dancers on video and imagine yourself in their shoes.

b. Pretend you can enter a painting; imagine what it is like.

c. Listen to music with eyes closed and create a sculpture from clay.

d. Draw the sets for the various scenes of a play you are reading.

e. Draw the visual and colour pattern of a dance.

- **Teaching through Bodily-Kinesthetic Intelligence**

This involves physical coordination and dexterity, using fine and gross motor skills, and expressing oneself or learning through physical activities. It may be exercised by playing with blocks and other construction materials, dancing, playing various active sports and games, participating in plays or make-believe, and using various kinds of objects to solve problems or to learn (Dickinson et al., 1996). Individuals with this intelligence would like to move around, touch the people they are talking to and act things out. They are good at large and small muscle skills; they enjoy all types of sports and physical activities. Some examples of people who are gifted with this intelligence are Martina Navratilova, Michael Jordan and Jim Carrey (Giles et al., 2003).

- **Teaching Techniques for Bodily-Kinaesthetic Intelligence**

Educators may develop this area of intelligence by feeling, touching, movement, improvisation, "hands-on" activities, permission to squirm and wiggle, physical

relaxation exercises and facial expressions (Giles et al., 2003; Begel et al., 2004). Some of the project ideas for planning Bodily-Kinesthetic Intelligence lessons are build or construct a model, choreograph a dance to explain something, conduct a class demonstration, conduct an experiment, create a board game, and develop a memory system based on movements (Begel et al., 2004). According to Armstrong (2010), Bodily-Kinesthetic activity can be used to teach Arts lessons in these ways:

a. Create the dance equivalent for different inventions, machines, settings, etc.

b. Create "human sculpture tableaux" to express an idea.

c. Make up gestures, postures, or facial expressions to accompany a musical score.

d. Design a "living painting" of a classical work.

e. Practice doing impromptu dramatic mime activities.

2.8 Learning

In the process of education, whatever exists in the educational set-up is meant for learning by the learners (Blakemore and Frith, 2005). Learning as postulated by Santrock (2004), comes by experience and has a permanent influence on the way we act, what we know and how we think. According to him, we inherit some capacities, which are inborn or innate such as how to swallow food or how to sleep but not everything we know is learned. This also suggests that there is initial knowledge or behaviour that everyone is born with hence any knowledge that comes by is to increase the innate ones. Skinner as cited in Farrant (1996) also postulates that

learning is experiences in succession and each experience has its own influence on behaviour. According to Farrant, learning exists in the following forms:

a) Psychomotor learning - It deals with the progression of one's ability like efficient harmonisation between the muscles and the brain as in drawing or writing.

b) Affective learning - This type of learning deals with one's feelings and values and has an impact on our character and personality. This include being well-organized and courteous.

c) Cognitive learning - This is obtained through active processing of the mind like recalling and reasoning.

According to Farrant (1996), learning can also be explained through the following processes:

- **Preparation**: organizing the environment for a new knowledge by bringing together relevant previous knowledge.
- **Presentation**: The act of introducing the learner to the selected new knowledge.
- **Association**: Connecting new knowledge to prevailing ones.
- **Systematisation**: Understanding of the new knowledge in readiness for its use.
- **Application**: Putting the new knowledge into practice.

Farrant (1996) moves on to say that for efficiency, it is the sole responsibility of the teacher to assist the learner through any of the learning stages. However, for this to be very effective, the learner must be very motivated, involved and ready.

2.8.1 Educational Resources

The Ministry of Education's vision for Ghana's long-term development (1995) aims at ensuring improvement in quality teaching and learning and as well as improving access to quality education, facilities and resources. The existence of both human and material resources to a large extent motivates and enhances students' academic performance. In order to promote the quality of education, its effectiveness and output; better material resources, human resources and physical facilities are needed. In academic work, educational resources have many effects and importance on providing learning permanent. The more a learning activity addresses the five senses the more the learning event becomes effective and permanent, and forgetting becomes less.

Learning environments are made up of physical, material and human or other service delivery elements. Academic performance can be enhanced when educational resources are readily available and are efficiently used. According to Lyons (2012), learning is a complex enterprise that involves an active interplay of students' motivation, human resources, physical facilities, teaching resources and skills of teaching and curriculum demands. Accessibility to these resources enhances the effectiveness of schools as they are the basic resources that bring about good academic performance in the students. With these, students are less likely to absent themselves from school that offers interesting, meaningful and relevant experiences to them.

Karemera (2003), points out that students' performance is significantly connected with satisfaction with academic environment and the facilities of library, classroom blocks, Science and Computer laboratories among others in the institution. Karemera further stated that determination to study by students together with the appropriate use of the resources and facilities provided by the school to the student and a relationship between students' learning styles have positive impact on student's performance. Young (1999) also stresses that student performances are directly related to the use of library facilities, other resources and level of their parental education. Therefore, it is essentially important for teachers and students to use the library.

2.8.2 Physical Facilities

Physical learning environments or the places, in which formal learning occurs, range from fairly modern and well-furnished buildings to open-air meeting places. Physical facilities include classrooms, auditoriums, administrative block, libraries, laboratories, workshops, assembly halls, play grounds and special rooms like clinics, staff quarters, students' hostels, kitchen, canteen, and toilet among others. Such other factors as availability of lavatories and a clean water supply, classroom maintenance, space and furniture availability all have an impact on the academic performance of students. When pupils have to leave school and walk significant distances for clean drinking water, for example, they may not always return to class (Miske and Dowd, 1998).

2.8.3 Material Resources

The quality of school buildings may be linked to other school quality issues, such as the presence of adequate instructional materials; working conditions for students and

teachers, and the ability of teachers to undertake certain instructional approaches. Material resources include textbooks, maps, charts, audio-visual and electronic instructional materials such as radio, tape recorder, television and video tape recorder. Other category of material resources consists of paper supplies and writing materials such as pens, eraser, exercise books, crayon, chalk, drawing books, notebooks, pencil, ruler, slate, workbooks and so on (Atkinson, 2000).

Adeogun (2001) depicts a very strong positive significant effect between instructional resources usage and academic performance. According to Adeogun, schools endowed with more materials perform better than schools that are less endowed.

2.8.4 Human Resources

The most indispensable element in the learning enterprise from the human resource point of view is the professional teacher, the head, assistant heads and other support staff, and the supervisors, for they form the focal point on which formal education moves. An educational institution's human resources comprise teachers and other supporting staff (laboratory assistants, store keeper, cooks etc.) who engage in the process of teaching and learning. According to Boateng (2003), the success and failure of the curriculum depends on the teacher who is also seen as the key player of the educational environment. They can make or unmake any educational curriculum and deliver the objectives of any reforms. Therefore, qualified human resource like professional teachers, heads and supervisors with whom the effective use of other resources embodied in any educational framework lies are needed in the Schools for effective teaching and learning and students' academic achievement. The writer

agrees that effective utilization of resources in education brings about productive learning outcomes since resources arouse students learning as well as motivating them.

2.9 Management of Educational Resources

According to Defraru (2014), resources / materials management is seen as the function of taking responsibility for the coordination of planning, purchasing, moving, storing and controlling materials in an optimum manner to provide pre – decided service to the customer at a minimum cost. They create conducive learning atmosphere, make explanation of challenging topics simple and motivate. Effective management of educational resources entails proper utilization, storage and maintenance of these resources.

2.9.1 Management of material resources

a) Utilization

Educational resources are to be utilized for the benefit of both teachers and students. According to Onyango (2001), resource allocation to teachers or students should follow the laid down procedure or criteria. He gives an example in issuance of materials, proper forms should be completed, records maintained and locations of materials known.

There should be frequent stock taking and updating of record. The available resources should be identified and situations under which they can be used should also be spelt out. More information about school equipment should also be provided. Olayinka

(2016) suggests that the information to be provided should include description of equipment, cost, date of acquisition, location, custodian, use of property and depreciation method. This includes information needed to identify the item.

b) Storage of resources

Storage of resources is very important. Unless a proper storage and retrieval system has been carefully designed, the teachers and students cannot find out the resources, thereby curtailing the worth of such resources. Storage of resources is also important in order to avoid buying some resources year after year and especially the resources which can be used for a long period of time. Clear storage could also ease the use of resources especially when in a hurry (British Columbia Ministry of Education, 2002).

Ogunsaju (1980) outlined some guidelines that need to be applied in storing resources:-

a. All library materials should be in a complex or rooms.
b. Open display storage should be used for all materials whenever possible. Storage in drawers and cupboards should be reduced to the barest minimum.
c. Flexible storage provides easy in interfiling classified items.
d. When resources are stored in containers, transparent materials should be used for Packaging.
e. Materials should be in one classified sequence to facilitate the subject approach.

Mostly for security reasons, it is essential to keep some items locked away especially if the school is used for other activities. Other ways of storing resources are through the use of commercial storage facilities. Example of such facilities are commercial

racks and rails which can be used for hanging charts, maps and pictures, while mobile tray units can also be used for storing model specimen and Realia.

c) Maintenance of resources

Maintenance of resources is quite important. The resources should be in good state and safe for use. According to Onyango (2001), facilities should be inspected or checked on regular basis for any possible hazards. Any hazards to the students' health or safety should be removed immediately. Resources especially buildings and facilities are of considerable investment of public funds and maintenance is essential to protect this investment. Renovation and repair of older school buildings should be done to bring them up to increase the life span of equipment (Bakhada, 2004). All stakeholders should be keenly aware of fire and other safely issues, should work to make the school environment as safe as possible and should be aware of procedures in the event of an emergency.

2.10 Concept of Academic Performance

The success of educational institutions is measured by academic performance, or how well students deal with their studies, and the extent to which a student, teacher, or institution has realized their educational goals (Ankomah, 2002). The Cambridge Dictionary of English (1995) explains academic performance as how well a school, college, university, an individual or a group is able to perform when given a learning task or activity or one's achievement in standardized tests in academic pursuit. In his view, Otoo (2007) defines academic performance as the capacity to achieve when one is tested on what one has been taught. It is linked to curriculum and intellectual capacity, indicating that academic performance is influenced by the learner's competence.

2.10.1 Factors Influencing Students' Academic Performance

Research supports the fact that student performance depends on different socio-economic, psychological and environmental factors. The findings of research studies show that student performance is affected by different factors such as Family Background, Learning Environment and Students' Role Performance.

2.10.1.1 Family Background

Majoribanks (1996) holds the view that family is the key to a student's life outside of school; it is the most important influence on students' learning and includes factors such as socioeconomic status and family structure. The environment at home is a primary socialization agent and influences a child's interest in school and aspirations for the future.

a. Socio – economic Status

Majoribanks (1996) defines Socio-economic Status as a person's overall social position to which attainments in both the social and economic domain contribute. When used in studies of children's school achievement, it refers to the SES of the parents' or family educational level, occupational level and income level (Jeynes 2002). Several comprehensive reviews of the relationship between SES and educational outcomes exist (Eamon, 2005; Jeynes, 2002; Majoribanks, 1996). These studies make it clear that those children from low SES families are more likely to exhibit the following patterns in terms of educational outcomes as compared to children from high SES families:

• have lower levels of literacy, numeracy, comprehension and lower retention rates,

• earn lower test scores and are likely to drop out of school

• exhibit higher levels of problematic school behaviour, for instance; truancy and

• are more likely to have difficulties with their studies and display negative attitudes towards school.

Similarly, studies of children's educational achievements over time have also demonstrated that social background remains one of the major sources of educational inequality. In other words, educational success depends very strongly on the socio-economic status of one's parents (Graetz, 1995). The effect of parental SES on children's educational outcomes according to Barry (2005), may be neutralised, strengthened or mediated by a range of other contextual, family and individual characteristics. Parents may have a low income and a low-status occupation, for example, but nevertheless transmit high educational aspirations to their children. What family members have (material resources, for instance) can often be mediated by what family members do (for example parental support, family cohesion). The social and the economic components of socio-economic status, in other words, may have distinct and separate influences on educational outcomes. While both components are important, social factors (for instance, parents' educational attainments) have been found to be more significant than economic factors, such as a family's capacity to purchase goods and services, in explaining different educational outcomes. It is argued that families where the parents are advantaged socially, educationally and economically, foster a higher level of achievement in their children. They also may provide higher levels of psychological support for their children through environments that encourage the development of skills necessary for success at school (Barry, 2005).

b. Family Structure

Socio-economic status may be linked to family structure. There is evidence to show that children from single-parent household do not perform well in school as children from two-parent households (Majoribanks, 1996). Rich (2000) supports this view by explaining that children from single-parent families are likely to have lower educational performance because sole parent families on average have lower levels of income, are headed by parents with lower educational attainment and are less likely to be in the labour force. According to Rich (2000), other factors that are likely to adversely affect educational outcomes of such children compared to those from two-parent families are said to include:

- the custodial parent having less time to spend with children in terms of supervision of school-work and maintaining appropriate levels of discipline,
- increased responsibilities on children such as childcare roles, domestic duties which impede the time available for school work; and
- the nature of parent-child relationships in sole parent families may cause emotional and behavioural problems for the child.

Divorce has been found to negatively affect academic performance (Jeynes, 2002) as students whose parents are divorced are among those who scored lowest on a standardized test. Possible explanations for this relationship, according to Majoribanks (1996) and Jeynes (2002), is that divorce can cause a family's socio-economic status to decrease and parental connection harmed. This reveals that the quality of parents and home background of a student goes a long way to predict the quality and regularity of the satisfaction and provision of a child's functional survival and academic needs. Poor parental care with gross deprivation of social

and economic needs of a child, usually yield poor academic performance of the child.

On the other hand, where a child suffers parental and material deprivation and care due to divorce or death, or absconding of one of the parents, the child's schooling may be affected as the mother alone may not be financially strong to pay school fees, purchase books and uniforms, such a child may play truant, thus his performances in school may be adversely affected (Jeynes, 2002). Similarly, good parenting supported by strong economic home background could enhance strong academic performance of the child. This further predicts academic performance where the child is properly counseled in the choice of his / her courses and vocation that matches his mental ability, interest and capability (Majoribanks, 1996).

2.10.1.2 Learning Environment

Barry (2005) holds the view that a student's educational outcome and academic success is greatly influenced by the type of school they attend. The school one attends is the institutional environment that sets the parameter of a student's learning experience. Depending on the environment a student can either close or open the doors that lead to academic achievement.

A Learning environment that is free of barriers, or obstacles or distractions such as noise, gas / smoke pollutions and so on can constitute health hazards, which in turn affect or reduce the student's concentration or conceptual focus to learning (Basil, 2007). According to Basil (2007), markets and garages located near schools have always posed a threat to students. Noise and pollution from these

sources have always endangered students' life and concentration. Therefore for an effective learning and high academic performance, schools in both rural and sub-urban and urban areas should be located off zones characterized with smoke/gas pollutions, market centres or garages, as conducive learning environments stimulate learning, understanding and high perception.

Crosnoe, Johnson, and Elder (2004) have suggested that school sector (public or private) and class size are two important structural components of schools. Private schools tend to have better funding and smaller class size than Public schools. The additional funding of Private schools leads to better academic performance and more access to resources such as computers, which have been shown to enhance academic achievement (Eamon, 2005). Smaller class size creates more intimate setting and therefore can increase teacher-students bonding which has also been shown to have a positive effect on students' success.

According to Danesy (2004), other factors that compliment environmental and socio-economic factors to produce high academic achievements and performance include good teaching, counselling, good administration, good seating arrangement and good building. Dilapidated buildings, lacking mentally stimulating facilities that are characterized with low or no seating arrangements will also be destructive. Danesy (2004) indicates that the innovative environment do stimulate head start learning and mental perception. It has also been proved that students who come from simulative environments with laboratory equipment or those that are taught with rich instructional aids and pictures perform better than those trained without them. Thus, teaching and learning should be done under organized, planned, and fortified

environment with learning instructional aids to stimulate students' sense of conception, perception and concentration to facilitate systematic understanding and acquisition of knowledge in them.

2.10.1.3 Students' Role Performance

Students' Role Performance (SRP), according to Barry (2005), is how an individual fulfills the role of a student in an educational institution. SRP involves factors such as Gender and Extracurricular Activities.

The effects sex has on a student's academic achievement has been debated and heavily researched over the past several decades (Chambers and Schreiber, 2004). Past research has indicated an academic gap between the sexes, with boys ahead of girls. However, more recent research shows that the achievement gap has been narrowing and that in some instance girls have higher academic achievement than boys (Eamon, 2005; Majoribanks, 1996 and Jeynes, 2002).

According to Jeynes (2002), there are several explanations for this increasing trend. These include biological differences, gender biases (such as reading being seen as not masculine), teaching, curricula and assessment (for instance less structured approaches to teaching grammar may have weakened boys') literacy performance, and socioeconomic factors. The last explanation is of particular interest, especially the finding that the gender gap continues within each socio-economic level (Majoribanks, 1996). That is, girls have been found to out-perform boys within high or low socio-economic groups. Furthermore, the performance of boys deteriorates more rapidly than the performance of girls as they move down the socio-economic

scale. As noted above, the relationship between the performance of boys and socio-economic status is often mediated or partially explained by family structure.

A consensus on whether or not a student participating in extracurricular activities such as sports will have a positive effect on academic performance has not been reached. From a theoretical point of view, extracurricular activities are viewed as boosting academic performance (Hunt, 2005). Coleman's multiple role theory posits that extracurricular activities provide additional complimentary role for the students that benefit the students academically because the added role of athlete, for example, increases self-esteem and overall participation / interest in school, which can boost grades (Hunt, 2005).

2.10.1.4 Students' Entry Grade

The magnitude of grades in the admission of students to the next educational level cannot be downplayed. Okumbe (1998) notes that the students selected to the next level of the educational ladder are the raw materials for the institution, with the students‟ entry grades serving as monitoring and accountability exercises for the school heads and teachers. Ohuche and Akeju (1988) also indicate that the entry grades are a sort of a motivational factor to students. Those who start with good grades in a course tend to strive hard under intrinsic motivation while low grade students strive to improve their performance under extrinsic motivation in the form of instrumental, achievement or social motivation. Farrant (1996) believes that inadequate general education of students to tackle a course leads to dropping out. The implication is that the quality of entry grades has an effect on academic performance in school. Entry grades are therefore vital in students‟ achievement and also regarded

as the foundation on which further education is built.

2.10.1.5 Access to Logistics / Teaching-Learning Aids

According to Ghana Ministry of Education (1994), material resources such as textbooks, stationery, furniture, equipment and recreational facilities are essential to effective education and also positively influence academic performance. As Adedeji and Owoeye (2002) indicate, availability of physical material resources is of importance to any educational endeavour. They point out that adequate school building, classroom furniture and other instructional facilities are imperative for the attainment of any educational objectives. As Sekyere (2002) posits, teaching materials are the items the teacher uses to make lessons interesting and for students to easily understand lessons and should therefore be provided in the right quantities for effective teaching and learning. The resource situation in an educational institution is a major determinant of secondary school performance (Adedeji and Owoeye, 2002). Reporting on the extent to which the quantity and quality of educational resource contribute to academic performance in the Edo State of Nigeria between 1989 and 1994, Fabunmi and Adewale (2002) established that allocation inefficiency of teaching and learning aids (visuals, audio-visuals, print and electronic, and art studio) accounts for differences in academic performance. Teachers are also effective in their teaching with the use of modern resources like computers, television and access to the internet.

2.10.2 Teacher Motivation

According to Oredin and Awodun (2012), people are best motivated to work towards goals that they have been involved in setting and to which they therefore feel

committed. The authors mention that some people have strong internal motivation - a sense of purpose or drive and others do not. People work to satisfy their needs, others work for power or fame, while others work to serve people and others work simply to earn money. They suggest that when teachers at all levels are involved in decision making, all the kinds of motivators are brought into play. Involvement should produce the commitment to goals on which a sense of achievement depends. Involving implies a sense of recognition and increase in the sense of responsibilities. Ornstein (1995) agrees with Maslow's hierarchy of needs as a means of motivation which emphasizes the fact that when one is capable of achieving their full human potentials, there is a healthy interaction within the society and these motives and needs evolve from within and produces self- actualization. Hence when teachers are relieved of the problem of shelter, food and clothing, there is a possibility of them giving out their best in teaching. The perception of an effective teacher could also be extended to that of a teacher who loves his students and his subject field. "Love" in this context means developing a personal interest in what one does. It is therefore necessary for teachers to be intrinsically motivated to be in the teaching profession.

Supporting this, Hayford (1998) observes that central to the work of effective teachers who produce excellent performance of pupils in schools in Ghana is the availability of generous resources and facilities. Such qualitative pupil performances are also partly due to responsibilities on the part of teachers who have developed a special relationship with their pupils and interest in their subject. This means that commitment to work is a necessary condition for teachers to perform well in their chosen careers. Since teachers play a vital role in a meaningful educational enterprise, the issue of job satisfaction for teachers must be a priority consideration when

determining the factors that contribute to academic performance.

2.10.3 Students' Motivation and Learning

According to Kochhar, (2004), effective learning in the classroom depends on the teacher's ability to maintain the interest that brought students to the course in the first place. Whatever level of motivation students bring to the classroom will be transformed, for better or worse, by what happens in that classroom. Unfortunately, there is no single magical formula for motivating students. Factors like interest in the subject matter, perception of its usefulness, general desire to achieve, self-confidence and self-esteem, as well as patience and persistence affect students' motivation to work and to learn.

Kochhar (2004) explains motivation as "what directs the energy of an alert group into constructive channels and keeping it there. It means inculcating and stimulating interest in a particular topic at the moment". The author suggests that it is necessary for a teacher to understand and use the natural urges of the child to assist him in acquiring new and desirable motives because student motivation is essential for school performance. Motivation helps students to accomplish academic goals by generating interest and effort in academic work, perseverance in doing class work or homework, completion of difficult tasks, self regulation, risk taking, and independent learning, among others.

Though experienced teachers have an array of instructional methods and materials to motivate and encourage students, they still would need to apply some stimulation or encouragement for some of their students (Ornstein, 1995). Ornstein explains his view by grouping students into two categories: students who take responsibility for their

own learning, and students who easily get distracted. According to the author, students who take responsibility for their own learning could buckle down on their own immediately they get to the classroom lesson or home work assignment. Rather such students stay on tasks, do their assignments on time and deal with academic problems as they arise without boredom or confusion. On the other hand, distractive students always skip difficult tasks, daydream or stare out windows during classes and lack total concentration in class. This makes them unable to stay focused and clarify their own lessons or assignments thus making their school work become increasingly difficult. Ornstein (1995) insists that it is necessary for teachers to find ways of making their students take responsibility for their own academic performance.

Students have been seen to learn best when incentives for learning in a classroom satisfy their own motives for enrolling in the course. McMillan and Schumacher (2010) have classified some of the needs students may bring to the classroom as the need to learn something in order to complete a particular task or activity, seek new experiences, perfect skills, overcome challenges, become competent, succeed and do well, and feel involved and to interact with other people. Satisfying such needs is deemed rewarding and such rewards sustain learning more effectively than grades do. It is therefore advised by McMillan and Schumacher for teachers to design assignments, in-class activities, and discussion questions to address these kinds of needs.

In sum, a combination of healthy family background, good environment, Students role performance, students' entry grade with a fortified learning or instructional aids,

teachers' motivational incentives and students' motivational incentives prompt academic performance while a lack of this will retard academic performance.

2.11 Empirical Literature

2.11.1 Academic Performance and Educational Resources

Opoku – Asare et al. (2014) explored how the teaching methods, instructional strategies and resources employed by G.K.A. teachers in Ghana's Senior High Schools affect student achievement in the subject. The study used both qualitative and quantitative data gathered through questionnaire administration, interview and observation. The study revealed a high student-teacher ratio which encourages 'whole class' teaching via the lecture method, and teacher use of verbal examples, textbook illustrations, chalkboard diagrams, and photographs as instructional media. It also shows that lack of art studios, tools and materials, inadequate funding, and weak institutional support discourage the teaching of practical lessons. Lack of ICT and internet facilities also discourage research that could supplement teaching notes GKA students learn for assessment. Invariably, many Visual Arts and Home Economics students who offer G.K.A. make poor grades in internal and external examinations and miss out on higher education.

Opoku – Asare and Siaw (2015) investigated into rural–urban disparity in students' academic performance in Visual Arts Education using six Senior High Schools in Kumasi Metropolis, Ghana. The study adopted the qualitative-quantitative research approach with interview, observation, and questionnaire administration. Findings from six public SHSs in Kumasi — two each in rural, peri-urban, and urban areas— revealed that urban schools perform better than rural and peri-urban schools because

they attract and admit junior high school graduates with excellent Basic Education Certificate Examination (BECE) grades, have better infrastructure, more qualified teachers, prestigious names, and character that motivate their students to do well.

Effiong (2015) examined the impact of instructional materials in teaching and learning of Biology by SSS 2 students in Yakurr local government area of Cross River state in Nigeria. The descriptive statistical method was employed. Five (5) comparable secondary schools were selected to represent the population of the study. The data collected were analyzed using simple percentage method. The result of the findings revealed that there is a significantly positive impact of instructional materials on academic performance of students. This is because the students understood the concept so easily when taught with the instructional materials.

2.11.2 Academic Performance and Punctuality to class

Rodgers (2001) explored the effects of class attendance on academic performance in Introductory Statistics in an Australian university. The study used a large panel data set for business and economics students. The methodology took account of unobserved heterogeneity among students. The study unravelled that attendance has positive and statistically significant effect on academic performance. Rodgers argued that if a student is always in class, fully participates and engages in discussions with the tutor, ceteris paribus, it will very much positively affect the performance of the student.

Stanca (2010) explored the effects of attendance on academic performance. The study used a large panel data set for introductory microeconomics students to explicitly take into account the effect of unobservable factors correlated with attendance, such as ability, effort and motivation. Panel estimators indicated that attendance has a smaller but significant impact on academic performance. Lecture and classes have a similar effect on academic performance individually, although their impact cannot be identified separately. Overall, the results indicated that, after controlling for unobservable student characteristics, attendance has positive and statistically significant effect on student learning.

2.11.3 Academic Performance and Project Assignment

Latif and Miles (2011) examined the factors affecting the academic performance of economics students at Thompson Rivers University in Canada. The study used Ordered Probit method, with Ordinary Least Squares method and the Propensity Score Matching method used in robustness checks. The results depicted that graded homework has a positive effect on academic performance. They argued that the teacher can best measure the seriousness and background preparedness of the student and subsequently come out with appropriate remedial measures to assist the student through the undertaking and prompt submission of projects by the student.

Koppensteiner (2018) investigated the impact of relative age and class assignment on academic performance in Mathematics for Brazilian Primary Schools. The study employed the use of questionnaire to form data. The study employed Ordinary Least

Squares (OLS) methodology. The results showed that class assignment has significantly positive impact on academic performance.

2.11.4 Academic Performance and Teachers' Motivation

Oredin and Awodun (2012) explored the effect of science teachers' motivation students' academic performance in Science in Senior Secondary Schools in Ondo and Ekiti States of Nigeria. The study employed the use of questionnaire and was a descriptive survey. A stratified random sampling was used for the selection. The data collected for the study were analyzed using Descriptive Analysis, Multiple Regression analysis and Pearson Product Moment Correlation. The study revealed that; participation in seminars/ workshops, availability of teaching materials and granting of study leave with pay to science teachers have positive and significant relationship with academic performance of science students. However, prompt payment of science teachers' salary has significantly negative effect while regular payment of science teachers' allowance has negative but insignificant effect on academic performance.

Tastan et al. (2018) examined the impacts of teacher efficacy and motivation on students' academic performance in science education in secondary schools located in Iran and Russia. The study employed questionnaire as its data collection instrument. In the survey, 440 secondary school and 350 high school students were drawn from 15 schools in two countries of Iran and Russia. A sample of 790 students was randomly drawn from selected schools. The result depicted that there is significantly positive effect of teacher self-efficacy and motivation on students' academic

achievement. They argued that if motivation is always given to the teacher, it will unarguably boost the teacher's morale to give off his possible best to improve the performance of the students.

In conclusion, the empirical literature showed that educational resources, students' punctuality to class, undertaking project assignment, and teachers' motivation are factors that have impact on academic performance of the students.

CHAPTER THREE

METHODOLOGY

3.1 Overview

This chapter concerns with methods that were espoused for the research. This chapter provides lucid data on the methods and procedures such as research design, research methods, the population studied, sample and sampling techniques, data collection and ways of ensuring the reliability of the data collected for the study.

3.1.1 Research Design

Research design provides the adhesive that embraces the research project together (Trochim, 2006). It is a blueprint outlining how data is to be collected for an evaluation or appraisal that includes recognizing the data gathering method(s), the instruments to be used, how the instruments will be administered, and how the information will be structured and analyzed (Worgu as cited in Yeboah, 2012). In this study, the mixed method research design was used.

According to Creswell (2013), the mixed methods research design is a methodology for conducting research that involves collecting, analyzing, and integrating both quantitative and qualitative research and methods in a single study to provide a better understanding of the research problem than either of each alone. The mixed methods research design takes advantage of using multiple ways or methods to explore a research problem rather than restricting the researcher to a specific research method. This research design is to overcome the limitations of a single design. The study

required the adoption of a combination of quantitative and qualitative research methods and instruments to bring about the needed information because as Bell (2005) expounds the quantitative method offers the researcher the chance to make statistical analysis and generalities. Denzin and Lincoln (2000) also contend that although qualitative and quantitative approaches ask questions, those of the qualitative approach stress on how social experience is created and given meaning in contrast the quantitative studies emphasizes on measurement and analysis of causal relationships between variables, not processes.

This means the combination of qualitative and quantitative research paradigms has a high tendency to achieve both comprehensive and insider outlook of the phenomenon under study, as well as quantification of variables to provide answers to the research questions (Denzin and Lincoln, 2000). It could therefore be concluded that while numbers are the end product of quantitative researches, flow diagrams and narrative description of events and processes are the end results of qualitative researches (Landy and Conte, 2004; Rubin and Babbie, 2001).

The mixed method research design was engaged for this study to ensure that the research is enriched by their strengths, to overcome the limitations of a single design and to also provide a form of triangulation to verify the effects of educational resources on the academic performance of students in the case study school.

3.2 Research Methods

The research methods used in the study were descriptive and case study of the quantitative and qualitative research approaches respectively.

3.2.1 Descriptive Research Method

The present study espoused an ex-post facto, descriptive research technique. The descriptive research method was used to measure the effect of educational resources on students' academic performance. Kerlinger (1964) defines ex post facto research as that research in which the independent variable or variables have already occurred and in which the researcher starts with observation of a dependent variable or variables. The researcher adopted ex post facto research design, which is usually used to try to understand hidden meaning of possible backgrounds of events that have happened and which cannot be controlled, engineered or manipulated by the investigator. This research method is ideal for conducting this social research because it is empirically based investigation which does not include the researcher's direct control over the independent variables since they have already led to an effect which can no more be manipulated. The researcher therefore considered the independent variables in retrospect for its possible effects on the dependent variable. This research method was found appropriate for this study because investigating the effect of educational resource usage cannot be manipulated by the researcher. The independent variables in this study are educational resources (teaching and learning materials, physical infrastructure, finance and availability of professional teachers), undertaking of project works, punctuality of students and teacher motivation, with academic performance as the dependent variable.

- **Reasons for Employing the Descriptive Research Method**

The study chiefly focused on the description of the effects of educational resources on the learning processes in GKA classrooms. The characteristics of the students, head of department and GKA subject teachers in the school were also described.

3.2.2 Analytical Research Method

Analytical research, as a style of qualitative inquiry, draws from the disciplines of philosophy (the meaning of concepts), history, and biography. Difference from ethnography: It is non-interactive document research. Analytical research describes and interprets the past or recent past from selected sources. The sources may be documents preserved in collections, and/or participants' oral testimonies (McMillian and Schumacher, 2001). In Analytical Research, the researcher has to use facts or information already available and analyze them to make a critical evaluation of the material. It involves the in-depth study and evaluation of available information in an attempt to explain complex phenomenon. Analytical research is primarily concerned with testing hypothesis, specifying and interpreting relationships, by analyzing the facts or information already available. This research method was adopted because the researcher wanted to find the correlation between the available resource materials and their impact on students' performance.

3.3 Population

Polit and Hungler (1999) refer to population as an aggregate or totality of all the objects, subjects or members that conform to a set of specifications. The population for this study consisted of the Headmistress, Head of Visual Art Department, GKA teachers and Visual Art Form Three students of Effiduasi Senior High School. The

area was selected for the study because as a tutor with three years of teaching exposure in the school, the researcher has sufficient knowledge about circumstances pertaining to educational resources availability and their use as well as effects on education. The population for the study is 1 Headmistress, 1 Head of Visual Art Department, 4 GKA teachers and 62 Form Three students in the Visual Art department totaling 68.

3.3.1 Target Population

Yeboah (2012) defines target population as the entire group a researcher is interested in; the group about which the researcher wishes to draw conclusions. In addition, Jaeger (1988) argues that target population is the group of persons, objects or institutions that define the objects of the investigation.

In this study, the target population was made up of sixty-two (62) Form 3 Visual Art students in the school. It also included one (1) Head of Department for Visual Art, 4 four (4) Visual Art teachers and one (1) headmistress of Effiduasi Senior High School. In total there were 68 respondents.

3.3.2 Accessible Population

Accessible population refers to members of the population who can easily be reached for information by the researcher. It is from the accessible population that researchers draw their samples (Castillo, 2009). The accessible population for this study was all 62 students in Form 3 who offer General Knowledge in Art in the Visual Art programme, the headmistress, all the 4 GKA teachers and the HOD of the Visual Art

department. The research concentrated on this sizeable number basically to be able to conduct thorough one-on-one interactions with the stakeholders involved in the conduct of the study to have a firm grasp of situations in the school.

3.4 Sampling Design

Saunders, Lewis and Thornhill (2007) contend that sampling designs are means that are used to select a model from the population by reducing it to a more convenient size. Sampling designs take many forms which include systematic, purposive, simple random, quota, stratified, convenience, cluster and multi stage sampling (Zikmund, 2003). For the purposes of this study, the purposive and convenience sampling techniques were employed.

3.4.1 Purposive Sampling Technique

In qualitative research, Patton and Cochran (2002) uphold that samples are usually purposive. This means that participants are selected because they are likely to produce useful data for the project. Oliver (2006) clarifies further that it is a sampling technique that is not established on probability but the researcher purposefully chooses people to include in a research grounded on the fact that such people have expert information that would be of enormous benefit to the research. The purposive sampling technique was adopted by the researcher to select two form 3 Visual Art classes in Effiduase Senior High School offering GKA.

3.4.2 Convenience Sampling Technique

According to the Business Dictionary (2018), convenience sampling is a statistical technique of drawing representative data by selecting units or availability or easy

access. This type of sampling helps the researcher to gather available data very quickly. The convenience sampling was used in selecting Effiduase Senior High School because of proximity and easy access to data. The researcher teaches in the selected school and as such access to data gathering and also familiar to the people took advantage of the credibility he had with them.

3.5 Data Collection Instruments

According to Yin (2003), there are different data collection instruments or source of information when conducting a research. Dowson (2002) says research instruments are the tools that a researcher employs to collect data for a study. These include questionnaire, documentation, tests, archival records and interview, to mention a few. In the current study three instruments were used and the techniques employed in gathering the necessary data were questionnaire, interview and observation. These instruments were considered important to triangulate the data and/or to combine the strengths of each instrument by minimizing their weaknesses.

3.5.1 Questionnaire as a Tool for Data Collection

The researcher chose questionnaire as the main data collection instrument because it is easier to handle or work with and simpler for respondents to answer within short period of time (Koul, 2008). Similarly, Gall et al. (2007) point out that the questionnaire is the most widely used instrument in educational research. The questionnaires were administered to the teachers and students as the primary data collection instrument. Questionnaires were used for data collection because as Orodho (2005) observes that they have major advantages including efficient use of time,

anonymity is possible and questions are standardized, that is, everyone gets the same question.

3.5.1.1 Designing the Questionnaire

The open and closed ended items were adopted. To enhance the attractiveness of the tool, it was given a title that was clear, brief, precise, and descriptive of the research work; it was well typed, well-spaced and easy to read. Similar questions were grouped together. Drafted questions were checked by colleagues and research supervisor to make them free from error. The questionnaire sought to establish the opinions of effects of educational resources on students' academic performance in GKA.

3.5.1.2 Administration of Questionnaire

In all, 66 copies of the study questionnaire were personally administered to the sampled population by the researcher and these are as follows: 4 to GKA teachers and the remaining 62 were administered to students. However, the questionnaire the teachers answered was different from the students. The administration of the questionnaire was carried out personally by the researcher to ensure that all the items in the questionnaire were correctly answered. There was a 100% return rate because the researcher was with them in the same school and was always on them for collection.

3.5.2 Interview as a Tool for Data Collection

Interview was conducted in order to get detailed information and to cross check and supplement the information collected through the questionnaire. Interviews are

methods of gathering information through oral quiz using a set of pre-planned core questions (Patton and Cochran, 2002). Interview provided an opportunity for the researcher to draw closer to the head of the school as well as the HOD of the Visual art department. This allowed the interviewer to clearly outline the objectives of the study to them. As a result, the researcher was greatly assisted in collecting the needed information for the research.

3.5.2.1 Design and Conduct of Interviews

The interview guide designed to ask for information had both planned and semi-planned questions. With the planned interview guide, the researcher used a set of programmed questions that were short, clearly written and closed ended. Therefore, this allowed the researcher to get accurate answers in the form of a set of alternatives read on paper. Questions on the interview schedule were submitted to the project thesis supervisor for inspection and corrections. The headmistress and the head of department for Visual Art were interviewed on the effects of educational resources on visual art students' academic performance in G.K.A.

3.5.3 Observation as a Tool for Data Collection

Observation, according to Leedy and Ormrod (2005), involves retrieving information, data or impressions on the field of research with the use of the researcher's senses. These senses may include listening, smelling, looking, feeling, touching and any other in the quest to investigate a phenomenon. The researcher used observation to examine the various resources available in the school. The observation had its own check lists to better facilitate the observation process. The observation of the educational resources consisted of observing the teachers as they delivered their service, stores,

library, teaching aid, studios, classrooms and the school plants/physical facilities like playing ground. Observations made in the school started on the 3rd of March 2018 and ended on the 12th of March 2018.

3.6 Sources of Data

The study made use of primary data as its basic source. Information collected through observation, interview and questionnaire administration were treated as primary data whiles information obtained from files, books, journals and internet source were categorized as secondary data.eg students attendance register.

3.7 Model Specification

Following Koppensteiner (2018) and Latif and Miles (2011), the study adopted the Ordinary Least Squares (OLS) model in analyzing the data gathered. The dependent variable is the academic performance that is premised by the availability of educational resources made accessible to students in General Knowledge in Art of the Visual Art programme at Effiduasi Senior High School. The fundamental equation model is that academic performance is a function of educational resources, students' punctuality to class, project works or assignments given by the tutor and teacher motivation. Therefore the fundamental equation model is stated in the form as captured in equation (3.1).

PERF = F (EDUR, PUNCT, UPROJ, TRM)…….……..…… (3.1)

Where PERF represents academic performance, EDUR represents educational resources, PUNCT represents punctuality to class, UPROJ represents project works or assignments and TRM represents teacher motivation.

PERF explains the level of performance of the students in examinations, preferably external ones made possible in the face of the available educational resources. PERF embodies how well students are able to perform in their field of study, measured by the nature of grades they score in the external examinations, which is the West Africa Senior High School Certificate Examinations (Hayford, 2007; Asihene, 2009; Dorleku, 2013).

EDUR denotes the educational resources in the school that help the students in their academic endeavours, consolidating on their performance in examinations. The EDUR includes teaching and learning materials, physical infrastructure and availability of professional teachers. It can be argued out that if educational resources are readily available and easily accessible and used by students, it will hugely reflect in their academic performance (Opoku – Asare et al. 2014; Effiong, 2015; Opoku – Asare & Siaw, 2015).

Seriousness on the part of students identified by the number of times and frequency of the students in class to participate in lessons is a major determinant of academic performance. PUNCT, which is punctuality, is thus captured as an explanatory variable influencing the level of performance of the students in external examinations as far as General Knowledge in Art is concerned. If a student is always in class and, ceteris paribus, fully participates and engages in discussions with the tutor, it will very much positively affect the performance of the student (Rodgers, 2001; Stanca, 2010).

UPROJ represents the project works or assignments given by the tutor which the students undertake. One of the basic ways of a teacher getting a feedback on academic strengths and weaknesses of students is through the giving of assignments, exercises and projects (Latif and Miles, 2011; Koppensteiner, 2018). Giving the assignment is one thing and getting the necessary input from the students in terms of their answering and submitting the work promptly is also another thing. The teacher can best measure the seriousness and background preparedness of the student and subsequently come out with appropriate remedial measures to assist the student through the undertaking and prompt submission of projects by the student. For the purpose of this study, all exercises, assignments, class demonstrations and project work, were all subsumed under project, UPROJ.

TRM captured teacher motivation, which in one way or the other induces him or her to willingly devote himself or herself towards the devising of every possible method to help the students to enable them perform well in examinations. TRM therefore, encapsulates any form of motivation given to the teacher aside constant flow of monthly salary. If this level of motivation is always given to the teacher, it will unarguably boost the teacher's morale to give off his / her possible best to improve the performance of the students (Oredin and Awodun, 2012; Tastan et al., 2018).

The baseline parametric model is thus, contained in equation (3.2)

$$PERF = \beta_0 + \beta_1 EDUR + \beta_2 PUNCT + \beta_3 UPROJ + \beta_4 TRM + \varepsilon \quad (3.2)$$

The βs are the parameters to be estimated, PERF as already mentioned measures the performance of the students in external examinations. EDUR is the educational

resources that can be accessed by the students in the school; PUNCT captures the frequency and punctuality of students in class discussions. UPROJ entails how serious the students are in terms of the undertaking and submission of projects given to them. TRM is the level of motivation given to the teachers which encourages them to undertake every necessary research aimed at helping to improve the academic performance of the students. β_0 is the constant term, ε is the error term which captures all other explanatory variables which influence performance but are not captured in the model. The coefficients β_1, β_2, β_3 and β_4 are the elasticities of the respective explanatory variables. The following are expected $\beta_1 > 0$, $\beta_2 > 0$, $\beta_3 > 0$, and $\beta_4 > 0$.

3.8 Justification and Definition of variables

3.8.1 Academic Performance (PERF)

The Cambridge Dictionary of English (1995) explains academic performance as how well a school, college, university, an individual or a group is able to perform when given a learning task or activity or one's achievement in standardized tests in academic pursuit. Otoo (2007) defines academic performance as the capacity to achieve when one is tested on what one has been taught. It is linked to curriculum and intellectual capacity, indicating that academic performance is influenced by the learner's competence. The success of educational institutions is measured by academic performance, or how well students deal with their studies, and the extent to which a student, teacher, or institution has realized their educational goals (Ankomah, 2002). Dorleku, (2013) defines academic performance as how well students are able to perform in their field of study, measured by the nature of grades they score in the external examinations, which is the West Africa Senior High School Certificate Examinations. The WASSCE grades according to the stipulation by WAEC range

from A1 to F9. For the purpose of this study, the researcher used the WAEC grading scale in Table 3.1.

Table 3.1: WAEC Grading Scale for WASSCE

MARKS	WASSCE GRADE
100-80	A_1
79-70	B_2
69-65	B_3
64-60	C_4
59-55	C_5
54-50	C_6
49-45	D_7
44-40	E_8
39 and below	F_9

Source: WAEC

3.8.2 Educational Resources (EDUR)

Resources denote the educational resources in the school that help the students in their academic endeavours, consolidating on their performance in examinations. The educational resources include teaching and learning materials, physical infrastructure and availability of professional teachers. It can be argued out that if educational resources are readily available and easily accessible by students, it will hugely reflect in their performance. Educational resources have positive effects on academic performance (Effiong, 2015; Olayinka, 2016).

3.8.3 Punctuality (PUNCT)

Seriousness on the part of students identified by the number of times and frequency of the students in class to participate in lessons is a major determinant of performance. Punctuality is thus captured as an explanatory variable influencing the level of performance of the students in external examinations as far as General Knowledge in Art is concerned. If a student is always in class and, ceteris paribus, fully participates

and engages in discussions with the teacher, it will very much positively affect the performance of the student (Rodgers, 2001; Stanca, 2010).

3.8.4 Undertaking of Project Works (UPROJ)

One of the basic ways of a teacher getting a feedback on academic strengths and weaknesses of students is through the giving of assignments, exercises and projects. Giving the assignment is one thing and getting the necessary input from the students in terms of their answering and submitting the work promptly is also another thing. The tutor can best measure the seriousness and background preparedness of the student and subsequently come out with appropriate remedial measures to assist the student through the undertaking and prompt submission of projects by the student (Latif and Miles, 2011; Koppensteiner, 2018). For the purpose of this study, all exercises, assignments class demonstrations and project work, are all subsumed under project, UPROJ.

3.8.5 Teacher Motivation (TRM)

Motivating teachers is a major method to encourage him/her to eagerly dedicates him / herself to creating potential ways to assist learners to enable them academically perform well in examinations. Consequently, it captures any form of motivation offered to teachers beside his / her unceasing payment of their monthly salary. This is in the form of involving teachers in decision making, the enjoyment of free accommodation, food and clothing, and periodic show of appreciation by PTA to the teachers. If motivation given to teachers is always high, it will undoubtedly increase the teachers' confidence and determination to offer their best to advance students'

academic achievements (Ornstein, 1995; Oredin and Awodun, 2012; Tastan et al., 2018).

3.9 Validity and Reliability of the Instruments

All the instruments engaged, precisely, interview, observation and questionnaire were authenticated through expert judgment. A copy each of the designed instruments was presented to the thesis supervisor to validate the representativeness of items, and reading through the instruments to correct grammatical errors and to also eliminate immaterial questions. Then the data gathered were examined for wholeness, coded and fed into a computer for analysis using the Gretl computer software.

3.10 Criteria for Evaluation

Following Koutsoyiannis (1977), Latif and Miles (2011) and Koppensteiner (2018) and the OLS regression model for the study was evaluated using statistical and econometric test. All the estimated coefficients or parameters were tested at 1%, 5% and 10% significant levels. According to Koutsoyiannis (1977), R- squared (that is the multiple coefficient of determination) was used to determine the goodness of fit of the regression to all the samples. A high R-squared denotes a high explanatory power, which means that the explanatory variables are significant in explaining the variations in the dependent variable. A low R-squared, on the other hand, gives an indication of a weak explanatory power of the explanatory variables. The study also examines the $\check{R}^2$ (adjusted R^2) which is the R^2 that takes into consideration the degree of freedom. Moreover, the t-test statistic (t-ratio) and p-value were used to test the significance of the individual independent variables on the dependent variable. For an estimate to be significant, the t-ratio (which is calculated by dividing the parameter by the standard

error) should be at least 1.80. The F-ratio was also used to determine the joint significance of all the explanatory variables in explaining the dependent variable. In all, the signs of the parameters were evaluated to determine the magnitude to which the signs of the parameters satisfied the expected a priori signs.

3.11 Data Collection Procedure

The data gathering instruments were personally administered to respondents. To achieve this, an introductory letter was obtained from the Department of Educational Innovation in Science and Technology which described the objectives of the study to the respondents. When the headmistress, teachers and students who were of interest to the study were contacted, there was the need to explain, among other things, the intentions of the research to them. Then copies of the interview guides were given to them to familiarize themselves with the questions before the scheduled dates for the interviews and the observations were conducted and made in the school.

3.12 Ethical Consideration

The researcher sent an introductory letter given to him by the Kwame Nkrumah University of Science and Technology, Kumasi to the District Director of Education, Sekyere East District, then to the Headmaster of Effiduasi Senior High / Commercial School to seek permission to gather data from the school. The researcher obtained consent from the school's Headmaster before giving the questionnaires to both the teachers and the students. The researcher sought direct consent from both the teachers and the students. In doing so, a consent statement at "Appendix E" was read out to each participant for acceptance before the administration of questionnaires. The participants were made aware that their participation was

voluntary, and that they were free to decline or end the answering of the questionnaire at any time during the study. Efforts were made to maintain confidentiality of the responses. Participants were told that their responses would be kept confidential and that no one known to them would have access to the information provided and none of the respondent's name was recorded. Additionally, the questionnaires were packed in an envelope to prevent the loss of any of the questionnaires. All references were duly acknowledged to avoid plagiarism. Data obtained through this process were analysed and are presented in Chapter 4 which also shows the main findings.

CHAPTER FOUR

PRESENTATION AND DISCUSSION OF FINDINGS

4.1 Overview

This chapter presents the data that were gathered to answer questions that guided the study. The researcher explained the procedure followed in the analysis of the data. The chapter presents the main themes that emerged from the data, and offer a discussion of the data analysis of the study and interpretation of findings. The chapter begins with the demographic information of the respondents and the school followed by analysis, presentations, interpretation and discussion of research findings based on the respondents questions. Tables, pictures and charts are used to present finding while frequencies and percentages are used to discuss the findings.

4.1.1 Profile of Effiduasi Senior High School

The school was established in May 1943 by Mr. E.R. Addow who was a merchant from Kuahu. He started with three students his son, a nephew and a friend's son, having weathered the initial storm of frustration and steadily gaining the support of the community a few more students enrolled in the school. However, the school was purely a commercial school- Modern School of Commerce (MODESCO).

There was a transformation in 1965 were the school was absorbed into the public system, Effiduasi Secondary School (EFFISCO) was born and curriculum expanded. Subsequently subjects in other programmes were added. Currently the school holds the largest number of student population in the district (2879 students) (Effiduasi Senior High School, 2016)

4.2 Activities Undertaken for Objective One

Objective One sought to document the types and nature of educational resources available for the teaching and learning of GKA at Effiduasi Senior High School.

4.2.1 Findings from Interviews, Questionnaire and Observations

To achieve this objective, the educational resources identified were classified into two and as human resources and material resources.

- **Baseline Characteristics of the Human Resource**

The principal objective of the research was to examine the effects of educational resources on students' academic performance in GKA in Effiduasi SHS. To be able to come out with useful results necessary for policy making, the study analyzed the baseline characteristics to be able to get informed and in-depth knowledge about the major stakeholders and respondents for the study. The baseline analysis of the respondents which largely centred on the students of GKA, GKA teachers of the Visual Arts Department and the headmistress encompassed the qualification of the tutors, the number of years spent in teaching GKA in general and in the institution of interest in particular, their average ages, the nature of the leadership style of the headmistress, how responsive the headmistress was to requisitions made to her by the GKA Department to ensure smooth and effective delivery of lessons. It also embodied the seriousness on the part of the students towards learning in general and attitudinal composure of the students towards the study of GKA to be specific. It also looked at the general atmosphere of the institution in terms of serenity, conduciveness, how tense, or otherwise as could impact on effective teaching and learning of the GKA as a subject.

As basis of the study, the study found out from the respondents regarding the general geographical ambience of the school, which was revealed that it could conveniently be ranked as above average, and indeed the visual estimation of the facilities proved it. It was indicated on the average that the teachers in the GKA Department had been in the school for a minimum of four years and could also boast of at least a ten-year experience in the teaching of the subject. The study also found out that the attitude of the students towards the study of GKA in particular left much to be desired and, in general, it was middling good. The average age of the tutors was 38 years, which showed that the tutors were quite energetic, exuberant and productive, given all the needed educational resources. Table 4.1 shows the baseline characteristics of the tutors of GKA at Effiduasi Senior High School.

Table 4.1: Summary of the demographic characteristics of GKA teachers in the school

Demographic Characteristic	**Percentage of the specific demographic feature**			
Gender	Male	25% (1)	Female	75% (3)
Years in current institution	1-4years	25% (1)	Above 4years	75% (3)
Highest academic qualification	First degree	75% (3)	Postgraduate	25% (1)
Number of periods allocated	Below 24 a week	0% (0)	24 and above	100% (4)

Sources: Field Survey 2017

From Table 4.1, it is explicitly shown that out of the total number of teachers teaching GKA, 75% are females whilst 25% are males. It also shows that 75% of the teachers have been in the school for more than four years, which shows that they are very much accustomed to the circumstances in the school and have profuse knowledge about the existing and prevailing conditions in the school. By GES convention, the prerequisite academic qualification of a tutor in the SHS is one with first degree. This qualifies a person to teach in the SHS. It is thus conspicuously clear that all the tutors

of GKA in the institution under study hold the minimum qualification as required by the rules of the profession. This therefore, explains that if all the needed educational resources, coupled with proficient and effective monitoring of the activities of teachers and students, there should be improvement in the academic performance of the GKA students. Related to qualification is whether the teachers are overloaded in terms of teaching beyond the professionally stipulated number of periods a week. Table 4.1 shows that, per GES regulation regarding the least number of periods a teachers should deliver a week which is 24 periods, the teachers are not in any way overburdened.

Table 4.2: Demography of the headmistress of the school

Demographic Characteristic	Degree of Measurement
Gender	Female
Years in headship position	8 Years
Highest qualification attained	PhD

Sources: Field Survey 2017

From Table 4.2, it can be stated that the headmistress of the institution has all that it takes to ensure that the requisite measures necessary to ensure flamboyant academic performance of students will be put in place. All the demographic characteristics of the head of the institution undoubtedly show that if funds are readily available for the procurement of GKA resources, then the academic performance of the students will be such a good one. It was further noted that the head of the institution hugely blended the spirit of autocracy, which insisted on firmness, and democracy, which also gave way to freely expression of views to come out with informed ones, as a

leadership style. The leadership style was seen to be the best as it ensured efficiency and effectiveness of teaching and learning.

Table 4.3: Demographic characteristics of GKA students

Demographic Characteristic	Percentage of the specific demographic feature			
Gender	Male	96.9% (57)	Female	3.1% (5)
Accommodation status	Day	54.8% (34)	Boarding	45.2% (28)
Age	14–18years	35.5% (22)	Above 18years	64.5% (40)
Permanent residence	Village	69.4% (43)	Town and City	30.6% (19)
BECE grade	6 – 24	9.7% (6)	Above 24	90.3% (56)

Sources: Field Survey 2017

It is clear from Table 4.3 that the percentage of male GKA students (96.9%) outweighs the percentage of female GKA students (3.1%). It also portrays that (54.8%) of the students of GKA are day, which means that they possibly live within the township of Effiduasi and its immediate surroundings, whereas 45.2% of them are boarders. It also gives the visual impression that most of the students pursuing GKA are above 18 years (64.5%), whilst (35.5%) are within the ages of 14 to 18 years. Again, the table depicts that a greater chunk of the GKA students permanently domicile in villages (69.4%) while just (30.6%) are in towns and cities. The permanent place of residence, directly or indirectly, speaks volumes about the income levels of the students and their ability to buy their own extra academic resources to aid their learning and/or absorption of lessons delivered. It can further be extrapolated from Table 4.3 that the performance of the GKA students in the BECE, which is a springboard to entering the SHS, was sordidly disgusting, abysmal and totally appalling. Table 4.3 shows that 90.3% of the GKA students had an aggregate range of 25 and above, whilst just an insignificant percentage 9.7% had between 6 and 24. It

can be seen that a greater percentage of the students did not have access to quality at the basic level.

Accordingly, most of these students did not have active interaction with quality resources, hence their abysmal performance in the BECE. These suggest that students performance is premised on educational resources and that educational resources have a great effect on students' academic performance.

4.3 Findings from Observation Made on the Types and Nature of Material Resources

This sub-section looked at the type of material resources available for the teaching of GKA and goes ahead to describe their current state.

- **Classrooms**

Observation made revealed that the school had adequate, well ventilated and properly lit classrooms which were fully equipped with desks capable of accommodating all GKA students in the school. These classrooms are also equipped with marker boards alongside chalkboard which helps to facilitate teaching. In spite of these qualities which make the class a conducive place for learning, sections of the window were without louver blades, as such this makes teaching and learning very difficult whenever it rains because the rain gets into the classrooms and damage students' books and sometimes classes will have to be stopped, whenever it rains during rainy seasons. Moreover, there are no cupboards in the class for students to keep their works or for teachers to store students' books so students' books easily gets miss which mostly prevents students for taken part in class exercises. Also, there are no teachers' tables and chairs in the classrooms for them to mark students' work in the class. All assignments will have to be carried to the staff room for marking and

brought back for distribution but sometimes students' books get miss up in the staffroom preventing the student form getting marks for academic records. In addition to all these, the ceiling in the class rooms also leaks whenever it rains. Figure 4.1 shows sample of pictures taken from the GKA classrooms.

Plate 4.1: Classroom

(Source: Field Work, 2017)

Plate 4.2: Classroom (broken louver blades)

Plate 4.3: Classroom (leaking roof)

(Source: Field Work, 2017)

- **Art Studio**

The data collected through observation, questionnaire and interview conducted with the sampled population proves that Effiduasi SHS has only one art studio in which all art related practical works are carried out. This studio was well equipped with long tables and benches which facilitate practical works. However, because the benches are not conducive for the height of the tables, students are normally found standing rather than sitting when doing practical works. In addition, because of the large size of the class, the students are normally crowded in the studio. This is as shown in Plates 4.4.

Plate 4.4: Art studio

(Source: Field Work, 2017)

More so, because the studio is only one, in most occasions when it is time for GKA practical works to be carried out, the studio would have been occupied by either the Leather Work or Textiles students and as such the GKA teacher and students have to make do with the classroom which is also not conducive for practical works because

of the small size of the desks available in the classrooms. Figure 4.5 shows an example of such a situation.

Plate 4.5: Practical Lessons in Classroom

(Source: Field Work, 2017)

The studio is housed in an old structure built since the establishment of the school. The walls have developed cracks and there are loosed wires which may cause harm to students. Termites have started attacking the door frame. Rooms which were designated for GKA offices in the basement of the structure have not been completed till date.

Plate 4.6: Art studio

Plate 4.7: Basement for office

(Source: Field Work, 2017)

Plate 4.8: Hanging wires

Plate 4.9: Decaying door frame

(Source: Field Work, 2017)

The student respondents revealed that they have only one type of GKA book for reference in the school stores and non in the library. This was confirmed by the teachers as they also revealed that the school provided them with only one old GKA text book and copies are kept in the store for students which even do not cover all the

topics to be treated for all the three years. As a result, the teachers had purchased a new GKA text book (Adom Series) which help them to get extra information for preparing notes for students.

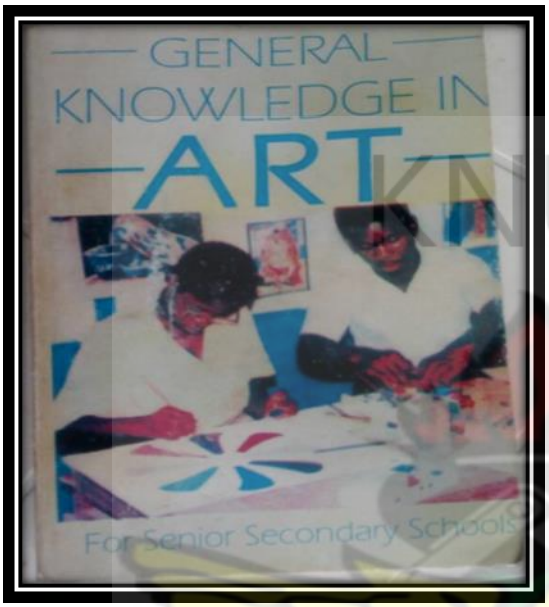

Plate 4.10: Old GKA book

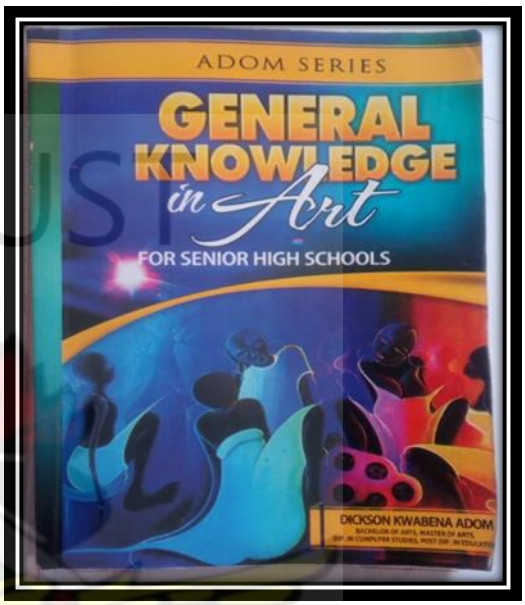

Plate 4.11: Adom Series

(Source: Field Work, 2017)

This sub-section looked at material resources available in the school and whether they were inadequate, adequate or highly adequate. It found out if all the necessary resources required for the effective teaching and learning of GKA were easily accessible by both teachers and students. This was purely descriptive and was measured on a three scale of adequate, not adequate or highly adequate. The nature and types of resources that were captured included adequate classrooms for the teaching and learning of GKA, studios, students' chairs and tables, certain basic tools, enough GKA books and other reading materials at the library, sufficient storage facilities, toilet facilities and GKA office. Others were the adequacy of water supply

to the studios, persistent power supply, hygienic canteen and dining hall, students' sick bay, well-furnished dormitories, bus to convey day students in and out of school and career guidance and counseling.

The respondents were first asked to indicate whether the availability of these resources had the potential of positively affecting the performance of students, more importantly in external examinations. Their concerns as to the sufficiency of the existing resources were to be ranked as not adequate, adequate or highly adequate. Out of the total student respondents of 62, 13 responded that the nature and types of the material resources made available by the school was highly adequate, 32 answered the resources were not adequate, whilst 17 reported they were just adequate. Again, as to whether the provision of the resources required to be made by parents was adequate, 8 mentioned they were not adequate, 30 said they were adequate and 24 agreed that the provision expected from parents was highly adequate. The totals of the adequacy of the available material resources provided by both the school and the parents were calculated and represented in a group bar graph to show the number of the respondents that agreed that the resources were not adequate, adequate or highly adequate.

This sub-section looked at availability of educational resources in the school and whether they were adequate or inadequate. It found out if all the necessary resources required for the effective teaching and learning of GKA were easily available to both teachers and students.

Table 4.5: Availability of material resources

Resources	Adequate		Inadequate	
	Frequency	Percentage %	Frequency	Percentage %
Classrooms	52	83.87	10	16.1
Desks	35	56.45	27	43.54
Studio (stools)	0	0	62	100
Text books	8	12.90	54	87.09
Other teaching / learning resources	18	29.03	44	70.96

Sources: Field Survey, 2017

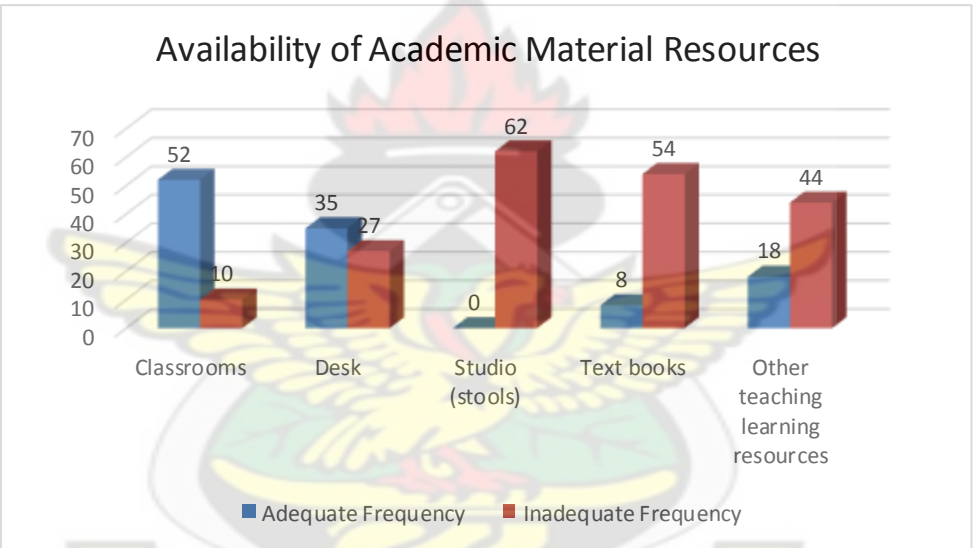

Figure 4.1: The graphical representation of the availability of material resources in the school.

Table 4.5 shows that over 60% of all the student respondents reported that material resources or facilities were inadequate. Only a few of the students rated the material facilities to be adequate. For instance, 62 out of the total 62 responded that studio (stools) were woefully inadequate, 54 also reported that text books were not adequate, 44 students also responded that other teaching learning resources were inadequate whilst 52 and 35 of the respondent said that classrooms and desks respectively, were adequate in the school. This shows that generally, the students responded inadequacy

of academic facilities and therefore were likely to have negative effects on academic performance.

The teachers and the head teacher concurred with the views of the students. Inadequate facilities, according to the teachers, HOD and head teacher has had adverse effect on curriculum delivery and implementation in GKA. The head of department added lack of water supply to the studio of art as drawback to effective art work. The head teacher added that lack of material facilities such as studios lead to poor academic performance in GKA. Educational resources are important tools in the teaching and learning process. Adequate and appropriate use of these resources helps keep learners interested and improves academic performance. However, inadequacy of educational resources as the case is adversely affects academic performance.

4.5 Activities Undertaken for Objective Two

Objective Two: To analyse the effects of the available educational resources for teaching GKA on students' academic performance at Effiduasi Senior High School.

4.5.1 Analysis of Findings on the Effects of the Educational Resources of GKA on Students' Academic Performance

Academic performance of the students was measured in terms of the grades that they scored typically in external examinations. Conventionally, it can be stated that if the resources are adequate and efficiently used, it will positively and significantly influence the nature of grades the students will get; they will score very good grades. Contrariwise, if the available resources meant for the study of G.K.A. are inadequate

and particularly not efficiently used, it will reflect in the form of worst performance by the students in external examinations.

The WASSCE grades according to the stipulation by WAEC range from A1 to F9; A1 is seen as the most preferred grade by students and F9 is never expected by students as it indicates a fail in the subject. For the purpose of this study, the researcher assigned 80% for A1; which is the best performed grade, whilst F9 is assigned 39%. Similar scenarios apply to the grades found in between A1 and F9. Academic performance of the students is noted as a dependent variable, which is seen as a function of educational resources, punctuality on the part of the students, frequent undertaking of supervised projects by the students and the teacher motivation.

That is, increases in the level of academic resources, punctuality by the students, projects undertaken by students and motivation enjoyed by teachers should largely make it possible for students to perform well in the external examinations conducted by WAEC. The regression results generated for the study on the influence of the independent variables on the dependent variable are displayed in Table 4.6.

Table 4.6: Regression results of the output of the respondents

PERF	Coef.	Std. Err.	T	P>ltl
Const	392.852**	169.021	2.3243	0.02370
UPROJ	-8.69852	7.48612	-1.1620	0.25010
PUNCT	0.0324575	0.281769	0.1152	0.90870
TrMOT	1.74901	33.5737	0.0521	0.95864
EDUR	0.0328156***	0.0112365	2.9204	0.00500

[***] (**) {*} denotes significance at [1%] (5%) {10%} respectively

R – squared = 0.869265 Adjusted R – squared = 0.658077

F (4,57) = 2.608168 P-value (F) = 0.044954

PERF = Academic Performance, is dependent variable

Source: Computed from Gretl

As shown in Table 4.6, the coefficient of educational resources is significantly positive at 1% level. Specifically, an improvement in educational resources (EDUR) will cause academic performance of students (PERF) to increase by 0.03 approximately. There is a general concern espoused by people that the adequacy and the usage of all the needed academic resources for the smooth learning by students will ultimately affect positively and significantly on the academic performance of the students. This is because students easily understood the concept taught and are able to remember and reproduce the concept when asked. The result is in support of the findings of Adebule and Ayoola (2015), Effiong (2015) and Olayinka (2016) which indicate that students understood the concepts so easily when taught and manipulate or use the instructional materials and that translate into better academic performance of students. The study recommends that all the stakeholders of education, ranging from the government through to the parents should not relent in their effort to providing educational resources to the students to enable them to perform. It should again be emphasized that maintenance and replacement of existing educational resources in the school be regularly ensured by the authorities of the school to ensure persistent accessibility by students.

From Table 4.6, the results showed that there is a positive relationship between the academic performance of students (PERF) and the students' level of punctuality

(PUNCT). This implies that as the level of punctuality on the part of the students increases, it increases or improves upon the academic performance of the students by 0.03 approximately. The sign here met the expectation of the study because an increase in the punctuality of students is expected to lead to an improvement in the performance of the students, all other things being equal. Intuitively, as students are always present in class, they are able to participate in whatever academic discourse is engineered by their teachers. Additionally, the students are able to seek for further clarification of concepts treated by their teachers which did not go down well with them. However, the relationship between the academic performance of students and punctuality is not statistically significant, which is in line with the findings of Stanca (2010) and Louis et al. (2015). Stanca (2010) and Louis et al. (2015) found a positive but statistically insignificant impact of students' level of punctuality on academic performance of students. This means that students' level of punctuality does not explain variations in the academic performance of students. It is suggested that measures should always be put in place by the stakeholders of education, including parents and teachers to ensure that truancy among students is not countenanced upon to discourage those who would want to play truant in school.

From Table 4.6, the results depicted that the coefficient of projects undertaken by the students (UPROJ) is negative and statistically insignificant. Specifically, an increase in projects undertaken by the students will cause academic performance to decrease by 8.70 approximately. This clearly shows that the undertaking of projects by the students had no effect on the academic performance of the students in terms of external examinations. Conceptually, the mere taking of projects by the students does not ensure that the students would perform well in external examinations. Perhaps, the

number of projects given to the students were not adequate and also do not meet WAEC standard. It can also be said that even if the projects merited WAEC standard, the students did not receive proper monitoring and supervision as well as prompt remedial measures from the teachers. It is recommended for the purposes of policymaking that in order to ensure that the undertaking of projects by students would have a significant effects on the academic performance of students, the projects should be structured in a way that would enable effective monitoring by the teachers, should be of WAEC standard, and should also be frequently given.

From Table 4.6, the results depicted that there is a positive relationship between teacher motivation (TrMOT) and the academic performance of students (PERF). The sign here met the *a priori* expectation of the study. This implies that as the level of motivation given to the teachers increase, it leads to an increase in the academic performance of the students by 1.75 approximately. This is because the element of motivation is seen to be a powerful force to boost the morale of the educational workforce. Once the teacher is motivated, the teacher feels comfortable and highly ensconced to give off their best to help the student. The positive relationship is, however, not significant. This means that teacher motivation (TrMOT) does not explain the variations in the academic performance of students (PERF). The result is in line with Tastan et al. (2018) and Oredein and Awodun (2013). The study therefore proposes that teachers should always be motivated in the form of involving them in decision making, and relieving them of the problem of shelter, food and clothing.

4.6 Model Efficiency Diagnosis

To check the robustness of the estimated co-efficient of the explanatory (independent) variables, the efficiency of the model is tested. The R square of the model is 0.869265 which shows that the explanatory variables included in the baseline parametric model (equation 3.2) explain approximately 86.9% of the observed variations in the academic performance. The F-statistic of 2.608168 with a probability value of 0.044954 also indicates that the overall effect of the explanatory variables on academic performance is statistically significant at 5%. This implicitly suggests a high predictive power of the explanatory variables. Thus, the explanatory variables highly explain the variations in the academic performance.

In summary from the Table 4.6 it could be deduced that educational resources variable (EDUR) was positive and statistically significant. Students' level of punctuality variable (PUNCT) and teacher motivation variable (TrMOT) were positive but statistically insignificant whereas projects undertaken by the students variable (UPROJ) was negative and statistically insignificant. The overall effect of the explanatory variables on academic performance is statistically significant at 5%.

4.7 Activities undertaken for Objective Three

Objective three sought to propose innovative strategies to manage educational resources for the teaching and learning of GKA at Effiduasi Senior High School.

4.7.1 Analysis of findings on the Management of Educational Resources Available for Teaching and Learning of GKA

Table 4.7: Teacher response to questions on management of educational resources

Types of Resources		Well Managed	Not Well Managed
Human Resources	In-service training	1	3
	Teacher motivation	1	3
	Monitoring and evaluation of teachers	3	1
Material Resources	Good storage facilities	1	3
	Maintenance and Repairs of materials	1	3
	Regular check and inspection	0	4
Financial Resources	Release of funds	1	3
	Purchase of materials for students by school	0	4

Sources: Field Survey, 2017

Respondents (teachers) were asked which of the educational resources in the school were better managed eg. In terms of maintenance, storage, etc.

Table 4.7 gives an overview of the better managed resources in the school. A greater number of teachers (97.44 %) indicated that resources in the school are not managed well. The table shows that all respondents rated human resources 58.3% as not well managed, followed by material resources 60.6% with 87.5% rating financial resources as the worst managed resource in the school. However, monitoring and evaluation under human resources was rated as the best managed item. From the Table 4.7 it could be observed that is a correlation between effective management of educational resources and academic performance. This implies that the effective management of educational resources (Human, Material and Financial resources) has positive effects on academic performance of students. The results however, showed that resources are not well managed and that affect the academic performance of students.

Table 4.8: Students' response to questions on management of educational resources

Types of Resources		Well Managed	Not Well Managed
Human Resources	Teacher motivation	17	45
	Monitoring and evaluation of teachers	49	13
Material Resources	Good storage facilities	15	47
	Maintenance and Repairs of materials	9	53
	Regular check and inspection of materials	23	39
Financial Resources	Purchase of materials for students by school	2	60

Sources: Field Survey 2017

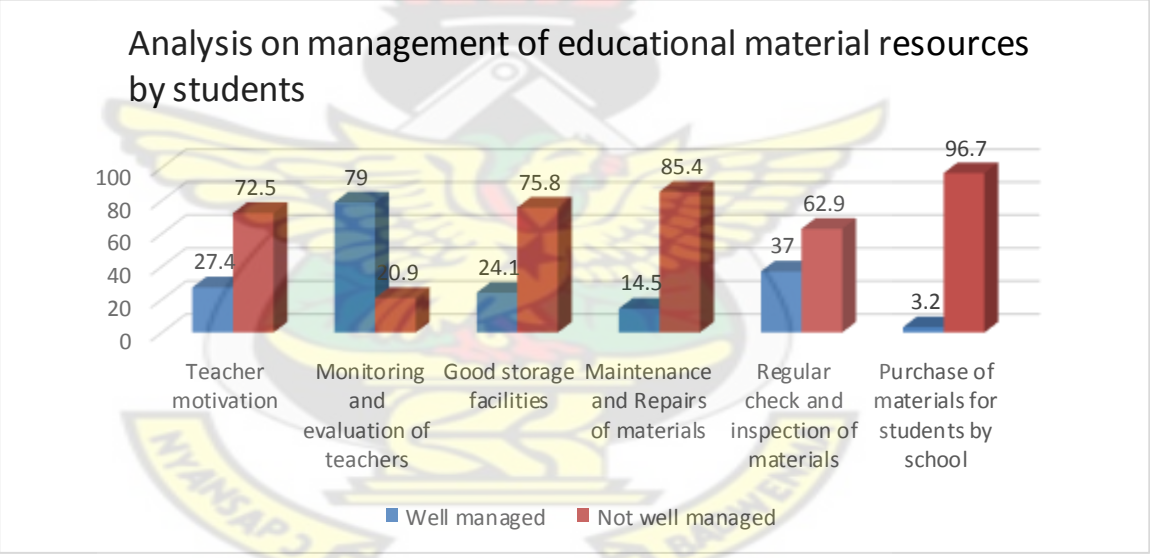

Figure 4.2: The graphical representation of the management of educational material resources by students.

Table 4.8 gives an overview of how resources are managed in the Effiduasi Senior High School. Overall, majority of the student respondents indicated that resources in the school are not managed well. Table 4.8 shows that all the 62 respondents rated human resources as follows: motivation for teachers 27.4% said well-managed, 72.6%

said not well managed, supervision of teachers 79.1% said well-managed, 20.9% said not well managed. On material resources; good storage 24.2% said well-managed, 75.8% said not well managed, maintenance and repairs of materials 14.6% said well-managed, 85.4% said not well managed, and regular inspections as 37.1% said well-managed, 62.9% said not well managed, and finally financial resource recorded 3.3% said well-managed, 96.7% said not well managed, on purchase of materials.

In conclusion, in every area of development, human, financial and material resources play an indispensable role. Badly managed, the human, financial and material resources of an organization can limit their progress in every direction. If the resources especially, human resource are effectively managed, planned and monitored, their knowledge, power, skills and competence can lead to accessible social and economic progress, likewise the material resources. In fact, in the educational system, human resource is the product of the organisation's life, its quality or inferior nature. An organization with insufficient human resources, even when it has other immeasurable resources, will remain a poor and unprogressive organisation so long as the bulk of its staff remain untrained, and has people with no viable skills and competence to harness the organisation's financial and material resources for effective and efficient performance. To ensure effective management of educational resources, innovative strategies, sufficient and appropriate training, performance appraisal process with feedback and adequate motivation are fundamental to improving on teachers effectiveness in work and for enhancing the skills required for future challenges. Proper management mechanisms and reasonable precaution should also be taken to ensure protection of assets and physical security of the GKA studios. Effective financial management is also vital for academic

performance. It involves planning, organizing, controlling and monitoring financial resources in order to achieve performance. Well-managed human resources with well-managed material resources will precede success and efficient educational system.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Overview

This chapter concludes the entire study. The chapter briefly sums up the main findings of the research, provides detailed conclusion and outlines recommendations for the study.

5.1.1 Summary of Findings

This study sought to empirically investigate the availability and effects of educational resources on students' academic performance as well as proposing innovative strategies to manage educational resources for the teaching and learning of GKA at Effiduasi Senior High School.

Findings from the researcher's observation revealed that: the school has adequate, well ventilated and properly lit classrooms which are fully equipped with desks capable of accommodating all GKA students in the school. These classrooms are also equipped with marker boards alongside chalkboard which helps to facilitate teaching. In spite of these qualities which make the class conducive place for learning, sections of the windows are without louver blades which allows rain water to wet the classroom and disrupt classes, there are no cupboards in the class for teachers to store student's books, there are no teacher's table and chair in the class for them to mark student's work in the class and lastly, the ceiling in the classrooms also leaks whenever it rained. The study also proved that Effiduasi SHS has only one art studio.

This studio is well equipped with long tables and benches which facilitate practical works. However, because the benches are not conducive for the height of the tables, students are normally found standing rather than sitting when doing practical works. In addition, because of the large size of the class, the students are normally over clouded in the studio. The student respondents revealed that they have only one type of reference GKA book in the school stores and non in the library. This was confirmed by the teachers as they also revealed that the school provided them with only one old GKA text book and copies are kept in the store for students which even do not cover all the topics to be treated for all the three years. As a result, the teachers have purchased a new GKA text book (Adom Series) which help them to get extra information for preparing notes for students.

The study employed the OLS regression technique to examine the possible relationships among the investigated series. Empirical findings analysed are summarised as follows: The study found that the educational resources have significantly positive effects on students' performance at 1% level. This means that improvement in the educational resources increase students' academic performance. The study further unraveled that the relationship between projects undertaken by the students and the students' academic performance is negative and statistically insignificant. The study further revealed that students' level of punctuality has positive but statistically insignificant relationship with students' academic performance. The study further unearthed that teacher motivation has positive but statistically insignificant impact on students' academic performance.

Concerning the management of educational resources, majority of the students were of the view that they were poorly managed in the area of teacher motivation, monitoring and evaluation of teachers, good storage facilities, maintenance and repairs of materials, regular check and inspection of materials and purchase of materials for students by school. To ensure effective management of educational resources, innovative strategies, sufficient and appropriate training, performance appraisal process with feedback and adequate motivation are fundamental to improving on teachers effectiveness in work and for enhancing the skills required for future challenges. Proper management mechanisms and reasonable precaution should also be taken to ensure protection of assets and physical security of the GKA studios. Effective financial management is also vital for academic performance. It involves planning, organizing, controlling and monitoring financial resources in order to achieve performance. Well-managed human resources with well-managed material resources will precede success and efficient educational system.

5.2 Conclusions

The general conclusion of this study is that educational resources are scientifically related to student academic performance and that their relations are so important that they can't be overlooked. Based on the research findings the following conclusions have been made.

i. The educational resources for teaching and learning theoretical lesson in GKA in the classroom are not adequately available and majority are in a poor state. However, educational resources for practical GKA lesson are inadequate compared to the number of students and the few available ones are not up to

standard. This makes Effiduasi Senior High School no different from other schools where similar researches have been carried out in the country.

ii. The study found that the educational resources have significantly positive effects on students' performance at 1% level. This means that improvement in the educational resources increase students' academic performance.

iii. Concerning the management of educational resources, majority of the students were of the view that they were poorly managed in the area of teacher motivation, monitoring and evaluation of teachers, good storage facilities, maintenance and repairs of materials, regular check and inspection of materials and purchase of materials for students by school. To ensure effective management of educational resources, innovative strategies, sufficient and appropriate training, performance appraisal process with feedback and adequate motivation are fundamental to improving on teachers effectiveness in work and for enhancing the skills required for future challenges. Proper management mechanisms and reasonable precaution should also be taken to ensure protection of assets and physical security of the GKA studios. Effective financial management is also vital for academic performance. It involves planning, organizing, controlling and monitoring financial resources in order to achieve performance. Well-managed human resources with well-managed material resources will precede success and efficient educational system.

5.3 Recommendations

The study therefore recommended that all the stakeholders of education, ranging from the government through to the parents should not relent in their efforts to providing educational resources to the students to enable them to perform. It should again be emphasized that maintenance and replacement of existing academic resources in the school be regularly ensured by the authorities of the school to ensure persistent accessibility by students.

The effect of projects undertaken by the students on the students' academic performance was negative and statistically insignificant. It is hence, recommended for the purposes of policymaking that in order to ensure that the undertaking of projects by students would have a significant impact on the academic performance of students, the projects should be structured in a way that would call for effective monitoring by tutors, should be of WAEC standard, and should also be frequently given.

The effects of students' level of punctuality on the students' academic performance was positive but statistically insignificant. The policy implication is that as the level of punctuality on the part of the students increases, it improves upon the academic performance of students. However, the impact is statistically not different from zero. It is therefore recommended that measures should always be put in place by the stakeholders of education including parents and teachers to ensure that truancy in students should not be countenanced upon. It is therefore recommended that motivation of teachers should always be made monumental and readily available to engender improvement in the academic performance of students.

Concerning the management of educational resources, the following recommendations have been put in place: teachers should be motivated, monitoring and evaluation of teachers should be frequent, good storage facilities should be ensured, regular maintenance and repairs of materials should be ensured, regular check and inspection of materials should be ensured and purchase of materials for students by school should be ensured.

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APPENDIX

APPENDIX A

Regression results

Model 21: OLS, using observations 1-62
Dependent variable: PERF

	Coefficient	*Std. Error*	*t-ratio*	*p-value*	
Const	392.852**	169.021	2.3243	0.02370	**
UPROJ	-8.69852	7.48612	-1.1620	0.25010	
PUNCT	0.0324575	0.281769	0.1152	0.90870	
TrMOT	1.74901	33.5737	0.0521	0.95864	
EDUR	0.0328156***	0.0112365	2.9204	0.00500	***

Mean dependent var	437.0968	S.D. dependent var	193.5297
Sum squared resid	1931209	S.E. of regression	184.0676
R-squared	0.869265	Adjusted R-squared	0.658077
F(4, 57)	2.608168	P-value(F)	0.044954
Log-likelihood	-408.7164	Akaike criterion	827.4328
Schwarz criterion	838.0685	Hannan-Quinn	831.6086

APPENDIX B
QUESTIONNAIRE
KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

DEPARTMENT OF DEPARTMENT OF EDUCATIONAL INNOVATION IN SCIENCE AND TECHNOLOGY

QUESTIONNAIRE FOR HEAD TEACHER

This questionnaire is to enable me collect necessary information to complete my research on the Topic: **"EFFECTS OF EDUCATIONAL RESOURCES ON THE TEACHING AND LEARNING OF GENERAL KNOWLEDGE IN ART AT EFFIDUASI SENIOR HIGH SCHOOL, ASHANTI REGION".**

All information provided in this study will be treated as confidential and your anonymity is assured.

PART I: SOCIO- DEMOGRAPHIC FACTORS

1. Indicate your gender a) Male [ ] a) Female [ ]
2. For how long have you served as a headmaster in this school?
   a) below one year [ ] a)1-3 years [ ] a) 4-6 years [ ] a) 7-9 years [ ] a) Over 9 [ ]
3. What is your highest academic qualification?

   a) P.hD [ ] a) M. Ed [ ] a) B. Ed [ ] a) B.Sc. [ ] a) Dip. Ed [ ]
   Any other, please specify __
4. Please indicate the type of your school.

   a) Mixed day [ ] b) Mixed boarding and day [ ] c) only Girls (boarding) [ ]

   d) only Girls (Day) [ ] e) Boys boarding [ ] f) Only Boys (Day) [ ]
5. What is the average number of lessons that a teacher in your school is allocated per week? a) Below 18 [ ] b) 19-24 [ ] c) 25-30 [ ] d) above 30 [ ]
6. How many students are offering GKA in the school? 30-40 [ ] 41-50 [ ] above 50 [ ]
7. How many teachers teach GKA in the school? ……..
8. What is the G.K.A teacher: student radio in the school?
9. What is the minimum qualification of GKA teachers in your school?
   a) Ph.D [ ] a) M. Ed [ ] a) B. Ed [ ] a) B.Sc. [ ] a) Dip. Ed [ ]
   Any other, please specify __
10. Who appoints teachers to teach GKA in the school?

a) Head of department [ ] b) Head teacher [ ] c) Board of governors [ ]
d) Education Director [ ]

PART 2: AVAILABLE ACADEMIC RESOURCES

11. Do teachers have a staff common room furnished with adequate tables and chairs?
    a) Yes [ ] a) No [ ] a) On the average [ ]
12. Does the school has classrooms for teaching GKA? a) Yes [ ] a) No [ ]
13. Are the classrooms for teaching and learning GKA have adequate tables and chairs for students? a) Yes [ ] a) No [ ]
14. How many studios has the visual art department? ……..
15. Is there a studio always available for executing practical works in G.K.A?
    a) Always [ ] b) Sometimes [ ] c) Never

- If you answered 'a' or 'b'to Question 14, does the studio has adequate stools/chairs and tables/easels? a) Yes [ ] b) No [ ]

16. Does the school provide basic tools and materials to students for executing practical works in GKA? a) Yes [ ] b) Sometimes [ ] c) No [ ]

- If you answered 'a' or 'b' to Question 15, who provide(s) the tools and materials?
    a) Government only b) the school through internal generated funds only
    c) stakeholders/philanthropists only
    d) government + stakeholders/philanthropist e) government + School's IGF
    f) School's IGF + stakeholders/philanthropist

17. Are there G.K.A books in the library for the students? a) Yes [ ] b) No [ ]

- If "yes" are they adequate for all the students? a) Yes [ ] b) No [ ]

18. Are there storage facilities for G.K.A works in the school? a) Yes [ ] b) No [ ]
19. Does the department has an office for G.K.A? a) Yes [ ] b) No [ ]
20. Are there adequate number of latrines/toilets in the school for the number of students in the school? a) Yes [ ] b) No [ ]

- If Yes to Question 19, who provided the toilet facilities?

a) Government only [ ] b) the school through internal generated funds only [ ]

c) P.T.A [ ]

d) stakeholders/philanthropists only e) government + stakeholders/philanthropist

f) government + School's IGF g) School's IGF + stakeholders/philanthropist

21. Do you have water supply to the visual art studios? a) Yes [ ] b) No [ ]

- If Yes to Question 20, who provided the water supply

a) Government only [ ] b) the school through internal generated funds only [ ] c) P.T.A [ ]
d) stakeholders/philanthropists only [ ]
e) government + stakeholders/philanthropist [ ]
f) government + School's IGF [ ] g) School's IGF + stakeholders/philanthropist [ ]

22. Do you have electricity supply to the visual art studios? Yes [ ] No [ ]

- If Yes to Question 21, who provided the water supply

a) Government only [ ] b) the school through internal generated funds only [ ] c) P.T.A

d) stakeholders/philanthropists only [ ]

e) government + stakeholders/philanthropist [ ]

f) government + School's IGF [ ] g) School's IGF + stakeholders/philanthropist [ ]

23. Does the school provide adequate decent and hygienic canteen or dining hall for students to eat in the school? a) Yes [ ] b) No [ ]

24. Does the school have a sick-bay to care for sick students in the school?

a) Yes [ ] b) No [ ]

25. Does the school provide descent dormitories for boarding students who offer GKA? a) Yes [ ] b) No [ ]

26. How do Day students come to school and go out from school?

a) By school bus only [ ] b) By private cars only[ ] By commercial cars only [ ]

b) by both Private and commercial cars [ ] By walking

27. How often do you supervise the teaching and learning of GKA in the school?
a) Once a term [ ] b) twice a term [ ] c) trice a term or more [ ] d) don't supervise [ ]

28. Does the school provide career guidance and counselling to GKA students in the school? a) Yes b) No c) Sometimes

- If your answer is No, please give reason(s)
  ……
  ……

Teaching and learning materials (TLM)

29. How many reference books are available for G.K.A in the school? ……
30. How many teachers guide are available for G.K.A teachers? ……
31. How many teachers syllabus are available for G.K.A teachers? ……
32. List any other teaching and learning materials that are used for teaching and learning of GKA in the school. ……..
    ……..
    ……..
    ……..
    ……..
    ……..
33. Who provide(s) the available TLMs that you have listed?
    a) Government only b) the school through internal generated funds only c) stakeholders/philanthropists only
    d) government + stakeholders/philanthropist
    e) government + School's IGF f) School's IGF + stakeholders/philanthropist

Tick if available

34. Teaching resources such as manilas [ ], dusters [ ], maker boards [ ], maker pens [ ], models [ ], charts [ ], sketch pads [ ], colours [ ]
35. Do you approve of the use of resource persons in the teaching/learning of G.K.A? a) Yes[ ] b) No[ ]
36. Do you approve of the use of field trips/excursions in the teaching/learning of G.K.A? a) Yes[ ] b) No[ ]
37. Does the government disburse funds to support G.K.A? a) Yes[ ] b) No[ ] c) Sometimes

    If "Yes" to 37 how has it affected the subject? .....
38. Do you have any suggestions on the provision of TLR? .....
39. Do you think availability of teaching and learning resources (TLR) influences academic performance? a) Yes[ ] b) No[ ]

    If Yes, how……
40. Does the school organize pre-service or in-service training to GKA teachers periodically in the school? a) Yes [ ] b) No c) Sometimes

- If you answered 'a' or 'c' to Question 40, how many times in a year? …….

41. Are GKA teachers motivated to teach the subject in the school?

    a) Yes [ ] b) Sometimes No [ ]
42. How best do you think educational resources can be properly managed to help promote the teaching/learning of GKA?

    ……

PART 3: STUDENT'S PERFORMANCE

43. How do you rank the general performance of the students in GKA?

    Bad, below average, average, good, excellent
44. If good or excellent, what do you think has contributed to that? ……
45. If average or anything below average, what do you think are some of the contributing factors? ……
46. How will you rate the average punctuality of students in the visual art (GKA) on a scale of 0 to 100?

    100 [ ], 75 [ ], 50 [ ], 25 [ ], below 25 [ ]
47. Do you think G.K.A students are given exercises / assignments very often by their teachers? a) Yes[ ] b) No[ ]
48. How often do G.K.A students promptly submit their projects for consideration by their teachers in a week? No _____

APPENDIX C

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

DEPARTMENT OF DEPARTMENT OF EDUCATIONAL INNOVATION IN SCIENCE AND TECHNOLOGY

QUESTIONNAIRE FOR G.K.A TEACHERS

This questionnaire is to enable me collect necessary information to complete my research on the Topic: **"EFFECTS OF EDUCATIONAL RESOURCES ON THE TEACHING AND LEARNING OF GENERAL KNOWLEDGE IN ART AT EFFIDUASI SENIOR HIGH SCHOOL, ASHANTI REGION".**

All information provided in this study will be treated as confidential and your anonymity is assured.

PART I: SOCIO- DEMOGRAPHIC FACTORS

1. Indicate your gender a) Male [ ] a) Female [ ]

2. For how long have you served as a teacher in this school?

a) below one year [ ] a)1-3 years [ ] a) 4-6 years [ ] a) 7-9 years [ ] a) Over 9 [ ]

3. What is your highest academic qualification?

a) P.hD [ ] a) M. Ed [ ] a) B. Ed [ ] a) B.Sc. [ ] a) Dip. Ed [ ]

Any other, please specify __

5. What is the average number of periods allocated to you per week?

a) Below 2 [ ] b) 4 [ ] d) 6 [ ] e) 6 and above [ ]

6. How many students are offering GKA in your class? 30-40 [ ] 41-50 [ ] above 50 [ ]

7. How many teachers teach GKA in your department? ……..

10. Who appointed you to teach GKA in the school?

a) Head of department [ ] b) Head teacher [ ] c) Board of governors [ ]

d) Education Director [ ]

PART 2: AVAILABLE ACADEMIC RESOURCES

11. Do teachers have a staff common room furnished with adequate tables and chairs?

a) Yes [ ] a) No [ ] a) On the average [ ]

12. Does the school has classrooms for teaching GKA? a) Yes [ ] a) No [ ]

13. Are the classrooms for teaching and learning GKA have adequate tables and chairs for students? a) Yes [ ] a) No [ ]

14. How many studios has the visual art department? ……..

15. Is there a studio always available for executing practical works in G.K.A?

a) Always [ ] b) Sometimes [ ] c) Never

• If you answered 'a' or 'b'to Question 15, does the studio has adequate stools/chairs and tables/easels? a) Yes [ ] b) No [ ]

16. Does the school provide basic tools and materials to students for executing practical works in GKA? a) Yes [ ] b) Sometimes [ ] c) No [ ]

• If you answered 'a' or 'b' to Question 16, who provide(s) the tools and materials?

a) Government only b) the school through internal generated funds only c) stakeholders/philanthropists only d) government + stakeholders/philanthropist

e) government + School's IGF f) School's IGF + stakeholders/philanthropist

17. Are there G.K.A books in the library for the students? a) Yes [ ] b) No [ ]

• If "yes" are they adequate for all the students? a) Yes [ ] b) No [ ]

18. Are there storage facilities for G.K.A works in the school? a) Yes [ ] b) No [ ]

19. Does the department has an office for G.K.A? a) Yes [ ] b) No [ ]

20. Are there adequate number of latrines/toilets in the school for the number of students in the school? a) Yes [ ] b) No [ ]

• If Yes to Question 20, who provided the toilet facilities?

a) Government only [ ] b) the school through internal generated funds only [ ]

c) P.T.A [ ]

d) stakeholders/philanthropists only e) government + stakeholders/philanthropist

f) government + School's IGF g) School's IGF + stakeholders/philanthropist

21. Do you have water supply to the visual art studios? a) Yes [ ] b) No [ ]

• If Yes to Question 21, who provided the water supply

a)Government only [ ] b) the school through internal generated funds only [ ] c) P.T.A [ ] d) stakeholders/philanthropists only [ ]

e) government + stakeholders/philanthropist [ ]

f) government + School's IGF [ ] g) School's IGF + stakeholders/philanthropist [ ]

22. Do you have electricity supply to the visual art studios? Yes [ ] No [ ]

• If Yes to Question 22, who provided the water supply

a) Government only [ ] b) the school through internal generated funds only [ ] c) P.T.A d) stakeholders/philanthropists only [ ]

e) government + stakeholders/philanthropist [ ]

f) government + School's IGF [ ] g) School's IGF + stakeholders/philanthropist [ ]

23. Does the school provide adequate decent and hygienic canteen or dining hall for Students to eat in the school? a) Yes [ ] b) No [ ]

24. Does the school has a sick-bay to care for sick students in the school?

a) Yes [ ] b) No [ ]

25. Does the school provide descent dormitories for boarding students who offer GKA? a) Yes [ ] b) No [ ]

26. How do Day students come to school and go out from school?

a) By school bus only [ ] b) By private cars only[ ] By commercial cars only [ ]

b) by walking, Private and commercial cars [ ] e) by walking [ ]

27. How often do the head teacher supervise the teaching and learning of GKA in the class? a) Once a term [ ] b) twice a term [ ] c) trice a term or more [ ] d) don't supervise [ ]

28. Does the school provide career guidance and counselling to GKA students in the school? a) Yes b) No c) Sometimes

• If your answer is No, please give reason(s) ……

Teaching and learning materials (TLM)

29. How many reference books are available for G.K.A in the school? ……

30. How many teachers guide are available for G.K.A teachers? ……..

31. How many teachers syllabus are available for G.K.A teachers? ……..

32. List any other teaching and learning materials that are used for teaching and learning of GKA in the school. ……..

……..

……..

……..

……..

……..

33. Who provide(s) the available TLMs that you have listed?

a) Government only b) the school through internal generated funds only c) stakeholders/philanthropists only d) government + stakeholders/philanthropist

e) government + School's IGF f) School's IGF + stakeholders/philanthropist

Tick if available

34. Teaching resources such as manilas cards [ ], dusters [ ], maker boards [ ], maker pens [ ], models [ ], charts [ ], sketch pads [ ], colours [ ]

35. Do you use resource persons in the teaching/learning of G.K.A?

a) Yes [ ] b) No[ ]

36. Do you use field trips/excursions in the teaching/learning of G.K.A?

a) Yes [ ] b) No[ ]

37. Does the government disburse funds to support G.K.A? a) Yes[ ] b) No[ ] c) Sometimes

d) don't know [ ]

If "Yes" to 37 how has it affected the subject? .....

38. Do you have any suggestions on the provision of TLR? .....

39. Do you think availability of teaching and learning resources (TLR) influences academic performance? a) Yes [ ] b) No[ ]

If Yes, how……

40. Does the school organize pre-service or in-service training to GKA teachers periodically in the school? a) Yes [ ] b) No c) Sometimes

• If you answered 'a' or 'c' to Question 40, how many times in a year? ……

41. Are GKA teachers motivated to teach the subject in the school?

a) Yes [ ] b) Sometimes No [ ]

42. How best do you think educational resources can be properly managed to help promote the teaching/learning of GKA?…….

PART 3: STUDENT'S PERFORMANCE

43. How do you rank the general performance of the students in GKA?

a) Bad [ ],b) below average [ ], c) average [ ], d) good [ ], e) excellent [ ]

44. If good or excellent, what do you think has contributed to that? ……

45. If average or anything below average, what do you think are some of the contributing factors? ……..

46. How will you rate the average punctuality of students in the visual art (GKA) on a scale of 0 to 100? a) 100 [ ], b) 75 [ ], c) 50 [ ], d) 25 [ ], e) below 25 [ ]

47. Do you give exercises / assignments to G.K.A students very often?

a) Yes [ ] b) No[ ]

48. How often do G.K.A students promptly submit their projects for consideration by their teachers in a week? No. _____

APPENDIX D

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

DEPARTMENT OF DEPARTMENT OF EDUCATIONAL INNOVATION IN SCIENCE AND TECHNOLOGY

QUESTIONNAIRE FOR G.K.A STUDENTS

This questionnaire is to enable me collect necessary information to complete my research on the Topic: **"EFFECTS OF EDUCATIONAL RESOURCES ON THE TEACHING AND LEARNING OF GENERAL KNOWLEDGE IN ART AT EFFIDUASI SENIOR HIGH SCHOOL, ASHANTI REGION".**

All information provided in this study will be treated as confidential and your anonymity is assured.

PART I: SOCIO- DEMOGRAPHIC FACTORS

1. Indicate your gender a) Male [ ] a) Female [ ]

2. You are in what form?

a) form one [ ] b) form two [ ] c) form three [ ]

5. What is the average number of periods allocated for GKA for a week?

a) Below 2 [ ] b) 4 [ ] d) 6 [ ] e) 6 and above [ ]

6. How many students are in your class? 30-40 [ ] 41-50 [ ] above 50 [ ]

PART 2: AVAILABLE ACADEMIC RESOURCES

12. Does the school has classrooms for teaching GKA? a) Yes [ ] a) No [ ]

13. Are the classrooms for teaching and learning GKA have adequate tables and chairs for students? a) Yes [ ] a) No [ ]

14. How many visual art studios are in the visual art department? ……..

15. Is there a studio always available for executing practical works in G.K.A?

a) Always [ ] b) Sometimes [ ] c) Never

• If you answered 'a' or 'b'to Question 15, does the studio has adequate stools/chairs and tables/easels? a) Yes [ ] b) No [ ]

16. Does the school provide basic tools and materials to students for executing practical works in GKA? a) Yes [ ] b) Sometimes [ ] c) No [ ]

• If you answered 'a' or 'b' to Question 16, who provide(s) the tools and materials?

a) Government only b) the school through internal generated funds only c) stakeholders/philanthropists only d) government + stakeholders/philanthropist

e) government + School's IGF f) School's IGF + stakeholders/philanthropist

17. Are there G.K.A books in the library for the students? a) Yes [ ] b) No [ ]

• If "yes" are they adequate for all the students? a) Yes [ ] b) No [ ]

18. Are there storage facilities for G.K.A works in the school? a) Yes [ ] b) No [ ]

19. Does the department has an office for G.K.A? a) Yes [ ] b) No [ ]

20. Are there adequate number of latrines/toilets in the school for the number of students in the school? a) Yes [ ] b) No [ ]

• If Yes to Question 20, who provided the toilet facilities?

a) Government only [ ] b) the school through internal generated funds only [ ] c) P.T.A [ ] d) stakeholders/philanthropists only

e) government + stakeholders/philanthropist

f) government + School's IGF g) School's IGF + stakeholders/philanthropist

21. Do you have water supply to the visual art studios? a) Yes [ ] b) No [ ]

• If Yes to Question 21, who provided the water supply

a)Government only [ ] b) the school through internal generated funds only [ ] c) P.T.A [ ] d) stakeholders/philanthropists only [ ]

e) government + stakeholders/philanthropist [ ]

f) government + School's IGF [ ] g) School's IGF + stakeholders/philanthropist [ ]

22. Do you have electricity supply to the visual art studios? Yes [ ] No [ ]

• If Yes to Question 22, who provided the water supply

a) Government only [ ] b) the school through internal generated funds only [ ] c) P.T.A d) stakeholders/philanthropists only [ ]

e) government + stakeholders/philanthropist [ ]

f) government + School's IGF [ ] g) School's IGF + stakeholders/philanthropist [ ]

23. Does the school provide adequate decent and hygienic canteen or dining hall for students to eat in the school? a) Yes [ ] b) No [ ]

24. Does the school has a sick-bay to care for sick students in the school?

a) Yes [ ] b) No [ ]

25. Does the school provide descent dormitories for boarding students who offer GKA? a) Yes [ ] b) No [ ]

26. How do Day students come to school and go out from school?

a) By school bus only [ ] b) By private cars only [ ] By commercial cars only [ ]

b) by walking, Private and commercial cars [ ] e) by walking [ ]

27. Does the school provide career guidance and counselling to GKA students in the school? a) Yes b) No c) Sometimes

• If your answer is No, please give reason(s) ……

Teaching and learning materials (TLM)

32. List any teaching and learning materials that are used for teaching and learning of GKA in the school. ……..

……..

……..

……..

……..

……..

33. Who provide(s) the available TLMs that you have listed?

a) Government only b) the school through internal generated funds only c) stakeholders/philanthropists only d) government + stakeholders/philanthropist

e) government + School's IGF f) School's IGF + stakeholders/philanthropist g) students

Tick if available

34. Teaching resources such as manilas cards [ ], dusters [ ], maker boards [ ], maker pens [ ],

models [ ], charts [ ], sketch pads [ ], colours [ ]

36. Do you use field trips/excursions in the teaching/learning of G.K.A?

a) Yes [ ] b) No[ ]

38. Do you have any suggestions on the provision of TLR? .....

39. Do you think availability of teaching and learning resources (TLR) influences academic performance? a) Yes [ ] b) No[ ]

If Yes, how……

42. How best do you think educational resources can be properly managed to help promote the teaching/learning of GKA? ……

PART 3: STUDENT'S PERFORMANCE

43. How do you rank the general performance of the students in GKA?

a) Bad [ ],b) below average [ ], c) average [ ], d) good [ ], e) excellent [ ]

44. If good or excellent, what do you think has contributed to that? …….

45. What was your entry grade? a) 6-24 b) 25 and above.

46. How will you rate the average punctuality of students in the visual art (GKA) on a scale of 0 to 100?

a) 100 [ ], b) 75 [ ], c) 50 [ ], d) 25 [ ], e) below 25 [ ]

47. Are you given GKA exercises / assignments often? a) Yes [ ] b) No[ ]

48. How often do G.K.A students promptly submit their projects for consideration by their teachers in a week? No. _____(NB. To be multiplied by the no. of weeks in the term)

49. Are your teachers motivated?

a) least motivated b) middling motivated c) very well motivated

APPENDIX E

CONSENT LETTER

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY
COLLEGE OF ART AND THE BUILT ENVIRONMENT
DEPARTMENT OF EDUCATIONAL INNOVATIONS IN SCIENCE AND TECHNOLOGY
MPHIL ART ADMINISTRATION

THE HEADMASTER
EFFIDUASI SENIOR HIGH SCHOOL
P. O. BOX 14
EFFIDUASI-ASHANTI

CONSENT LETTER TO UNDERTAKE RESEARCH WORK

AT EFFIDUASI SENIOR HIGH SCHOOL, ASHANTI-REGION

I Mr ..... the Headmaster consent to Mr Opoku Manu Ameyaw to undertake research work on "effects of educational resources on the teaching and learning of General Knowledge in Art at Effiduasi Senior High School, Ashanti Region in the quest of gaining information for his thesis.

I consent to this research work and any information gained to be solely used for research purposes and in any other articles that may be written and published from the thesis.

EFFIDUASE SNR. HIGH COMM SCH.
EFFIDUASE - ASHANTI
HEADMASTER

Signature of Headmaster .....

Signature of researcher .....

Date .....