A SURVEY OF THE AVAILABILITY AND USE OF INSTRUCTIONAL MATERIALS FOR ART TEACHING IN FOUR COLLEGES OF EDUCATION IN KADUNA AND PLATEAU STATES, NIGERIA

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OCTOBER, 2015

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A DISSERTATION SUBMITTED TO THE SCHOOL OF POSTGRADATE STUDIES AHMADU BELLO UNIVERSITY, ZARIA, NIGERIA IN PARTIAL FULFILLMENT OF REQUIREMENTS FOR THE AWARD OF MASTER OF ARTS IN ART EDUCATION

DEPARTMENT OF FINE ARTS
AHAMADU BELLO UNIVERSITY, ZARIA

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Declaration

I declare that this dissertation titled "**A Survey of the Availability and use of Instructional Materials for Art Teaching in Four Colleges of Education in Kaduna and Plateau States, Nigeria**" has been performed by me in the department of Fine Arts under the supervision of Dr. Mrs. R. A. Nkom and Prof. M. P. Mamza. The information derived from the literature has been duly acknowledged in the text and a list of reference provided. No part of this thesis was previously presented for another degree or diploma at any University.

_____ _____

Dateba Malise Turba **Date**

Certification

This dissertation titled "**A Survey of the Availability and use of Instructional Materials for Art Teaching in Four Colleges of Education in Kaduna and Plateau States, Nigeria**" by Dateba, Malise Turba meets the regulations governing the award of the degree of master of art of Ahmadu Bello University, Zaria, and is approved for its contribution to knowledge and literary presentation.

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Dedication

I dedicate this thesis to God Almighty and to all lovers of Art Education.

Acknowledgements

I acknowledge first of all the Almighty God for his grace upon my life and the opportunity he has granted me to further my education. May his name be praised and honoured for ever.

My gratitude goes to my late parents, Da Turba Dateba and Na Nabot Turba whom God used to have put me in school even when they themselves were not opportune to have gone to school. May what they have sown in my life grow to produce fruits that will be of great benefit to many people that will come in contact with me. The great financial, moral as well as spiritual support given me by my great wife, Mrs. Roseline Malise, my two lovely daughters, Plangchin and Dorcas kept on encouraging me. May their expectations of me never be cut short. The great love and care offered me by my beloved sister, Mrs. Jummai S. Bibot can never be forgotten. Her assistance has made me to achieve this much. May God Almighty bless and keep you.

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Abstract

This study was a survey of the availability and usage of contemporary art teaching and learning materials in Colleges of Education in Kaduna and Plateau States. Teachers in Nigeria over the years have been using the conventional instructional materials but modern ones are better and more effective. Information and communication technology (ICT) has made communication easy and has improved media instructional materials which art teachers should be exposed to in Colleges of Education. Teachers are expected to be conversant with the use of these contemporary instructional material. The aim of the study was to assess the availability and usage of contemporary instructional materials in colleges of education in Kaduna and Plateau states with the following objectives. To assess the types of modern instructional materials in Colleges of Education in the above mentioned states. Determine the adequacy and use of such audio visual and electronic resources in the Colleges of Education and to assess the problems teachers and students face in the use of audio visual and electronic resources. The population for the study consisted of a total number of 174 art students and 45 art teachers making a total of 219 from the four colleges of education being covered in the study. The instrument used for data collection consisted of two sets of questionnaires, they are Art Teachers Inventory Questionnaire (ATIQ) and Art Students Inventory Questionnaire (ASIQ). The major findings of the study indicate; Inadequate modern instructional materials in Colleges of education in Kaduna and Plateau states, the adequacy and use of such instructional materials for teaching Fine and Applied Arts was far below average as the modern materials were not available, Teachers competence on the use of modern instructional materials was more than that of students who largely depended on the colleges to provide them. Teachers and students face some problems which include lack of availability of modern instructional materials. Based on the findings, there is need for all stake holders in the educational sector to provide adequate modern materials. Institution should organize professional workshops and seminars that will guide the teachers on the use of contemporary materials.

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Abbreviations and Symbols

AV	-	Audio Visual
VA	-	Visual Aids
NCCE	-	National Commission for Colleges of Education
NPE	-	National Policy on Education
ICT	-	Information Communication Technology
JSS	-	Junior Secondary School
NCE	-	Nigeria Certificate in Education
AVA	-	Audio Visual Aids
MS Word	-	Microsoft Word
DVD Player	-	Digital Video Disc Player
3 D Images	-	Three Dimensional Images
WASCE	-	West African School Certificate Examination
CAI	-	Computer Aided Instruction
CDs	-	Compaq Disc
CD –ROM	-	Computer Diskette – Read Only Memory

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The emergence and production of instructional materials had undergone several reviews and processes by different professionals in various fields of learning. These experts have developed and produced such materials in line with the needs of their areas of specialization and the resources available in their locality. Experience over the years has shown that teachers have been depending on excessive use of words to express and to convey ideas or facts in the teaching-learning process. This practice is termed the "chalk-talk" method. In modern times, advances in technology have made it possible to produce materials and devices that could be used to minimize the teachers talking all the time, make the message clearer, more interesting and easier for the learners to assimilate. (Onasanya, 2008). According to Soetan (2010), graphics materials include charts, posters, sketches, cartoons, graphs and drawings. Graphics communicate facts and ideas clearly through combination of drawings, words and pictures. The use of graphics in teaching creates greater understanding of the materials being studied. They also help learners to visualize the whole concepts holistically showing the relationships with one another. The role of graphic materials in visual communication is therefore very unique and significant.

Olumorin (2009) in the simplest term defines instructional materials as those materials that help the teacher to teach with ease and the learners to learn without stress. The author explained that instructional materials appeal to the senses of seeing, touching, smelling, feeling and hearing. They include projected, non projected audio visual, printed and others. It also includes three dimensional objects that are produced through locally sourced materials, programme instruction, and instruction package. Natoli (2011) states that instructional materials are also referred to as Audio Visual (AV or A/V) which works with both sound and visual components. The production or use of such works or equipment to create and present works

such as slide, tape presentation, firm and television programme are examples of audio visual presentation.

To enhance teaching and learning process, it has become pertinent on the part of teachers to employ the use of contemporary instructional materials. This is because of the great role they play in teaching and learning situation. Ajidagba (2004) explains that instructional materials are very essential for teaching art because a high percentage of what is learned in the arts is abstract. Thus such abstract contents are better explained through the use of instructional materials. They also introduce to the class objects that cannot be physically brought to the class. Example, air plane as an example of "means" of transportation in social studies and objects that are too tiny to see with the naked eyes or observe their function.

Farrant in Olorukooba (2010) outlined some of the instructional materials which have been in use over the past 70 years. They include; the radio, record player, tape recorders, television sets, slide and film strips pictures, charts, diagrams, globes. models, flannel boards, over head projections, cinematography films, open reel projectors, maps etc. Most of these instructional materials are not being popularly used these days in schools and colleges. This is as a result of the recent technological advancement and the great achievements made in the field of educational technology. Contemporary instructional materials that are used in the educational field, include the computers, video cameras, digital cameras, cam coders, digital tablets, i-pad, compass, power point presentation packages, the teaching machines, flannel boards, models, magic boards, magnetic boards, electronic learning devise, the internet with newer soft ware, like Corel draw 8-15, Adobe Cs3-Cs5 which consist of photo shop, instant artist, dream weaver, micro media, flash and a host of others. These contemporary instructional materials have more advantages over the former ones mentioned earlier. The use of these audio visual and electronic resources have the potential for enhancing students' learning if adequately used. The role of these resources in teaching and learning is considered most important and widely-discussed

issues in education policy.

In education, teaching and learning using these instructional materials has influenced the design of various curricular pragramme nationally and globally in the launching ' of different educational programmes. The modern technology for example, allows learners' interaction with the computer screen rather than the teacher alone. Through the computer network, learners are able to communicate with the instruction on the material and can discuss assignments involved. Learners also can either attend lectures or do distant programme online. Current technologies in e-learning such as Aula-Net tend to provide group learning where individuals share ideas on line (Fulks, 2000). It has also helped in moving from the elitist advantage learning to mass education through digital media where more learners could get access to education for both campus and distant learning students (Kennedy, 2001).

The philosophy of the Nigerian Certificate in Education programme on Fine and Applied Arts is to provide academic and professional training for NCE teachers (NCCE, 2003). It aims at developing students' aesthetic perception, artistic talents and expression as well as stimulates interest and enquiries in the practical and theoretical areas which affect the teaching of art in the primary and junior secondary schools.

The objectives of the NCCE programme apart from emphasizing on the training of professional art teachers, is also to help them on the effective use of teaching aids. The specific objectives of teaching Fine Arts are as follows;

a. Equipping and providing the students with knowledge, understanding and skills in Fine and Applied Arts.

b. To equipped students with the necessary knowledge and skills for the promotion of Nigerian and world's artistic and cultural heritage.

c. To develop in the pre-service teachers the ability to communicate effectively through

the arts and proper use of instructional materials.

d. Prepare teachers education at the tertiary level. (NCCE, 2003).

1.2 Statement of the Problem

Over the years, teachers have used conventional instructional materials with some measure of success, but modern ones driven by Information and Communication Technology (ICT) would seem to be more effective. Information and Communication Technology (ICT) has made communication easy and improved the media of instructional materials, which art teachers should be exposed to, in the Colleges of Education. Teachers are expected to be conversant with the use of such modern instructional materials, unfortunately, this do not appear so. This might be because such facilities are not available and where available, some teachers might not be competent enough to use them. The complexity of some ICT equipment tends to also frighten teachers, who have no practical experience of them. Hence the ICT devices-supplied to some schools, are grossly under used. The Fine Arts lecturers in Colleges of Education seem not to have been left out in this worrisome trend. Some teachers in the Colleges of Education do not have ICT skills and therefore, there is a poor use of ICT. Therefore the problem of the study is the availability and use of modern instructional materials in Kaduna and Plateau states.

1.3 Objectives of the study

The aim of this study was to assess the availability and the usage of contemporary instructional materials in Colleges of Education in Kaduna and Plateau States. The objectives of the study are to:

i. Assess the modern instructional materials available in colleges of education of the above mentioned states.

ii. Determine the adequacy and use of such audiovisual and electronic resources in these colleges of education.

iii. Ascertain the competencies of teachers and students who make use of the modern materials.

iv. Identify the problems that teachers and students' face in the use of audio visuals and electronic resources in colleges of education in Kaduna and Plateau states, respectively.

1.4 Research Questions

1. What are the available types of audio visual and electronic resources in the Colleges of Education?

2. What is the perception of the Art Students concerning adequate use of audio visual and electronic resources in the Colleges?

3. What is the teachers' competence on the use of audio visual and electronic resources?

4. What are the problems of using audio visuals and electronic resources to teach fine and applied arts?

1.5 Scope of the Study

This study focused on availability and usage of modern instructional materials in Federal College of Education, Zaria, Kaduna State, College of Education, Gidan Waya; Federal College of Education, Pankshin and College of Education, Gindiri. Only Fine and Applied Arts Departments will be considered, and both teachers and students will be involved.

1.6 Significance of the Study

The findings of this study will be very useful to the proprietors, teachers and students in the Colleges of Education in the sense that where such contemporary instructional materials are lacking, they will be provided so as to enhance effective teaching and learning. The teachers also will benefit greatly from the findings and recommendations of the study because where

such contemporary instructional materials are not available, it will affect teaching and learning. Students stand as great beneficiaries to this study since the availability and effective use of contemporary instructional materials can make them better understand what they are being taught. The ministry of Education can also benefit from this study if they implement recommendations made by the researcher as this will greatly promote teaching and learning in schools.

1.7 Operational Definition of Terms

- Availability: Means where something is present or ready for immediate use.

- Usage: Refers to the acting amount or mode of using a tool, equipment, etc.
- Contemporary: - This means happening or existing now or at the particular time one is referring to. The researcher wants to use the time space of the 1990's to date. It from this period that Nigeria started witnessing the importation of these new instructional materials in our educational system.
- Instructional Materials: - In this study instructional materials refer to materials used by the teachers to aid in teaching successfully and efficiently. They are those materials that help the teacher to teach with ease and the learners to learn without stress. They appeal to the senses of seeing, touching, smelling, feeling and hearing. Instructional materials are also referred to as teaching aids and sometimes as audio-visual aids. Examples of instructional materials include:- pictures, charts, diagrams, globes, models, flannel boards, radio, record player, tape recorders, television sets, slides and film strips, cameras, projectors, computers, etc.
- Adobe Photoshop: - It is a software used in graphic art for editing of pictures.
- Cinematography: - often shortened to cine', is that branch of photography which deals with motion pictures whether made by professionals or amateurs. It is concerned therefore with the design, development, and production of all motion film material and the

equipment used with it.

- Digital Tablet: - Is a small phone like computer designed mostly in square forms. A smaller version of an i-pad which uses devices such as sim cards and modems.
- Flannel Board: - A board with soft twilled wool with a loosed texture and a slightly napped surface used to mount printed or drawn diagrams.
- Hardware: - Is a colloquial term applied to manufactured pieces of audio - visual equipment such as radios, recorders, record players, cameras, computers, Television sets, projectors, etc.
- Instant Artist: - Is a software which contains different designs used by artists in producing their works.

1.8 Theoretical Framework

The role of audio visual or use of television graphics could best be explained by the social cognitive theory. The theory is of the postulation that people learn thorough observation and mass media, especially through the television which is all about observation. Baran (2002) on social cognitive theory argues that: "People model (copy) the behaviours they see and that modeling happens in two ways. The first is imitation, the direct replication of an observed behavior. The second form of modeling is identification, a special form of imitation in which observers do not copy exactly what they have seen but make a more generalized but related response.

This theory supports the fact that the use of audio visuals is another way of stimulating learning among children and other younger folks. The research agrees with this theory because the effective use of electronic materials and electronic resources have been discovered by many art educators to help remote, sustain learning and even motivate creativity in students.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.0 Introduction

The literature concentrates on relevant materials from government policy reports on Colleges of Education, professional organizations reports, unpublished theses. Books, journals, and newspapers. Literature review according to Osuala (2007) serves as an overview of works that have been done on the chosen research field which serves two purposes, One, set the theoretical base for the research, and secondly, to put the current research in the right perspective.

In this review, consistency with both purpose and research questions were sought by the following sequence:

i. The concept of Art, Fine Art

ii. The concept of Instructional materials,

iii. Types of contemporary instructional materials

iv. Provision of contemporary instructional materials in schools

v. The effects on the use of contemporary instructional materials on students

vi. Challenges on the use of contemporary instructional materials in Nigerian schools

vii. Preservation of instructional materials

viii. Empirical review

ix. Summary of the chapter.

2.1. The concept of Art and Fine Art

Ogumor (2007) says art generally is a way of life. Its is the power of doing anything. It means any skills, trade, craft or acquired expertise. Technically it is the study and creation of things informs, texture, lines and colour which gives pleasure to the mind and satisfies our sense of beauty.

Manot (2013) defines Art as the product or process of deliberately arranging items (often with symbolic significance) in a way that influence and affect ones o more of the

senses, emotion and intellect. It encompasses a driver's range of human activities, creations and modes of expression. This includes music, literature, film, photography, sculpture, ceramics, textiles and painting. The meaning of art is explored in a branch of philosophy in own as aesthetics. Whereas disciplines such as anthropology, sociology analyze its relationship with human and generations. Traditionally, the term art was used to refer to any skill or mastery. This conception changed during the romantic period when art came to be seen as a special faculty of the human mind to be classified with religion and science. Generally, art is made with the intention of stimulating thoughts and emotions.

Banjoko (2009) says giving a definition of what art means in a single sentence or statement could be very difficult. Such a definition may not be embracing enough to represent all what Art stands for. Art is a very wide human activity involving some skills. It is imaginative creative and aesthetic in nature. One uncontroversial thing about art is that it affects every aspect of man's life. The author further outlined some definitions of art.

- Art is a general name given to all skillful activities.
- Art is a means of self expression of inner feelings or ideas about things, people and the environment in general.
- Art is the visual and non-visual representation of human thought.
- Art is the act of making skillful use of materials to produce things for human use and pleasure
- Art is the skill of doing something which is not taught by nature.
- Art is a universal language of expressive
- Art is a subject that studies human beings in their environments together with their culture, how they communicate within the culture, the agree of their appreciation for the works of art and preservation of their culture.

The researcher in a summary of all the definitions given by these authors puts it that art can be said to be a universal language of self expression of man in his cultural and natural environment through the use of some materials, skills and techniques to produce various works of self satisfaction, utility and beauty or aesthetics.

Fine Art: This refers t o an art work whose visual products serve decorative purposes. Fine Art appeals to aesthetic and emotional sense and it is the language of feeling. It includes drawing, painting, sculpture and architecture. (Banjoko, 2009).

Manot (2013) states that the word fine art has to do with appreciation of the beautiful, and we use it to describe that branch of art which has no other function than the appeal it makes to man's sense of beauty and higher emotion. Painting, sculpture and music belong to this branch of art. The distinguish bring characteristic which we can observe in the fine arts is that they express themselves to man's emotions, that they spring from his impulse rather than from his intellect. Here we see paintings and sculptures as a form of emotional expression: a language of teachings.

Art Teaching in Schools and Colleges

Furedi (2009) expressed that the arts are central to the idea of education being about inculcating a love of learning, of acquiring knowledge. It is no accident that the arts are traditionally connected with the idea of being educated. Hence an educated person is assumed to be interested in the arts.

Art is taught in most secondary schools in Nigeria and is referred to as creative Art at the Junior Secondary Schools. It is also made compulsory in most schools because of the import art role if plays and how it is related to other subjects taught at the secondary school level. A student needs some bases knowledge of art to be able to draw diagrams in biology, agricultural science, geography, chemistry etc. While at the senior secondary school, the teaching of art becomes elective. Only students who have interest and some talent or skills would want to study art at the senior secondary school. This is because at this section art has become a little more

advanced. It is now beyond drawing alone but includes painting, graphic design, textile design, art history sculpture etc. At this level, art is referred for as visual art. Art teaching at the Colleges of Education in Nigeria that are not technical have departments of Fine and Applied Arts, where art courses like Art for Junior, Art Education, Art history, painting, sculpture, graphic design, textile design, drawing and ceramic.

Students are exposed to all these subject areas during their first two years, that is NCE I and II and are made to choose a combination of any two subject areas of their choice (based) on their performance during their final year. Examples of such selection could be painting/sculpture, graphics/textile design, ceramic/sculpture, etc.

2.2 The concept of instructional materials

Instructional materials are those materials the teacher uses to help him teach effectively and make the students understand the lesson clearer. They include projected, none projected, printed and others such as 3-dimentional objects that are produced through locally sourced materials, program instruction, instruction package among others. Examples Corel draw, M.S Word, Power Point, etc. Farrant (1980) and (Olorukooba (2010) state that instructional materials, which are also referred to as audio - visual aids (AVA), are aids in teaching and learning that communicate through the ear or the eye. They also stressed that the use of instructional materials help to save the teacher's time of long explanation and give students quick understanding. Examples of instructional materials include flannel boards, maps, globes, models, charts, diagrams, posters, television sets, radio sets, record players, tape recorders, e.t.c and devices like projectors, cameras, video recorders, e.t.c

Natoli (2011) states that instructional materials are also referred to as Audio Visual (AV or A/V), which comprise works with both a sound and a visual component, the production or use of such works or equipment used to create and present such works. Slide tape presentation, film and television program are examples of audio visual presentations. Bassey (2002) describes instructional media as system components that may be used as parts of instructional processes

which are used to disseminate information, message and ideas or making difficult concepts understood easily. Teaching and learning materials refer to media/devices used in a teaching learning situation for the purpose of promoting easy understanding of arts topics. Tijani (2007) reports that the use of instructional materials significantly improve the academic performance and creative thinking of subjects studied. The researcher here sees from the concepts of instructional materials that can either be audio visual or seen in the form of electronic resources which may either use batteries or electricity. The others are diagrams and pictures or illustrations. All these resource materials greatly enhance teaching and learning.

2.3 Types of contemporary instructional materials.

Contemporary instructional materials can be classified into two major types. The teaching aids like charts, models, posters, maps, globes, and instructional devices which are also called presentation equipment. This includes projector, tape recorders, video cameras etc

Graham (2011) outlines a list of some contemporary instructional presentation equipment to include the following:

i. LCD projectors: There is a range of them with a wide choice of specifications. One can choose a projector based on the capacity of lighting he requires, the clearness of the image, resolution, zooming power and much more.

ii. Overhead Projectors: An overhead projector is very basic but is one of the most reliable projectors which are widely used today. This projector displays an image with a much larger proportion onto a screen or onto any white surface making it possible for the audience to view from a distance. The prime function of the projector is to enlarge images for easy viewing by the participants, audience or students. These images are made on transparencies.

Televisions and videos are an important part of Audio Visual Presentation equipment. They are available in a wide range built in DVD players.

iii. AV Tollers: AV Trollers are required for overhead projectors, television and any

other equipment

iv. Other Presentation Equipment: these include microphones, CD, Radio, Cassette player, remote controls, pointers, conference kits and much more.

v. Computer Based Displays: Computer based displays are also commonly used for visual presentations. These can be on the laptop and presented via data projectors. Computer based presentations are more professional and modern. They are more modern and advanced than slides that were used in the past; making a smooth transition. These instructional materials can be enhanced with the use of sounds and videos.

Baird, (2011) lists the following as types of instructional materials: Posters, slide shows, models, videos, presentation software, hand notes and transparencies.

2.2.1 Types of audiovisual aids used in teaching

i. Training Aids: Usually instructors will use training aids such as instructional videos, to help students understand a particular subject or idea. DVDs or videotapes cover an assortment of topics, allowing the teacher to select premade material to enhance subject. Training aids can be played on an MP3 player, laptop, TV or CD.

ii. Presentation Slide: Teachers create their own presentation slides to add personality to lesson. They can use graphics, music, photos and charts as needed for each component of a topic. Computer programs that create slide include Microsoft PowerPoint, Google Presentation, Adobe Publisher and Apple Keynote.

iii. Digital Projectors: Digital projector allows instructors to display 3 - D images large enough for the audience to view and to demonstrate material or stimulate assembly of components for a particular project.

iv. Audio Recordings: Instructors who want to include a speech or lecture from an authoritarian source use audio recordings to supplement class discussion.

vi. Multimedia: Multimedia combines elements from a variety of audio visual aids, allowing a teacher to use his own materials with others. Multimedia may use websites. Slideshows, computer -based training courses and TV in one teaching session. Multimedia offers an arrangement of communication tools for an audience that may include several learning styles.

vii. Types of multimedia devices

2.4 The role of contemporary instructional materials.

Instructional materials are very essential for teaching the art based courses because a high percentage of what we learn in the arts are abstract contents and are better explained through the use of instructional materials. Yusuf (2009) states that the use of instructional materials also helps to introduce to the class objects that cannot be physically brought to the class e.g. air plane as an example or objects that are too tiny to see or observe their function with naked eyes. The role of visual aid is to move a presentation from basic information to a complete package that brings the information to life through colours, exciting examples and activities, movement and visual images that make the presentation memorable.

i. Support Different Learning Styles: People learn in a variety of different ways. Only a part of what we learn and retain is taken in through our hearing. Visual aids support different learning styles by matching the verbal presentation of the message with images (visual learners). Charts and graphics that facilitates questions and answers (audio learners) and hands on activities that encourages audience/students participation (tactile). A worksheet to encourage member of audience to take notes is an example of a visual aid that serves the role of addressing different learning subjects.

ii. Bringing Diversity Among the Students: Students come to a presentation with diverse backgrounds in experience and personal knowledge. Visual aids help to ensure that everyone has the same background information that informs the

premise of your presentation. In other words, never assume that every student knows what they need to know to be at the same starting point for your presentation. Also, never assume they all share the same values or opinions. Visual aids can help bridge the differences among your students so that they start with a common foundation of background knowledge.

iii. Encouragement of students Participation - Visual aids serve as an encouragement to students participation. Visual aids help the audience or students to emphasize with the materials in the form engaging note taking, partner or small group discussion, questions and answers or some problem - solving activities. The role of visual aids in this case is to take the focus of attention off the presenter and place it on the content of the message. This is very effective way to ensure that your message is more completely understood and retained longer.

iv. Comprehension and Retention -There arc many reasons why people may not fully understand what is being spoken during a presentation. This is because they may have short attention span and their minds may wonder off to another subject, they may not hear everything that is being said, noise interferences may be a barrier to their comprehension. Visual aids help clarify and reinforce the spoken message. The combination of hearing and seeing the message more than doubles comprehension and relation.

v. Auditory Learners and Aids: Auditory learners focus more on the word rather than the written expression. Tape recordings of lectures or movies are highly helpful to auditory learners because they pick up on speech nuances such as lone and pinch, Computer with speech - recognition devices will also help auditory learners to process and retain information better than just reading from a textbook. Students with hearing disabilities will also benefit from teachers who use microphone while lecturing.

vi. Visual learners and Aids: Slide projectors have given way to power point presentations in the modern classroom, but the concept is the same. Visual learners understand meaning through graphics portrayals such as charts, illustrations and diagrams. Teachers that take time to compose or find visual supplements to accompany their lectures help greatly in augmenting learning potentials. The old adage that ' a picture is worth a thousand words' is true, especially in today's image submerged society.

vii. Movie Clips: Incorporating a YouTube movement or any other instructional video chip into a lesson plan can greatly increase understanding as well as enjoyment during the learning process. If an interactive white board with internet capabilities is not available, many video clips from the web can be downloaded embedded in a power point presentation for classroom purpose. Be sure to prepare students before watching the clip by telling them what to expect and then following up with discussion questions that is related to the lesson.

viii. Special Education Students - Students with special needs often require information to be presented to them in several different formats before they can adequately understand a concept or process information. Playing a book on tape while simultaneously reading together in class is a good way to reinforce materials. Videos that deal with the targeted subject matters can be shown afterwards to further augment learning.

A similar view as explained by Stephen (2011) states that in 1983, Psychological Howard Gardner identified seven intelligences. Among these was spatial (visual) intelligence, the tendency to learn through images. Individuals who are generally spatial learners have propensity to think in pictures or with art related vocabulary, such as colour, space and texture. The primary role of visual aids is to effectively integrate auditory and visual information. The best visual aids reinforce rather than repeat what is spoken.

According to visual auditory and kinesthetic learners' approximately 40 percent of students have better recall of information if it is presented with pictures or other visual aids or prompts. Because so many people are visual learners, it stands to reason that the use of visual aids is an important mechanism.

Stephen (2011) outlines other key roles of instructional materials. They include:

i. Memory Retention - The office of training and education of the U.S Occasional safety and Health Administration has reported that psychologist and educators have found that the use of visual aids led to a retention of information rate three days after a meeting or other training event that was six times greater than when information is presented by the spoken words. Visual aids allow the speakers to use verbal and non-verbal communication to solidify the message and provide a point of reference for the mind.

ii. Attention Span - Everyone has a limited attention span. Once this capacity is spent, the mind will decrease its ability to retain information and listen effectively. Using visual aids refreshes the mind and engages it in a different way, renewing the attention span. Visual aids keep the mind entertained and therefore sharp and ready to receive information.

iii. Organization of Communication - visual aids also plays the role of organizing communication, making it easier to remember points of a speech or presentation helps the mind to separate message into smaller chunks of information. The visual aids also create a point of reference for the mind to quickly refer to when attempting to retrieve information. For example the use of icons or labels helps triggers messages in the mind. When you see the logo of a popular restaurant on a highway, your mouth may begin to water because it represents eating a meal

iv. Comprehension - Not everyone understands concepts and information at the same rate. Some people can understand messages quickly while others need help to grasp

what is being said. Instructional materials are a way of

v. further explanation. If some people are more visual than audio learners, the visual aids may be necessary for comprehension. Visual aids create repetition and the more repetition in communication, the greater the chances that your audience will understand and remember effectively.

vi. Create a Focal Point - Visual aid helps a speaker to stay on track. If there is one central visual aid that the speaker can use, then the speaker's thought and the student's attention will stay on course. There's nothing worse than listening to a speaker who rambles and lose the audience. Visual aids assist in avoiding such a scenario. The researcher believes that the use of visual aids help to reduce the teacher's talking and make the students grasp what he wants them to understand easily. Therefore, the role of instructional materials as discussed above are very relevant and teachers should cultivate the habit of effective use of such if available or they should learn to improvise them whenever they are not available

2.5 Provision of contemporary instructional materials in schools

In recent times Nigeria's population has risen to over 160 million people. With this population growth the government and private bodies have to build more schools to meet up the high demand of young Nigerians seeking for education. Mbahi (2001) confirms that art education is faced with inadequate resources, poor accommodation and shortage of qualified teachers at all levels of education. In support of this view, Mamza (2008) averts that most schools across the nation lack instructional materials and other facilities for effective teaching of art and to him unavailability of these materials and facilities will make art teachers exercise in futility since no one can learn painting by reading about it alone, Mbahi (2001) further observes that kitchens, toilets are converted into art classes in some schools in the country. According to him, an ideal art - room is where there is a large space with large tables, adequate storage facilities, materials and space for projects storage, etc.

Most schools in the country lack art facilities for effective teaching of art. Such facilities include classrooms and studios, work space, equipment, supply of consumable materials, etc. Where these facilities are not available, the teachers use methods which were not capable of generating and sustaining enough interest in art by the students. (Wangboje, 1995) and Mamza (2008). Therefore, the teaching of art is best done where these materials and facilities are provided in adequate quantity. Without adequate instructional materials and facilities in our schools the arts cannot play their role in nation building. Mamza (2008) further adverts that all these problems came into being because of poor funding of schools. It would perhaps be easy to overstress the importance of financial considerations in the development of education in schools. In any case, policy makers should see art as an important subject in the school curriculum and provide adequate facilities for teaching the subject.

In support of the above mentioned views, many artists and art educators (Wangboje 1995, Mbahi, 2000, Oguibe 2004, and Mamza 2008) feel that lack of materials, qualified art teachers, redundancies in our curriculum are problems facing the effective teaching and learning of art education in schools today. This also affect the implementation and innovation in art. They also reported that most institutions teaching the subject lack studios, lecture rooms and other facilities for teaching and learning the subject.

Researchers such as Ogunleye (2003), Okonkwo (2000), Mkpanang (2005) report that there are inadequate resources for the teaching of science and art courses in most schools in Nigeria .They further state that where there are some resources at all, they are not enough to go round those who need them. Hence there is need for improvisation. The researcher agrees with the fact that the provision of resource materials for art teaching is very necessary. This is because the role they play is paramount in teaching and learning tart.

2.6 The effects on the use of contemporary instructional materials on students

Today the world expects more of visual than audio. Many decades ago visual equipment

were not very well known. Television, computers, films now play a vital role in every persons daily lives. Graham (2011) states that the use of audio visual aids strengthens an instructor's verbal presentation while helping his students capture a specific message. Audio visual aids keep an audience's attention throughout a presentation and help them remember particular information. If teachers use simple, efficient instructional materials, they will enhance their teaching and students understanding.

Lin (2011) remarks that the use of audio visual technology has an important role to play in the modern classroom, but teachers who rely too much on technology may actually inhibit students learning. It's the law of diminishing returns; you can only get useful enjoyment and assistance from a machine. The author made this statement to mean that an individual can get the maximum information needed from the machine if he can effectively manipulate it. The personal relationships between teachers and students are ultimately more valuable and rewarding in a brick and mortar classroom environment.

Improving the quality of education and training is a critical issue, particularly at a time of educational expansion. Modern technologies and the use of contemporary instructional materials can enhance the quality of education in several ways, by increasing student's motivation and engagement, by facilitating the acquisition of basic skills and by enhancing teachers training (Wadi and Sonia, 2002).

Higher education institutions across the world have been adopting contemporary teaching and learning technologies in an effort to create an environment for both students and their instructors to engage in collaborative learning and gain access to information. Access to the use of these contemporary instructional materials increases the information accessibility of students to support them in trying new strategies thinking and creativity that are reflective in practice aimed at engaging them to new innovation through the use of such materials (Ololube, 2006).

2.7 Problems of the use of contemporary instructional materials in schools

Some challenges on the use of contemporary instructional materials in Nigerian Tertiary

Institutions have been broadly grouped into four categories by Olawaranti, 2010) which include:

a. Inadequate infrastructure

b. Inadequate skilled man power

c. Resistance to change and

d. Inadequate findings

Tertiary institutions in Nigeria lack adequate modern technological infrastructures to effectively tap from the opportunities offered by the cyber space. Personal computers (PCs') are available in most Nigerian tertiary institutions, but they are not readily accessible to students because of the low computer (PCs) student ratio which is averagely put at about 1 to 40. In most cases, the basic software needed for practical works are not available, and where they are available, they are not accessible because of the low ratio. There is also, the lack of computer-aided instruction and other specialized software to support some areas of teaching and research. Internet connectivity is available in most tertiary institutions in Nigeria but on the whole the band width subscribed to is too small to support any meaningful academic activity during peak period. Other infrastructures like multimedia projectors are not readily available in many schools as well as interactive white boards and mobile devices are lacking.

Inadequate skilled manpower: Inadequate technical personnel are a major problem in Nigerian institutions. The reason for this can be ascribed to the lucrative job opportunity available for such professionals outside the academics. This situation has made many institutions to rely on private ventures to provide support for the few facilities available. Such services in most cases are commercial in nature and lack academic content.

Resistance to change- There is the concern of faculty members not willing to take the "bull" approach to teaching and learning. Rather, they stick to the traditional hard "approach". Report from OBCD (2000) gives reasons why facilities resist e-learning which include:-

i. That e-learning development, with its standardization aspects, might conflict with the professional culture of academics which is, based on autonomy and reward

system often based on research.

ii. Concern about intellectual property rights between faculty, institutions and technologies.

Funding - This is the major challenge confronting the acquisition and utilization of contemporary instructional materials in most tertiary schools. Institutions solely rely on their proprietors for funding and the bulk of such fund goes to servicing the overhead cost. Since no clear sustainable business model has yet emerged for commercial provision of e-learning and failures have been more numerous than success, (OBOD, 2000), institutions are not willing to invest the little fund available to them on e-learning project.

In a similar view, Onu (2011) lists the following as challenges being faced on the use of contemporary instructional materials. They include - educational policy and planning problems, infrastructure inadequacy, lack of capacity building, problem in the area of language and content, inadequate funding and lack of steady power supply.

If these challenges are not properly tackled by government, educational planners and all stakeholders in the field of education, then there will be no great benefits that can be tapped in these contemporary technological developments.

2.8 Contemporary instructional materials and development of creativity in art

The use of contemporary instructional materials in schools by the teachers in learning process has been observed by Wadi and Sonia (2002) as very important. They pointed out that it improves the quality of education and training, particularly at a time of educational expansion. They are of the view that it can enhance the quality of education in several ways: by increasing learner motivation and engagement by facilitating the acquisition of basic skills, and by enhancing teacher training.

These contemporary materials are also transformational tools which, when used appropriately, can promote the shift to a learner-centered environment. They summarized their view under three points.

1. Motivating to learn: The use of these contemporary instructional materials such as videos, television and multimedia computer software that combine text, sound and colourful moving images can be used to provide challenging and authentic content that will engage the student in the learning process and collaboration. Interactive radio likewise makes use of sound effects, songs, dramatizations, comic skills and other performance conventions to compel the students to listen and become involved in the lesson being delivered more than any type of instructional materials. Networked computers with internet connectivity can increase learner motivation as it combines the media richness and interactivity of other equipment with the opportunity to connect with real people and to participate in real world events.
2. Facilitating the acquisition of basic skills: The transmission of basic skills and creativity can be facilitated by the use of contemporary instructional materials through drill and practice. Educational television programmes such as "who wants to be a millionaire?", Nigeria's biggest thought provoking programme, enlightens people because of the questions that are required to be answered before the cash prize ,is awarded. Questions are drawn from all works of life ranging from religious, political, cultural, educational, social, to contemporary issues, thereby facilitating the acquisition of basic skills among learners. The constant use of these instructional materials especially the internet where several online activities like games, jigsaw puzzles, the face book and other online programmes properly help to drill the learners and increase their skills as well as the thinking or reasoning capacity which can greatly promote creativity.
3. Enhancing teacher training. The effective uses of contemporary materials have also been found to increase teachers training. Teachers who use these materials for their lesson presentation must train themselves on their use. They can present their

lectures by using the PowerPoint and other instructional materials which will help to maintain and sustain their learners' interest.

Isola (2010) correlated instructional material resources with academic achievements of students in ten subjects. Data were collected from the subject teachers in relation to the resources employed in the teaching. The achievements of students in W.A.S.C.E for the past five years were related to the resources available for teaching each of the subject and concluded that material resources have a significant effect on students' achievement in each of the subjects. The researcher found out that schools with adequate instructional materials performed better than those with inadequate instructional materials Furthermore, Ogbe (2002) states that Art education teachers have the responsibility of helping every student to develop his creative potential to the greatest level possible. The school also has an additional responsibility of identifying students who have high potential for success at task requiring creative abilities. They should be offered some assistance relating to this responsibility. He also observed that a high level of creative ability is generally accompanied by a high level of intellectual ability. However, high intelligence alone does not guarantee creativity to produce creative work. The child must also be stimulated to create nurtured and develop his talent. To add to this, Olejarz (1999)and Lanre (2006) state that the prospects of computer integration into the Fine Art curriculum are very timely.

> "Technology has provided artists with new tools throughout history. As new technologies become available, artists learn to use them as traditional means of expression are transformed or entirely new means of expression are developed" (Olejarz, 1999) in Lanre (2006).

Throughout history, advances in technology continue to provide artists with diverse means of expression. The tools of artistic expressions change as man's quest for high taste appreciates. Olejarz's position expressed the fact that though conventional methods of expression are relevant, they could be transformed for more development in the digital age. Some of the prospects of integrating computer into Fine Arts curriculum as pointed out by Olejarz (ibid) put computer as (i)

compact tool kit, (b) enhances creativity, (c) technology for storage, (d) enhances problem solving and critical thinking, and (e) reduces time and costs.

Computer as a compact tool kit: It is amazing to know that almost all the materials that are used by the artists could be readily found on the computer packages such as CorelDraw, Photoshop, and Paint etc. provide artists with a wide variety of art materials. It is also possible for the artist to have a mobile studio if he can afford an art-functional laptop, which he could carry around and work with anytime anywhere. Artists need not travel distances to acquire expensive materials because the can be improvised locally.

Computer enhances creativity: In a study by Egbedokun, (2004), it was found that computer assisted instruction enhanced the performance of students in creative design when compared with students exposed to the conventional method of teaching Fine Arts. Craft (2000) defines creativity as imaginative activity fashioned so as to produce outcomes that arc original and of value. Craft's definition combines the ability and the sensitivity of user with' his manipulative ability to compose ideas on the computer. The computer has no power of its own to improve creativity, it is the user who has the control, hence, the need for technical-know-how.

Computer enhances problem solving skill and critical thinking: Beamish and An, Lanre (2006) remark that one of the major aims in contemporary education is the development of problem solving and thinking skills among students. Artists need critical thinking to meet the demands of the society. Computer allows students reflect thoughtfully on ideas and knowledge they have acquired from a particular source and logically incorporate such ideas to make a whole.

Computer reduces time and costs: Cross (1976), Lanre (2006) posits that students who were exposed to computer assisted instruction spent less time in task completion when compared with students in the conventional classroom. This result was also supported by the findings of Egbedokun (2004) in a study that compared time spent by learners exposed to Computer Aided Instruction (CAI) and those in the conventional classroom. It was not achieved through magic, but was basically dependent on the fact that students need not wait for colour to ferment, boards to

stretch and other conventions ,it was made possible because those conventions have been digitized and thus, make achievement faster. This researcher agrees with these views and believes that computer enhances creativity in art learning.

2.9 Improvisations of instructional materials

To improvise means to produce or make do with something in the absence of the original or normal thing known. Improvisation has become very necessary in the field of teaching and learning. This is because it helps to sustain learning activities and over dependence. The most common excuses made by several teachers for not using instructional materials is that they are difficult to obtain and expensive to buy. Both of these objections can be surmounted if such teachers can improvise materials locally.

Balogun (2002) identified two main constraints militating against the successful improvisation of instructional equipment. These are the technical and the human factors respectively. While the technical factors relate to the issue of degree of accuracy and precision that is possible with the improvised equipment, the human factor relate to the teachers' skill in developing the resources towards providing the appropriate learning experience to the learners.

Also, Maduabunmi (2003) reports that lack of adequate training as a major problem militating against the effective use of local resources for teaching. Isola (2010) stresses that there is the need for a definite well planned training programme of improvisation for teachers. He suggested meaningful workshop on improvisation technique for teachers to improve and update their competence. Adeyanju (1994) on improvisation puts it that the art teacher can arrange 3 to 4 smaller tables together to have a large table for students to work on. He can also remove the large chalk board and turn it flat on the smaller tables so that the students can use the back for work space like textile printing, graphic work, clay work etc.

Teachers can improvise some basic instructional materials by sourcing for items that are available in their immediate environment to replace both those that are not available, scarce or very expensive. Examples can be, using a handset with camera and voice recording device in place

of a video camera and a tape recorder, a white wall or a piece of white cloth can be improvised for a projector stand, clay can be improvised in place of Plaster of Paris, a handset with Bluetooth with internet device can be used for recording and browsing to replace the internet and the computer, CDs with recent storage devices can contain volumes of information. For example, the Encarta which is a very big book can be narrowed down to a CD. The Bluetooth device has enabled students to download big textbooks, bibles of different versions into the handset from online or the internet. Through the use of the internet facilities on handsets, presently, students can browse, communicate, chat with their friends, teachers and search for information with regards to their studies.

Keith (2001) stated that the value of understanding the structure of the information in this case is that the teacher should make sure that the students have all the individual skills and competencies and then provide situations for the students to practice and perform their abilities to solve problems. Solving of problems require the students to improvise. Their understanding is a very active concept where they have to act their new knowledge in a flexible way. This requires putting new components together in novel ways, improvising for solutions Onasanya et al (2008) notes that improvisation demands adventure, creativity, curiosity and perseverance on the part of the teacher. This researcher adds that such skills are only realizable through well-planned training programme on improvisation.

2.10 Preservation of instructional materials

After purchasing or making of instructional materials, there is almost no limit to the forces which try to destroy them. Such forces include dust, damp, wind, rain, termites, borers, moths, high power voltage, and not to mention the frequent used by both the teachers and students. There is the need to protect all instructional materials especially the electrically operated ones, which are particularly susceptible to dust, damp and high electrical voltage.

Farrant (1980) and Olorukooba (2010) states that damp encourages the growth of mildew on paper and cloth and fungus on films and the lenses of cameras and projectors. Fungus

is more serious because it can completely ruin expensive equipment. Damp can also affect the insulation of the winding of transformers ad electric motors and bring about their destruction when they are used. Hence it is important to provide protection from damp for expensive pieces of equipment. They further explained that storage facilities should be provided for .storing instructional materials. Equipments like cameras, video cameras, projectors, laptops, computers, PowerPoint presentation package etc. should be cleaned up and put back into cases to protect them from dust and damp. Stabilizers should be used to regulate the current or voltage of electricity during presentation in lectures so as to protect such materials from being destroyed by high electricity voltage.

Data storage is getting cheaper and more space efficient. Disc density has nearly doubled every 15 months for the past five years while the cost per megabyte fell 52 percent every year during the same period. (Goldman, 2000).

Since instructional materials play significant roles in teaching and learning they should be properly handled by both the teacher and students and should be serviced from time to time to ensure their sustainability.

2.11 Empirical Studies

Some researchers have had related studies in various subject areas on the availability and usability of instructional materials. Duguryil, Duguryil and Katnyon (2003) carried out a research on the availability and level of ICT use as a resource in Science, Technology Mathematics (STM) instructional delivery. Their findings revealed that most Science Technology Mathematics teachers arc aware of ICT resource such as computer sets, television sets, and video cassettes. Resources such as the internet, www and computer soft ware programmes are not well known by the same science technology mathematics teachers in secondary schools. Nwosu (2003) discovers that only few computer software programmes (2CD - ROM) one for biology and another for physics exist in Nsukka urban area secondary schools. According to Domingo (2006), audio visual and electronic resources are credible tools in disseminating distance

education. Audio visual and electronic resources provide access to full range of learning and teaching and teaching internals. Mcharazo, (2006), King & Bill (2002) asserts that audio visual and electronic resources have enhanced distance education.

According to Adibe (2002) use of audio visual and electronic resources in distance learning is a landmark in its development. While Nwizu (2008) says the use of audio visual and electronic resources has broken the barriers of time, distance, and location, which impede the growth of formal education, just as Adeyemi (2004) emphasizes that students use these resources to complete major assignments. Adibe's work is on the use of audio visual and electronic resources, in distance learning and not on art education specifically. While Nwizu who also carried out a similar research in (2008) on the use of audio electronic resources the findings as reported has broken the barriers of time, distance, and location, which impede the growth of formal education. His research is generalized on formal education growth but this researcher is focusing on the availability and level of usage by audio electronic resources in some Colleges of Education.

Umeh (2013) did a research work on the availability and use of human and material resources in the teaching of ecology and genetics in Biology education in senior secondary schools in Anambra state. The researcher used the descriptive survey method with a sample population of 128 biology subjects. The research findings show that the biology teachers are qualified to teach the subject but they are not resourceful as they do not attend conferences and workshops. It also found out that most secondary schools lack well equipped biology laboratory and science equipment. The research work was focused on the use of instructional materials resources for teaching Ecology and genetically concepts and has less to do with fine arts which is the major area of focus in this research.

Cirfat Zumyil and Tongyura (2003) did a similar research on "An evaluation of the availability of resources for Biology teaching in secondary schools. The research used a survey method and covered 5 local government areas in Plateau state. The result shows that there are

few available resources not enough for students use in most schools. This research work has no reliability shown and is on biology as a subject while this research wants to find out what contemporary instructional materials are available in colleges of education and their level of usage.

The versatility and ease with which ICT applies itself as a teaching aids or resource helps makes it an indispensable tool for improved and efficient resource in art instructions. As a result. Different governments worldwide have made huge investments in computers, internet access, development and technological support (United States education report 2001), Despite this laudable advantage, Nigeria unfortunately is about two decades behind other developed nations in ICT use as it relates to educational instructional delivery.

In a study, Busari (2003) discovers a dismal performance of secondary school students on factors such as manpower, knowledge and use of computer aided instruction, and concluded that there is a low level of ICT awareness in most secondary institutions and colleges in Nigeria.

2.12 Summary of literature review and uniqueness of the study

Though the emerging technological tools offer new opportunities in education through expanding access to formal and informal education, in most countries, Nigeria inclusive, face significant challenges in harnessing their educational systems to promote broader economic and social development plans. Nevertheless, governments are articulating' broad vision of development of "information societies" in which widespread access to technology can nurture human capital, improve government services, promote culture and support economic growth. The contemporary technology is being targeted as a vehicle for this growth and social development. (Onu, 2011).

The challenge for moving educational systems forward, therefore, is to take advantage of the opportunities provided by these new technological advancements to support learning outside of schools while, at the same time incorporating contemporary practices and models from daily life in wider society into formal educational structure and processes. Exploring and realizing the

potential for these technologies help make schools more productive and efficient than they currently are, transform teaching and learning into an engaging and active process connected to real life, and prepare the current generation of young people for the future work place may be a key determinant of the future success (or failure) of such initiatives. (Onu. 2011).

What made this study unique, is that it covered four Fine and Applied Arts departments in four Colleges of Education, Two of the colleges are Federal Colleges while the other two are State Colleges. All the students in N.C.E II and III and all the art teachers in these colleges were involved. The researcher also developed a check list that was used for personal observation of what were there on ground. That helped in validating the findings of the study.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.0 INTRODUCTION

This Chapter deals basically with the research methodology of the study. This research has employed the use of descriptive research. The chapter has been discussed under the following sub-topics.

3.1 Research design

3.2 Population of the study

3.3 Sample size and Sample procedure

3.4 Instrument for data collection

3.5 Procedure of data collection

3.6 Data analysis techniques

3.1 Research Design

This research design adopted is descriptive. Descriptive research design consists of Case Survey and Comparative. This study has adopted the Survey method. It enhanced the researcher to have administered designed questionnaires to many respondents at the same time. It gave an accurate assessment of the characteristics of the population which included the students and Fine Art lecturers in the Departments of the Colleges of Education in Kaduna and Plateau states. To have arrived at an accurate and reliable result which were generalized, much effort was to be put in place by the researcher. The descriptive research design is mostly scientific in nature and deals with the observation and description of the behavior of a subject without influencing it in any way. The choice of using descriptive survey research design is in line with Olayiwola (2007) who asserts that descriptive research concerns itself with the collection and analysis of data for the purpose of describing, evaluating or comparing current or prevailing practices of events or occurrences. The author further states that descriptive survey research describes a given state of affairs at a particular time. He states that this method uses

questionnaires and/or interviews for the collection of data from the population based on appropriate sampling techniques.

3.2 Population and Sample

The population for the study comprised of students from the four Colleges of Education and the Fine Arts lecturers teaching the courses. The choice of NCE II and III was made because they have been exposed to Fine Arts for one and two years respectively and are more conversant with the learning materials available in their individual departments. They are also expected to have a better knowledge base of contemporary instructional materials in use in the institutions, than those in NCE 1.

Table 3.1 Sample for the study

3.1.1 Students

NAME OF COLLEGE	NCE II	NCE III	TOTAL NUMBER OF STUDENTS
Federal College of Education, Zaria, Kaduna state.	18	15	33
College of Education, Gidan Waya, Kaduna state.	21	25	46
Federal College of Education, Pankshin, Plateau state.	25	30	55
College of Education, Gindiri, Plateau state.	18	22	40
TOTAL	**82**	**92**	**174**

3.1.2 Lecturers

S/N	NAME OF COLLEGE	NO. OF LECTURERS	TOTAL NO. OF LECTURERS
1.	Federal College of Education, Zaria, Kaduna state.	12	12
2.	College of Education, Gidan Waya, Kaduna state.	10	10
3.	Federal College of Education, Pankshin, Plateau state.	14	14
4.	College of Education, Gindiri, Plateau state.	9	9
	TOTAL	**45**	**45**

3.3 Instrument for Data Collection

Three sets of questionnaires were used for the study. One set was for the students and titled Contemporary Instructional Materials Inventory Questionnaire (CIMIQ) while the other was for lecturers titled Art Teachers Inventory Questionnaire (ATIQ). Another instrument used for data collection was a checklist designed by the researcher. The check list was to help in the observation of all the contemporary instructional materials that were available or not as compared to responses given on the questionnaires by both the Fine and Applied Arts teachers and students.

Section A: This section deals with the personal data of the respondents. It covered seven items.

Section B: This section has twenty (20) items or questions to be answered by the respondents by ticking between two options for each question. This section is to ascertain the availability of contemporary instructional materials in the college.

Section C: This section consists of twenty (20) questions aimed at finding out the level of usage of the contemporary materials in the colleges where available and also six questions to find out the level of usage of software packages in the Fine Art Department of the Colleges where they were available.

Section D: This section consists of ten (10) questions. It was aimed at finding factors that inhibit the use of contemporary instructional materials in the College of Education under the study.

Validity

To ensure the validity of the instruments of this study, the researcher used the services of three experts in education to ascertain its validity. One of the experts specialized in research methodology, while the other two specialized in Art Education.

Pilot study

A pilot study was conducted at the College of Education, Akwanga, Nasarawa State with ninety five (95) questionnaires distributed. Forty (40) questionnaires for NCE II and III

students each while fifteen (15) for lecturers which were selected randomly this was carried out to test the instruments the researcher intended to use in the main research work.

3.5 Procedures for data collection

The researcher collected an official letter of introduction from his Head of Department of Fine Art in Ahmadu Bello University to all the Colleges of Education under this study soliciting their cooperation. The researcher visited all colleges and with the assistance of two lecturers in each school, distributed the questionnaires to all the research respondents, waited and collected them immediately. This procedure was followed until all the four Colleges of Education under the study were covered. A checklist was used to compare the responses made, to asserting if those items were truly on ground.

3.6 Data Analysis Techniques

Data obtained were analyzed using percentages and mean.

CHAPTER FOUR

DATA PRESENTATION, RESULT AND DISCUSSIONS

4.1 INTRODUCTION

This chapter presents the analysis of data generated. The results are interpreted, and findings are discussed.

4.2 Personal Bio-data of Fine and Applied Arts Teachers and Students.

A total number of forty five Fine and Applied Arts teachers from all the four colleges of education and one hundred and seventy four students were involved in the study. Where the variables were similar, they were compared along side on the tables for proper understanding. Such variables include Sex, Age, Academic Qualifications and teaching experience for the teachers.

Table 4.1 Bio-data of Respondents by their Gender

Gender	Teachers		Students	
	Frequency	%	Frequency	%
Male	28	62	141	81
Female	17	38	33	19
Total	45	100	174	100

The total number of teachers involved in the study were forty five. There were twenty eight male representing 62% while there were seventeen female representing 38%. There were one hundred and seventy four students out of which one hundred and forty one were male representing 81% and thirty three were female representing 19%.

Table 4.2: Ages of Respondents

Teachers			Students		
Age range	Freq	%	Age range	Freq	%
30-35 yrs	2	44	15-20 yrs	41	24
36-40yrs	22	48.8	21-25yrs	69	40
41-and above yrs	21	46.6	25 and above yrs	64	56
Total	45	100%		174	100%

Data in table 4.2.2 shows that teachers between age thirty to thirty five were only two which the presents 4.4% while those between age range of 36 yrs- 40yrs were twenty two representing 48.8% and those within the age range of land above years were twenty one, representing 46.6%. the students had forty one respondents within the age range of 15-20yrs representing 24% and sixty mine were within the age range of 21-25yrs which was 40% and those within the age range of 26 yrs and above were sixty four representing 36%.

Table 4.3 Teacher's Academic Qualifications

Academic Qualification	**Freq**	**%**
HND	2	4.4
BA, B.Ed	33	73.3
MA, MA. Ed	10	22.2
Ph.D, Prof	0	0
Total	45	100

Out of forty five fine and applied Arts teachers, only two had H.ND which represents 4.4% thirty three had first degree which represents 73.3% and ten of them had a second degree representing 22.2%.

Table 4.4: Teachers' Teaching Experience.

Teaching experience	**Freq**	**%**
2-5yrs	7	15.5
6-10yrs	13	28.5
11-20yrs	18	40
21 years and above	7	15.5
Total	45	100

Data in table 4.4 indicates that out of forty five teachers, seven of them have taught between 2-5 years representing 15.5% while thirteen of them have taught between 6-10 years which represents 28.8%, eighteen of them have taught between 11-20 years which represents 40% and seven of them had been teaching between 21 years and above which represents

15.5%.

Research Question One

What types of audio visual and electronic resources are available in the Colleges of Education?

To answer this research question, the frequencies of responses on the availability of audio visual and electronic resources were computed and presented in table 1.

Table 4.5: Types of contemporary instructional materials available.

N = 219

S/No	Item		(%)		(%) Not		(%)Available
		Freq.	Available	Freq.	available	Freq.	but not in use
1	Sets of computers	208	96	7	3.16	-	0
2	Video cameras	93	43	100	47	22	10
3	Digital cameras	80	37	137	63	-	-
4	Camcorders	69	32	148	68	-	-
5	Digital tablets		-	219	100	-	-
6	I-pad	49	23	167	77	-	-
7	Power point presentation package	99	46	89	41	28	13
8	Teaching machines	-	-	219	100	-	-
9	Magic boards	89	41	128	59	-	-
10	Over head projectors	80	37	109	50	29	13
11	Modems	108	50	109	50	-	-
12	Internet connection	99	46	98	45	20	9
13	Plastic, wooden or metal models	167	77	49	23	-	-
14	Open real projector	69	32	109	50	40	18
15	Multi-media devices	49	23	167	77	-	-
16	Television set	188	87	11	5	17	8
17	Computer printer	182	84	15	7	20	9
18	Flex machine for poster design	-	-	219	100	-	-
19	Projector white board	117	54	99	46	-	-
20	Head transfer machine	-	-	219	100	-	-

Data in table 4.5 on types of contemporary instructional materials available in the Colleges of Education covered, the prominent ones available include: computer sets with

frequency of 211 representing 96%, followed by television sets which stood at 87%, next was computer printers with 84%, closely followed by plastic, wooden and metals at 77%. Projector while board with 54%. Internet connection had 46%.

Instructional materials that were not available in the colleges are as follows; Teaching machine, flex machine, and heat transfer machine all had 100%. While i-pad and multi-media had 77%, camcorders had 68%, digital cameras had 63%, magic boards had 59%, open reel projector had 50%. Only a few instructional materials were available but not in use. These were internet connection, opened projector with 18%, television sets, computer printer had 8% and 9% respectively.

Table 4.6: Check list designed to compare the responses of respondents on the availability of instructional materials in Colleges of Education
N = 4

S/N	Item	Available in all Colleges Freq.	%	Available in some colleges Freq.	%	Not available in all colleges Fr eq.	%
1	Sets of computers	4	100	-	-	-	-
2	Video cameras	-	-	2	50	-	-
3	Digital cameras	-	-	3	75	-	-
4	Camcorders	-	-	2	50	-	-
5	Digital tablets	-	-	-	-	4	
6	I-pad	-	-	3	75	-	100
7	Power point presentation package	-	-	3	75	-	-
8	Teaching machines	-	-	-	-	4	100
9	Magic boards	-	-	-	-	4	100
10	Over head projectors	-	-	1	25	-	-
11	Modems	-	-	3	75	-	-
12	Internet connection	-	-	3	75	-	-
13	Plastic, wooden or metal models	4	100	-	-	-	-
14	Open real projector	-	-	1	25	-	-
15	Multi-media devices	-	-	3	75	-	-
16	Television set	4	100	-	-	-	-
17	Computer printer	4	100	-	-	-	-
18	Flex machine for poster design	-	-	-	-	4	100
19	Projector white board	-	-	3	75	-	-
20	Head transfer machine	-	-	-	-	4	100

From the check list above, in table 6 only sets of computers, computer printers, plastic, wooden and metal models, and television sets were available in all the colleges. Items like video cameras, digital cameras, camcorders, i-pad, power point presentation package, over head projectors, modems internet connections, open reel projector, multimedia devices, and projector white boards were found in some of the colleges. The following items were not seen or found in any of the colleges visited. They include digital tablets, teaching machine, magic boards, flex machines and heat transfer machine.

Research Question Two:

What is the adequacy and use of contemporary instructional materials in these colleges as perceived by fine and applied arts students?

Table 4.7: Adequacy and use of contemporary instructional materials

N = 174

S/N	Item	Very often		Often		Rarely		Never	
		Freq	%	Freq	%	Freq	%	Freq	%
1	Sets of computers	57	33	117	87	-	-	-	-
2	Video cameras	-		50	29	1000	57.4	24	14
3	Digital cameras	30	17.2	80	46	64	38	-	-
4	Camcorders	25	14.3	75	43	74	43.5	-	-
5	Digital tablets	-	-	-	-	130	75	44	25.2
6	I-pad	20	12	80	46	60	33.4	14	8
7	Power point presentation package	10	6	70	40.2	70	40.2	24	14
8	Teaching machines	-	-	-	-	-	-	174	100
9	Magic boards	-	-	-	-	-	-	174	100
10	Over head projectors	-	-	-	-	60	34.4	114	66
11	Modems	40	23	90	52	44	25.2	-	-
12	Internet connection	60	34.4	70	40.2	44	25.2	-	-
13	Plastic, wooden or metal models	70	40.2	90	52	14	8	-	-
14	Open real projector	10	6	10	6	92	53	62	36
15	Multi-media devices	15	1.2	20	12	100	57.4	39	22
16	Television set	70	40.2	90	52	14	8	-	-
17	Computer printer	60	34.4	95	55	19	11	-	-
18	Flex machine for poster design	-	-	-	-	-	-	174	100
19	Projector white board	50	29	100	57.4	24	14	-	-
20	Head transfer machine	-		-		-	-	174	100

Table 7 above contained the frequencies and percentages of use of instructional materials. Those instructional materials are very often used include; set of computers with 57%, wooden, plastic and metal models and television sets with 40%. While those often used include projector white board with 57%, computer printers at 55% followed by modems, plastic, wooden and metal models, and television sets all had 52%. Digital tablets were those items rarely used with 75%, followed by multimedia, and video cameras with 51%. Open reel projector had 52% flex machines and heat transfer machines with 100% overhead projector stood at 66%.

Research Question Three

Do the teachers know how to use modern audio visual and electronic resources?

To answer this research question frequencies of respondents were computed as well as their percentages.

Table 8: Teachers' knowledge on how to use modern audio visual and electronic resources.
N = 45

S/N	Item	Frequency	Yes (%)	Frequency	No (%)
1	Sets of computers	45	100	0	0
2	Video cameras	38	84	7	16
3	Digital cameras	45	100	-	0
4	Camcorders	45	100	-	0
5	Digital tablets	10	22	35	78
6	I-pad	40	89	5	11
7	Power point presentation package	30	67	15	33
8	Teaching machines	0	0	45	100
9	Magic boards	0	0	45	100
10	Over head projectors	20	44	25	56
11	Modems	45	100	0	0
12	Internet connection	40	89	5	11
13	Plastic, wooden or metal models	45	100	0	0
14	Open real projector	15	33	30	67
15	Multi-media devices	10	22	35	78
16	Television set	45	100	0	0
17	Computer printer	40	89	15	11
18	Flex machine for poster design	0	0	45	100
19	Projector white board	38	84	7	16
20	Head transfer machine	0	0	45	100

Data on table 8 shows that teachers can competently use computers, digital cameras, camcorders, modems, television sets and models which all show 100%. These are closely followed by their ability to use i-pad, computer printer and internet which have 89%. While their ability to use projector white board and video camera is 84%. For power point presentation package is 67%. They do not know how to use magic boards, flex machine and heat transfer machine which stood at 0%.

Research Question Four

What are the problems of using audio visual and electronic resources to teach Fine and Applied Art Courses?

To answer this research question the frequencies of responses made by the art teachers and students were analyzed and percentages were worked out for each problem in order of their magnitude.

Table 9: Problems of using audio visual and electronic resources.

N = 219

S/No	Problems	Freq.	(%)
1	Inadequate provision of Instructional Materials	210	96.14
2	Lack of skills/competence	199	92.05
3	Inadequate supply of electricity	195	89.58
4	Lack of internet connection	182	83.33
5	Lack of maintenance of instructional materials	173	79.16
6	Large class size compared to the few available instructional materials	167	77.08
7	Lecturers carry heavy work load	156	72.91
8	Lacking adequate storage facilities	153	70.83
9	Inadequate period for practical's	136	62.50
10	Poor attitude to work/lack of commitment	134	61.23

The data on table 9 above reveals that inadequate provision of contemporary instructional materials is the leading problem faced by Fine and Applied Arts Teachers and

Students in Colleges of Education, it has 96.14%. the next problem is that of lack of competence/skills with 92.05%. This is closely followed by inadequate supply of electricity with 89.33%. The next problem is the lack of internet connection which has 83.33% closely followed by the problem of lack of maintenance of instructional materials with 79.16%. The sixth problem is that of large class size as compared to the few available instructional materials which has 77.08%. This is closely followed by the problem of lecturers carrying heavy work load which has 72.91%. Lack of adequate storage facilities has 70.83, while the last two problems are inadequate period for practical with 62.50 and poor attitude of teachers to work/lack of commitment which has 61.23%.

4.4 Major Findings

The major findings of the study include:

i. There were no adequate modern instructional materials in Colleges of Education in Kaduna and Plateau States.

ii. The adequacy and use of such instructional materials for teaching Fine and Applied Arts was below average as the modern materials were not much available.

iii. Teachers competence on the use of modern instructional materials was more than that of student who largely depended on the colleges to provide.

iv. Problems art teachers and students face in the Colleges were many with regards to the use of audio visuals and electronic sources with the foremost as lack of availability of modern instructional materials.

4.5 Discussions

The objectives of the study was to survey the availability of contemporary instructional materials for teaching Fine and Applied Arts in Colleges of Education, in Kaduna and Plateau States. The study was also aimed at finding out the types of modern instructional materials available in the four Colleges of Education in Kaduna and Plateau states.

The first finding showed that there were no adequate modern instructional materials in

the colleges. This definitely will affect the smooth teaching and learning in the Fine and Applied Art. Applied Arts courses learners learn and retain things better when visual instructional materials are used.

The adequacy and use of such instructional materials for teaching was below average since they were not mostly available in the colleges. An individual would not be able to use any instructional materials when such materials are not in place.

The implication of these findings is that the art students who are being trained to become art teachers in primary and junior secondary schools might not be able to teach effectively if they do not know most of these contemporary instructional materials and how to use them. This agrees with Onuorah (2006) who is of the view that when learners are not properly taught they tend to have a poor foundation and this will in-turn affect their future performances in learning and passing on facts and knowledge to others.

Teachers' competence on use of modern instructional materials was more than that of students who largely depended on the Colleges to provide for them to use. This shows that most of the teachers have personal computers camcorders, digital cameras, i-pads, etc. and are always using them. Apart from that teachers have a wider opportunity to learn more than the students.

This problem constitute a great hindrance to both the art students and lecturers on the use of contemporary instructional materials. This finding is supported by Mamza (2008) who asserted that most Nigerian schools and Colleges lack adequate facilities for effective teaching of art. Such facilities include classrooms and studios, work space, equipment and materials. This is further supported by Mbahi (2001) who asserted that art education is faced with inadequate resources, like working materials, teaching aids and equipment, poor accommodation, shortage of qualified teachers at all levels of education and inadequate electricity supply.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter contains the summary, conclusion and recommendations.

5.1 Summary

This study was undertaken to find out the availability and use of contemporary instructional materials in teaching Fine and Applied Arts in Colleges of Education in Kaduna and Plateau States. Four research questions were raised to guide the study.

The other issues considered in the study included the background of the study, statement of the problem, research questions, significance of the study, aim and objectives of the study, scope of the study, operational definition of terms and theoretical frame work.

A review of related literature which includes the concepts of art and fine arts, art teaching in Colleges of Education, concept of instructional materials, types of contemporary instructional materials, provision of counterparty instructional materials in schools, the effects on the use of contemporary instructional materials on students, problems of using modern instructional materials, preservation of instructional materials, summary of literature review and uniqueness of the study.

The methodology which includes research design, population and sample, instrument for data collection and data analysis techniques was considered.

Data presentation, results and discussions were also considered, while Chapter five covered the summary, conclusion and recommendations by the study.

5.2 Conclusion based on findings

The following conclusions were made by the researcher which were based on the findings of the study.

i. Colleges of Education in Kaduna and Plateau States lack contemporary instructional materials. This can negatively affect the teaching and learning of Fine and Applied

Arts courses.

ii. There was no adequacy and use of instructional materials by both the Fine and Applied Arts teachers and students.

iii. Teachers' competence on the use of contemporary instructional materials was far above their students' level of competence. This might largely be due to teachers' level of exposure to these materials and experiences in using them.

iv. There were several problems art teachers and students face with regards to the use of contemporary instructional materials such problems include: lack of contemporary instructional materials, lack of skills and competence, inadequate supply of electricity, lack of internet connection, lack of maintenance of instructional materials, large class size compared to the few available instructional materials, etc.

5.3 Recommendations Based on Findings

Based on the findings of this study, the researcher made the flowing recommendations.

1. There is the need for all stake holders in the educational sector in this country to provide adequate modern instructional materials to all colleges of education. This will make Nigeria move alongside with other nations of the world that are technologically developed. This will also greatly promote teaching and learning of art in Colleges of Education.
2. Colleges of Education and Ministry of Education should always organize seminars, workshops to train teachers on the use of contemporary materials so that when such materials are supplied in schools they will not be difficult for the teachers to use and teach their students also.
3. Teachers should put in more effort to teacher their students how to use these contemporary instructional materials even if it means them bringing their personal ones or borrowing from other schools or places that have such materials.
4. The colleges should as a mater of urgency come to the aid of the fine and Applied Arts

by providing some solutions to some of the problems being faced by both art teachers and students. They can provide alternative source of light by using generators, connecting the department with internet, buying some of the basic contemporary instructional materials like power point presentation package, video cameras, digital cameras, etc.

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APPENDIX I

Department of Fine Arts,

Ahmadu Bello University,

Zaria.

16th January, 2013.

The provost,

Federal College of Education,

_____

Dear Sir,

PERMISSION TO ADMINISTER QUESTIONNAIRES IN THE FINE & APPLIED ART DEPARTMENT OF YOUR COLLEGE

I am a Post Graduate Student from the above institution carrying out a research. I will appreciate it if my request is granted to enable me collect data from your college.

Thanks for anticipating your positive response Sir.

Yours faithfully,

Dateba Malise Turba

APPENDIX II

Department of Fine Arts,

Ahmadu Bello University,

Zaria.

16th January, 2013.

The provost,

College of Education,

_____

Dear Sir,

PERMISSION TO ADMINISTER QUESTIONNAIRES IN THE FINE & APPLIED ART DEPARTMENT OF YOUR COLLEGE

I am a Post Graduate Student from the above institution carrying out a research. I will appreciate it if my request is granted to enable me collect data from your college.

Thanks for anticipating your positive response Sir.

Yours faithfully,

Dateba Malise Turba

APPENDIX III

ART STUDENTS INVENTORY QUESTIONNAIRE (AT1Q)

Dear Respondent,

1 am a post graduate student of Ahmadu Bello University, Zaria carrying out a research on" the availability and usage of contemporary instructional materials in Colleges of Education in Kaduna and Plateau States". Your honest responses will be highly appreciated as they will be useful to this study. Ail information given will be treated in confidentiality.

INSTRUCTIONS

SECTION A (PERSONAL DATA)

1. Name of Institution.....
2. Department.....
3. Level: NCE II ( ) NCE III ( )
4. Sex: Male ( ) Female ( )
5. Age: 17 - 25yrs ( ) 26 - 30yrs ( ) 31yrs and above ( )

SECTION B: To ascertain the availability of contemporary instructional materials in the Colleges.

Do you have the following instructional materials in your department?

1. Sets of computers Yes ( ) No ( )
2. Video cameras Yes ( ) No ( )
3. Digital cameras Yes ( ) No ( )
4. Camcorders Yes ( ) No ( )
5. Digital tablets Yes ( ) No ( )
6. I - pad Yes ( ) No ( )
7. Power point presentation package Yes ( ) No ( )
8. Teaching machines Yes ( ) No ( )
9. Magic boards Yes ( ) No ( )
10. Over head projectors Yes ( ) No ( )
11. Modems Yes ( ) No ( )
12. Internet connection Yes ( ) No ( )
13 plastic,wooden and metal model Yes ( ) No ( )
14. Open reel projector Yes ( ) No ( )

15. Multi-media devices Yes ( ) No ( )

16. Television set Yes ( ) No ( )

17. Computer printer Yes ( ) No ( )

18. Flex machine for poster design Yes ( ) No ( )

19. Projector white board Yes ( ) No ( )

20. Heat transfer machine Yes ( ) No ( )

SECTION C: How often do you use these instructional materials in your department?

1. Sets of computers

Very often ( ) Often ( ) Rarely ( ) Never ( )

2. Video cameras

Very often ( ) Often ( ) Rarely ( ) Never ( )

3. Digital cameras

Very often ( ) Often ( ) Rarely ( ) Never ( )

4. Camcorders

Very often ( ) Often ( ) Rarely ( ) Never ( )

5. Digital tables

Very often ( ) Often ( ) Rarely ( ) Never ( )

6. I-pad

Very often ( ) Often ( ) Rarely ( ) Never ( )

7. Power Point presentation

Very often ( ) Often ( ) Rarely ( ) Never ( )

8. Teaching machines

Very often ( ) Often ( ) Rarely ( ) Never ( )

9. Magic boards

10. Over head projectors

Very often ( ) Often ( ) Rarely ( ) Never ( )

11. Modems

Very often ( ) Often ( ) Rarely ( ) Never ( )

12. Internet connection

Very often ( ) Often ( ) Rarely ( ) Never ( )

13. Plastic, wooden or metal models

Very often ( ) Often ( ) Rarely ( ) Never ( )

14. Open reel projector

Very often ( ) Often ( ) Rarely ( ) Never ( )

15. Multi-media devices

Very often ( ) Often ( ) Rarely ( ) Never ( )

16. Television set

Very often ( ) Often ( ) Rarely ( ) Never ( )

17. Computer printer

Very often ( ) Often ( ) Rarely ( ) Never ( )

18. Flex machine for poster design

Very often ( ) Often ( ) Rarely ( ) Never ( )

19. Heat transfer machine

Very often ( ) Often ( ) Rarely ( ) Never ( )

20 Projector white board

Very often ( ) Often ( ) Rarely ( ) Never ( )

We often use the following software packages in our Department

1. Photoshop

Very often ( ) Often ( ) Rarely ( ) Never ( )

2. Instant artist

Very often ( ) Often ( ) Rarely ( ) Never ( )

3. Dream weaver

Very often ( ) Often ( ) Rarely ( ) Never ( )

4. Micro media

Very often ( ) Often ( ) Rarely ( ) Never ( )

5. CDs and flash drives

Very often ( ) Often ( ) Rarely ( ) Never ( )

6. Corel draw 8-15

Very often ( ) Often ( ) Rarely ( ) Never ( )

Section D: (To determine factors that hinder the effective use of contemporary instructional materials in these Colleges).

What are the factors that hinder your effective use of the above mentioned instructional materials?

1. Lack of skills/competencies required for the use
2. Lac of adequate storage facilities
3. Inadequate provision of such instructional materials
4. Inadequate supply of electricity
5. Large class size compared to the far available instructional materials
6. Lack of internet connections to the department
7. Inadequate period for practical lessons
8. Lecturers carry heavy teaching load
9. Lack of maintenance of these instructional materials
10. Poor attitude to work/lack of commitment

Kindly rank the following ten (10) pints in the order of which they are responsible/hider your usage of them as instructional materials.

1	Lack of skills/competencies required for the use of contemporary instructional materials.	
2	Lack of adequate storage facilities	
3	Inadequate provision of such instructional materials	
4	Inadequate supply of electricity	
5	Large class size compared to the far available instructional materials	
6	Lack of internet connections to the department	
7	Inadequate period for practical lessons	
8	Lecturers carry heavy teaching load	
9	Lack of maintenance of these instructional materials	
10	Poor attitude to work/lack of commitment	

APPENDIX IV

ART TEACHERS INVENTORY QUESTIONNAIRE (AT1Q)

Dear Respondent,

1 am a post graduate student of Ahmadu Bello University, Zaria carrying out a research on" the availability and usage of contemporary instructional materials in Colleges of Education in Kaduna and Plateau States". Your honest responses will be highly appreciated as they will be useful to this study. Ail information given will be treated in confidentiality.

INSTRUCTIONS

SECTION A (PERSONAL DATA)

1. Name of Institution.....
2. Department.....
3. Course taught.....
4. Sex: Male ( ) Female ( )
5. Age: 30 - 35yrs ( ) 36 - 40yrs ( ) 4yrs and above ( )
6. Academic qualification HND ( ) BA, B.Ed ( ) MA, MA.Ed ( ) Ph. D ( )
7. Teaching experiences: 1-5yrs ( ) 6-10yrs ( ) 11-1yrs ( ) 16-20yrs ( ) 21 and above ( )

SECTION B: To ascertain the availability of contemporary instructional materials in the Colleges.

Do you have the following instructional materials in your department?

1.	Sets of computers	Yes ( )	No ( )
2.	Video cameras	Yes ( )	No ( )
3.	Digital cameras	Yes ( )	No ( )
4.	Camcorders	Yes ( )	No ( )
5.	Digital tablets	Yes ( )	No ( )
6.	I - pad	Yes ( )	No ( )
7.	Power point presentation package	Yes ( )	No ( )
8.	Teaching machines	Yes ( )	No ( )
9.	Magic boards	Yes ( )	No ( )
10.	Over head projectors	Yes ( )	No ( )
11.	Modems	Yes ( )	No ( )
12.	Internet connection	Yes ( )	No ( )

13. Plaslic, wooden or metal models Yes ( ) No ( )
14. Open reel projector Yes ( ) No ( )
15. Multi-metia devices Yes ( ) No ( )
16. Television set Yes ( ) No ( )
17. Computer printer Yes ( ) No ( )
18. Flex machine for poster design Yes ( ) No ( )
19. Projector white board Yes ( ) No ( )
20. Heat transfer machine Yes ( ) No ( )

SECTION C: How often do you use these instructional materials in your department?

1. Sets of computers

Very often ( ) Often ( ) Rarely ( ) Never ( )

2. Video cameras

Very often ( ) Often ( ) Rarely ( ) Never ( )

3. Digital cameras

Very often ( ) Often ( ) Rarely ( ) Never ( )

4. Camcorders

Very often ( ) Often ( ) Rarely ( ) Never ( )

5. Digital tables

Very often ( ) Often ( ) Rarely ( ) Never ( )

6. I-pad

Very often ( ) Often ( ) Rarely ( ) Never ( )

7. Power Point presentation

Very often ( ) Often ( ) Rarely ( ) Never ( )

8. Teaching machines

Very often ( ) Often ( ) Rarely ( ) Never ( )

9. Magic boards
10. Over head projectors

Very often ( ) Often ( ) Rarely ( ) Never ( )

11. Modems

Very often ( ) Often ( ) Rarely ( ) Never ( )

12. Internet connection

Very often ( ) Often ( ) Rarely ( ) Never ( )

13. Plastic, wooden or metal models

Very often ( ) Often ( ) Rarely ( ) Never ( )

14. Open reel projector

Very often ( ) Often ( ) Rarely ( ) Never ( )

15. Multi-media devices

Very often ( ) Often ( ) Rarely ( ) Never ( )

16. Television set

Very often ( ) Often ( ) Rarely ( ) Never ( )

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Very often ( ) Often ( ) Rarely ( ) Never ( )

18. Flex machine for poster design

Very often ( ) Often ( ) Rarely ( ) Never ( )

19. Heat transfer machine

Very often ( ) Often ( ) Rarely ( ) Never ( )

20. Often (Projector white board Very often ( ) Often (

Very often ( ) Often ( ) Rarely ( ) Never ( )

We often use the following software packages in our Department

1. Photoshop

Very often ( ) Often ( ) Rarely ( ) Never ( )

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Very often ( ) Often ( ) Rarely ( ) Never ( )

3. Dream weaver

Very often ( ) Often ( ) Rarely ( ) Never ( )

4. Micro media

Very often ( ) Often ( ) Rarely ( ) Never ( )

5. CDs and flash drives

Very often ( ) Often ( ) Rarely ( ) Never ( )

6. Corel draw 8-15

Very often ( ) Often ( ) Rarely ( ) Never ( )

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6	Lack of internet connections to the department	
7	Inadequate period for practical lessons	
8	Lecturers carry heavy teaching load	
9	Lack of maintenance of these instructional materials	
10	Poor attitude to work/lack of commitment	