EFFECT OF OVERHEAD INSTRUCTIONAL PROJECTION ON FINE ARTS STUDENTS' PERFORMANCE IN JUNIOR SECONDARY SCHOOL IN KAITA LOCAL GOVERNMENT, KATSINA STATE, NIGERIA

BY

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M.ED/EDUC/0402/2009/10

May, 2015.

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A Thesis Submitted to the School of Postgraduate Studies Ahmadu Bello University, Zaria In partial Fulfillment of the Requirements for the Award of Master Degree in Education (Instructional Technology)

Department of Educational Curriculum and Foundation, Ahmadu Bello University, Zaria

May, 2015.

DECLARATION

I declare that the work in thesis entitled **"**Effect of Overhead Instructional Projection on Fine Art Students' Performance in Junior Secondary School in Kaita Local Government Area, Katsina State" was performed by me in the department of Educational Foundation and Curriculum. The information derived from the literature has been duly acknowledged in the text and a list of references provided. No part of this thesis was previously presented for another degree or diploma at this or any other institution.

ABDU, Musa Dankama	**Signature**	**Date**

CERTIFICATION

This thesis entitled "EFFECT OF OVERHEAD INSTRUCTIONAL PROJECTION ON FINE ART STUDENTS' PERFORMANCE IN JUNIOR SECONDARY SCHOOL IN KAITA LOCAL GOVERNMENT AREA, KATSINA STATE" by Musa Dankama ABDU meets the regulations governing the award of the degree of Master Degree in Instructional Technology in the Department of Educational Foundation and Curriculum of the Ahmadu Bello University, Zaria and is approved for its contribution to knowledge and literary presentation.

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ABSTRACT

This study investigated the "Effect of Overhead Instructional Projection on Fine Art Students' Performance in Junior Secondary School in Kaita Local Government Area, Katsina State". To achieve the purpose of this study, three objectives were formulated as well as research questions and hypotheses. Quasi-experimental research design was adopted in the study involving a pre-test and post-test. The population of the study comprises of all the JSS students in Five government secondary schools with the total number of 907 from which 40 students was assigned to experimental and 40 students for control groups. Purposive sampling technique was used to select 40 students from 4 schools. Fine Arts Performance Test (FAPT) was used as an instrument for data collection. Mean and standard deviation were used to answer the research questions while t-test was used to test the hypotheses at 0.05significance level. The result of the study revealed that utilization of overhead projector has significant effect on the students' academic performance in junior secondary school in Kaita Local Government Area of Katsina State Gender had no significant influence of students' performance when fine art was taught with the overhead projector. It was concluded that utilization of overhead projector which teachers employ in the teaching of fine art has significant effect on students' academic performance in junior secondary school. Based on the findings, it is recommended that teachers should be well trained in appropriate and effective utilization of overhead projector in teaching and learning Fine art in Junior Secondary Schools in order to improve students' academic performance in Fine art not only in Katsina State but to other junior secondary schools in Nigeria among other recommendations.

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Definition of Operational Terms

Flip chart: is a collection of large pages of pictures/charts which are bound together at the top

Educational Technology: is a systematic way of designing, carrying out and evaluating the total process of learning and teaching

Effects: Refers to the outcome of the use of visual resources in learning social studies revealed on students' score

Visual: refers to pictorial aids that appeal to the sense of sight.

Audio: refers to materials aids that appeal to sense of hearing.

CHAPTER ONE
INTRODUCTION

1.1 Background to the Study

Education has been identified as the aggregate of all the processes and means by which a person develops abilities, attitudes and other forms of positive behavior and value in the society in which he or she lives. The goal of a functional education is to prepare its beneficiaries with all it takes to adjust well in the societies, contribute meaningfully to the development of the society and as well live a fulfilled life.

Therefore, it could be stressed that the above is possible through effective combination and utilization of different resources employed in the running of the educational enterprises. The availability of instructional projection to teach the students is likely to lead to effective learning outcomes and also affects the output (Abolade 2004). Federal Government of Nigeria, (2004) affirms that education is therefore, a transformation process during which the future of any society is shaped through instruction of these that child may learn.

Educational instructions are very crucial to these processes because it is the hub of the whole transformation process. Ndagi (2001) added that, school is not just a place where children/student acquire education, the school provides an environment that is suitable for the proper development of the learners when in school so that they can become good members of the society. Also the school provides the teachers the opportunities to perform their numerous but crucial roles in the teaching and learning process. Jega (2002) therefore, noted that teachers need to know the resources for learning that their students will use and that can influence the effectiveness of instructional programmes. However, creative uses of variety of media will increase the probability of students' learning by

helping them to retain better what they learn, and improve their performance of skills they are expected to develop. Long before they learn to talk or interact selectively with people and objects around them, babies store up visual images that are meaningful to them. For example when they see their mothers warm their bottles or move their high chairs close to the table they know that food is coming and respond accordingly.

It is obvious that if learning resources are selected and used carefully, learning retention is longer; learning becomes more interesting, effective and meaningful. This means that for any subject, relevant learning resources are necessary for teaching in order to meet the objectives as laid out by the Ministry of Education. In support of this view, it is obvious that curriculum cannot be effectively implemented in the absence of adequate teaching/learning resources. This means that relevant types of resources must be made available for-teaching in order to enforce realization of its objectives.

In using instructional materials to solve some of the problems in education, teachers should be systematic in designing, carrying out and evaluating the total process of teaching and learning in terms of specific objectives to be achieved, which are based upon research in human learning and communication to bring about more effective instruction in the learning process. Ogogan (1997) as cited by Aliyu (2001) opined that sight and hearing are the two senses mostly used in human learning and teaching activities. According tohim, these senses receive primary consideration in the development and selection of teaching materials.

The five senses used in teaching and learning include touching, taste, smelling, hearing and seeing. UNESCO (1992), postulates that instructional media refer to materials or devices which presents a complete body of information and largely self-

supporting rather than supplementary in the teaching/learning process. Such media include audio media - radio, tape recorder, record player, phonograph, reel to reel recorder, visual media – projected (computer, filmstrips, slides, overhead, opaque, cine), non-projected (chalkboard, whiteboard, textbooks, flannel board, models, mobiles, pictures, templates, diorama, puppets, real objects), audio-visual such as film with sound, television, tape/sound slide projector, tape/film charts, videotapes, tape/overheads, transparencies.

In recent time, much has been spent over years by local, state and federal government, NGO's philanthropists and many more organizations propagating for qualitative education. Despite this, the school performance level in Nigeria is falling drastically across all levels of education especially between the 15-24 age groups of students who are the working force of the Nation. Fine Art as a concept has been defined as the totality of a man's creativity while creativity is the use of one's imaginative skills to produce a physical object or develop ideas that impart positively and bring about a radical change in an organization or society. Fine art also known as visual art is a branch of art concerned with conception or imagination, and creation of art works employing different resources and techniques for the production of objects of aesthetic or beautification values. Painting, sculpture, drawing and print-making fall within this category. This category of art encompasses all activities involving the application of aesthetic designs to everyday functional objects (Azi 2009).

The use of these media of instruction in Art schools to inculcating knowledge and practical skills in Art students have not been embraced by most of the school leaving the teachers, lecturers, instructors and technologists in total darkness as to the use of such

media in the teaching-learning of Fine and Applied Art. The inclusion of these media of instruction in the course of teaching via discussions, explanations, illustrations and demonstration will greatly improve students' academic performance/achievement. These media which are self- instructing can be used by individual or groups to facilitate learning without the presence of the teacher or lecturer. Abolade (2004), further states that studies have shown that out of the five sense organs we use for acquiring knowledge, visual materials that can be seen only, take up to 80% in the learning process, while audio materials and equipment that appeal to our sense of hearing take 11% and testing takes 9%. Therefore, it is stated that Audio – visual instructional materials have made education more qualitative, quantitative and meaningful because they have produced desirable results.

In this study, therefore, emphasis is accorded to the use of overhead projector in facilitating students learning of Fine Art in junior secondary schools. Aguokobuo (2002) observes that lack of effective utilization of overhead projector by fine art teachers in teaching the subject at the junior secondary school level has been one of the factors responsible for poor students' performance in the subject. An example is the result of the junior secondary school examination released by the Education Resource Centre (ERC), Katsina State. The result revealed that out of about 53,608 candidates that sat for Fine Art at JSCE Junior secondary certificate examination now Basic Education Certificate Examination (BECE) in 2011, 80% of the students failed to pass the subject (Source: Measurement and Evaluation department ERC, 2011).

Gender is the range of characteristics pertaining to, and differentiating between masculinity and femininity. Depending on the context, these characteristics may include

biological sex (that is the state of being male, female or intersex), sex based social structures (including gender roles and social roles) or gender identity. John Money (2010) introduced the terminological distinction between biological sex and gender as a role. However, Money's meaning of the word did not become widespread until the 1970s, when feminist theory embraced the concept of a distinction between biological sex and the social construct of gender. Today, the distinction is strictly followed in some context, especially the social sciences and documents written by the World Health Organization (WHO). Furthermore, in many other contexts, including some areas of social sciences, gender includes sex or replaces it.

Food and Drug Administration (2011) reversed its position and began using sex as the biological classification and gender as "a person's self-representation as male or female, or how that person is responded to by social institutions based on the individual's gender presentation". The social sciences approach gender as a social construct, and gender studies particularly do, research in the natural sciences investigate whether biological differences in males and females influence the development of gender in humans.

This study therefore investigates the effect of overhead projector on the academic performance of Junior Secondary Schools Fine Art students. Alaba (2001) Overhead projectors are all those devices like, machines and materials which can be used by educators to present a complete body of information in the teaching and learning process for a more effective instruction. They are used as a visual aid to display information for students. It allows for material or diagrams to be displayed to large classes enabling more time for teaching or class discussions. It is important that when you are making transparencies to write large and legibly, and to only include main points or ideas. The

overhead projector is easy to use and can be easily incorporated into the classroom. Therefore, the teacher can get his message across to the students and the students on their part are motivated and become eager to learn. They focus their full attention on the lesson and assimilation is the result.

1.2 Statement of the Problem

The desire to embark on this research study stemmed from the fact that most of the junior secondary schools in Katsina State cannot meet up with the practical requirements of Fine Arts. This is because they lack instructional equipment such as overhead projector for adequate teaching and learning of the subject in Katsina State. The effect of the aforementioned problem is clearly manifested as it has greatly hampered students' enrolment for Art courses at the tertiary level of education to such an extent that Fine Art is no longer a compulsory requirement for admission into most of the Art schools and above all Art as profession.

Ademola (2004) stated that the non-inclusion of media such as overhead projector in Fine Arts curriculum has experienced a brought great set back as most Fine Arts teacher prefer or agitate for the conventional method of instruction such as discussion, explanation, illustration and demonstration due to their inability to utilize the media for effective instructional delivery of Fine Art as a subject.

Parents and government on their part have done little to save the situation. Students' on their part have given the glory of Fine Arts to road side apprentice whom also does it for aesthetic-values only and not for instructional value. They don't see media such as projector as a tool necessary for the teaching of Fine Arts. Their comprehension of Fine Arts is the application of pencil to paper neglecting that it employs different

resources and techniques for the production of objects.

It is therefore on the above note that the researcher observed that the poor utilization of overhead projectors in teaching Fine Arts affects academic performance of junior secondary students. It is anticipated that educational technology could be used to solve some of these problems as it lays emphases on shift from teaching and learning in a lecture method approach to system and instructional media approach (projector).

1.3 Objectives of the Study

The following are the objectives of this study:

i. Determine the effect of overhead instructional projection on Fine Arts students' performance in junior secondary school students in Kaita local government, Katsina state.

ii. Determine the effect of overhead projector on male and female JSS Fine Art students' academic performance in Kaita Local Government Area, Katsina State.

1.4 Research Questions

Based on the research objectives, the following research questions are raised:

i. What is the effect of overhead instructional projection on Fine Arts students' performance in junior secondary school students in Kaita local government, Katsina state?

ii. To what extant does overhead projector affects students' academic performances in JSS Fine Art in relation to their gender?

1.5 Hypotheses

The following null hypotheses are formulated to further probe into the research questions:

a. H_1 There is no significant difference between the performance of fine art students taught using overhead instructional projection and those taught using the conventional method in Kaita Local Government Area, Katsina State

b. H_2 There is no significant impact on the effect of overhead instructional projection on Male and female students' academic performance in JSS fine art in Kaita Local Government Area, Katsina State.

1.6 Basic Assumptions

This study assumes that:

i) Students selected are representatives of the junior secondary schools students' Kaita Local Government, Katsina State.

ii) State government supplies learning materials and funds to the four (4) selected schools in the state.

iii) The overhead projector is applicable in learning most of the concept in Fine Arts subject.

iv) Students learn and benefit mostly from the learning materials that appeal more to the

sense of sight than hearing.

1.7 Significance of the study

The finding of this research study might prove useful to teachers, students, ministry of education, curriculum planners, and so on in the following ways:

The findings will make teachers use suitable equipment or facilities to foster learning and improve student's performance in Fine Arts subjects. It will ease teaching and enable teachers to discover modern projecting machines, alleviate Fine Arts teachers from too much dependence on locally resource instrumental materials and make them enroll for ICT's modern way of imparting knowledge to students.

The study will exhibit the hidden cause of students' difficulties of distinguishing abstract concepts in Fine Arts, indicate the extent of the effects of projector on students' attitude and performance in Fine Arts and can create forum for students to develop interest in using modern teaching machines.

Subsequently, parents will be aware of the need to provide their children/wards with educational resources. It will enable curriculum planners to understand the impact on the use of educational resources on students' performances, help to generates more adaptation of teaching facilities or equipment as they relate to fine arts teaching and bring about less complicated machines for better understanding of the subject.

The finding will also be of help to educational administrators in the sense that it will highlight the need for the provision of adequate relevant modern instructional materials. It will also serve to highlight the needs for administrators to encourage and support teachers to be attending seminars and workshops on using modern machines to impart knowledge to children and students. The teachers will stand a better chance to benefit from

the result of this study which will help them to adequately plan for the teaching of students at all levels.

1.8 Scope of the Study

The study confined itself in finding the effect of overhead instructional projection on fine arts students' academic Performance in Junior Secondary School in Kaita Local Government, Katsina State. It also examined the influence of gender on the academic performance of students taught fine art using overhead projection. Four state junior secondary schools in Katsina State that are offering Fine Arts subject were selected randomly selected as a sample for the study out of ten schools in Kaita Local Government Area of Katsina State. Conceptually, the study was delimited to areas of assessing the effects of overhead instructional projection in teaching Fine areas because it would expose students at junior secondary schools level to the basic rudiment of Arts design for national development and it is also important to them in exploring the students' potential of his environment.

CHAPTER TWO
REVIEW OF RELATED LITERATURE

2.1: Introduction

This chapter reviews all the necessary literature needed to carry out the studies, under the following sub-headings:

- Conceptual Framework
- Concept of Education and National Orientation
- Nature and Relevance of Fine Arts Education
- Students' Academic Performance
- Gender and Fine arts students' performance
- Concept of Overhead instructional projection in Fine Arts
- Concept of Instructional Technology
- Empirical studies

- Summary

2.2 Conceptual Framework

2.2.1: Concept of Education and National Orientation

Education involves the inculcation of knowledge, skills and attitudes within and outside formal system, geared towards the development of a person's mind and personality in order to contribute meaningfully to the development of his society and to be useful to one self. The National Policy on Education by the federal ministry of education, (FRN, 2004) affirms that education is an instrument per excellence for effecting national development. Government, realizing the importance of education, has adopted it as a vital tool for achieving its national objectives, which include; Free and democratic society, Just and egalitarian society, United, strong and self-reliant nation Great and dynamic economy, Land of bright and full opportunity for all citizens.

Nigeria's philosophy of education is based on the development of the individual into a sound minded and effective citizen. It advocates for equal educational opportunities for all citizens of the nation at the primary, secondary and tertiary levels, both within and outside the formal school system. Anderson (2003) in effect, the quality of instruction at all levels has to be oriented towards inculcating the following values: respect for the worth and dignity of the individuals, faith in man's ability to make rational decisions, moral and spiritual values in interpersonal and human relationships, shared responsibility for the common good of society, respect for the dignity of labor, promotion of the emotional, physical and psychological Health of all children.

The FRN (2004) further stressed that for this philosophy to be in harmony with Nigeria's national objectives, it has to be geared towards self- realization, better human

relationships, individual and national efficiency, effective citizenship, national consciousness, national unity, as well as towards social, cultural, economic, political, scientific and technological progress. Hence, for all these factors to be realized, they have to be embodied in the various subjects of the school's curriculum, (especially core subjects), like integrated science and Health Education, Fine Arts and English. Also in the pre-vocational subjects such as Fine Arts, Woodwork, Metal Work, Auto-Mechanics, Local Craft, Business Studies, Home Economics and other electives like French and Arabic. Against which backdrop, Fine Arts as a pre-vocational subject plays a very prominent role not only in the educational development processes, but national growth (social orientation) .

Education Jega (2002), is the aggregate or all the process by which a child or young adult develops the abilities, attitudes and other forms of behavior which are of positive value to the society in which he/she lives. This means that education is a process of transmitting cultural values in terms of continuity and growth and for dissemination of knowledge either to ensure social control or to guarantee rational direction of the society or both.

Education brings the past and the present together so as to develop a better future. Similarly, Gagne (2004) see education as a process of helping each individual to lead the fullest of life he or she is capable of living through the understanding of past and present heritage and possibly participate in the future. Agu and Hamad (2000) "Education involves the inculcation of knowledge, skills and attitude within and or outside the formal school system, all geared towards the development of a person's mind and personality to contribute to the development of his society and to be useful to himself"

The hope of every child, society and nation lies in its education. Education is a lifelong process and the basis of sustainable development, (Gestwicki (2007). Edith (2001), states that education is essentially concerned with the development within the individual of a system of values. Here education is seen to be the best guide and reformer, through which one could develop his full potentials in life. Education is the foundation of one's success in life. People's hidden abilities are probably hidden and can only be unveiled through education.

2.2.2: Concept of learning

Learning is change due to experience in a student's way of thinking, feeling or acting; (Stromqist, 2002). Esu and Obi (1995) "learning is a process by which behavior is oriented or changed through practice or training". Learning is deFined as the process of acquiring knowledge or skills. It is a reaction to any situation, which results in the change of attitude and behaviour. Cox and Webb (2004) learning occurs whenever the activity of an organism brings about a relatively permanent change in behaviour. There are different categories of learning ranging from the very simple learning of lower organisms to the complex learning of man. In all these cases, however, the general definition would apply. They all involve relatively permanent changes in behavior even though the processes which bring about the changes are profoundly different.

Learning takes place in two different ways, namely consciously and unconsciously. Unconscious learning, is otherwise called casual or accidental, it comes about as a result of experience from the environment. It does not need a cause to take place. This means it just happens without any effort made or put into learning. Conscious learning is a type of learning that takes place as a result of a cause. Since it is caused and

requires effort, it has to be planned and organized before it can take place, it has to be guided and directed by someone for positive results.

It is the major type of learning that takes place in the school setting. The teacher therefore has to systematically plan his lesson as well as use instructional materials to ensure proper learning. Evidence from research findings has confirmed that 80% of what we learn is from sight. This probably makes it compulsory for the use of visual materials to aid the learning of Fine Arts. Stressing more on the indispensability of Overhead projectors, Sharon (2000) referred to it as a "well worth while" state that "through the use of visual aids students learn up to 35% more in a given period of time and remember up to 55% longer. From the foregoing, it should therefore be noted that effective learning for better result is achievable through the use of overhead projectors.

Thus, almost all students, both those who offer Art and science subjects always register for it the Junior School Certificate Examination. Realizing this, one will hope that the fine arts teacher will encourage students to offer it by using instructional materials always so as to motivate and sustain their interest and improve performance in their examination. Fine Arts as a Pre-vocational subjects are dynamic in nature; there has always been discoveries and new knowledge, which give Fine Arts a dimension. This makes its study more interesting and rewarding than in the past.

2.2.2: The Learners of Fine Arts

Despite the central role played by learners in the teaching of Fine Arts, available literature in Fine Arts resources seem to underplay the role of learners as important human resources in the teaching of Fine Arts. There are however quite professional skills needed by the teachers to enable them impact the necessary knowledge and skills to the students.

The use of overhead projector can influence positively teaching and learning processes. Salami (2004) opines that, the use of conventional instructional technology to learning has preoccupied the classroom situation in Nigeria Junior Secondary Schools in order to move with the trend in developed countries worldwide from the aged-long techniques to the modern. Among these trends are treatment-procedures through the use of teaching through Overhead projectors.

Individualized instruction UNESCO (2001) is a process by which a student learns on his own a field of study or a topic broken into bits his level and ability, using specially prepared programmes, books, links and electronic teaching machine, while the instructor serves as a consultant. He is able to determine and learn the amount of work and also able to study at given periods and at his own pace.

This research is to determine the impact of overhead projector on the academic performance of junior secondary school students in Fine Arts in Kaita Local Government Area, Katsina state.as seen by the researcher are inadequate and the available resources are not well utilized in the teaching/learning process in most junior secondary schools. Instructors cannot teach the learners effectively without the Overhead projectors. Only when educational resources are available that learner will be able to learn effectively.

2.2.3: Concept of Teaching

The first teachers were (and still are) parents, a role imposed on them by the compelling moral obligation of parenthood, (Clough & Corbett 2000). Everything they taught the child merely reflected the requirements of the immediate home and community standards. They did acquire organizational skills, tools, special training or improved remuneration to perform this function. They then added that, the first type of

teachers with some professional status were self-appointed, that is to say that, they were not in the employment of anybody or organization, neither they required to receive any special training to perform. These were the philosophers like Socrates, Aristotle, Plato and the prophets of the past. In those days, these people were sought for by their disciples for their knowledge, skill or wisdom. They were more or less born teachers who had some special charisma to operate (Alaba 2001).

In modern times however, there is a group of people called teachers, who Stromquist (2002) joined the profession on the basis of civil contract terms of employment by virtue of their skill, training and knowledge. Roll- Peterson (2001) defines teaching as "the guidance of pupils through planned activities so that they may acquire the richest learning possible from their experiences". They also added that "learning is the result of experiencing and requires the active pArticipation of the child". Going by the above definition, the pupil does not learn merely because he has been exposed to a teacher's knowledge, to the content of textbooks, etc rather, learning is an active process which goes on within the pupil by guiding his learning experiences through planned activities.

Abdullahi (2001), sees teaching is a systematic, rational and organized process of transmitting knowledge, attitude and skill in accordance with professional principles. Those who do not perform in accordance with the professional principles are therefore not teachers. One aspect of the above definition is that not all those who claim to be teachers are real teachers (professionally qualified). And in that case a teacher must fulfill and possess certain professional requirements. Sharon (2002) teaching is "an attempt to help someone acquire, or change some skill, attitude, knowledge, ideal or

appreciation. In other words, the teacher's task is to create or influence desirable changes in behavior, in his pupils". This implies that success in teaching is measured by the degree to which the teacher is able to achieve the desired learning in his pupils. Therefore in order to achieve this objective the teacher must know the type of problem to be solved in any situation and this involves the appropriate the selection of content and methods.

McMahon and Timothy (2002) views teaching as the acquisition of knowledge through active participation of the learner when he is guided (by the teacher) He also added ‘it could be looked upon as a process of transmission of knowledge to those who will be committed to it in this case the pupils” This implies that teaching goes with learning. Teaching is a very complex undertaking; it is the most complex of human enterprises. While this is true of all teaching it applies with even greater force to the teaching of Fine Arts than it does to any other teaching because the Fine Arts teacher has immeasurably finer and more lasting work to do than any other teacher. The teaching of Fine Arts cannot then, be done any rigid set of rules (Brady, 2001).

2.3 Nature and Relevance of Fine Arts Education

Fine Art is an Art developed primarily for aesthetics, distinguishing it from applied Art that also has to serve some practical function. Historically, the five main Fine Arts were painting, sculpture, architecture, music and poetry, with performing Arts including theater and dance. Today, the Fine Arts commonly include additional forms, such as film, photography, and conceptual Art. And print making. However, in some institutes of learning or in museums, *Fine Art* and frequently the term *Fine Arts* (pi.) as well, are associated exclusively with visual Art forms. One definition of *Fine Art* is "a visual Art considered to have been created primarily for aesthetic and intellectual

purposes and judged for its beauty and meaningfulness, specifically, painting, sculpture, drawing, water colour, graphics, and architecture." In that sense, there are conceptual differences between the *Fine Arts* and the *Applied Arts.* As originally conceived, and as understood for much of the modern era, the perception of aesthetic qualities required a refined judgment usually referred to as having good taste, which differentiated Fine Art from popular Art and entertainment. However in the postmodern era, the value of good taste is disappearing, to the point that having bad taste has become synonymous with being avant-garde. The term "Fine Art" is now rarely found in Art history, but remains common in the Art trade and as a title for university departments and degrees, even if rarely used in teaching.

The word "Fine" does not so much denote the quality of the Artwork in question, but the purity of the discipline traditional canons. This definition originally excluded the applied or decorative Arts, and the products of what were regarded as crafts. In contemporary practice these distinctions and restrictions have become essentially meaningless, as the concept or intention of the Artist is given primacy, regardless of the means through which this is expressed.

Fine Art is engaging as teachers can use paintings, photographs, literature, music, and dance to help students meet learning goals across the curriculum. Primary sources may inspire students to express themselves in creative works of their own. By connecting intellectually as well as emotionally to art, students strengthen their literacy skills and meet learning standards related to evaluating information presented in diverse formats and media. It encourages students to think about what the artist is trying to convey through a particular piece and why he or she chose the medium used. What materials or

techniques were popular with other artists at the time? What was happening at the time the artwork was created that sparked the desire to create a specific piece of art? What emotion is the artist trying to evoke? Does the artist want us to celebrate? To take action? To think more deeply? To mourn? (Branton 1999)

2.4 Students' Academic Performance

Academic performance has been linked to differences in intelligence and personality. Students with higher mental ability as demonstrated by IQ tests and those who are higher in conscientiousness (linked to effort and achievement motivation) tend to achieve highly in academic settings. A recent meta-analysis suggested that mental curiosity (as measured by typical intellectual engagement) has an important influence on academic achievement in addition to intelligence, and conscientiousness. Students semi-structured home learning environment, transitions into a more structured learning environment when children start first grade. Early academic achievement enhances later academic achievement (Ndak 2003)

Parent's academic socialization is a term describing the way parents influence students' academic achievement by shaping students' skills, behaviors and attitudes towards school. Parent influence students through the environment and discourse parents have with their children. Academic socialization can be influenced by parents' socio-economic status. Highly educated parents tend to have more stimulating learning environments (Talabi 2004).

Student's first few years of life are crucial to the development of language and social skills. School preparedness in these areas help students adjust to academic

expectancies and instructional facilities toward learning as well. Another very important enhancer of academic achievement is the presence of physical activity practical in subjects, participatory lessons etc. Studies have shown that physical activity can increase neural activity in the brain. Exercise specifically increases executive brain functions such as attention span and working memory with facilities and equipment.

2.4.1 Gender and Fine Arts JSS Students' Academic Performance.

Salami (2004) states that, sex has no barrier to successful achievement in Fine Arts teaching and learning as both male and female are engaged in education. However, Brady (2001) states that, in school enrolment, there are more number of male then the females. It is expected that more males would offer Fine Arts subjects than female. While Azi, Nkom and Aboderin (2011) argues that girls comprise a smaller percentage of children in formal education system than boys in many part of Africa. Furthermore, genders inequalities' in Africa, where by in most regions where much higher school enrolment by boys than girls while in some regions there are actually more girls, due to the fact that boys have to stay at home and attend tend to the family farms and others professions like mechanics. They also explained that education is only a human right, but also central to the transmission of values such as equality, democracy, equity and national unity as well as preparation for citizenship.

Shell and Hedland (2000), "Gender discrimination" and the non-availability of abundant locally relevant textbooks have made gender and its corresponding concepts difficult to handle by teachers. However, Primary Fine Arts teachers can better handle this gender, where they take gender issues as those relating to how people are perceived and expected to think and act as men, women, boys or girls because of the way society is

organised, not because of their sex or biological differences. Teachers should be ready through their teaching to de-emphasize discrimination based on a person's sex and emphasize fairness and justice in the distribution of benefits and responsibilities between men and women (World Health Organization 2008).

2.4.2 Relevance of overhead projector on Fine Arts Students' Performance.

Siundu and Mohammed (2003) outlined the relevance of overhead projectors in the teaching of Fine Arts students as follow; overhead projectors help to implant what is pleasantly learned in the memory of the learner and makes for their easy recall, the choices of appropriate overhead projectors to suit a given teaching learning encounter keeps the teacher professionally alive and prepare him to teach effectively, overhead projectors make teaching and learning very simple and easy, the time taken to achieve more learning outcomes is very short with the use of overhead projectors, overhead projectors have the potential of reducing learner's classroom's disruptive behaviors to the barest minimum and therefore contribute quite positively to the desired effective classroom management, overhead projectors enable more learning to take place.

Therefore, there is great need to introduce overhead projectors in the process of teaching and learning of Fine Arts because in the teaching and learning of Fine Arts overhead projectors can be used in teaching many topics such as: painting, sculpture, architecture, music and poetry, with performing Arts including theater and dance..

2.5 Concept of Instructional Technology

Learning and Instructional materials are learning resources used by instructors, teachers, tutors or facilitators to help learners improve reading, to illustrate facts or ideas, reinforce a skill and reduce anxiety. Learning and instructional material are to be used to

serve and meet many of our education needs, if only educators can access and effectively utilize of the learning material.

Talabi (2004) says instructional materials should be selected to enhance the transmission of instruction to the students, not serve as either substitute for the teacher or as a smoke screen for a poorly planned lesson. Most classroom communication can benefit from the use of audio-visual instructional materials, which come in various forms to convey meaning to learners without complete dependence on verbal, symbols or words, textbooks, field trips etc. Audio instructional materials are those teaching aids that appeal to the sense of hearing alone. They include radio, tape recorders, and telephones, while visual learning and instructional materials are those teaching aids that appeal to the sense of sight such as televisions, slides, pictures, diagrams, maps, charts, and so on.

Multimedia instructional materials refers to the use of appropriate and carefully selected varieties of learning experiences which, when presented to the learner through selected teaching strategies, will rein force and strengthen one another so that the learner will achieve predetermined and desired behavioural objectives, (Alessi, Stephen, Trollop & Stanley 2001). Those who have properly implemented such systems and procedures have reported that outcomes exceeded both traditional single-medium channel utilization and traditional verbal instruction.

Teachers face not only the problems of approaches to learning and communicating historical information, but also the tasks of absorbing and understanding current development. It is logical, then that efforts are made to increase the efficiency with which information, can be transmitted to learners.

Fen (2003) reports that, hearing and seeing are the primary means of human

learning. Seeing and hearing influence human behaviour because teaching at its best is the stimulation and direction of learning, which are the major factors in the effectiveness and efficient ways in learning and teaching process.

The concept of instructional materials has been emphasized by both foreign and Nigerian writers. Webb (2002), states that textbooks alone can no longer satisfy the demand of present day education which requires the combined services of radio, television, teaching machines, tapes recordings, wall charts, journals, films, models, slides, and so on. And that it is only by the acquisition of these varied materials that the schools can assist its users to attain the educational objectives of the school curriculum. Otote (2004) stated that "various methods are being used with varying degree of success in different countries to solve the problem of shortage of teachers. One of such methods is the use of instructional materials. The televisions, radios, films and so on. have all been playing significant roles in training teachers and prepare student-teacher academically and professionally.

FRN (2004) advice that teachers should be prepared before going to the classroom to teach and should gather aids, writes lessons plans, review notes and predict possible students' response to their questions. He further mentioned that the instructor should motivate his students in order to capture their attention. He emphasize that for the above to be achieved, the teacher must use different methods such as lectures, discussions, laboratory tests, games, and instructional aides. He also recommends' case study, survey interviews, visits and other field studies methods of teaching Economics to supplement the classroom methods of lectures, discussions, discovery and role playing.

The most vital component of instructional materials which enhances or promotes

teaching and learning is instructional media utilization and production. Instructional media have been found to be highly effective in teaching and learning of many subjects, including Fine Arts (Branton 1999). They can also be grouped as projected and non-projected media. The non-projected visual aids that do not require the use of light source include instructional display boards, chalkboards, magnetic boards, still pictures, posters, cartoons, flannel graph, and so on. The projected visual instructional media include overhead projector, opaque projector, film strip projector, motion pictures, slide projector, and so on (Edith 2001).

To ensure that the learners become deeply perceptive and analytical of the visual world so as to make their own judgment and choices of what may be appropriate and aesthetically pleasing in a situation, they should develop relevant skills needed for interpreting the messages they receive in visual form and must also become fluent in expressing their own ideas visually. In fact, they should develop visual awareness and visual expressions. The successful utilization of visual aids depends on the wisdom and resourcefulness of the teacher. This also calls for the use of the teacher's professional knowledge of the students, the teaching and the learning process as well as a thorough knowledge of the limitations and capabilities of the media.

In his study, BaumgArtner and Kalz (2004) found out that visual equipment and materials accomplish the following when effectively utilized; offer a reality of experience which will stimulate self- activities on the part of the pupils; supply a concrete basis for conceptual thinking and reduce meaningless words responses to pupils; have a high degree of interest for the pupils and Make learning permanent, provide experiences not easily obtained by other materials and contribute to the efficiency and variety of learning;

develop a continuity of thought visa: like in motion pictures; contribute to the meaning of words and hence to vocabulary development.

Anderson (2003) note that instructional materials includes, "all those devices, man, machines and materials which can be used by Educators to present a complete body of information in the teaching and learning process for a more effective instruction".

2.5.1 Role of Instructional Technology in Learning

The importance of educational media and resources to teaching and learning has now been firmly established as a crucial aspect of the- curriculum. Instructional technology has been defined by various persons, particularly eminent educationists. Instructional Technology is a "concept about how problems in human learning are identified and solved", (Alaba 2001). Similarly, Smaldino *et.al* (2005) stated that, instructional technology is the systematic use and involvement or other organizational knowledge to the solution of the problems and tasks or education to produce intended goals. It focuses our attention to the various problems in education. It is the main stream of projected visual instrumental resources because its prospect embodies the systematic and continuous application of learning principles to develop the most effective and efficient learning experience.

Smaldino further explains that Instructional technology can be viewed as a product as well as a process. As a product, it consists of the use of audio- visual (AV) equipment (hardware and software) for the solution of problems in education. For instance, the use of instructional overhead projectors in teaching process, while Instructional technology as a process, is the development of learning experience through the science of learning. Abolade (2004) sees educational technology as "a process

consisting of educational media like the projector media, instructional television and radio as well as method of organizing and effectively utilizing these media in the classroom".

The perception of some of the authors above is the educational technology is the systematic approach to the teaching and learning process that involves wise use of the media for effective results that meets the needs of the learner. The place of educational technology in effective teaching and learning can therefore not be over looked. For example Branton (1999) asserts that 'students prefer visually presented information and are more likely to attend to visual stimuli than auditory stimuli presented simultaneously." He however adds by saying that non-verbal illustration contents should be integrated with the verbal content to enhance realism of concrete situations. Having this in minds it is very clear that education technology is indispensable to the educational process especially to the young learners in junior secondary schools.

2.6 Overview of Overhead Instructional projection in Fine arts

An overhead projector relies on a bright lamp that sends an image through a lens-and-mirror assembly onto a screen. With the exception of the fan that cools the lamp, these devices contain no moving parts. If you want to project movies and sound, an overhead projector won't meet your needs, but it also doesn't require cables and software troubleshooting, or force you to reboot a misbehaving computer to complete a presentation. Compared to computer-connected LCD projectors, overhead projectors provide uncomplicated service based on reliable low-tech components, and don't require you to learn new technologies or skills (Vikoo 2003).

Overhead projectors carry a price tag that can run from 10 percent to 50 percent

of the cost of their LCD-based cousins. Both device types use specialized lamps, but the price differential continues when you evaluate their parts head to head. In some cases, you can buy a new overhead projector for the cost of an LCD projector lamp. If you present materials that don't require computer projection of A/V content, an overhead projector will save you money, both when you buy it and over its functional life.

Among multimedia technology resources are Overhead projectors are equipment that use electricity and are projected either on walls of classrooms or white screen surfaces. The mainly appeal to sense of sight. Like audio aids, they are specifically aimed at improving and supplementing teaching, but not to replace it. The use of projected visual aids attracts more inputs from both the teacher and the students, therefore, not intended to end the work of teachers, enumerates examples of projected visual media aids are LCD projector, digital camera, iPod, telenzion and video, laptop, MP3, recorder, games console, joystick, camcorder, earphone. overhead projectors, filmstrip projectors, opaque projectors, slide projectors, motion pictures, and so on. Azi (2010) adds that, evidence of the effectiveness of instructional multimedia technology as enrichment of resources in the 21st century, can be seen in different technology hardware,

Overhead projectors allow teachers to integrate a variety of visual aids including

charts, graphs, slides, photographs, and video. In the same talk, presentations of software programs include Microsoft power point, Coral presentations, and apple keynote, depending on the technological resources to your school. You may be able to give multimedia presentations in your presentations using projector transparencies never try to write or draw on them while talking to students. Teachers prepare them well in advance and make sure any text is large and visible enough to be seen from the back of the room.

Overhead projector

5”X5” all-purpose model

This is a great all-purpose model, it is large enough for most projectors, but small enough to be easily transported and stored. It features a 5” X 5” field of view and can project up to 10X. Its convenient handle and button loading design allow for easy projection of larger images by section giving a clear bright projection right out to the edges. One role that visual resources play is the provision of a concert referent for ideas, Ndak (2003), says words did not look or sound (usually) like the things they stand for, but visuals are iconic, that is to say, they serve as a more easily remembered link to the original idea. They can also motivate learners by attracting their attention, emotional responses. “Instructional delivery cannot be over emphasized and the impact of visual resources utilization on students’ performance”. The review also indicates that visual resources when utilized effectively by the teacher in the instructional process enhance students’ performance and learning take place immediately.

The utilization of overhead projector has made a tremendous impact among trainers and teachers since its discovery as projected visual equipment. This projected medium is a very valuable accessory to a programme of visual education. A powerful light in the body of the machine passes through the transparent glass as well as through the transparency being used. The image appears in the mirror above the machine, an in turn is reflected on the screen situated at the back of the teacher (Stephen 2004)

Abdullahi (1998), reports that, alighted overhead projectors, screen has advantage of attracting student's attention; teachers should therefore select and project visuals towards sustaining the attention of their students. He adds that overhead projectors serve as substitutes for the real things particularly those that are either too far away, too dangerous or too big to be brought in to class room or too small to be seen by the human eye or inaccessible because of their cost or importance.

Okam (1995) states that overhead projectors are those instructional materials which require projection viewing. Overhead and opaque projections slide and filmstrips are among the traditional audio visual media associated with the classroom. Although they have been around for more than half a century they are still among the most popular teaching tools. The large bright images provided captures by these technology tools audiences' attention as no other technology does.

It has been argued by Smaldina (2005) that overhead projector aids increase the rate of learning by providing worthwhile experiences for learners. Projected media materials also give instructions a more scientific base through providing a framework for systematic instructional planning. Ndak (2003) states that, Overhead Projector is one of the veritable projected visual aid used in schools today, they are very effective, simple to

operate and cost effective. The projector is usually box-shaped and has a large aperture on its top.

2.6.1 Advantages of the Overhead Projector

The image it projects is so bright that blackout is quite unnecessary; the teacher can write directly on the transparency with the overhead projector, transparency markers as the object are being projected, overhead projector enables the teacher to face his/her learners from the front of an illuminated room and project on the screen above and behind him, the teacher can write, sketch and erase as he is presenting his lecture, transparencies can be prepared in advance and used at the discretion of the teacher with no dual operation, progressive disclosure can be easily achieved by simply covering that portion of the transparency which is not to be seen.

2.6.2 Types of Projectors

a. Slide Projector

The slide projector is an opto-mechanical device to view photographic slides. The projector is an example of diascopic projection. Transparent films are used which allows light to pass through them. The basic parts of a slide projector are; the lamp which is the source of light, the reflector which is a mirror that causes all the light from the lamp to be thrown in the forward direction, the condenser which concentrates the rays of light to the lens, the heat filter protects the film from too much heat, the projection lens inverts the image before magnifying and focusing it on the screen.

The fan that cools the lamp from heat.

The use of a single slide can vitalize an entire teaching session; one slide can make a topic or a lesson remain vividly in the memories of learners. Carefully selected

slides or just one slide can attract attention, arouse interest, assist lesson development; test learner‘s understanding, review instruction, present the next lesson or subject and facilitate student-teacher participation. The versatility, easy means of selection, low cost and ease of preparing slides make them important teaching tools.

b. Production of Slides

Slide formats are of two types. There is the older 3½ by 4 inch slides and the newer 2 b 2 inch. The 2 by 2 inch is more popular and regularly used in educational settings. Slides can be made with cellophane, and so on etched glass, plain glass and photographic prints. Most of these materials may be purchased in any stationery store or photo chop. It may be in monochrome (black and white) or coloured (kodachrome).

All teaching slides are easy to produce. However, that of photographic type requires special ability, and, unless one has knowledge of photography and access to darkroom, it would be advisable and less expensive to borrow; rent or purchase these slides. Notwithstanding, the teacher will find it valuable preparing or producing the slides that accompany his/her lecture.

(a) **Cellophane Slides** – in order to produce cellophane slides, the following materials are required: 2 by 2 inch sheet of plain or coloured cellophane, a 4 by 4 inch sheet of carbon paper, two pieces of 2 by 2 cover glass, a typewriter and a binding tape. At the onset, lay out the slide on a 2 by 2 inch of scrap paper. Be sure to leave half inch margin on all sides. Then fold sheet of carbon in half, and place cellophane in centre. Insert carbon and cellophane into typewriter and adjust machine for stencil position. Type material on cellophane through the carbon, remove cellophane and place it between two pieces of cover glass. Then, secure glass cover with building tape. With slide in correct position,

place a thumb mark in lower left-hand corner. However, instead of using the typewriter, transparency marker (Fine or medium tip) may be applied directly to the cellophane. In this case, it is suggested that one places the cellophane over the drawing or sketch and merely trace it on the transparency.

(b) **Binding Slides** – all permanent slides are to be made with two pieces of frames, held tightly with tape. This is the direction for binding slides; cut the tape; place tape upon a flat surface with adhesive side on top; holding the two pieces of frames firmly with all edges even, set one side in the centre of the tape, starting at one end; with firm pressure, roll the slide along the tape until all edges are covered; press down the edges of the tape on both sides of frame; make corners even by folding one side under, and the other side over

c. Filmstrip Projectors

The filmstrip is a continuous strip of film consisting of individual frames and pictures arranged in sequence, usually with explanatory title. The filmstrip is considered as one of the most potent type of instructional materials. The use of the filmstrip and the filmstrip projector in practically any learning situation will give satisfactory result. Each picture on the filmstrip can be readily projected on the screen for any length of time. Teachers and learners can then discuss the content as exhaustively as may be required. If used properly, the filmstrip will increase learner‘s interest, clarify lessons and save considerable teaching time.

c. Production of Filmstrip

With a good 35mm camera, a simple filmstrip can be made since it is merely a series of individual picture arranged in a specific order on a strip of film. When preparing the

filmstrip, it is important that one should; prepare a script; plan each shot; arrange each picture in the proper sequence; photograph each scene in the proper order; store film in a filmstrip container, and title and file each filmstrip on the tip of the container.

In order to plan and produce your own filmstrip, you need to; decide the main purpose of the filmstrip, what it is to tell or explain; determine the audience to which the filmstrip will be shown as well as their attitude and experience level; plan the character of the presentation. Is it to be humorous, sober or informative? and outline the story or message.

e. Opaque Projector (Episcope)

The opaque projector is a predecessor of overhead projector. It is the simplest and least expensive of all various devices for projection purposes. It is designed to project any kind of non-transparent flat surface matter such as pictures, photographs, cartoons, drawings, magazine illustrations or other small objects. Solid objects are not excluded.

The machine operates with reflected light; the lamp illustrates the material and the image is reflected by a mirror through the lens to the screen. Its effectiveness is based on the reflective power of mirrors. A considerable amount of light is lost through the reflection process and therefore, the room in which the opaque objects are to be projected must be as dark as possible, although, the equipment may be used without complete darkness.

Advantage of Opaque Projectors

(1) It can be used in teaching all school subjects involving printed tables, diagrams, charts, pictures and so on.

(2) Solid objects like watches, coins, specimens, and so on. may be projected thereby becoming larger.

(3) It is most suitable for instructional purposes because it is still projection and provides opportunity for close observations and discussion.

(4) It stimulates attention, arouses interest, clarifies information and helps learners retain knowledge for a longer period of time.

(5) It saves laborious hours of chalkboard writing and skand so onhing.

(6) It can be used to introduce subject/topics, present specific information, test knowledge and ability as well as review of instructional problems.

2.6.3 The Role of Overhead projectors in teaching and learning Fine Arts

The use of instructional materials (overhead projectors) facilitate and ease better understanding, capture more authentic information with better view of images and general sharpening of intelligence. Webb, Mary and Margaret (2004), also emphasize the potentials of projected instructional media in education, prepared the first picture books and cartoon for children.

Seels, Barbara and Rita (1994) on the other hand predicted that a simple apparatus employing the eye will be found. Nigeria has the world highest records in institutions of learning expansion, within the last decade and indicates that larges classrooms are needed; there are problems of effective communication and the ability to cater for the individual differences in learners and their needs. BaumgArtner and Kalz (2004) states that one positive method of overcoming this problem is to use the public address system for effective communication and the overhead projector for projecting clear, large images for the audience. The use of instructional transparencies and television will place the talents of our best teachers at the disposal of millions of viewers at the same time. Television and radio programmes can also project for future use with

students.

Siundu and Mohammed (2003) also add that most problems of population explosion usually accompanies knowledge and information explosion. Knowledge is made concrete by the use of instructional media like slide, filmstrip, opaque motion pictures, video recorders and microforms for storage of information or data for use. The most common problem in the junior secondary schools today's is that, students learn and forget, which is the result of too much theoretical expressions and lack of overhead projectors for instructions by the teachers while the learners are passive listeners. Theories of learning have exposed the very important roles that projected still visuals can play in the business of education.

Azi (2010) notes that in a learning situation, three elements constitute what is referred to as the learning event and these are the learners, the stimulus or stimulus situation and the response. The learning event exhibits both individual and group differences. For instance, there exist in the learner so many differences in physiological, mental and emotional development and these differences account for the choice of instructional materials for stimulating interest in learning, effective communication of factual knowledge, clearing misconception and so leading to a deeper understanding of the concept taught. Visual media have been adjudged effective in the teaching and learning process. Greenwood Electronic Media (2001) summaries some of the values of Visual instructional media; they illustrate and clarify non-verbal symbols and images, quantitative relationship, abstract concept and specific details; they promote greater acquisition and longer retention of factual knowledge, they stimulate interest in learning, which leads to plenty of activities, they captivate and hold attention; they reinforce

verbal message; they provide for direct interaction of students with the realities of social and physical environment.

The teachers in this technological age has wide spectrum or resources available to them to provide conditions, which help them achieve their objectives (Heeks, 1999). The most important rule for selection of any projected instructional media could be stated as follows; a medium of instruction must be selected on the basis of its potentials for implementing stated objectives (Aguokogbuo, 2002).This means that, for any instructional medium properly selected, the objective is the reference point. Other factors in projected instructional media selection presented by Vikoo and Baribor (2003) are as follows:

Learning materials should suit the individual differences in the students. This implies that the learning styles of every student are important factors in the achievement of objectives; Accuracy of the content of the materials should be properly cross-checked before use in form of relevance of the instructional materials to the content of what the teacher will teach. The instructional materials should be available always in order to make the lesson easily understood. Therefore in choosing learning materials, instructional materials that are difficult to get, should not be selected no matter how cheap or valuable they are to lesson (Koert, Robin & Van 2000).

Learning and instructional materials are of great importance in teaching and learning process, it gives the students a better understanding of what the teacher tries to explain in the classroom. For Kadage (2010), reports on the role of Audio-visual Centers in Higher Institutions of Learning", he states that, the use of various learning resources has resulted in the general conclusion that where audio-visual materials are used, the

learning environment is highly stimulating and the students appear to take greater interest in learning. He narrates some of the functions of audio-visual centers as follows; audio-visual centers provide materials for specific teaching and learning situations; materials stored can easily be retrieved from the store position, research is conducted about the use of various forms of media and their effectiveness and efficiency in the instructional process; evaluation is done to check if the objectives are achieved and if other areas are to be expanded.

Instructional technology centers help by minimizing the teachers' problems of where relevant materials can be found for use. Abolade (2009) stated that the use of learning and instructional materials is indispensable for effective classroom teaching. He says if education is to keep pace with the ever increasing knowledge, with new technology, new ideas, and educational pattern must be developed that provides effectiveness in both depth and breadth. He further stresses the role of learning and instructional materials in teaching/learning process as students remember; 10% of what they read, 50% of what they hear and see, 70% of what they say, 90% of what they see, hear, say and do.

The above findings has shown that, for permanent retention of the acquired knowledge, students should be made to see, hear, say and do the things they have been taught in the classroom for teaching and learning to take place. Also relative concepts are concretized through the use of appropriate instructional materials.

Timothy (2004) Quotes a Chinese adage that says; "I hear and I forget, I see and I remember, I do and I understand"

Teachers ought to call into use the five senses in their teaching of their subjects, to

facilitate teaching/learning process, hence, the importance of learning and instructional materials. The use of learning and instructional materials are therefore not a luxury but a necessity which must concern people who are directly involved in educational development in Nigeria.

Edith (2001) states that learning and instructional materials (media) are used to create a "pre-lab" in which students see an experiment performed in advance from beginning to the end and learn precisely what they are required to do. Learn in the experiment pre-lab may be developed in slide-tape, television or other formats.

Azi (2010) notes that students may be exposed to a real-life experience through the use of media in order to provide them with a vicarious alternative to a "live performance" or filed trip. For example, student, are to visit various types of agencies to learn how they were organized, meet their staff and facilities. But because of the cost and inconvenience to the agencies, services of slide-tape presentations were created to provide students with a stimulated field trip. These simulated fields trips are designed in the materials to meet fixed learning objectives. This is because recording alone is not sufficient to provide student with an educational experience and because they are not recording of a live concert.

Overhead projectors help students to hear and see better because media are straight-forward image enhancement Student's perception can be improved by using devices such as audio, appliers or overhead projectors in large classes to help students see or hear better. Modern technology allows teachers to use overhead projectors to design learning experiences. For example, it involves the use of a large-screen television to present a common (shared) image to students of a computer terminal output (Smaldino

et.al 2005).

Learning and Instructional projected visual media are used show students how a specific perceptual motor skill is performed correctly. Ike (2005) it is essential to demonstrate the proper way or skill, because it permits the teacher to focus his or her attention on the teaching task and not the demonstration itself. Many flexible media allows a more detailed analysis of skill than is possible with a live demonstration through the use of options such as skill slow motion pictures. Oruille (2005) still overhead projectors can be used to provide students with feedback and opaque or filmstrip recordings can be useful. More so learning is enhanced when a learner receives accurate knowledge of a result about their behavior, For example, a learner who takes pArt in an exercise would be videotaped and provided with immediate feedback. Teachers must make concerted effort towards the teaching and learning of Fine Arts as it plays a wide variety of importance in the area of cultural heritage and citizenships education.

2.6.4 Significance of Overhead Projector on Fine Arts Students' Performance

In this era of information and communication technology (ICT), teachers are continuously urged to avail themselves with a variety of instructional materials found to have significant impact in improving learning. It is believed that students understand and remember better what they see and do (Talabi, 2004). Students learn more and faster when audio-visual materials are employed. Talabi (2004) argue that instructional material when utilized wisely could be used to realize the goals of education. In his findings Ademola (2004) states that instructional materials can be used to promote and encourage

effective' teaching and learning activities in the Fine Arts classroom. Agu (2000) assert that, some findings have shown that students are stimulated more when taught with instructional materials. Ademola (2004) argues that, instruction involving the use of audio-visual materials facilitates permanency of learning. In his own contribution Adediwura (2007) suggests that the use of audio-visual makes subject-matter real and understandable. In its own contribution the National Council for Educational Technology (NCET) confirm that research has shown that the use of computer by both staff and students increase students' performance.

It is the strength of the above views arising from various researches by educationist form the basis of this work. The objectives were to establish the contribution instructional materials made in improving teaching and learning in Katsina state with particular reference to Fine Arts at Junior Secondary School level.

2.6.5 Problems Associated with Use of overhead Projector on Fine Arts Students Performance

In every school system, there are normally reasons for the introduction of any new subject into the school curriculum of that system, in the same way the introduction of Fine Arts into the Nigerian school system has been informed by several reasons. Adediwura, & Bada (2007) for example, suggest that of Fine Arts was introduced by the wave of curriculum reform, adaptation and innovation that swept across Nigeria. Secondly, it was introduction with a desire to make education responsive to the needs of the society. It is claimed that education will also help in the production of good citizens

among others, (Aguokogbuo, 2000).

However, previous studies have shown certain peculiar problems associated with the introduction and teaching of Fine Arts in both primary and junior secondary schools not only in Katsina state, but in other states in Nigeria. The researchers identified major problems of Fine Arts one of which is the lack of adequate instructional projected media materials in the field. However they failed to mention that both Colleges of Education and the Universities are now producing and coming up with instructional materials that will help in the teaching of Fine Arts. In addition trained personal have been made available who will handle the subject effectively not only at the Primary, Junior Secondary School levels, but also at the Senior Secondary School level Tertiary Institutions. Haruna (2000) indicates that the "universities and colleges of education have produced some experts in Fine Arts that will enable the programme take off at the junior secondary school levels now".

On a related problem, Nwanna- Nzewunwa (1986) remarks that the overhead projectors are the key element for a successful learning situation. His attributes that, training, approaches and report in the classroom are needed for meaningful internationalization of the values of Fine Arts education. In a study conducted by Talabi (2004) on student's attitudes towards Fine Arts, four Secondary Schools and three Teachers Colleges were used. One problem identified was that a large number of students in the secondary schools dropped Fine Arts because it was not pArt of their final examination which was conducted by the West African Examination Council (WAEC). Although he did not indicate that Fine Arts is offered only in junior secondary school level JSS I – III while it was expected to be offered up to SS III. In the Teacher Training

colleges, it should be noted that the dropping of Fine Arts by the students in the Junior Secondary School levels is not due to lack of content of Fine Arts programme. The programme of instruction is designed in such a manner as to allow the individual to move to increasingly higher levels of understanding of selected themes and units as he proceeds through the primary to post primary.

2.7 Empirical Study

Jega (2002) researched into problems of teaching Fine Arts in primary schools in Zaria Local Government Area (LGA). 100 teachers were involved in 6 selected schools. Some of her major findings were that; 91% of the teachers had no instructional materials aid in teaching Fine Arts; the schools lack text books and worse still no overhead projectors and other teaching materials and traditional methods of teaching were used by the majority of the teachers. Although the study identified problems affecting the teaching of Fine Arts in primary schools particularly on teachers and teaching methods, the researcher failed to point out that teacher's problems at the primary school levels had been subject to specialization.

Aliyu (2001), in his study on the factors affecting the use of instructional materials in classroom teaching in schools and colleges uses questionnaires and structural oral interviews to gather his data. The study revealed that many schools and colleges in Imo State had no instructional materials. This is supported by the fact that only 38% of the schools and colleges indicated that they had instructional materials. That schools and colleges with student population of above 500 (25%) had more instructional materials than schools and colleges with student population of 500 and under (10%); that schools and colleges had more imported instructional materials (55%) than locally made ones

(35%); and also that the few available instructional materials were not adequately used in teaching. The study also reveals that the principals, vice principals, deans of studies, senior tutors and the teachers identified some factors as being fully responsible for the inadequate use, availability and non-availability of instructional materials in teaching in their schools and colleges.

In his recommendation, he advised that funds be set aside during budgets especially for the purchase, maintenance and production of instructional materials. That instructional material centres should be established in the state as one of the arms of the Educational Service Board. Also, that the production of low cost instructional materials made out of local materials be intensified. He also said that a miniature resource centre should be established in every school and college and a media specialist be posted to each school and college to manage the resource centre. He further said that it is imperative for workshops and continuing education programmes to be organized in order to train and keep teachers up-to-date on the use of instructional facilities.

The literature review has shown that the researcher has no choice but to use the projected visual instructional materials under the appropriate physical conditions if the researcher really wants to improve the quality of effective learning in our junior secondary schools. That being so, it is important for those concerned with these schools to assess the extent to which conditions are being fulfilled and endeavor to see that steps are taken to enhance the provision of these visual instructional materials in our junior secondary schools.

However, in spite of the existence of these findings especially in the field of educational technology which encourages the use of projected visual instructional

materials to enhance greater achievement in the Fine Arts, it is sad to note that students' performance in Fine Arts has continued to be poor over the years at the junior secondary schools certificate examinations (JSSCE) level. Some findings have discovered lack or interest in the subject by the students as responsible for the poor performance.

Anderson (2003) in their research into Fine Arts offered in Advanced Teachers College (ATCS) involved 26 lecturers and 100 students in the 20 ATCS covered in the study. Their findings show that resources/facilities were inadequate. Siundu and Mohammed (2003) researched into Fine Arts methods and evaluation in selected Teachers Training College in Anambra state. One of the major problems discovered was that teachers evaluate only the cognitive outcome of learning using essay and objective test devices. Furthermore, majority of the schools had no instructional materials for the teaching of Fine Arts.

The findings of the above studies pointed out problems associated with Fine Arts which are lack of instructional materials or outdated teaching Medias. However, they failed to explain whether this and other problems serve as militating factors against the teaching of Fine Arts at the junior secondary school level. They also failed to indicate that more experts are being graduated yearly in both colleges of education and the Universities to solve this problem.

On a related issue, Lawal and Yusuf (2003) observed that due to the large number of practitioners or instructors who are without adequate handling background and interest in the teaching of pre-vocational which make up the content of Fine Arts. Alaba (2001) list some problems of Fine Arts even though he fails to indicate at which level these problems were more serious. This research assumes that these problems may hinder the

use of overhead projectors in the teaching of Fine Arts in junior secondary school level; use of overhead projectors in the teaching of Fine Arts cannot be predicted, since it visualizes the topics that deal with human being that are hard to predict as a result of change in behavior, problems of materials :- Materials in teaching fine arts are still limited, it requires a lot of teachers time to make instructional materials suitable for use in school, available materials are still very expensive.

Problems of teachers:- There are very few teachers who are specially trained to handle Overhead projectors for the teaching of Fine Arts, fine Arts advocate scholars of other disciplines who can handle overhead projectors materials in teaching of the subject.

Abolade (2004) points out that despite the efforts put in to spell out the national philosophy and policy on education, Fine Arts objectives and the curriculum at all levels of the Nigerian post primary education, the introduction of Fine Arts at the universities level has not achieved the desirable objectives. He further explains, for instance, that knowledge is still being acquired for passing examination and possessing certificates. In addition, teaching/learning materials still lack equitation/logical organization to facilitate movement from the simple to the complex (spiral development). Gagne (2004) comment that teachers as well as administrators still see the need to cover the syllabus and provide a package of pre-selected knowledge to each new generation of students. Psychological factors such as readiness, motivation, maturation, interest and so on have proven to be great factors that influence teaching and learning of any discipline at any level of education. Readiness for learning as observed by Vikoo (2003) depends on physical and mental maturity. That readiness in a child is marked with eagerness to respond to the learning tasks he/she is presented with. When a child is ready to learn, he automatically

develops interest in it especially if there is motivation. The output performance is always very high. The learner of Fine Arts like any other subject would have to overcome so many difficult obstacles for effectively learning.

With the above view, Kadage (2009) went further to add that Fine Arts teachers in many schools are often reluctant to conduct practical, that lecture method is the most popular teaching strategy. This method is teacher centered as already observed. It is probably the easiest method of teaching available to any lazy and undedicated teacher. But for a subject like Fine Arts that is activity oriented and needs real Overhead projectors, it does not pay and the students are always the loser as they find it difficult to comprehend concepts and features that should have been taught using overhead projectors materials.

Crowning these problems is the scarcity of visual instructional media materials like overhead projectors. The few instructional materials that are found around from available evidence are authored by educational technologies and specialists who make the quality of such instructional materials very inadequate to specific subject specialists like Fine Arts.

2.8 Summary

This chapter has discussed views and opinions of some eminent educationist as expressed. Efforts have been made to review related literature. Although these opinions are exhaustive, however, the following areas were discussed; fine Arts as a pre-vocational subject in the junior secondary schools level, other researcher, findings on the effect of gender in teaching and learning process.

Overhead Projectors are very important in the teaching and learning process, they

facilitate learning by giving substance to abstraction. The use of Overhead projector also helps clear misconception motivates interest and deepens on student's level of understanding. The teaching of fine arts can be more meaningful through the utilization of appropriate instructional material.

Education is generally seen by many scholars as a preserver and transmitter of tradition, culture, norms and worthwhile skills from one generation to another. Gagne (2004) sees education as a process of helping an individual to be capable of living through the understanding of past and present heritage and possibly participate in the future. In the same vein Otote (2004), an educationist says that education involves the inclusion of knowledge, skill and attitudes within and outside the formal school system, all geared towards the development of a person's mind and personality to be able to contribute to the development of a person's mind and personality and be able to contribute to the development of his society and also be useful to himself.

Learning which is as aspect of education can only take place when a child is mature and ready. However, learning will be more meaningful to the child if it is accompanied by motivation. It behooves on the Fine Arts teacher to make his teaching interesting so that his student will learn well. He/she can do this by making use of his projected visuals as instructional materials to teach. Okam (2000) summarizes that instructional materials help students develop problem–solving skills, acquire scientific learning process and develop functional knowledge and manipulative skills. Therefore, teachers must make concerted efforts towards the teaching and learning of Fine Arts as it plays a vital role and is of great importance in the area of Citizenship Education.

Overhead Projector has been viewed as the use of appropriate and carefully

selected varieties of learning experiences which, when presented to the learner through selected teaching strategies, will reinforce and strengthen one another so that the learner will achieve predetermined and desired behavioral objectives. In this study, a great deal of emphasis is accorded to the use of this type of media system (projected media) in teaching and learning Fine Arts in Junior Secondary Schools (JSS).

Lawal and Oyeleye (2003) opines that Fine Arts like other subjects can effectively be taught using overhead projector that appeal to sight. Studies conducted by Reiser and John, (2006) reveals that the application of overhead projector produce the desired learning experience in the students. It also moves intermittent application of the media systems.

CHAPTER THREE
METHODOLOGY

3.1 Introduction

The chapter presents the methodology used in carrying out the research work. It focuses on the research design, sample and sampling techniques, research instrument, validity of instruments, testing, and reliability of instrument, method of data collection and method of data analysis.

3.2 Research Design

The research design for this study is quasi-experimental 2 X 2 factoria design of the pretest-posttest. The control design is ideal for the work because it controls most of the

threats to internal validity of the study (Salami, 2004). The "experimental" groups were taught with the use of overhead projector identified for this research study. While students in the control group were taught using lecture method. The purpose of the pre-test is to evaluate the effectiveness and changes that take place in the different Fine Arts lessons taught and the performance in Fine Arts teaching/learning process. The post-test was used to determine the impact of treatment and ability level on the two experimental groups in the four schools. Pre-test were administered before the treatment to determine the equivalence of the groups.

Table 3.1 illustrates the design format.

Table 3.1 Design format

Group	**Pre-test**	**Treatment**	**Post-test**
Experiment	01		0_3
Control	02		0_4

Source: O_1 = Test measure received by Experimental group during pre-test.

O_2 = Test measure received by Experimental group during pre-test.

O3 = Test measure received by Experimental group during posttest.

O_4 = Test measure received by Experimental group during posttest.

3.3 Population

The total population for this study is 907 JSS III Fine

Arts male and female students of State Secondary Schools in Kaita Local Government Area of Katsina State. The Students are from five Government Junior Secondary Schools in the area (Kaita).

Table 3.2 Population distribution of JSS III Fine Arts students in Junior Secondary School in Kaita local government.

S/N	Name of School	No of Male Std.	No of Female Std.	Total No. of Students.
1	**GSS (J) Dankama**	**140**	**43**	**183**
2	**GJSS Dankaba**	**76**	**57**	**133**
3	**GSS (J) Girka**	**45**	**13**	**58**
4	**GSS (J) Kaita**	**270**	**82**	**352**
5	**GJSS Yandaki**	**121**	**60**	**181**
	Grand Total	**652**	**255**	**907**

Source: Planning Research and Statistics Department (PRS), Ministry of Education HeadquArters, Katsina, Katsina State. (2012)

3.4 Sample and Sampling Techniques

One hundred and sixty JSS three Fine Arts students from four junior secondary schools out of 907 students in Kaita local government were selected for this study. Simple random sampling techniques was used in this study to select four junior secondary schools and out of the whole population only four schools had up to forty male and female students and this fostered the decision of their being selected. Also, the 80 (40 male and 40 female) students were selected after all their names are written on pieces

of paper, whereby the first forty male names and first forty female names were considered for the study.

GJSS, Dankama, Dankaba formed the experimental, group while GSS Kaita formed the control group. Forty students were selected from each school and two schools constituted the experimental group while one school formed the control group. This brings the total number of experimental group to 80 while control group remains at 40. The experimental group were exposed to projectors while the control group will be taught using conventional teaching methods (chalk and talk), randomly selected for the study. The students were taught a concept of elements of Arts and principle of design subtitled shapes and sizes.

Table 3.3. Schematic Presentation of the Selected Schools.

Group	Schools	Total No of Male	Total No of Female	Sampled No
Experimental Schools	**GJSS Dankama**	20	20	40
	GJSS Dankaba	20	20	40
Control Schools	**GJSS Kaita**	20	20	40
Grand Total		60	60	120

3.5 Instrumentation

The Fine Arts achievement test consists of a set of 20 cognitive and psychomotor test items designed by the researcher. The test items were structured to consist of concepts on balance, proportion, colour, rhythm, texture; harmony in Fine Arts was designed to find out the extent of the student's performance in the selected Fine Arts concepts. This test was given to the four groups. The purpose of this multiple test is to evaluate the effectiveness of overhead projector on academic performance in Fine Arts learning in the three groups of schools. These test item objectives are constructed from the multiple test questions in junior secondary schools certificate examination past questions and these questions are validated by some experts in Fine Arts. The 20 test item objectives consists of four response options of which one is the correct answer and the remaining three options are good distracters. However, the pre-test items are to determine the strength and quality of the subjects (sample) and the impact of the overhead projector on the student's academic performance in Fine Arts learning before the administration of Post-test while the post-test objectives are to determine or assess the relative change in the students' performance in Fine Arts after the pre-test in the three groups of schools.

The data collected for this study were of two types:

i. The pre-test in Fine Arts conducted in the selected schools for this study.

ii. The post-test in Fine Arts conducted in the selected schools by the researcher.

These pre-test and post-test objectives are parallel test items in quality and quantity covering the same items in the syllabus.

3.5.1 Validity of instrument

The instrument was subjected to validity by the supervisor and two (2) teachers of

Fine Arts from department of Fine Arts in Federal College of Education, Katsina, and Katsina College, Katsina. It was also given to two experts in the field of measurement and evaluation and instructional technology at the Ahmadu Bello University, Zaria to establish content validity. They were asked to evaluate the instruments in terms of clarity of items, linguistic accuracy and appropriateness of the instrument to achieve the purpose of the study. Revisions and suggestions made by the panels of experts were taken in account before the final version of the instrument was used.

3.5.2 Pilot testing

The test instrument for the study was pilot tested using the JSS 2 students of GSSJ Kaita and GSSJ Girka. The instrument was administered twice based on an interval of two weeks to 10 students. The pilot study was done to:

a. Determine the appropriateness of the length of time required to take the test;
b. Determine the appropriateness of the wording of the instrument and to;
c. Find out the reliability of the instrument

The test was administered for thrice under the same condition. On each occasion of test administration, it took the students 25 minutes to answer the questions. The scores of the sample were recorded in terms of their overall performance on the test and re-test administered. The reliability co-efficient of the test re-test scores was obtained by means of Pearson Product Moment Correlation Coefficient (PPMCC).

3.5.3 Reliability of the Instrument.

Overhead projector was subjected to a pilot test on sample of 10 students randomly selected from those in Government Junior Secondary School Girka in Kaita Local Government Area of Katsina State. The result obtained from the field test was analyzed

using Pearsont Product Moment Correlation Coefficient statistics. The result obtained was 0.89 (Appendix).

3.6 Procedures for Data Collection

The researcher personally handled the demonstration teaching and application of instrument, (Pre-test and post-test to all the groups). Both experimental and control groups were pre-tested before teaching began to determine their entry knowledge in respect to these complex concepts in Fine Arts.

An introductory letter was collected from the Department of Educational Foundations and Curriculum and the State Ministry of Education, Katsina, for the students' field research to be allowed access to certain relevant documents and some valuable information which researcher needed for the study. The introductory letter was handed over to the principals of sample schools and the Zonal Director of education of the zone. A total of 120 copies of test items were produced by the researcher and distributed to the sampled students.

The instruments were administered with the assistance of the members of staff of the schools, who will be trained on test items distribution and test administration. The data collection exercise lasted for one week in the four schools. After the completion of test administration, the researcher collected back the data for analysis.

3.7 Procedures for Data Analysis.

The data obtained from this study was subjected to statistical analysis. Frequency and simple percentage was used to enumerate the total number of respondents. The means and standard deviations of both experimental and control groups was for comparison in determining whether or not overhead instructional projection and

application on teaching Fine Arts could improve learning. To up hold or reject the hypotheses independent test analysis was conducted an alpha of 0.05 level of significance was used. The researcher used IBM SPSS 20.0 version software for that data calculation and data storage.

CHAPTER FOUR
DATA PRESENTATION AND ANALYSIS

4.1 Introduction

This chapter focuses on the data analysis, Response to research questions; hypotheses testing; summary of findings, and discussion of result based on the research questions and research hypotheses. The results obtained from the data collected are presented in the following tables:

4.2 Data Analysis

The data collected for this study were analyzed to answer the research questions and test hypotheses stated in chapter one. The research questions and hypotheses are analyzed as follows:

4.2.1 Response to Research Questions

Research Question One

What is the effect of overhead projector on Fine Arts Students' performance in JSS in Kaita Local Government Area, Katsina State?

Table 4.1 effect of overhead projector on Fine Arts students' performance in JSS in Kaita Local Government Area, Katsina State.

Group	N	Mean	SD	SE
Pre Test	160	38.40	10.90	0.86
Post Test	160	39.80	11.30	0.89
Difference		1.4	1.6	0.3

Table 4.1 showed that the pre-test mean was 38.4, standard deviation was 10.90 and the standard error was 0.86, while for the post-test, the mean was 39.80, standard deviation was 11.3 and standard error was 0.89. There was 1.4, 1.6 and 0.3 mean difference standard deviation difference and standard error difference, respectively. The difference showed an increase in students' academic performances. The standard deviation and standard error of the post-test was higher than the standard deviation and standard error of the pre-test. This implied that students performed better academically with the use of overhead projector than when they were taught without overhead

projector.

Research Question Two

To what extant does overhead projector affects students' academic performances in JSS Fine Art in relation to their gender.

Table 4.2 Extent to which overhead projector affects students' academic performance in JSS Fine Art in relation to their gender

Group	N	Mean	SD	SE
Pre Test male	80	35.72	8.61	0.96
Post Test male	80	40.80	12.00	1.30
Difference		5.08	4.61	0.34
Pre Test Female	80	35.72	8.61	0.96
Post Test Female	80	38.80	10.50	1.20
Difference		3.08	1.89	0.24
Overall Difference		2.00	2.72	0.10

Table 4.2 showed that the pre-test mean was 35.72, standard deviation was 8.61 and the standard error was 0.96, while for the post-test, the mean was 40.80, standard deviation was 12.00 and standard error was 1.30. There was 5.08, 4.61 and 0.34 mean difference, standard deviation difference and standard error difference respectively in the male performance. In the same Table 4.2, it showed a pre-test mean of 35.72, standard deviation of 8.16 and standard error of 0.96 while for the post-test, the mean was 38.80, standard deviation was 10.50 and standard error was 1.20. There was 3.08, 1.89 and 0.24

mean difference, standard deviation difference and standard error difference respectively in the female performance. The mean difference showed an increase in students' academic performance of the female. The standard deviation and standard error of the female was higher than the standard deviation and standard error of the male.

This implied that female students performed better academically when they were taught using overhead projector than the male students. Overall, it can be said that there was 2.00, 2.72 and 0.10 mean, standard deviation and standard error differences between the female and the male performance Displays result of t-test on male students on the experimental group and male student in the control group at pretest level. The entries suggest that the hypothesis be rejected. A critical look at the figures reveals that the difference in performance is not very much. Comparison of performance of female experimental group and female control group also scored that there is no difference at pretest level as shown in table 4.2

4.3 Test of Hypotheses

This section tested the two null hypotheses stated in chapter one. These were presented in table 4.4 to 4.6.

Hypothesis One

H_1 There is no significant difference between the performance of fine art students taught using overhead instructional projection and those taught using the conventional method in Kaita Local Government Area, Katsina State. Test to hypothesis one was presented in Table 4.4

Table 4.4 t-Test Analysis of the Pre-Test and Post-Test Performance of Students Taught Fine Art using overhead projector.

Group	N	Mean	SD	SE	d	t	P-ALUE
Pre Test	160	38.40	10.90	0.86	318	1.68	0.26
Post test	160	39.80	11.30	0.89			

The calculated t-value was 1.68 while the critical value was 1.14at 0.05 level of significance. Since 1.68 for calculated t-value exceeded critical value of 1.14 at 0.05 level of significance the null hypothesis which stated that there is no significant impact in the effect of overhead projector on Academic performance of JSS Fine Art students in Kaita Local Government Area, Katsina State was rejected. Therefore, it could be said that there was significant difference in the use of overhead projector in teaching Fine Art (post-test) than when students were taught Fine Art without overhead projector (pre-test).

Hypothesis two

H_2 There is no significant impact on the effect of overhead project on Male and female students' academic performance in JSS fine art in Kaita Local Government Area, Katsina State.

Test to hypothesis two was presented in Table 4.5

Table 4.5 t-Test Analysis of the Male and Female Students Taught Fine Art with Overhead projector.

Group	N	Mean	SD	SE	d	t	P-VALUE

Female	80	35.72	8.61	0.96	158	3.07	0.0025
Male	80	40.80	12.00	1.30			

The calculated t-value was 3.07 while the critical value was 1.98 at 0.05 level of significance, since 3.07 for calculated t-value exceeded the critical value of 1.98 at 0.05 level of significance the null hypothesis which stated that there was no significant impact on the effect of overhead project on gender (Male and female) in JSS Fine Art students' academic performance in Kaita Local Government Area, Katsina State was rejected. Therefore, it could be said that significant difference does not existed between female and male students taught Fine Art using overhead projector.

4.4 Summary of Findings

i. The study found that students performed better academically when taught with the use of overhead projector than when they were taught conventionally.

ii. Female students who were taught with Overhead projector performed better than male students who were taught with the Overhead projector in teaching and learning Fine Arts.

iii. There was significant difference in the performance of students who were taught using Overhead projector in teaching Fine Arts and the students who were taught Fine Arts without using Overhead projector.

iv. Significant difference does not existed between female and male students taught Fine Art using overhead projector.

4.5 Discussions of the Findings

The effect of overhead instructional projection on academic performance of Fine Arts students was found to be positive. This was as revealed by the study that students performed better academically when they were taught Fine Arts using Overhead projector than when they were taught without Overhead projector. It is obvious that Overhead projectors when use effectively in teaching and learning process enhances students' understanding. It is believe that instructions are better understood when learning is made real as asserted by Sharon (2002) who stated that overhead projector is a "well worth while" and stated that "through the use of visual aids students learn up to 35% more in a given period of time and remember up to 55% longer. From the foregoing, it should therefore be noted that effective learning for better result is achievable through the use of overhead projectors

The effect of Overhead projector on academic performance between male and female students proved that the female students performed better than the male, the difference of mean scores between the ''Female students was a total of 38.80, while the male students had 40.80 (Table 4.2). When students were both taught, male students seem to have paid more attention to the lesson than the female students. This is in line with Otote (2004), who stated that "Gender discrimination" and the non-availability of abundant locally relevant textbooks have made gender and its corresponding concepts difficult to handle by teachers. This was shown in the outcome of the research as their attentive nature gave them upper hand on the male counterpart. This goes to say that

superiority is not in strength but in humility.

Overhead projectors were found to be more impactful in this study. This was proved as students in the experimental group that is those that were taught using Overhead projector had a score higher than the control group that is those that were taught without using Overhead projector. This is in line with Ademola (2004) who stated that, instruction involving the use of audio-visual materials facilitates permanency of learning. In his own contribution Stephen (2004) suggests that the use of audio-visual makes subject-matter real and understandable. In its own contribution the UNESCO (2001) confirm that research has shown that the use of computer by both staff and students increase students' performance.

CHAPTER FIVE
SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Introduction

This study investigated the effect of overhead instructional projection on fine art students' academic performance in junior secondary schools in Kaita Local Government Area of Katsina State. In chapter four, the data generated were analyzed and used to answer research question stated in chapter one. The focus of this chapter is to give an over view of the whole study at a glance. The chapter is presented under the followings: Summary, Conclusion, Recommendations, Limitations of the Study and Suggestions for Further Studies.

5.2 Summary

The study titled "effect of overhead instructional projection on fine art students' academic performance in junior secondary schools in Kaita Local Government Area of Katsina State." with a view to determine the effects of Overhead projectors utilization that yields the highest scores in performances amongst students of Fine Arts. The study carried out at Government Secondary School Junior Dankama GJSS Dankaba, GJSS 'Yandaki and GJSS Kaita, all the JSS Three students which were 907 all offering Fine Arts were splinted into arms that is A –B formed the population of the study from which 320 students from the pre-test and post-test was used for the sample size. The study aimed at achieving three specific objectives form which the three research questions were postulated. The research design for the study was quasi-experimental design. There were two groups; group A and group B consisting of 40 students each. The instrument for the study was a structure Fine Arts Achievement Test (FAAT), aimed at assessing the performance of both pre and post-test groups after instruction. The test materials was

consisted of 20 items multiple choice (A – D) questions that last for thirty (30) minutes which the researcher was administer to each of the experimental group 'A' and 'B'. This was aimed at determining the impact in perception and performance between the groups before and after the treatment as a result of exposure to Overhead projectors after instruction and all the copies were returned and found to be valid.

Data collection from the post-test mean scores of students performances were statistically analysed using statistical mean and standard deviation and testing at p value at 0.005 level of significance. The summary of the major findings of this study is as follows:

Students performed better academically when they were taught using Overhead projectors than when they were taught without Overhead projectors.

Female students performed better academically when they were taught using Overhead projectors than the male counterparts.

Significant difference does not existed between female and male students taught Fine Art using overhead projector.

5.3 Conclusions

From the finding of this study, the following conclusions were made:

Utilization of overhead projectors that teacher's employ in the teaching of Fine Arts has significance effects on student's academic performance in junior secondary school.

Neither the male nor the female students performed significantly better than the other when Fine Arts were taught with the utilization of Overhead projectors to them.

Utilization of Overhead projectors facilitates effective teaching and learning of

Fine Arts in junior secondary school level.

Finally, Overhead projectors should be properly used in order to enhance academic performance of students in Fine Arts in junior secondary schools in Kaita Local Government area Katsina state.

5.4 Recommendations

On the basis of the findings of this study the following recommendations were made.

Teachers should place emphasis on the use of overhead projectors in teaching and learning Fine Arts concept in junior secondary schools.

Educational body like Universal Basic Education (UBE) and National Policy on Education (N.P.E.) should recommend to the teachers of Fine Arts the use of the overhead projector while teaching and incorporated into its curriculum the appropriate methods and other instructional materials to be adopted in the teaching of other subject related to Fine Arts in all junior secondary school levels in Kaita Local Government area, Katsina state.

Workshops, seminars and conferences should be organized for teachers to be well trained and acquainted with the effective use of overhead projector in teaching and learning Fine Arts in order to improve students' academic performance not only in Katsina state but, to other junior secondary schools in Nigeria at large.

5.5 Implication of the Study

Since the statistical analysis has shown the differences between each group of students taught with utilization of overhead projectors and in comparing the differences it has revealed that the utilization of overhead projector is more effective in teaching and

learning Fine Arts subject, since the result show that those who are taught with use of Overhead projectors perform better than those taught without utilization of overhead projectors, this implies that it should be adopted in teaching Fine Arts as that it have positive effect on students performances when taught using of overhead projectors.

5.6 Limitations of the Study

The following are the limitations of this study.

This study is restricted to three Secondary schools in Kaita local Government of Katsina State made the scope of the generalization that can be made from this study narrow.

The study was conducted while some schools were writing examinations, but with the help of the principal in those schools the students were given special time in answering the achievement test.

The study is also limited to three secondary schools because of the time and financial constraints.

The researcher experience problem of language communication in the sense that some students find it difficult to understand English language for effective teaching and learning process in three secondary schools.

5.7 Suggestion for Further Studies

On the basis of the findings of this study, the researcher makes the following suggestions for further studies:

There is need to conduct similar studies on the effect of overhead projectors utilization on the academic performance of junior secondary schools in related subject.

There is need to conduct similar studies to investigate others related instructional

material to Overhead projectors on Fine Arts subject in junior secondary schools.

A correlation study of Fine Arts teachers' academic performance on Fine Arts student performance in Kaita local government area of Katsina state.

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APPENDIX I

The Director
Zonal Inspectorate of Education,
Katsina.
All Principals of Kaita local government,
Secondary schools,
Katsina State.

Sir,

INTRODUCTION LETTER.

This is to introduce the bearer of this letter, Musa Abdu Dankama, from Ahmadu Bello University, (ABU) Zaria, conducting a research work on instructional projection on student's performance.

2. Kindly provide him with all the necessary information, materials and gadgets that would facilitate his research work.

3. Thanking you in anticipation.

Secretary, (ERC).

SANI YARIMA.

APPENDIX II

Zone ……

Name of school ……

Student's name: …….

Class …….

Sex ……..

STUDENTS' ACHIEVEMENT TEST (FINE ARTS)

MULTIPLE CHOICE QUESTIONS:

Instruction:

1- Answer all questions by ticking the correct answer.
2- Use pencil throughout.
3- All questions carry equal marks, 5 marks for each question.

1. "Paper mash: is the process of making
   A. Wall painting
   B. Models by using grinded papers mixed with starch
   C. Models with clay
   D. Fixing papers on wall
2. One of the following is not a make-up materials
   A. Eye pencil
   B. Salt
   C. Lipstick
   D. Powder
3. The making of sweet combination of sound in harmonies pattern is known as
   A. Singing
   B. Music
   C. Design
   D. Painting
4. Sound can be described as……
   A. Something you feel
   B. Anything you can touch
   C. Anything you can hear
   D. Anything you can handle
5. One of the following is NOT a function of drama
   A. Educative
   B. Staging

C. Information
D. Entertaining

6. Which of the following is a process of making clay work durable?
   A. Storage
   B. Polishing
   C. Glazing
   D. Firing
7. Which of the following is NOPT a local craft?
   A. Photography
   B. Dyeing
   C. Carving
   D. pottery
8. Art is generally deFine as
   A. Copying from nature
   B. Drawing and painting
   C. Self expression
   D. Drawing and design
9. Large painting done on a wall is known as
   A. Architecture
   B. Mural
   C. Mosaic
   D. Design
10. Drawing or painting by using small piece of broken glass, tiles or stone is called
   A. Mosaic
   B. Mural
   C. Stitching
   D. Printing
11. ……. Is the result of mixing red and blue in equal proportion
   A. Purple
   B. Yellow
   C. Orange
   D. Green
12. A place where Art work are kept for historical purpose is called
   A. Art room
   B. A studio
   C. Art hall
   D. Museum
13. A graphic Artist produces
   A. Poster

B. Chair
C. Pots
D. graphs

14. A good arrangement of object or figure in an Artwork is called?
    A. Composition
    B. Tone
    C. Balance
    D. organization
15. Brightness or dullness of a colour is described as……..
    A. Shade
    B. Intensity
    C. Tone
    D. Harmony
16. Pick the one that does not belong to the group
    A. Tone
    B. Line
    C. Pattern
    D. Balance
17. A petro-chemical solution used for fixing object or piece of wood together is called……
    A. A sticky water
    B. Evostick
    C. Liquor
    D. Vessels
18. Which of the following is NOT and industrial Art?
    A. Printing
    B. Drama
    C. Textiles
    D. Metal work
19. When dyeing a piece of cloth, it stArt with……
    A. Light colour
    B. Dark colour
    C. Neutral colour
    D. Primary colour
20. What are the clothe own by actors during drama?
    A. Costumes
    B. Dress
    C. Socks
    D. Sets

Thank for the response

APPENDIX III

DATA SUMMARY

S/NO	GROUP	N	MEAN	SD	SE	DF	TCALC	TCRIT	DECISION
1	AEXPPRE	160	38.40	10.90	0.86	318	1.14	1.97	RETAIN
	ACONPRE	160	39.80	11.30	0.89				
2	AEXPPOST	160	65.84	7.63	0.60	318	26.26	1.97	REJECT
	ACONPOST	160	41.80	8.70	0.69				
3	ACONPRE	160	39.80	11.30	0.89	318	1.76	1.97	RETAIN
	ACONPOST	160	41.80	8.70	0.69				
4	AEXPPRE	160	38.40	10.90	0.86	318	26.14	26.14	REJECT
	AEXPPOST	160	65.84	7.63	0.60				
5	MEXPPRE	80	35.72	8.61	0.96	158	3.07	1.98	REJECT
	MCONPRE	80	40.80	12.00	1.30				
6	FEXPPRE	80	35.72	8.61	0.96	158	2.05	1.98	REJECT
	FCONPRE	80	38.80	10.50	1.20				
7	MEXPPOST	80	66.69	7.72	0.86	158	18.72	1.98	REJECT
	MCONPOST	80	42.30	8.67	0.97				
8	FEXPPOST	80	65.09	7.52	0.84	158	18.77	1.98	REJECT
	FCONPOST	80	41.30	8.77	0.98				
9	MEXPPRE	80	35.72	8.61	0.96	158	23.87	1.98	REJECT
	MEXPPOST	80	66.59	7.72	0.86				
10	FEXPPRE	80	35.72	8.61	0.96	158	22.97	1.98	REJECT
	FEXPPOST	80	65.09	7.52	0.84				
11	MEXPPOST	80	66.59	7.72	0.86	158	1.24	1.98	RETAIN
	FEXPPOST	80	65.09	7.52	0.84				

APPENDIX IV

Two Sample T-Test and Confidence Interval

Two sample T for AEXPPRE vs ACONPRE

	N	Mean	StDev	SE Mean
AEXPPRE	160	38.4	10.9	0.86
ACONPRE	160	39.8	11.3	0.89

95% CI for mu AEXPPRE - mu ACONPRE: (-3.84, 1.03)
T-Test mu AEXPPRE = mu ACONPRE (vs not =): T= -1.14 P=0.26 DF= 318
Both use Pooled StDev = 11.1

Two Sample T-Test and Confidence Interval

Two sample T for AEXPPOST vs ACONPOST

	N	Mean	StDev	SE Mean
AEXPPOST	160	65.84	7.63	0.60
ACONPOST	160	41.80	8.70	0.69

95% CI for mu AEXPPOST - mu ACONPOST: (22.24, 25.84)
T-Test mu AEXPPOST = mu ACONPOST (vs not =): T= 26.26 P=0.0000 DF= 318
Both use Pooled StDev = 8.19

Two Sample T-Test and Confidence Interval

Two sample T for MEXPPRE vs MCONPRE

	N	Mean	StDev	SE Mean
MEXPPRE	80	35.72	8.61	0.96
MCONPRE	80	40.8	12.0	1.3

95% CI for mu MEXPPRE - mu MCONPRE: (-8.36, -1.8)
T-Test mu MEXPPRE = mu MCONPRE (vs not =): T= -3.07 P=0.0025 DF= 158
Both use Pooled StDev = 10.5

Two Sample T-Test and Confidence Interval

Two sample T for FEXPPRE vs FCONPRE

	N	Mean	StDev	SE Mean
FEXPPRE	80	35.72	8.61	0.96
FCONPRE	80	38.8	10.5	1.2

95% CI for mu FEXPPRE - mu FCONPRE: (-6.09, -0.1)
T-Test mu FEXPPRE = mu FCONPRE (vs not =): T= -2.05 P=0.042 DF= 158
Both use Pooled StDev = 9.58

Two Sample T-Test and Confidence Interval

Two sample T for MEXPPOST vs MCONPOST

	N	Mean	StDev	SE Mean
MEXPPOST	80	66.59	7.72	0.86
MCONPOST	80	42.30	8.67	0.97

95% CI for mu MEXPPOST - mu MCONPOST: (21.73, 26.85)
T-Test mu MEXPPOST = mu MCONPOST (vs not =): T= 18.72 P=0.0000 DF= 158
Both use Pooled StDev = 8.21

Two Sample T-Test and Confidence Interval

Two sample T for FEXPPOST vs FCONPOST

	N	Mean	StDev	SE Mean
FEXPPOST	80	65.09	7.52	0.84
FCONPOST	80	41.30	8.77	0.98

95% CI for mu FEXPPOST - mu FCONPOST: (21.24, 26.34)
T-Test mu FEXPPOST = mu FCONPOST (vs not =): T= 18.42 P=0.0000 DF= 158
Both use Pooled StDev = 8.17

Two Sample T-Test and Confidence Interval

Two sample T for MEXPPRE vs MEXPPOST

	N	Mean	StDev	SE Mean
MEXPPRE	80	35.72	8.61	0.96
MEXPPOST	80	66.59	7.72	0.86

95% CI for mu MEXPPRE - mu MEXPPOST: (-33.42, -28.31)
T-Test mu MEXPPRE = mu MEXPPOST (vs not =): T= -23.87 P=0.0000 DF= 158
Both use Pooled StDev = 8.18

Two Sample T-Test and Confidence Interval

Two sample T for FEXPPRE vs FEXPPOST

	N	Mean	StDev	SE Mean
FEXPPRE	80	35.72	8.61	0.96
FEXPPOST	80	65.09	7.52	0.84

95% CI for mu FEXPPRE - mu FEXPPOST: (-31.89, -26.84)
T-Test mu FEXPPRE = mu FEXPPOST (vs not =): T= -22.97 P=0.0000 DF= 158
Both use Pooled StDev = 8.09

Two Sample T-Test and Confidence Interval

Two sample T for MEXPPOST vs FEXPPOST

	N	Mean	StDev	SE Mean
MEXPPOST	80	66.59	7.72	0.86
FEXPPOST	80	65.09	7.52	0.84

95% CI for mu MEXPPOST - mu FEXPPOST: (-0.88, 3.88)
T-Test mu MEXPPOST = mu FEXPPOST (vs not =): T= 1.24 P=0.22 DF= 158
Both use Pooled StDev = 7.62

Two Sample T-Test and Confidence Interval

Two sample T for ACONPRE vs ACONPOST

	N	Mean	StDev	SE Mean
ACONPRE	160	39.8	11.3	0.89
ACONPOST	160	41.80	8.70	0.69

95% CI for mu ACONPRE - mu ACONPOST: (-4.20, 0.24)
T-Test mu ACONPRE = mu ACONPOST (vs not =): T= -1.76 P=0.080 DF= 318
Both use Pooled StDev = 10.1

Two Sample T-Test and Confidence Interval

Two sample T for AEXPPRE vs AEXPPOST

	N	Mean	StDev	SE Mean
AEXPPRE	160	38.4	10.9	0.86
AEXPPOST	160	65.84	7.63	0.60

95% CI for mu AEXPPRE - mu AEXPPOST: (-29.49, -25.36)
T-Test mu AEXPPRE = mu AEXPPOST (vs not =): T= -26.14 P=0.0000 DF= 318
Both use Pooled StDev = 9.38

APPENDIX V

Gender Perspective

CONMALES EXPMALES

Comparisons

1. AEXPRE VS ACONPRE

Result t= 1.14, P = 0.26

Implication t-calc < t-crit. = t 0.05, 318 = 1.97 and P > α = 0.06

We therefore retain the null hypothesis and conclude that there is no significant difference between the performance of the control group and that of the experimental group at pretest level.

2. A EXPPOST VS A CONPOST

Resent t = 26.26, p = 0.0000

Implication t-calc. > t-crit. = t 0.05, 318 = 1.97 and P < α = 0.05

We therefore reject the null hypothesis and conclude that, there is significant difference between performances of the control group at the post test level. This means that the use of the instructional materials has significant effect on the performance of the students.

3. MEXPPRE vs MCONPRE
Result, t=3.07, p=0.0025

4. FEXPPRE vs CONPRE
Result, t=2.05, p=0.042

5. MEXPPOST vs CONPOST
t=18.72 p=0.0000
66.69 7.72 0.86
42.30 8.67 0.97

6. FEXPPOST vs FCONPOST

t=18.72,	p=0.0000	
65.09	7.52	0.84
41.30	8.77	0.98

7. MEXPPRE vs MEXPPOST

t= 23.87	p=0.0000	
35.72	8.61	0.96
66.59	7.72	0.86

8. FEXPPRE vs FEXPPOS

t=22.97,	p=0.0000	
35.72	8.61	0.96
65.09	7.52	0.84

9. MEXPPOST vs FEXPPOST

t=1.24,	p= 0.22	
66.59	7.72	0.86
65.09	7.52	0.84

10. MCONT PRE vs MCONPOST

t=1.76, p=0.080

11. A CONTPRE vs A CONTPOST

39.8	11.30	0.89
41.8	8.70	0.69

12. AESXPPRE vs AEXP POST

t= 26.14	p=0.0000	df. 318
38.4	10.9	0.86
65.84	7.63	0.60

13. MEXPPRE vs FEXSPRE