ASSESSMENT OF AVAILABILITY AND UTILIZATION OF ELECTRONIC MEDIA RESOURCES IN TEACHING ENGLISH LANGUAGE IN SENIOR SECONDARY SCHOOLS IN KADUNA STATE, NIGERIA

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A DISSERTATION SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES, AHMADU BELLO UNIVERSITY, ZARIA, IN PARTIAL FULFILLMENT OF THE REQUIRMENTS FOR THE AWARD OF MASTER DEGREE IN EDUCATION (CURRICULUM AND INSTRUCTION)

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DECLARATION

I hereby declare that the work in the dissertation entitled "Assessment of Availability and utilization of Electronic Media Resources in Teaching English Language in Senior Secondary Schools in Kaduna State, Nigeria" has been carried out by me in the Department of Educational Foundations and Curriculum. The information derived from the literature has been duly acknowledged in the text and list of references provided. No part of this dissertation was previously presented for another degree or diploma at this or any other Institution

_____ _____

Timinepre Joy ORUSENGHA Date

CERTIFICATION

This dissertation entitled ASSESSMENT OF AVAILABILITY AND UTILIZATION OF ELECTRONIC MEDIA RESOURCES IN TEACHING ENGLISH LANGUAGE IN SENIOR SECONDARY SCHOOLS IN KADUNA STATE, NIGERIA by TIMINEPRE JOY ORUSENGHA meets the regulations governing the award of the degree of Master in Education (Curriculum and Instruction) of the Ahmadu Bello University, and is approved for its contribution to knowledge and literary presentation.

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DEDICATION

This research work is dedicated to my son, Prince Fame Ozamonu Obundaa. Who went through so much discomfort for the sake of this research work. Son, may the almighty God always bless and keep you.

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ABSTRACT

The research was carried out to assess the availability, and utilization of electronic media resources in teaching and learning of English language in senior secondary schools in Kaduna State, Nigeria. The study was carried out with four objectives among which are to: examine the availability of electronic media resources used in teaching English language in senior secondary schools in Kaduna State; and identify the various types of electronic media resources used in teaching English language in senior secondary schools in Kaduna state. Four corresponding research questions were raised and answer while four null hypotheses were formulated and tested in the study. Relevant and related literatures were reviewed on the key variables of the study. The research adopted survey design the population of the study was 3895 comprising of 152 English language teachers and 3743 SS II students. A sample size of 350 were drawn from the population and used as respondents. Purposive and random sample techniques were adopted to draw the sample. Two sets of questionnaire were developed and administered on the two categories of respondent's teachers and students. These instruments were validated by the researcher's supervisors before it was pilot tested which showed a reliability values of 8.88 and 0.94 respectively. Data collected were analysed with SPSS version 20. The demographic characteristics of the respondents were analysed using frequency counts, percentages and mean response to answer the research questions. The hypotheses were tested using Chi-square at 0.05 level of significance. The findings of the study revealed that most of the required electronic media resources for the teaching and learning of English language were not available in the senior secondary schools Kaduna State. It was also found that the level of awareness of usage of available electronic media resources was very low. The study also revealed that most of the required electronic media resources for the teaching and learning English language were not available in the schools. In view of the findings from the study, it was concluded that there are no adequate supplies of various electronic media resources that can be used in the teaching of English language in secondary schools within the study area. The study recommended among others that ministry of education should as a matter of urgent importance provide necessary electronic media resources for the teaching and learning of English language in senior secondary schools in Kaduna state, Nigeria.

TABLE OF CONTENTS

Contents		Pages
Cover Page		i
Title Page		ii
Declaration		iii
Certification		iv
Dedication		v
Acknowledgements		vi
Abstract		viii
Table of Contents		x
List of Tables		xiii
List of Appendices		xiv
List of Abbreviations		xv
Operational Definition of Terms		xvi
CHAPTER ONE: INTRODUCTION		
1.1	Background to the Study	1
1.2	Statement of the Problem	3
1.3	Objectives of the Study	5
1.4	Research Questions	5
1.5	Research Hypotheses	5
1.6	Basic Assumptions	6
1.7	Significance of the Study	6
1.8	Scope of the Study	8
CHAPTER TWO:	**REVIEW OF RELATED LITERATURE**	
2.1	Introduction	10
2.2	Conceptual Framework	10
2.2.1	Concept of English Language	11

2.2.2 Concept of Electronic Media 13

2.2.3 Students' Performance in English Language 14

2.3 Theoretical Framework 16

2.4 English Language Curriculum for Senior Secondary Schools 20

2.5 Historical Background of Electronics media in teaching and learning 22

2.5.1 Types of Electronic Media 29

2.5.2 Sources of Electronic Resources 32

2.6 Utilization of electronic media in teaching and learning of English Language in Secondary Schools 36

2.6.1 Factors influencing utilization of electronic media in teaching 43

2.6.2 Teachers Electronic media usage 45

2.6.3 Types of Electronic media usage 46

2.7 Electronic media in teaching English language 48

2.7.1 Constraints of the use of electronic media in teaching and learning English language 55

2.7.2 Media and technology as cognitive tools 58

2.8 Empirical Studies 61

2.9 Summary 69

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction 70

3.2 Research Design 70

3.3 Population 70

3.4 Sample and Sampling Techniques 72

3.5 Instrumentation 73

3.5.1 Validity of the Instrument 73

3.5.2 Pilot Study 73

3.5.3 Reliability of the Instrument 74

3.6 Procedure for Data Collection 74

3.7 Procedures for Data Analysis 75

CHAPTER FOUR: RESULTS AND DISCUSSIONS

4.1 Introduction 76

4.2 Descriptive analysis of Respondents' Bio-data 76

4.3 Solutions to research questions 78

4.4 Test of hypotheses 86

4.5 Summary of major findings 89

4.6 Discussion of Findings 90

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction 93

5.2 Summary 93

5.3 Conclusion 95

5.4 Recommendations 95

5.5 Contribution to knowledge 96

5.6 Suggestions for further Research 97

References 98

Appendices 106

LIST OF TABLES

Table 1:	Population of the Study	71
Table 2:	Sample and Sampling Techniques	72
Table 3:	Frequency Distribution of Respondents by Gender	76
Table 4:	Frequency Distribution of Marital Status of the Respondents	77
Table 5:	Frequency Distribution of Respondents According to Age	77
Table 6:	Opinions of the respondents on the available electronic media for the teaching and learning of social studies in the colleges	79
Table 7:	Opinions of the respondents on the available electronic media for the teaching and learning of English language in senior secondary school	81
Table 8:	Opinions of the respondents on the extents of utilization of available electronic media for the teaching and learning of English Language in the senior secondary school	83
Table 9:	Opinions of the teachers and students awareness in the usage of the available electronic media resources for the teaching and learning of English language in the senior secondary school	85
Table 10:	Analysis of variance on available electronic media resources for the teaching and learning of English language	86
Table 11:	Analysis of variance on factors on the available electronic media resources for the teaching and learning of English language in senior secondary school	87
Table 12:	Two sample t-test on available electronic media for teaching and learning of social studies by status of respondents	88
Table 13:	One way analysis on the utilization of electronic media for the teaching and learning of English language in senior secondary schools	89

LIST OF APPENDICES

Appendix 1:	Introductory letter	106
Appendix II:	Availability of Electronic Media Resources for Teachers	108
Appendix III:	Result of the reliability test	114

LIST OF ABBREVIATIONS

CAI	-	Computer Assisted Instruction
CD ROM	-	Compact Disc Read Only Memory
CTMML	-	Cognitive Theory of Multi Media Learning
EFA:	-	Education for All
FME	-	Federal Ministry of Education
ICT	-	Information and Communication Technology
MDGs	-	Millennium Development Goals
NERDC	-	Nigerian Educational Research Development Council
UNDP	-	United Nations Development Programme

OPERATIONAL DEFINITION OF TERMS

Availability: It implies whether there is the presence of any form of electronic media resources that are physically present in the senior secondary school in the study area.

Awareness: To get acquainted or well informed with new ideas, skills or materials resources

Electronic Media Resources: All types of gadgets that can assist in the teaching and learning of English language, and are powered by electronic energy like electricity, solar energy or heat energy.

Utilization: The manner in which the teachers employ the usage of the available electronic media resources in classroom instruction.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Electronics media are considered as important instrument in modern world in facilitating quality instruction. The use of electronic media facilities has become a necessity for improving quality in teaching and learning in schools. Electronic media resources are indispensable and have been accepted as part of the contemporary world, especially in the advanced countries to the extent of given a new phase to the education system in terms of pedagogical approach (Okafor, 2009).The Federal Ministry of Education (FME, 2010) recognizes the prominent role of electronic media in the modern world and has integrated electronic media into education in Nigeria. It emphasis that at the secondary school, computer education is made a pre-vocational elective which is part of electronic media devices.

English language is not only Nigeria's official language and medium of international interaction but also the language of instruction and reference throughout the entire educational system. Thus, competence in English language assumes great importance for students as it directly affect the level of progress attainable irrespective of aptitude in their particular fields. Egbe (2009) posit that competence in English language is an essential pre-requisite for educational and career success. As an official language in Nigeria, English is used for all government transaction both oral and written and it is one of the languages in which information is stored and retrieved from electronic media, hence it is important that the English language is well taught in schools particularly at secondary schools level.

The advents of information and Communication technology in schools have resulted in the presence of electronic media in the English language classroom or

language laboratory. The effect of media resources can be experienced at all levels and forms of education. Educators, teachers and instructors are discovering that the instructional delivery process in using electronic media environment (classroom or English laboratory), is different from the traditional classroom; despite, the relevance of electronic media resource to instruction; teachers and resources to harness the potentials to teach English language effectively. However, there is serious concern over the level of awareness of use of electronic media devices to instruct students in English language. This is characterized by possibly socio-economic and teacher's ability.

Availability of electronic media resources in secondary school will help to effectively teach and learn the English language (Alex, 2012).The adequacy of those resources poses another serious concern while it is true that government has not done much direct intervention to make electronic media resources widely available in schools. There is no doubt that governments have of recent signified intention to intensify the use of instructional materials in secondary schools. But evidence obtained from literature has revealed that the level of availability and use of electronic media resources for teaching and learning in Kaduna state secondary school is an issue of worried. For instance few schools have English laboratory. The few secondary schools that have the laboratory, teacher's skilfulness is doubtful.

The level of utilization of the resources is also a serious concern to enhance student's performance in English language examination. Evidence abounds to justify that many students or candidates (during standardize examination) could not answer half of the questions, not because of time factor, but inability to confidently and independently attempt the English language question (Aremu, 2014). Also, students' performances in recent external examination (WAEC, NECO, NABTEB, 2013, 2014) have shown great concern over the poor performance of students in English language.

Similarly students' negative attitude towards the subject coupled with their poor academic achievement in the subject have also warranted discussion and seeking for relevant use of modern resources in class instruction. Having this media resource in schools is one thing, using it for instruction is another thing. The study is therefore an attempt to assess the availability and utilization of electronic media resources for teaching English language at senior secondary schools in Kaduna state.

1.2 Statement of the Problem

Spoken English as it is being taught at the Secondary Schools is hampered by the poor instructional materials and methods. These problems as perceived could be as a result of the teaching methods adopted on the part of the teachers which greatly affect the way learners comprehend the spoken aspect of English language. This has in turn led to students imbibing the wrong information and passing same to the general public during communication.

Evidence obtained from relevant literature had revealed that the level of availability and utilization of electronic media facilities for teaching and learning English language in educational institution is an issue of serious concern. For instance between 2012–2014, only six schools Barewa College Zaria, Science Secondary School Kufena, G.S.S Kagoro, Capital School Kaduna, Queen Amina School and Government Girls Science School Soba are found to have well equipped language laboratory in Kaduna state, (NBTE, 2014). The effort of government in the provision of electronic devices such as computers, radios, projectors, televisions, internet and other to serve as instructional materials is far from satisfactory to achieve meaningful teaching and learning of English language. In a situation where 80% of students in school are taught without adequate used of instructional materials to improve students' academic performance, especially in English language (Ayoji, 2013), where it is available, it is

usually in few quantity and quality and the utilization to the maximum teaching and learning process is a source of concern in schools today.

Despite the inherent advantages of these electronic resources in teaching and learning, the extent to which schools in Nigeria have benefited in attaining teaching English language effectively is yet to manifest (Sweeny, 2010). It is obvious; teachers depended mostly on textbooks and chalk board in teaching the subject as instructional materials, while other relevant instructional materials such as maps and charts, overhead projectors, televisions, computers, radios, television and pictures were neglected, perhaps, possibly due to their insufficiency in schools. These deplorable situations affect the strategies and methodology application in teaching English language.

Advances in technology has brought instructional materials especially electronic materials to the forefront as the most tools of globalization which have affected the classroom teaching/learning situation positively. New technological breakthrough such as Audio, Audio visual electronic materials are important landmark in knowledge transfer. With this facilities and equipments, teaching and learning English language became very pleasant experiences and less stressful. Notable problems could be poor quality of teachers in terms of qualification and competence based to make use of this modern technology (electronic media). It is important to remark that teachers' inability or shortfall to make use of technologies should not serve as an excuse to retard student's acquisition of this core subject (English language) at credit level in schools. The study therefore is to assess the availability and utilization of electronic media resources in teaching and learning English language in senior secondary schools in Kaduna state, Nigeria.

1.3 Objectives of the Study

The study is set to achieve the following objectives, to:

1. examine the availability of electronic media resources used in teaching English language in senior secondary schools in Kaduna state.
2. identify the various types of electronic media resources used in teaching English language in secondary schools in Kaduna State.
3. ascertain teachers and students level of awareness of the available electronic media resources in senior secondary school in Kaduna state.
4. investigate the extent of utilization of electronic media resources for the teaching of English language in senior secondary schools in Kaduna state.

1.4 Research Questions

The following research questions were formulated to guide the study:

1. What are the types of electronic media resources used in teaching English language in secondary schools in Kaduna State.
2. To what extent are the electronic media resources available for use in teaching and learning English language in senior secondary schools in Kaduna state?
3. To what extent are teachers and students aware of the electronic media resources available in senior secondary schools in Kaduna state?
4. To what extent do English language teachers utilize electronic media resources in the teaching of English language in senior secondary school in Kaduna state?

1.5 Research Hypotheses

The following null hypotheses were postulated to guide the study.

1: There is no significant difference on the types of electronic media resources for the teaching of English language in senior secondary school in Kaduna State.

2: There is no significant difference on electronic media resources available for the teaching of English language in Kaduna state

3: There is no significant difference in the awareness level of teachers and students on the availability of electronic media resources in senior secondary school in Kaduna state.

4: There is no significant difference on the teachers effective utilization of electronic media resources for the teaching and learning of English language in senior secondary school in Kaduna state.

1.6 Basic Assumptions

It is assumed that:

1. The availability of electronic media resources in schools will improve the quality of instruction of English language in senior secondary schools in Kaduna state.
2. That the awareness level of teachers and students is high on availability of electronic media resources in senior secondary schools in Kaduna state.
3. The level of proficiency of teachers in the utilization of electronic media resources definitely stimulate the interest of the learners as well as improve the way these resources are being used by the learners.

1.7 Significance of the Study

The use of electronic media resources in education as a form of technology in modern class instruction makes English class interactive and collaborative as teachers and learners are given the opportunity to explore idea and have knotty problem solved. However, despite several curricular modifications, aims at enhancing quality of instruction, electronic media resources seems to be more appealing in enhancing teaching and learning. For this reason, this study can be used to further aid effective

English language curriculum implementation through effective utilization of electronic media resources to facilitate learning. English language teachers can find some of the findings of the research useful, by understanding the impact of electronic media resources application in teaching and learning process. Teachers will be encouraged by the study to identify suitable areas that needed application of media and may detect their deficiencies and strengths in order to enhance the training of the teachers in their various institutions.

Curriculum planners of the various learning process can identify and incorporate most suitable media resources in English language curriculum for maximizing classroom instruction for students benefit. Students will also be motivated by the presence of electronic media resources in their classes to enhance their understanding of the lessons. Ministry of Educations, Kaduna state in particular can also benefit by ensuring availability and maintenance of the available media resources and also provide more to ensure quality instructions.

Educational bodies and associations particularly, Association of English Language of Nigeria (AELN) can benefit through identifying the needed electronic media resources in enhancing the subject, through continued call to government and other relevant agencies to assist in providing the needed electronic media resources to enhance teaching profession. Also, English language teachers Association of Nigeria (AELN) can benefit from the study through sensitizing members on the impact and usefulness of electronic media resources in classroom instruction and can also serve as "pressure group" to intimate the Ministry of Education in ensuring availability of these vital resources. Nigeria Educational Research Development Council (NERDC) and states Educational resource centers can benefit by considering the findings of the study in identifying and implementing for classroom instruction, various electronic media

devices to further enhance the teaching and learning of English language curriculum. As corporate bodies they can ensure adequate supply and maintenance of appropriate electronic media resources in schools. Publishers also will benefit by integrating media resources and concept of learning in teaching.

The finding from this study will enable teachers and students use appropriate electronic media tools in the teaching and learning spoken English language in schools respectively. Specially, some teachers who are reluctant to embrace this innovation in the use and knowledge of electronic media resources will see the need for it, if they want to ensure the success of their students academically. The data based documents will enable government plan to improve and upgrade the system by enforcing the training of teachers who are the electronic media facilitators. In addition, the study will serve as a guide to the management of senior secondary schools in Kaduna state, Nigeria to effectively use the data obtained from the data based document to know the electronic media resources available and the extent of its use for teaching and learning English language. Finally, the result of the study will serve as a guide and source of information for students and future researchers in the area and extent of electronic media resources availability and use in the teaching and learning of English language in senior secondary schools in Kaduna State, Nigeria.

1.8 Scope of the Study

The study assessed the availability and utilization of electronic media resources for teaching and learning of English language in senior secondary schools in Kaduna state, Nigeria. The study hopes to cover the basic electronic media resources such as audio and audio-visual, computers, in terms of the availability and utilization. Specifically, the study was delimited to English language teachers and students in both

private and public senior secondary schools (SSII) in Zaria and Sabon Gari Local Governments in Kaduna State.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter highlighted what some relevant authorities had written in relation to material resources and availability and utilization of electronic media devices in teaching English language in secondary schools in Kaduna State, Nigeria. The following sub- topics were reviewed: conceptual framework, concept of English language, concept of electronic media, students'-* performance in English language; theoretical framework, English language curriculum for senior secondary schools; methods of teaching English; historical background of electronic media in teaching and learning; types of electronic media; sources of electronic media resources; utilization of electronic media; factors influencing the use of electronic media resources in teaching English language; teachers electronic media usage; types of electronic media usage; electronic media in teaching; media in teaching and learning English language; constraints of the use of electronic media and technology as cognitive tools and empirical studies and summary.

2.2 Conceptual Framework

A conceptual framework according to William (2006), aimed at fulfilling the primary purpose of explaining the meaning, purpose, nature and challenges of a phenomenon often explained but unexplained in the world in which we live. The idea is to use that knowledge and understanding to act in more informed and effective ways from the foregoing. The study intends to conceptualize the theories of multimedia. These theories is based on the assumption that learners agents, purposefully seeking and constructing knowledge within the meaningful context using electronic devices.

The use of electronic device is a critical issue in teaching and learning process, particularly, at a set time of educational expansion and innovation to enhance the quality of classroom instructions in several ways. Electron media when used appropriate can enhance learners' motivation and engagement. It equally has the potential to promote the shift to a learner-centered environment.

2.2.1 Concept of English Language

The position of English language in our schools and society in general cannot be overemphasized. It is the language of government, business, education, commerce, mass media, literature and much of internal as well as international communication. English is used as medium of instruction from the third year of the primary school up to the university level.

Also, in Nigeria, English is the only effective medium of communication among Nigerians from different linguistic backgrounds. For instance, there is still a big problem about the number of different indigenous language in Nigeria. Some sources put the number at about two hundred and fifty (250), while others hold the view that there are about four hundred (400) different indigenous languages in Nigeria. Whatever, the fact remains, that Nigeria is a multilingual and multicultural country in need of neutral and unifying language for which English language fits the bill.

In view of this, it would have been impossible to have effective communication among the people since very few persons speak more than one of the acclaimed here major languages. That is Hausa, Igbo and Yoruba. In view of the multilingual nature of the country, English serves as the medium of social communication in the life of the educated Nigerians be it at weddings, receptions or any other social engagement and government functions.

Corder (2002) says that the objective of English language teaching is to turn out people who possess sufficient skills and knowledge of the target language for their needs. Broughton (2012) comment on the reason for teaching of English language in schools and the recognition of the fact that many students need English for specific and instrumental pusses. This led to the teaching of English for specific or special purposes and the proliferation of courses and materials designed to teach English for science, medicine, agriculture, engineering, tourism and so on.

Also, stressing the importance of English language in Nigeria, Adeyanju (2001) says English is a good candidate for a window on educational standards at secondary school level because it is one of the subjects that is obligatory or compulsory to all candidates. This in turn is because English is Nigeria's official language and therefore the medium of instruction at all levels. Adeyanju stresses that language and thought are very immediately interdependent. So much that no one really masters any subject beyond mere rote-learning without first mastering the language (registers jargons) of the subject. In order to think in the subject and to express ones knowledge of the subject in fluent, effective and appropriated language, a confident use of English is, therefore, a good indication of intellectual power or potential. This and several other reasons that could be adduced readily make English easily the most important subject on the time table.

Adedeji (2006, p.12) also notes that English language is a decisive factor in the students' success in the school as it is the medium of instruction. He further sates the goals of English language in secondary schools as:

i. to promote the art of spoken English as the medium for national and international communication;

ii. to maintain throughout the country, a high level of proficiency in the use of English language for both educational achievement and for jobs and;

iii. to stimulate the love for reading as pleasurable activity.

It should be equally understood that the motivation for learning English in Nigeria in present times is very strong. This point is admirably summarized in the report of the commonwealth conference on the teaching of English as a second language held in Uganda 1961. Miri (2009) says that English appears indispensable to modern living and our children must be given maximum encouragement and opportunity to learn it effectively in schools. He further establishes the fact that success in the language is the key to decent employment. Admission to post-primary institutions, including universities, depends on one's performance in English which is the medium of instruction from elementary school to the university.

2.2.2 Concept of Electronic Media

The Oxford Advanced Learner's Dictionary of Current English defined media as "the main means of communicating with large numbers of people, especially television, radio," Thus, all the ways, channels, tools and aids through which information, instruction, and/or knowledge could be conveyed to learners in typical language studies, can be seen as instructional media. Instruction media, therefore, are such things (electronic media devices) that can help the teacher to communicate effectively the needed knowledge or ideas to the students; such that at the end of such instruction, the student can be better influenced and skilfully enhanced. Nwanna (2003) puts it, "instructional media are those devices that are used to arouse students' learning." They are also called instructional aids, which brings life to learning. Wheeler (2001) stressed that electronic media permits students to understand and address complex problem in learning situation.

Nwanna-Nzewunwa (2010) saw electronic media as materials, equipment, and processes that utilize electronic technology to pass on information, knowledge and ideas to people living in society. For instance, radio, television, computers, e-mails, and projectors can be used by instructors to educate their students effectively. They are special types of instructional materials.

Awotua-Efebom (1999) reaffirm that the term instructional media would include any materials or equipment that a teacher can profitably use to facilitate teaching and learning by his students. The design, development, and art of producing such materials are a major concern of educational technology (Vikoo, 2003). Thus, educational technology has been viewed by Dike (1999) as "a systematic application of scientific or organized knowledge to identifying and analyzing educational problem, evolving and managing programme for solving these educational problems." Literarily, media that use electronics or electromechanical energy for the end user to access the content are called electronic media (Chiu, 2002). This kind of media are opposite with print media that end-user does not need to use electronics or electromechanical energy to access its concept. Electronic tools like Video recording, audio recording, multimedia presentation, slide presentation, CD-ROM, and online contents are the primary sources of electronic media that are familiar to the general public. Any equipment used in the electronic communication process for example, television, radio, telephone, desktop computer, game console, handheld device may also be considered as electronic media (Chiu, 2012).

2.2.3 Students' Performance in English Language

A high level of language proficiency is required from students in the rules of the language which enables them to speak and understand the language. The actual production of language in day-to-day situation is a matter of performance. It has been

observed that the performance of students in any field of study is an outcome of the evaluation of the classroom activities and other instructional techniques. In the same vein, student's performance in English language is determined by proper evaluation of the classroom activities. Mohammed (2013) says a matter of some concern is the current low performance of our students in West African School Examination Council (SSCE). Teachers of English are particularly disturbed by the poor performance in English language.

Banjo (2005) has observed that Nigerians students are not getting much out of English in terms of transfer of value or service function in other subject areas. In other words, they are performing poorly in school in general, due to partly inadequate mastery of English. It is easier to detect their inability to express themselves meaningfully in English without interference from the mother-tongue or Pidgin. For example, expression such as:

i. 'sometimes last year', instead of 'sometime last year'; and,
ii. 'can be able to' instead of simple 'can or be able' as few instances of English usage that show inadequate learning and lack of concern for appropriateness.

Banjo goes further to observe that students' poor performance in English could be attributed to the following factors: More and more pupils are ill-prepared for secondary education; lack of growth in the quality of English teachers capable of sustaining the momentum of earlier years in which the standards were high as in some of the older schools; the tendency of some teachers to leave the classroom in search of greener pasture and the gradual disappearance of textbooks from the market and the prohibitive prices of those available, coupled with the proliferation of unauthorized short notes, questions, answers manuals all of which foster rote learning rather than develop or challenge students' critical intelligence.

Opata (2011 p.34) identifies reasons why students fail English subject as:

i. **Meaning:** student finds it difficult to give meaning (interpret) what they read. In some instances, the writers had written from a background different from that of the readers as a result wrong interpretation could be given to a particular write-up or passage;

ii. **Difficulty diction:** there are words which the reader finds difficult to understand;

iii. **Techniques employed:** some of the figures of speech used by the teachers make it difficult for the readers to understand English language write-up.

The analysis of English language SSCE performance becomes paramount because of complaints from public and parents on poor performance. Past records have shown on SSCE that English language remains a problem to students. In view of the above, one will agree that students' performance in English subject is declining due to poor and ineffective method of teaching in schools which resulted to half-baked secondary school leavers.

2.3 Theoretical Framework

Learning process have been shifted to students (learners) centered, based on cognitive learning research (Davidson, 2000). The study has examined several theories to understanding the nature and context of learning. Some of these theories include Socio-Cultural Theory (based on Vygotsky's inter-subjectivenes and Zone of Proximal development); Constructivism Theory; Cognitive Apprenticeship; Behaviourist Theory and the Cognitive Theory of Multimedia. Each of these theories is based on the same underlying assumptions that learners are active agents, purposefully seeking and constructing knowledge within a meaningful context. The view of this learning process is based on the research that has emerged from theoretical framework related to human

learning. Many reflected a constructivism view of the learning process. In this view, Learners are active agents who engage in their own knowledge constructions by integrating new information into their mental structure.

The learning process is seen as a process of "meaning making" in socially, culturally, historically, and politically situated context. In a constructivism learning environment, students construct their own knowledge by testing ideas and approaches based on their previous knowledge and experiences; apply these to new tasks, context and situation, and integrating the new knowledge gained with pre-existing intellectually constructs. These theory advocates that situated cognitive learning is one of the learning theories that emphasize the use of apprenticeship, coaching, collaborations, authentic contexts, task, activities and cognitive tools (Brown & Leidhoim, 2002). It occurs when students work on authentic tasks that take place in real world settings. Here, learning is viewed as a function of the activity, context and culture in which it occurs, which contrasts with most classroom learning which is abstract and out of context. Thomas (2000) stressed that situated cognitive theory emphasizes listening comprehension, story production and decoding skills and improved ability of learner to discover links among people, places, events and issues within historical contexts. Through collaborative problem solving, dialogue and discussions, students are able to develop deeper levels of understanding of a problem. This is quite relevant in this study because emphasis is on learning beyond teacher and students situation. But requires interactions with electronic media tools which enable learners to participate through coaching, tasks and activities that are student-centered in learning English language.

Cognitive Apprenticeship Theory: This is another theory for instructional process in which the teacher or more experienced person provides "Scaffold" to support learners' cognitive growth and development. Cognitive apprenticeship permits students to learn

through interactions, construct knowledge and share knowledge thereby building experience with the other members of the learning community. This theory is relevant to this study because it emphasizes support which electronic media resources does to learning through its tools by enabling groups to share online workspace to collaboratively develop intellectual products in the senior secondary school students in the aspect of teaching and learning English language.

Behaviourist Theory: The behaviourist theory of learning is propounded by B.F Skinner, An American Psychologist born in 1904. According to this theorist the behaviour of man from the simple to complex is learned and there are four fundamental factors:

i. Drive or motivations; which are strong stimuli that impel action.
ii. The cue or stimulus. According to this theory when a person is impelled a drive, cue (stimulus) determines when, where and which response he will make.
iii. Response: Clue leads to response. Response may occur by trial and error, by imitation or through verbal direction.
iv. Reinforcement or reward. This can be any event or anything used that strengthens the tendency for the response to the repeated.

Skinner carried out numerous studies on how to improve teaching and learning through the process of conditioning. Conditioning according to (Mustafa, 2006) states that under the laws of control, learning can take place. This, he said is possible under two phases that is, stimulus and response stages.

i. Learning can take place when properly guided.
ii. Learning can take place when there is a stimulus and response.
iii. Uncontrolled stimulus in human beings can elicit uncontrolled response.
iv. Conditioning contributes to the development of the intelligence of the learner.

He believes that students between the ages of 11-25 (which the senior secondary students fall into) should be exposed to partial conditioning which allows contributions from both students and teachers in teaching and learning. This applicable situation is important in learning English language.

The Cognitive Theory of Multimedia Learning (CTML)

Mayers Theory (2009) advocates cognitive science studies of the nature of the brain and how it learns. He refers to cognitive to perceiving and knowing in seeking to understand mental processes such as perceiving, thinking, remembering, understanding language and learning. The theory emphasized that cognitive science can provide powerful insight into human nature, and more importantly, it has the potential of humans to develop more efficient methods using instructional technology like electronic media resources.

The (CTMML) is based, on one of the principle aims to encourage to build a coherent mental representation from the presented materials of multimedia instruction. The processes ease the learning to make sense of the presented material as an active participant, ultimately constructing new knowledge. This aspect of Mayers theory is found to be very relevant to this study because it emphasizes “help” to the development of a better situation; production and understanding. Uche (2006), a strong advocates of Mayer theory restricted that helps in effective delivery of teaching and learning is the most efficient and reliable way which often leading to quick and better comprehension of knowledge in English language curriculum.

Therefore, the theory is adopted for the study due to the following reasons: the theory emphasizes the use of guidance. This theory can be used comfortably because it emphasizes the need for teaching and learning to be guided, which is what electronic

media resources represents. This is in agreement with Becta (2004) who observed that through the use of electronic media resource in teaching and learning in schools, teachers will shift from transferring knowledge to guiding learning process, since students through electronic media resources audio and audio visual will learn how to search, select, process and skillfully read, write and speak English language effectively.

Mayer's Theory (2009) emphasized programmed instruction which is fundamental in electronic media resources. Mpka (2009), while commenting on the usefulness of strategies and techniques of electronic media resources for instruction emphasized that its programmes are logical in sequence. This means that programme instructions are organized in steps and any attempt to deviate from the sequence leads to disorderliness in teaching and learning process. Mkpa's view agrees with Mayer's theory of cognitive. The researcher believes that if electronic media resources are adequately provided and appropriately utilized for this research purposes such as video, radio computer and internet, have the possibility of enhancing and facilitating teaching, and learning English.

2.4 English Language Curriculum for Senior Secondary Schools

English language is an integral part of any knowledge and plays an important role in the education system. The students have to know how to put their real life experiences papers or communicate effectively to express themselves, they should as well develop a creative ability to imagine a scenario, interpret and do a good write-up. Peter (2006) stressed that senior secondary school students has to be proficient in writing he needs to be taught the features of the forms of writing to be able to communicate effectively in writing reports as well as explaining procedures and processes. Olaofe (2009 p.24) emphasized that the importance of writing has made experts provide a uniform syllabus or curriculum for senior secondary school students

on English language. The writing skills to be taught in senior secondary school (SS1) are continuous writing (Narrative and Descriptive) essays, letter writing, recording keeping, speech, writing and article. The syllabus has been broken down into smaller units which include:

i. write correct and well punctuated sentences for a narrative essay or composition and descriptive work,
ii. write good letters (formal and informal),
iii. style of writing notices and invitation,
iv. identifying the general features of a speech (speeches for sending off a teacher, welcoming a new principal),
v. the features of a typical newspaper articles,
vi. Verbs usage; the regular lexical verbs, and
vii. The form or the third person singular form.

In senior secondary school (SS II) the students should be taught:

i. Identifying the main features of expository and argumentative essay;
ii. Distinguish the difference between senior formal and formal letters.
iii. Identifying the techniques of speech writing
iv. Identifying the techniques of technical and scientific writing.
v. Present participle, past participle.

In senior secondary schools III the students should be taught:

i. Revision of past work previously done on continuous writing, narrative, descriptive, expository and argumentative and so forth;
ii. Acquired enough literacy skills to engage in creative writing;
iii. Encourage and emphasis be made on formal and informal styles of writing;

iv. Use appropriate lexical items, structural patterns and accurate features in writing reports and

v. Describe accurately and concisely the function and technical and scientific machinery tools and equipments using appropriate vocabulary.

In the syllabus, there is a lot of repetition. What was done in senior secondary schools I and II and repeated in senior secondary School III to form a revision in preparation to internal and external examination, NECO, WAEC, NABTEC and so forth.

2.5 Historical Background of Electronic Media in Teaching English Language

Media and educational movement in fact was developed in Europe and initially was based on the material of cinema and press (Fedorov, 2008). In the early 1920s in Paris the cinema club movement emerged, with the distinct media educational aims. As early as in 1922 the first national conference of the regional departments of film education (*Offices regionaux du cinema educateur*) was held in France. At one of the congresses on education, it was suggested to prepare the cinema educators in universities (Martineau, 2008). Nazis occupation interrupted the intensive development of media education in France; however after 1945 it got another impulse, theories of media education dominated France at that time. The history of media education in Britain is also a few decades old. Same as many other countries, this movement began with film education, and then embraced a wider spectrum (press, radio, television, video, advertisement, Internet, and so forth). There are several organizations in UK that deal with various problems of media education. The educational department has conducted conferences and seminars, workshops for teachers. In the 1930s British media education (although this term was not used at the time, it dealt with education

with mass media application - film, radio, press) was developed mainly aimed at the opposition of the harmful media influences.

The history of Russian Media Education goes back to 1920s. The first attempts to instruct in media education (on the press and film materials, with the vigorous emphasis on the communist ideology) appeared in the 1920s but were stopped by Stalin's repressions. The end of the 1950s – the beginning of the 1960s was the time of the revival of media education in primary and secondary schools, universities, children centers (Moscow, Petersburg, Voronezh, Samara, Kurgan, Tver, Rostov, Taganrog, Novosibirsk, Yekaterinburg, and so forth), the revival of media education seminars and conferences. France maintained the status of a leader in the world media education process of that period. Since 1952, the courses of audio-visual education for teachers have been taught. Due to the rapid development of radio and television and French Union of the Regional Film Education Departments was renamed into the French Union of Audio-visual Education in 1953. In 1963 the ideas of aesthetical theory of media education were reflected in the documents of the Ministry of Education of France. Teachers were encouraged (including the money reward) to educate their students in cinema literacy (study of the history, language, genres of the film art, technology of the film shooting, appreciation of the aesthetical quality of a film). One of the founders of media education –Freinet, joined the discussion and emphasized that cinema and photography are not only the entertainment and teaching aid, not only the art, but the new form of thinking and self-expression (Freinet, in Fedorov, 2008). He believed that school children must be taught the language of audio-visual media the similar way they are practically taught basics of art.

Since the beginning of the 1960s the school and university audio-visual education (courses on film education were taught in 23 universities) was developing

under the influence of the breakthrough of European "author's cinema", especially the French "new wave" (*mouvelle vague).* In 1950 in Britain the concept of "screen education" was first formed, when school teachers founded the Society for Education in Film and Television (SEFT). The term "screen education" came into sight internationally in the beginning of the 1960s. Before that, the term "film education" was wider spread, but with the development of television many started to believe that these two screen media should be united for the educational purposes (Moore cited in Fedorov, 2001). Under the influence of the theory of "author's cinematography", British media education of that time was connected with the study of media as popular culture through its best examples (popular arts paradigm). At the same time ideas of McLuhan had a certain impact on the development of media education in Britain. And through in 1964 only a dozen out of 235 colleges of education in England and Wales offered its students special courses on screen arts (Marcussen cited in Fedorov, 2001), media culture in some or other form began to be studied in the majority of British University.

Media education on the American continent was in its rudimentary stage until the 1950s. Canada as the home country of the famous media theorist – Marshall McLuhan. And it was he who developed the first in the country special course on media culture in the 1950s. The history of the Canadian media an electronic media education commenced with the film study courses. Film education became a common phenomenon in Canadian secondary schools (Andersen & Glem, 2003). This movement was called Screen Education. In 1968 the first organisation united Canadian educators – Canadian Association for Screen Education: CASE, a year later it held the first big national conference in Toronto. Like in Great Britain, Canadian media educators of that period relied mainly upon the aesthetic (discriminatory theory of media education (Moore, 1969; Stewart and Nuttal, in Fedorov, 2001). Still in 1911, when in the USA

the National Council of Teachers of English was established, teachers discussed the topic of the educational value of films (Costanzo, 1992). Thus media an electronic media education in the USA has to some extent existed in the form of separate directions since the 1920s (film education, media education on the material of press and radio). For instance, Professor Dale of Ohio University promoted media education through press back in the last 1930s.

However, such training was offered essentially at the selected departments (journalism film) of few universities and was not widely spread. Since 19589 the program Newspaper in Classroom was introduced in secondary school which was sponsored by press through the American Newspaper Publishers Association (ANPA). 95000 teachers from 34000 schools joined it, involving more than 5 million students (Sim cited in Fedorov, 2001). And while by the end of the 1940s only 5 American universities offered film electives, at the beginning of 1950s there were already 10 of them. By the mid 1960s courses on radio and television were taught in 200 colleges, and the number of such course exceeded two thousands (Marcussen, 2014). In the 1960s media education in the USA like in many other leading countries (France, Canada, and the UK) was centered on film education. In 1969 Utah and Ohio universities supported the development of the series of materials for 'critical viewing' for integration in Oregon, Syracus, NY, Nevada and Florida (Tyner, 1999). Thus, film education became the first step for modern media education.

However, in most cases, screen education studied media technology (for example, students acquired skills to use video equipment) and not media culture. That is, with the help of audio-visual devices they shot some film sequences, or media materials served as an illustration for group discussions on topical social issues (for example, about Vietnam war, societal rights defense, and so forth). Still, even back then

a lot of teachers dedicated their classes to the study of film language, aesthetics of a film. Certainly, school media education was not obligatory in the USA. But teacher-enthusiasts tried to broaden the limits of media preferences of their students, lead them out of the vicious circle of pop culture, and get them interested in Art House production. Many universities added film studies into their curricula, with contents based on the visual language, film history and works of outstanding directors.

The powerful theoretical impact on media education all over the world was executed by the studies of Lasswel and McLuhan. It was McLuhan who first supported the argument for importance of media literacy in the 'global village' (McLuhan cited in Fedorov, 2001), into which according to him, our planet would turn after the unbound distribution and mass consumption of a wide spectrum of media texts in any part of the world. The development media education at all its stages of existence was significantly promoted by the UNESCO. In the mid 1970s UNESCO proclaimed not only its support of media education, but included media education in its list of priority directions for the next decades. In 1972 media education aspects were included into the programme documents of the Ministry of Education in France. In 1975 the Institute of Trainign for Film Culture Development (*L'Institute de formation aux activities de la culture cinematographique- IFACC)* was established. It reviewed the process of media education in universities, now oriented to the semiotic theory, to a great extent. In 1976 media and electronic media education was officially part of the national curriculum of secondary schools. Schools were recommended to spend up to 10% of the time on realization of this objective. In the Ministry's document of 1978 one can trance the synthesis of the aesthetic and practical concepts of media education (Chevallier cited in Ofodu 2007). Since 1979, media education (*education aux mediax)* in France has been maintained by several French Ministries.

During the 1980s media education in the USA continued to widen the sphere of its influence. One after another, pedagogic and research association were set up in various states, with an agenda to integrate some aspects of media education and media culture in schools and universities. In the majority of universities media courses became a common phenomenon in the 1980s. However, media education did not gain the status of an academic compulsory subject in primary and secondary school. Certainly, the USA is a country embracing huge territories and populations, compared to Norway or Finland for instance. An American researcher (Kubey, 1998), suggests that not only geographic and demographic factors hindered the development of media education, a certain hindrance on the way of the consolidation of the media educators' efforts was the American system of education on the whole, where each of the 50 states has its own policy in education and every educational institution – own curriculum and programs. Moreover, unlike other English-speaking countries (for example, Canada or UK), the leading media education communities in the USA are located outside the system of academic education. Besides, the pace of the media education development in the USA was slowed down by the relative cultural isolation of Americans from the rest of the world. It is known that Americans traditionally prefer to watch, listen to or read American media production.

During the time when in the Western hemisphere the intensive change of media education approaches was going on, in Russia of the 1970s – 1980s media education was still developing within the aesthetic concept. Among the important achievement of these years one can recall the first official programme of film education, published by ministry of Education, increase of the Ph.D dissertation on media education, experimental theoretic and practical work on media education by Baranov (Tver), Penzin (Voronezh), Polickko, Rabinovich (Kurgan), Usov (Moscow) and others

(Fedorov, 2001). Along with Britain, France still remains one of the most active European countries to develop the media education. In France, the cradle of the cinema, the film education is still standing its ground. However a film is studies among the other cultural and language means of expression. The theory and practice of audio-visual education (first of all, film education) in France was first systematized and analyzed by the group of researchers headed by M. Martineau and published in the late 1980s and early 1990s (Martineau, 1988). A little later, UNESCO (Bazalgette, Bevort, & Savino, 1992) and the European Council (Masterman & Mariet, 1994) published several fundamental researches, this time dedicated to media education on the whole. The considerable part in these works was devoted to the analysis of the French experience in the field.

UNESCO works nowadays not only with teachers, students and pupils, but also with the teachers in clubs, journalists, and librarians. UNESCO considers the work with information as a priority, due to its understanding of media education as primary civic education. The UNESCO staff believes that media education can be integrated with any school subject. Since 1995, already at an international level, UNESCO team launched the program 'FAX'. The pupils issued school-newspapers that were then sent by fax to partner schools in different countries, now this program takes advantage of the Internet technology logically, because recently UNESCO has paid much attention to the media education potential of the World Wide WEB (Bevort & Breda, 2001). Particularly, in the early 2000 the programme 'Educanet' was developed, with the mission to develop the critical, autonomous thinking related to Internet information; the responsibility of the students. As it has already been mentioned, media education In France has usually been integrated into the required school subjects (for example, French, History, Geography), through there are optional courses on media culture as well. Specific

courses on film, television journalism and media culture are offered in numerous specialized lyceums and universities. In higher education institutions of Paris, Lyle, Strasbourg and some other cities the special media studies courses are taught for pre-service teachers (Gonnet, 2001).

Since the late 1990s a new program of the electronic media integration has begin in France. According to it, for instance, each class should have an access to Internet and its own e-mail address. The project is sponsored by the regional administrations and the Ministry of Education. New electronic media promote the connection between the smaller schools in remote rural areas, and now they can exchange information and research results, communicate and use computers in teaching and learning. Teachers have an access to the database CNDP (*Centre Naitonal de RecherchePedagogique)* and download necessary materials from there. The key concept of media education in France is the world combination *I'education critique aux medias* (*or le judgment critique)* – critical thinking development. Evidently, one can draw a clear parallel with the concept of the critical thinking by the British Masterman. The view is that pupils (not only should students critically perceive and evaluate media texts, but also realize what kind of impact they exercise in surrounding reality (media as instrument of self expression of a personality, as means for the cultural development, and so forth) with the way media text influence the audiences, and so forth (Bazalgette, Bevort, & Savino, 1992; Bevort, 1999; Gonnet, 2001).

2.5.1 Types of Electronic Media

There are various types of electronic media which include audio media, overhead projector, slide projectors and filmstrip projector, film project and video player/projector, and multi-media presentation. Therefore, this section discussed the types as follows:

1. **Audio Media:**

   Audio media offer a wide range of opportunities for group or individual use. They can be used to deliver instruction involving verbal information, and also for guiding learning of intellectual and motor skills. With the availability of small compact cassette recorders, audio medium can be produced by teachers. It can also be used to supplement other media like filmstrips and slides. They are also relevant for learning objectives related to the effective domains of learning. Audio recording can provide response drill in mathematics, and language. Furthermore, several copies of the media can be produced easily. Audio medium is equally good for all types of instruction, from the precision of speech to the mental imagery formed by music and sound effect. Students are arouse with the nature and the beautiful appearance of the materials which will make them to settle down and learn what the teacher have prepare for them (Okobia, 2011).

2. **Overhead Projectors:**

   Using the overhead projector, transparent materials are projected so that a groups can see. It is simple to operate, and it is a versatile media for teachers to use. Transparency can face the audience from the front of the room and maintain eye-to-eye contact with students while projecting transparencies in a lighted room (Federou, 2001).

3. **Slide Projectors and Filmstrip Projector:**

   Slide projectors are used to project slides-small format photographic transparency in colour or black and white, individually mounted and used to transmit instructional content. On the other hand, filmstrip projectors project images container in filmstrips, which are series of small slides photographed in permanent sequence on a 35mm or 16mm film either in coloured, or black and

white. Some filmstrip projects can also be used to project slides. Teachers can use filmstrips and slides to enrich their instruction. They are less expensive, easily handled and stored for future use. They are adaptable for use in every subject area, and the rate of presentation for classroom use can be controlled by teachers using remote, reverse and advance mechanisms. Their presentations can be accompanied with print or audio recording (Gonnet, 2011).

4. **Film Project and Video Player/Projector:**

Film projectors and videotape projectors are used to project motion pictures, when motion is a significant factor of a subject. Educational films are in black and white and colour. There are also sound and silent motion pictures. Videotape availability has further widened the possibilities for the use of motion pictures, as they can be shown through monitor, that is cathode ray tube, or projected using video projector or through the digital projector, for group use. Motion pictures are relevant for all subject disciplines, in languages, sciences, art, social sciences and physical education. Motion pictures when accompanied by sound, many constitute a very effective way of emphasizing distinctive features for the task, which needs distinguishing the visual aspects of simulation. Motion pictures are also very good for ensuring students' positive attitude towards the subject of instruction. They can also be used to modify students' attitude in such areas like phonology, ecology, good work habit, hygiene in health education and so on (Blythe-Lotd cited in Schoepp, 2005).

5. **Multi-Media Presentation**

This involves combination of visual materials. It is a learning resources package, which can be effective when several media are used concurrently or specific instructional purposes. When two or more pictures are projected simultaneously,

on one or more screens for group viewing, the compound concept multi-image is used. However, when two or more different types of media are used, sequentially in a single instruction or for self-paced learning package, the term multi-media is used. Using multi-media or multi-image, a large amount of information can be passed across to students, and high interest can be created in students. Furthermore, different media can be tailored towards different objectives outlined for the lesson (Blythe-Lord cited in Schoepp, 2005).

2.5.2 Sources of Electronic Resources

Few students or faculty will submit to reading long passages of text on a computer screen. But many classrooms can benefit from electronic resources in at least two areas: supplementary readings and primary source. Even the best published readers or photocopied packets tend to dampen the thrill of discovery because they have been reselected and packaged for a particular purpose (seldom your own). Electronic sources, whether on CD-ROM or the Web, can significantly open up the range of materials accessible to your students.

There are a wide variety of electronic resources that can be useful for the classroom. Among the most popular have been CD-ROM document collection such as *Chaucer: Life and Times; Pennsylvania Gazette, 1928-1783;* and *Presidential Papers: Washington-Clinton.* Textbook publishers are increasingly providing electronic study guides, map exercises, sample presentation slides, and computerized test banks on CD-ROM, floppy disks, or even on the Web. Some schools are producing, or arranging access to, large collections of digital materials.

The most extensive, if still not fully developed, source for electronic resources is the World Wide Web. Many web site can deliver primary documents, secondary literature, sound and images from a wide varieties of spruces. Students who explore web

sites related to a course can bring compelling evidence and arguments back to the class. Publishers are building companion web sites around their textbooks and large international projects have been launched to provide on-line sources for standard humanities and social sciences survey cruses. Finally, libraries and scholars are making scanned materials accessible over the Web, although the copyright implication of this practice requires close attention.

In both cases, these relatively new forms of material require some special handling. When selecting electronic sources for course or subject(s) the following guidelines are considered:

1. Ensure that all electronic assignments contribute to the objectives of the course. The new materials should pass the same relevance test as traditional material.
2. Personally evaluate the scholarly quality of your electronic sources. Although linking to electronic sources might be free, one substandard source can lower the credibility of the course.
3. Use the appropriate medium: Can these materials be more easily or effectively used in a more traditional form? Try to use the Web for things that it can do particularly well: displaying multimedia materials, hyper linking to other sources, providing interactive experiences, or improving access to otherwise cumbersome or distant materials. As on-line achieves begin providing access to recordings and radio and television programs, it's possible value to teachers will increase even further.
4. When dealing with massive collection of primary documents, make the task of using them more manageable by discussing ahead of time the particular questions the collection might help answer. Then divide the class into groups, each of which will explore the archive with a particular question in mind. Short

review papers, web-page postings, or in-class presentations can enable each group to share small numbers of documents, images, and other artifacts that address the question or theme they have chosen.

5. Reinforce traditional research skills: Using on-line information at least as much skill and discipline as using traditional sources. Just because students can "cut and paste" from on-line sources, the process of researching and writing is not fundamentally different from that for a project that uses more traditional sources. Encourage students to take the same detailed notes and to follow the same strict citation procedures they use for conventional printed sources.
6. Mix traditional and electronic sources: Require students to consult traditional printed and microform source material as well as electronic resources. Most valuable sources will not be digitized any time soon, if ever, so student research should include at least as many traditional sources as electronic ones. Students wedded to the Internet sometimes tend to assume that they need never use a traditional library; some act at times as if they think information that is not on the Web does not exist. Be sure that you structure assignments in a way that does not sever your students' ties to the most important sources of scholarly materials.
7. Caution your students to be critical readers of on-line sources. Explain the Web's fluid (or non-existent) editorial standards and the need to determine the standards, origin, and scholarly discipline that went into the creation of each on-line source. Virtually anyone can create a web site, and there is no review process to test sites for accuracy or reliability unless the creator of the site initiates one. To avoid the problems such lax standards can cause, you should

heavily emphasize the on-line offering of established libraries, archives, and universities.

8. To ensure that your student become critical consumers of on-line material consider having them complete a quick questionnaire after reading the first electronic resource of the term. Ask them to identify the author of the material, give the address (URL) for the site, and comment on the scholarly methods and reputation of the sponsoring organization or individual. Have them try to discover how long a site has been in existence and how long the reference will remain on-line. Will more material be added or corrections made? How should they cite this material in their papers and can they be sure the material will still be at that location? A short discussion of the answers in class will counteract many of the source of confusion and disappointment.
9. Administration: The routine administration of courses (advertising a class, providing copies of the syllabus, assigning discussion sections, and getting out course news) can be more efficiently handled with a course home page, electronic discussion groups and e-mail lists. These tools can also dramatically improve the continuity and the community aspects of courses, helping students to engage with and learn from each other and even from people outside the course.
10. Readings/sources: The Web and CD-ROMs provide a wider variety of secondary and primary sources (including visual and audio sources) than has previously been available. With your guidance, your students can now gain access to materials that were once accessible only to experts because they were too cumbersome to reproduce for classroom use or too expensive for students to purchase. By taking their own paths through these sources, students can bring

their own evidence and argument into lectures and discussion sections, as well as write on a wider range of research topics.

11. Papers/presentations: Rather than performing assignments and taking exams from the teacher alone, students can perform more independent exercise in publishing, exhibit building, or assembling and presenting teaching units and other materials for their peers. A web archive of several terms' work can make the course itself an ongoing and collaborative intellectual construction.
12. Lectures: A computer with presentation software can provide a single tool for augmenting lectures with outlines, slides, statistical charts and tables, images, music, and even video clips. In addition to printing them as handouts, you can save in –class presentations in a web-compatible format for later review and discussion.
13. Discussion: Electronic discussion tools such as e-mail, conferencing software, and on-line chat services can seed discussion questions before the class meets, draw out your shy students, and follow up on discussions or questions on the reading between classes. For courses without face-to-face discussion sections, these tools can bring the course to life over great distances and help overcome scheduling difficulties.

2.6 Utilization of Electronic Media in Teaching and learning English Language in Secondary Schools

According to a 1999 National Center for Educational Statistics study on teacher quality in the USA, only 20% of all teachers feel very well prepared to integrate technology into their teaching (U.S. Department of Education) and Kampits (1998) examined technology use by rural teachers and found that more than one half of the teachers perceived themselves as novices in all aspects of technology use, and almost

one third to one half of the teachers never actually used technology for educational purposes. His study also revealed that fewer than 30% of the public teachers used Internet applications in their classrooms although U.S Department of Education and Kampits (1998) reported that the number of schools with Internet connection increased by 43% between 1994 and 1997.

In a study of Strudler, McKinney, Jones and Quinn cited in Osuji (2009), stated that technology integration attempts were not only time consumer but also frustrating since they had not been properly trained during their pre-service years. According to the most recent research by National Center for education Statistic (NCES, 2000), in the USA, nearly 70 percent of teachers do not feel well prepared to use computers and the Internet in their teaching. Similarly, in a survey of 4,049 elementary and secondary school teachers, less than 20% viewed themselves as very well prepared to incorporate technology into instruction (Archer cited in Uche, 2006). There may be several factors for teachers' feeling of being unprepared to use instructional technologies. First, when professional development is available, teachers typically received only basic knowledge about the way they should operate the computers and software, not information on how to integrate the technology into instruction or on how to assess its benefits (Hasselbring, Barron & Risko, 2000). Although they report desiring to use computers, and have gained adequate technical skills, they lack pedagogical knowledge about how to implement computers within the more routine tasks of teaching and managing their classrooms. In cases where technology-based instruction has been successful, the research suggests that it is most often the result of using the computer to deliver well-designed and well-managed instruction (Hasselbring & Williams-Glaser, 1999). Thus, the focus is placed on the teacher's actions in the classroom rather than on the technologies that were utilized in educational setting.

Second, the lack of teachers' beliefs about their ability to use technology in instruction (self-efficacy and self-confidence) has been shown to influence the levels of technology use by pre-service teachers (Tapola, 2001). Oliver and Shapiro (2005) argue that, observing models increase one's feeling of confidence. However, Faison (2005) found that teacher educators failed to model instructional technology use and did not require students to use technology in their classrooms and field-based assignments. Therefore, role models and motivational factors should be included in pre-service education programs. Likewise, Beaver (2010) examined the amount of anxiety undergone by pre-service teachers at a major university in the USA. According to the survey results, students reported a high level of anxiety when asked whether they felt prepared to use technology in their future teaching; because more than half of the students were not required to use it is their education course.

By developing and employing attitude towards Computer Technologies (ACT) and Self-Efficacy for Computer Technologies (SCT) instruments, Delcourt and Kinzie (1993) assessed pre-serve teachers' perceived usefulness of a comfort level with specific computer technologies. They administered the instruments to 328 students enrolled in teacher education program in the USA, and concluded that there was a strong association between time spent using computers and students; attitudes and self-efficacy. Further, teacher may sometimes resist using technologies based on their feelings of discomfort, dislike and even fear of technology (Stone, 2000). Hannafin and Savenye (2007) reported several possible explanations for teacher resistance to using computers. These reasons included:

a) Doubt that computers improve learning outcomes,
b) Resentment of the computer as competitor for student's attention,
c) Unsupportive administrators,

d) Increased time and effort required of the teacher and
e) Fear of losing control of center stage and fear of looking stupid in front of the class.

For effective technology integration, they further stated that there needed to be fundamental shift in the role of teacher in order to benefit from the interactive nature of the technology and its capacity to enable student-centered exploration. The teacher can no longer be a dispenser of information to relatively passive learners. They stressed that technology-oriented teacher's new role was described in the literature as manager of information, coach, guide, organizer, initiator and diagnostician. They put the role of traditional lecturer and imparter of knowledge at one end and the role of coach, observer and facilitator at the end of a continuum, and concluded that the traditional end of the continuum embraces behaviourist learning theory while the other end is likely to embrace constructivism.

Hannafin and Savenye (2007) investigate pre-service and in-serve teachers' beliefs on knowledge acquisition by means of a survey touching on knowledge acquisition views from objectivism to constructivism. They found that experienced teachers had a tendency to embrace objectivist view of learning whereas pre-service teachers held a constructivist notion of learning. Based on the interview results, they also concluded that external sources of influence and classroom management issues might create an environment that favours implementation of objectivist-based computer software programs rather than those that are grounded in the constructivist perspective.

In the USA, many schools have spent an extensive amount of money to purchase computers or to upgrade their instructional computing capacity with the hope that the mere presence of these technologies will promote positive instructional changes.

However, they were quick to discover that technology alone does little to support changes in the way teachers think about teaching and the way students think about learning. These types of changes emphasize a modification in a teacher's pedagogical belief system, not simply a change in the tools that are used to facilitate this process (Hasselbring, Barron & Risk, 2000). Change will not occur by simple adding a course or recruiting a new faculty member who understands technology. What is required is a transformation of the culture of teacher education, one in which technology is seen as changing relationships between students and teachers and between learners and knowledge.

Dexter, Anderson, and Becker (1999) examined the use of electronic media resources by teachers and their perceptions of the impact of electronic media resources on changes they made in their classroom practices. Their informants, who completed a questionnaire and a series of semi-structured interviews, included 47 teachers from 20 elementary and secondary schools in the USA. The teachers were categorized as being constructivist, weak constructivist and substantially constructivist according to their responses on the questionnaire. Through the interviews, the researchers determined that the teachers that fell into the weak or substantially constructivist categories felt that technology helped them change but they did not acknowledge it as the catalyst for change towards more constructivist practices. Rather they recognized that reflection upon experience, classes taken during their undergraduate education, context and culture of their school and school-wide initiatives and programs had the most profound effects on changing their teaching styles than mere presence of technology.

In a similar vein, Roblyer and Erlanger (1998) agreed in their research that teachers responded differently to technology integration because of their prior experiences with technology as pre-service teachers as well as the encouragement

provided in their past and present educational environments. Technology has also impacted pre-service teacher education programs at many universities. As an example, new initiatives for prospective teachers enable them to view best practices via streaming video over the web. When incorporated with online discussions and teacher/facilitator annotations, the support a teacher needs in implementing a vision or changing a practice is greatly enhanced (Herbet, 1999). According to the study conducted by Howard, McGee, Schwartz, and Purcell (2000), living-and-learning environments for the training can foster rapid changes in teachers' epistemological beliefs.

Results indicated that teacher epistemology became significantly more constructivist on three of four measured epistemological dimensions, and the training programme was very effective and that certain epistemological dimensions are subject to change. Teachers learning about constructivism by doing constructivism. Individually and collaboratively, teachers learned how to use the technologies by incorporating them into the design of lesson plans. In retrospect, trainers observed that one of the most powerful influences for epistemological change was the teacher-to-teacher encounter. Moreover, Davis and Resta (2002), concluded that electronic collaboration that was not constrained by time and space was an effective means of providing additional mentoring and support to beginning teachers in their first years of teaching.

Ismat (2005) found that half of the educators reported being prepared to use drill-and practice tutorials, games, word processing and publishing applications, however less than 10% felt competent to use multimedia and presentation packages, electronic network collaboration capabilities, or problem-solving applications. Parallel results were obtained from a national survey in the USA. The most common use of technologies among all elementary and secondary schoolteachers surveyed were word processing and skills practice games while the rare uses included spreadsheets,

databases, simulations and exploration type software. Most of the teachers identified improving computer skills when asked to classify their objectives for student computer use; consequently, they were not using technology for information analysis, exploration and other higher order and critical thinking skills that are crucial for conceptual understanding (Education Week, 1999).

Hasselbring, Barron and Risko (2000) asserted that early efforts to introduce pre-service teachers to technology were addressed by offering stand-alone courses usually focusing on acquisition of programming language. However, many of the leading schools of education quickly became dissatisfied with the results of these attempts and decided to place emphasis on using technology as an instructional tool (Erison & Moeller, 2001). It quickly became apparent that stand-alone technology courses were of limited value to pre-service teachers, primarily because the approach did not provide aspiring teachers with an instructional model for using technology in classrooms (Callister & Burbles, 1990). Accordingly, several schools of education abandoned the stand-alone courses in favour of the integration of technology into the entire educational curriculum offered to pre-service teachers. Other schools maintained that fundamental course could provide a solid foundation for integration in other courses (Harris, 2002). In a similar vein, Wetzel (2003) argued that pre-service training programs should require a core course in educational technology coupled with technological experiences woven throughout the method courses. Strudlr and Smeets (2005) also recommended combining technology integration courses with regular teacher education courses.

Vannatta and Bayerbach (2000) also pointed out that technology integration must be connected to course content, objectives and assignments, and addressed much earlier in the teacher education programs. According to their study, the majority of pre-

service teachers reported a change in their vision that included a more constructivist approach, where variety of technologies and applications are used to create products, facilitate processes, and analyze problems. Halpin (2004) found the similar result in his study that consisted of 73 pre-service teachers in an integrated elementary methods course prior to their teaching experiences. The results of this study indicate that the integration of computer literacy training into methods courses did provide future teachers with the confidence to transfer their computer skills into their classrooms based on their own exploratory experiences. It is important to integrate the use of computer applications into the pre-service methods courses already in existence to give the teacher the opportunity to experience exactly how technology can be an integral part of the dally operations of the classroom.

As Sandhotz, Ringstaff, and Dewyer (2007) pointed out that professional development and teacher preparation programmes have not caught up with the needs of teachers in learning the skills necessary for using technology to support constructivist learning environments. Research also shows that teachers become more effective in technology integration as long as they have adequate and proper training during their pre-service education, district-level and administrative support and an opportunity to share their experiences with other teachers who use technology in their classrooms.

2.6.1 Factors Influencing Utilization of Electronic Media in Teaching

Cooperation and communication between teachers, such as the exchange of English language experience and mutual encouragement to use electronic media has a positive effect on the willingness to utilize electronic media in the classroom. Another variable, which influences classroom use of electronic media positively is teaching style, Becker (2000) found that "Computer- using teachers are distinctively more constructivists than non-computer-using teachers".

Constructivism claims that skills and knowledge cannot be directly transmitted from teacher to students. The theory suggests getting students to articulate their understanding, and defending them against contrary points of view, claiming that understanding comes from individuals expending efforts to integrate newly communicated claims and ideas with their own prior beliefs and understanding. Faison (2006) further states that, using electronic media should fit into existing skills of teachers and should not demand for too much effort to change. The literature on factors which impact the use of electronic media, in classrooms positively has identified the teachers openness to change as a key issue (Snoeyink & Ertmer, 2001).

In addition to variables which have a positive influence on classroom media use, a number of variables have been identified, which have a negative influence. It is common knowledge that teachers are not able to make full use of electronic media because they lack the time needed to prepare teaching material using electronic media. Additionally, time is also needed for teachers to learn electronic hardware and software computer skills (Fabrary & Higgs cited in Goerge, 2011). An important additional determinant of teachers' engagement in the use of electronic media in classroom is their confidence in using technology (Lokken, Chek & Hastings, 2003). Teachers with little confidence in using electronic media in their work will try to avoid them. Russel and Bradley cited in Poivot, (2003), that many teachers who were not using computer were doing so because they lacked confidence with, or felt frightened by computers.

The lack of electronic media competence is clearly a barrier to teachers' use of electronic media in classrooms. As Becker (2000) notes, "Teachers who have a reasonable amount of technical skill and who use computers to address their own professional needs use computers in broader and more sophisticated ways with students than teachers who have limited technical skills and no personal investment in using

computers themselves." Similar results have also been found by others. Based on the above literature, an exploratory model that incorporates factors that have both positive and negative impact on use of media in a classroom by teachers can be provided.

2.6.2 Teachers' Electronic Media Usage

The integration of information and communication technologies can help revitalize teachers and students. This can help to improve and develop the quality of education by providing curricular support in difficult subject areas. To achieve these objectives, teachers need to be involved in collaborative projects and development of intervention change strategies, which would include teaching partnerships with electronic media as a tool. Teachers' attitudes are major predictors of the use of new technologies in instructional settings. Teachers' attitudes toward electronic media shape not only their own electronic media experiences, but also the experiences of the students they each. According to Blytheloard cited in Scheopp (2005), three conditions are necessary for teachers to introduce electronic media into their classrooms: teachers should believe in the effectiveness of technology, teachers should believe that the use of technology will not cause any disturbances, and finally teachers should believe that they have control over technology. Demetriadis, Barbas, Molohides, Palaigeorgious, Psillos, Vlahavas and Pombortsis (2003) reached similar conclusions in their research study: "Training efforts are generally welcome by teachers but consistent support and extensive training is necessary in order for them to consider themselves able to integrate electronic media in their teaching methodologies". According to Beever (2000) one of the major factors affecting people's attitudes toward a new technology is related to the features of the technology itself. Rogers pointed out five basic features of technology that affect its acceptance and subsequent adoption: relative advantage, compatibility,

complexity, can be observed and ability to be tried. Thus, a new technology will be increasingly diffused if potential adopters perceive that the innovation:

(1) Has an advantage over previous innovation;

(2) Is compatible with existing practices,

(3) Is not complex to understand and use,

(4) Shows observable results, and

(5) Can be experimented with on a limited basis before adoption.

Preparing students for real life in the technological and diverse world requires that teachers embed electronic media insignificant learning experiences (Braun & Kraft, 1995). However, research studies show that most teachers do not make use of the potential of electronic media to contribute to the quality of learning environments, although they value this potential quite significantly (Smeets, 2005). Harris (2002) conducted case studies in the primary and three secondary schools, which focused on innovative pedagogical practices involving electronic media. Harris (2002) concluded that, the benefits of electronic media will be gained "…when confident teachers are willing to explore new opportunities for changing their classroom practices by using electronic media, as a consequence. The use of electronic media will not only enhance learning environments but also prepare next generation for future lives and careers (Wheelr, 2001).

2.6.3 Types of Electronic Media Usage

Not only are different media able to accommodate different sets of symbol systems, they can also accommodate them differently. For instance, the print medium can accommodate static words and still pictures. The computer can accommodate static word and picture, moving pictures and sound, and has the ability to accommodate them in a different format (the words can be linked though hypertext for web page). The

quality of the learning interaction could be very strongly linked to each medium's capability of accommodating symbol systems. According to Whealer (2001), "Symbol system shape knowledge acquisition and organization through a particular medium". Depending on the way these symbol systems are organized, each medium has the ability to influence the learner interactions differently. This will also affect each learner's ability to get involved in the learning process.

Media have characteristics which can change the nature of learner interactions. In general these relate to issue such as:

i. Accessibility to students (the skills required to access the learning content).
ii. Ease with which the student can manipulate (re-play, re-organize, add, remove, search text).
iii. Portability (removal from restriction to place).
iv. Familiarity with the media on the part of the learner.
v. Sense of immediacy they bring to the learning interaction.
vi. Cost of reproduction and distribution.

Wetzel (1993) contend that, 'the quality of interaction depends on the depth of processing. Perhaps the processing depth can be linked to the five learning activities which seem to be able to accommodate notions of desirable learning. These are:

i. Acting on (learning by doing) or experiential learning, which suggest that the learner must leave his or her mark on the learning text.
ii. Interpreting or making meaning, reformulating the content.
iii. Reflection is a central learning activity involving forming individual points of view and critically considering issues raised; self-reflection is a major component of adult learning.

iv. Collaboration is a learning interaction which allows the learning processes to become not only democratic (Rumble, in Kaye, 2002) but also cognitively stimulating and challenging, particularly for adult learners. Some of the outcomes of this form of learning include high mastery and retention levels, improved quality of reasoning strategies and positive effects on social, motivation and attitudinal outcomes in addition to academic outcomes. The other issues which tended to affect learning on media were related to how the tutor used the learning activities, coupled with the tutor's awareness of each medium's capability to support different learning activities and learner needs.

2.7 Electronic Media in Teaching English Language in secondary schools

Many researcher and authority have commented immensely in the use of instructional materials in English language instructions and any other educational processes, that the use cannot be over emphasized. Abujaber in Ayoti, (2013), assert that, the importance of instructional materials for both teacher and students cannot be over emphasized. In English language, the use of instructional materials is essential to support learning because English language are concerned about natural and language spoken which cannot be easily expressed without the support of audio and audio-visual electronic aids.

Cursor in Hannafin, and Savenye (1993), points out that, using instructional materials in English language classroom widens the channels of communication between teachers and their students. He further maintain that the instructional materials allow the growth of specific learning abilities and enhance intellectual skills and major skills-the use of audio and audio-visuals enables the teacher to present and illustrate many physical phenomena and issues easily and at the same time, allows them to focus attention on the characteristic of objects.

Adeyanju (2003) was of this opinion that, learning can be reinforced with learning aids of different variety because they stimulate, motivate, as well arrest learner's attention for a while during the instructional process. They also claim that learning aids reduce-their talk and chalk method while some of the teachers claim that whenever they taught with some of the instructional materials, their student get more stimulated because the learning aid help them (students) to become more attentive. In addition, students positive attitude generate more interest for the lesson they teach as a result students participate better in class activity.

Bozimo (2002) asserts that, "the importance of instructional materials lies on the fact that abstract ideas, data or information expressed in printed pages become tangible and concrete when they are translated or reflected in forms of instructional materials and resources. She further maintain that, the inter disciplinary or integrated nature of English language demands that well thought-out materials be used in the classroom instructional to enable the learners comprehend the interrelatedness of knowledge and unity of various disciplines making up the linguistics ideas, social sciences and humanities. The materials will also be such that can unambiguously reveal the dynamic nature of man, his activities, decisions and problems".

There is need to realize that, the application of instructional in the English language classroom and any other instructional setting improves teaching-learning and allows the teachers and students to interact as human beings in the environment they find themselves, for their own purpose. More specifically, instructional materials is used to concretize conceptual abstraction in English language since the focal point of English language is to instil in students practical skills that they will use to explore solution to their situational problems within the environment they live in. In concrete terms, electronic media as instructional media has enhanced teaching and learning through its

dynamic, interactive and engaging content; it has provided real opportunities for individualized instruction. Information and communication technology has the potential to accelerate, enrich and deepen skills; motivate and engage students in learning; help to relate school experiences to work practices; help to create economic viability for tomorrows workers, contribute to radical changes in school; strengthen teaching, and provide opportunities for connection between the school and the world. Information communication technology can make the school more efficient and productive, thereby engendering a variety of tools to enhance and facilitate teacher's professional activities (Yusuf, 2005, p. 62).

a) Stimulation of interest
b) Concretize abstract issues or topics in English language
c) Creating effective communication.
d) Use for mass instruction and taking care of wide audience.
e) Providing meaning and useful sources of information to teachers and learners.
f) It helps in developing a continuity of reasoning and coherence of thought.
g) It save time and reduce verbalism or repetition of word.
h) It is use to improve teaching methods
i) To promote closer relationship between the community and school.

In teaching-learning process, there is the need to generate, arouse, motivate and maintain students' interest. If the learners' interest is build properly, learning can take place effectively. As instructional materials have the potentials if effectively used for regulating the pace of information flow among different class of learners under the same classroom. It addresses individual differences. Students are arouse with the nature and the beautiful appearance of the materials which will make them to settle down and learn what the teacher had prepared to teach. Nnyejimesi cited by Anyawu (2003) agreed and

based on investigations that pictures-stimulates and help further students to take active interest in the topic presented. He admitted that they find pictures interesting and that pictures gave them clear ideas of the topics. This resulted in further activities and comprehension of the verbal materials.

The use of instructional materials in English language makes learning real, practical and more permanents to the learners. It makes conceptual abstraction in English language more meaningful. Esu (2004) states that; instructional materials are valuable assets in learning situation because they make lessons practical and realistic. They are the pivots on which the wheels of the teaching-learning process rotate. Since it concretizes issue, it then facilitates revision (recall) activities and provide very unique opportunities for self and group evaluation for the teacher and the student alike. It captures the student intellect and eliminates boredom; make the work easer, neater, and boosting for clarity and more appeal.

Instructional materials if properly sued allow for a flow and transmission of ideal from the teacher to the students and likewise from the students to the teacher or from one group to other. The learners will be able to see, touch, spell what is been talked about by the teacher and be curious to ask questions that would be very helpful for effective evaluation (formative) of the teacher and instructions in English language. With the use of projected and electronic materials such as television, overhead transparencies and computer especially, instruction are packaged in a very broad manners and which take care of wide range of learner in a classroom with less stress and time. Many students will be able to learn faster as the package takes care of various learners' interest at the same time. Teacher can handle a very large class conveniently as the teacher is guiding and displaying the instructional materials on the wall with the use of projector.

Teachers are up to date and able to provide for reliable and useful information for the learners with the use of instructional materials, it can effectively be used to ultimate shorten information from various sources for the purpose of comparison and contrasting ideas. It helps in perception and retention of information or knowledge in English language learners.

English language discipline, been an integrated course of study that is used to study different disciplines, the use of instructional materials helps the learners on providing integrated experiences, which may vary from disciplines which make the end product of education more productive. Since students are expose to the real nature of those concept or body of knowledge they tend to analyse and synthesis those body of knowledge for the proper application in their daily lives. Emma and Ajayi (2004) asserts that, "figurative speaking instructional materials enable the teacher to be in more than one place at a time and to address several issues at a time. For example, a video material could be on while the teacher moves around to explain to individuals' students the subject contents in response to request based on individual differences on problems. While the video material continues, providing details of the assignment the teacher also becomes part of the listening audience. It reduces verbalism or repetition of word by the teacher without knowing their meaning and also adds Varity in reinforcing verbal messages by providing a multi-media approach. Esu (2001) asserts that instructional materials are indispensable factor in a teaching learning process. This is because, clearly words or verbalization has been found to be inadequate for effective teaching. Instructional materials, frankly speaking reduce the level at which the teacher should strives himself in the process of talking rather he guide the process of the instructions. And as a result save his time in process of teaching.

The teachers of English language perfect not only their methods of teaching but also perfect contents and situations (activities) to be taught. With the use of electronic media aids, the teacher is able to edit, try and retry, alter and delete his activities to fit the standard of the students and also to effectively address the English language curriculum objectives. Instructional materials if properly utilize helps in giving direct contact with the realities of the learners learning situation. The purpose of using electronic resources in English language is for the students to internalize the situation issues happening around his totality, the student will be able to identify crucial issues and address these issues if properly inculcated with the use of instructional materials.

Walsh in Chuba (2000) posited three importance of teaching aids in English language class, as; Easing off teachers teaching task, satisfying different learning patters and in-building of special appeal by teaching aid manufactures, which help to motivate or captivate interest of the learners. Also, Ikweumelu in Chuba (2000), outlined the following points as the reasons why teachers must apply teaching aids in the English language classrooms: teaching aids helps to concretize abstract issues and topics; they motivate pupils interest in topic being discusses, they develop continuity of reasoning and coherence of thought which augurs well with the inter-interdisciplinary nature of English language, Teaching aids of electronic resources save time and as things presented are almost self explanatory, energy is saved in too much talking and writing and they help to appeal to pupil interests and this is because, they tend to appeal to students difficulties as well as take care of students differences.

Scheffler and Logan (2000) emphasize that integrating technology not only involves the attainment of skills but also consists of a process in which learners try, fail, access, evaluate, analyze and apply meaningful tasks including but not limited to researching, analyzing data, applying and representing knowledge, communication and

collaborating. Thus, the integration of technology into education means using it as a tool to teach subject matter, and to promote problem-solving and higher-order thinking skills. It means using the electronic diverse where it is the best medium to support the learning goal. It requires changes in a school. The entire school community of students, parents, teachers and administrators has to accept that electronic media resources are part of everyday school life. Becker (2000) notes that a social network of electronic media (EM) using teachers and organizational support from both school and district resources are important factors that contribute to the successful technology integration.

Hadley and Seingold (2003) suggest that technology is most valuable to teaching and learning once teachers integrate it as a tool into everyday classroom practice and into subject-matter curricula. It is only through integrated practices that they can realize the hopeful and idealistic claims for technology (Ike, 2009). This requires readily and flexibly incorporating technologies into their everyday practice in relation to the subject matter they teach. Incorporating technology effectively involves: (a) Engaging in active learning; (b) Relying less on whole-group instruction; and (c) Encouraging more independent and self-motivated learning (Hadley & Sheingold, 2003).

Williams and Williams (2007) note that effective technology use should incorporate a variety of applications that focus on problem-solving and help development of creativity, adaptability and collaborative problem-solving skills. (Ike, 2007) argues against the integration of technology by schools where that integration is un-criticized and unquestioned and where schools are basically jumping on a very cost bandwagon. However, she concedes that where there is well planned, electronic media can "ground education in projects that have intrinsic meaning. While still teaching critical skills of symbolic analysis and a core base of integrated knowledge.

Much discussion about technology and education has focused on the question of how technology facilitates teaching and learning. Honey and Melor (2007) state that the most important element affecting how and whether teachers use technology in their teaching is their pedagogical beliefs on learning and instruction. They examined teachers perceptions of how and why they do or do not use technology in their teaching and concluded that high-tech teachers engaged their students in collaboration, project-oriented work and activities, inquiry and discovery-based learning. They suggested a transition from traditional to constructivist paradigm in both teachers' beliefs and educational system in order to benefit from technology as much as possible. Snoeyink and Ertmer (2001) agree that teacher's beliefs about knowledge acquisition and effective uses of technology are correlated with the ways they use technology in their classrooms. The teacher's view of learning, then, could be another factor to successful technology integration in teaching English language in schools.

2.7.1 Constrains to the Use of Electronic Media in Teaching and Learning English language

Limitations of infrastructure and finances effectively bar some countries from participating in this electronic revolution. In other countries, education and government leaders have legitimate concerns about the cost, the efficacy, and the feasibility of using communication technologies in their education systems. More specifically, developing countries face the following problems:

1. **Lack of Computers**

Desktop and Laptop are still very expensive in Nigeria such that more 85% of students are unable to acquire one for their academic utilization. There are still large percentages of students who are still unable to purchase computers for use. Currently new computers are as from 150,000.00 upwards. This assertion is in line with Honey

and Moeller (2000), as they stated that information and communication technology has immense potential to motivate and engage students in learning.

2. **Lack of Qualified Teachers to Teach with Electronic Media in Schools**

Lack of knowledge on the part of teachers on the usage of electronic media to teach students poses a serious problem to the teaching and learning using electronic media in Nigeria colleges of education. Hence Bozimo (2002) stated that teachers might find it difficult to deliver the appropriate education and training on their students. This is because the more a teacher is able to utilize the available electronic media to teach his students, the more he will impact on these students.

3. **Lack of Electricity**

Nigeria being a developing nation cannot boast of twenty four hours electricity supply. The institutions are directly connected to Power Holding Company of Nigeria, yet no electricity or power is supplied to the institutions. It is on a sad note that some of the schools and departments of the institutions cannot afford a generating set such that can power the entire computers and other electronic media for teaching and learning. Consequently, both the teachers and students are handicapped and may not be able to offer lesson using electronic media.

4. **Lack of Internet or Slow Connectivity**

Some of the Nigerian colleges of education are not able to connect to the world wide web, even if the colleges are connected, departments where students are to be taught information and communication technology are not connected due to the high costs involved in the connection.

5. **Burglary**

Electronic media are still very expensive in Nigeria, this made them a target for thieves who stole them and have always ready buyers at a second hand cheap rate. This automatically, increases the expenditure of the colleges by way of fortifying security measure, by providing extra burglary proof to protect the media room. This expenses including the large room the computers are to be kept made some universities to sky distance from purchasing electronic media.

6. **Lack of Finance**

Lack of finance and distributive capacity are some of the major dilemma utilization of electronic media is faced with. Nigeria has not been able to provide resources to keep up with this demand. This brings about comprised quality of education. Many Nigerian colleges are faced with predicament of educational expansion that corresponds with economic development.

Other problems are:

a. **Technical Know-how:** Electronic media is not easy to handle unless one acquires the skills to do that which is lacking among English language. This situation renders the electronic media (if available) almost useless. Often you see the English language teacher bringing some specialist in the operation of electronic media to the class because he/she cannot handle it. Unfortunately the operator might not know exactly how to present the experience the teacher wants to bring to the students and the impact which the media were to make would be reduced.

b. **Lack of Expert Technicians (repairers):** Whenever electronic media develop fault, the technician to repair it are not easily found. Sometimes, one has to take it (electronic media) to another state outside or even another country. Sometimes

is not that the technicians are not found but the parts that are faulty are not available and one must send for them in another foreign country. When situation reaches this level, it usually takes a very long time to repair it and at times the electronic media ends up condemned as a result of scarcity of spare part.

2.7.2 Media and Technology as Cognitive Tools

Cognitive tools have been around for thousands of years, ever since primitive humans used piles of stones, marks on trees and knots in vines to calculate sums or record events. In the broadest sense, cognitive tools refer to technologies, tangible or intangible, that enhance the cognitive powers of human being during thinking, problem-solving and learning. Something as complex as a mathematical formula or as simple as grocery list can be regarded as a cognitive tool in the sense that each allows humans to "off-load" memorization or other mental tasks onto an external resource. Today, computer software programs are examples of exceptionally powerful cognitive tools (Jonassen, 2000), Roger (2005). Also referred to as "cognitive technologies" "technologies of the mind" (Salomon, Perkins & Globerson, 2001), and "mind tools" (Jonassen, 2000), they will be referred to "cognitive tools" in this report (Kommers, Jonassen, & Mayes, 2002). As computers have become more and more common in education, researchers have begun to explore the impact of software as cognitive tools in schools (Jonassen & Reeves, 2002).

Computers as cognitive tools represent quite a different approach from media and technology as vehicles for educational communications. Computer-based cognitive tools have been intentionally adapted or developed to function as intellectual partners to enable and facilitate critical thinking and higher order learning. Examples of cognitive tools include: databases, spreadsheets, semantic networks, expert systems, communications software such as teleconferencing programmes, on-line collaborative

knowledge construction environments, multimedia/hypermedia construction software, and computer programming language.

In the cognitive tools approach, information is not encoded in predefined educational communications which are then used to transmit knowledge to students. Indeed, with cognitive tools, the needs for formal instructional systems design processes are reduced. Instead of specialists such as instructional designers shaping students' learning via prescribed communications and interactions, media and technology are given directly to learners to use for representing and expressing what they know. Learners themselves function as designers using media and technology as tools for analyzing the world, accessing and interpreting information, organizing their personal knowledge and representing what they know to others.

Use of technology from the behaviourist perspective mirrors traditional classroom practices, users are relatively passive, the content and interaction between the user and the software are predetermined and there is a limited repertoire of acceptable responses (Jonassen, 2000). The acquisition of facts through repeated practice and rote memory, or learning from the technology, is the goal of instruction (Jonassen & Reeves, 1996). Computer assisted instruction (CAI), integrated learning systems, drill-practice programs, computer-based tutoring systems, and assessment software are some of the technologies designed based on the behaviourist learning theory (Jonassen, 2000). CAI and integrated learning systems have been readily adopted in many schools in the USA as they closely match the traditional routine of classroom life. Jonassen argues that CAI can increase achievement because it leads to automaticity of lower-level skills through extended practice. A computer that is endlessly patient with the learner monitors this practice. In the tutorial form of computer-assisted instruction, the computer provides additional information to the learner if an incorrect answer is supplied. This continues

until the learner is successful. Skinner's views of immediate positive reinforcement following a correct answer are directly applicable to drill-and-practice and tutorial forms of CAI (Yaakub, 1998).

Technology integration from this perspective is commonly used to increase student motivation. In a study exploring differences in teachers' uses of technology and their perceptions of the value or role of technology, Ertmer, Addison, Lane, Ross, and Woods (1999) found that majority of the teachers in elementary schools in the USA perceived technology as an incentive or behavioural reward in order to motivate students to complete their assignments and make lessons more interesting to students. At the time of the study, the teachers in this study were using technology for drill-and-practice activities and as a presentation tool to support their lessons. Almost all uses observed by the researchers, as well as those described by the teachers, involved the application of some type of instructional game or informational CD-ROMs. The study revealed that their integration of technology was mainly related to its usage to employ computers as presentation tools providing additional resources and engaging visuals to enhance lessons, to motive students and to promote the belief that students need to use technology to be prepared for the future.

2.8 Empirical Studies

Beyerbach, Walsh, and Vannatta (2001) conducted a research study to investigate teachers' use of technology infusion and its role in student learning in the USA. This was a two-year evaluation study of a pre-service teacher technology infusion project in which teams of teacher educators and K-12 teachers collaborated to infuse technology in their respective teaching contexts, and to create links between these contexts. The results suggest that technology infusion to enhance teaching is a multifaceted process that takes time, support and collaboration. A team approach, with

practitioners from the K-12 and arts sciences and education faculty and undergraduate and graduate students offered a fruitful model for infusing technology both into teacher education and the schools where the students study and learn by doing. After participating in the project, "pre-service teachers changed their views of technology infusion from thinking that they would teach and learn about technology to thinking they world use technology to support student learning".

What the results of these studies all point to is a need to shift funding and research priorities from simply providing access to technology in schools to make sure that teachers are adequately trained and supported in both the technology skills and the pedagogical strategies to integrate technology into their teaching. The findings demonstrate a need for teachers and teacher trainers, to assume new roles, acquire new skills and adopt new teaching approaches as they integrate technology into their teaching. The evidence show that although educational reform focused on the restructuring of education, incorporating constructivist and cognitive processing view of learning and integrating uses of technology in the school curriculum, most pre-service teachers have not had adequate training in the use of electronic media within the constructivist learning environment. The similarity with the present study is that they all focus on the use of technology. It differs in area of coverage while the study under review was conducted in U.S.A, the present was carried out in Kaduna state, Nigeria.

Mustafa (2005) in a research titled, Implications of Learning Theories for Effective Technology Integration and Pre-service Teacher Training: A Critical Literature Review in Nigeria, examined different literature on the topic with the aim of address the issue of whether a constructivist and collaborative learning environment using problem-solving activities and authentic technology integration cases could help pre-service teachers learning how to use technologies as supporting tools to enhance

their teaching and students' learning. The methods used were two broad categories studies. The first category includes studies that have effective technology integration to improve learning as the primary concern of the research. These studies are generally concerned with the theoretical framework of technology use. The second category reviewed the studies that looked at the training programme for pre-service teachers. The research include the need for teachers and teacher trainers to assume new roles, acquire new skills, and adopt new teaching approaches resources and applications. The study is similar to the current study in that both focused on the utilization of electronic media. Both studies adopted the survey research design. The differences are however in the nature of population, while the research under review centered on primary schools pupils and teachers, and the current research focused on senior secondary schools and the teaching of English language using electronic media resources.

Nwanna-Nzewunwa (2010) worked on electronic media as instructional materials in social and business studies and as instruments of social change: empirical evidence from Nigeria. The study evaluated the roles of electronic media (radio, computers, television, projectors, videos, internet facilities and telecommunication facilities) in teaching effectiveness and social change from the perspective of a developing nation – Nigeria. The study sought to determine: extent of exposure of teachers to electronic media as instructional materials; the use of electronic media in instructions in Social and Business studies in respondents' areas; extent of their usefulness in teaching Social and Business; factors determining the usefulness of electronic media; usefulness of instructional materials in teaching Social, Management, and Business studies; problems associated with electronic media as instructional materials and achievement of social change and development.

The study used survey research design and used questionnaire as data collection tool. The study sampled a total of 600 teachers teaching in various schools that are located in the Niger Delta Region of Nigeria. The study found that, radio is the most potent instructional material in achieving teaching efficiency and generating desired social change. Computers, projectors, and internet facilities were found to have inherent capabilities of aiding teaching effectiveness that could lead to the attainment of desired social change. The study is related to the current study because it evaluated the impact of electronic media on teaching and learning in social studies and business education. Though the research has targeted various schools, the similarity with the current research is that they all focused on teachers and students. But while the research under review adopted quasi-experimental, the current research adopted survey method. While the research was conducted in the Nigeria Delta region, the current research was carried out in Kaduna State, Nigeria with focus on English language teaching and learning using electronic media as resource.

Ayersman (1996) conducted a survey of the electronic media utilization by distance learners of Indian open universities. The objectives of the study were to obtain the feedback of learners in respect to their accessibility to various media; media use profile, views on usefulness of media, impact of media on their learning activities, problem faced in the use of media and suggestions for improving the utilization of media in distance education. The population of the study comprised 665 learners and a descriptive sample survey method was adopted. The study reveals that most of the learners were not satisfied with the time allotted for media use and many learners were also not sure of the availability of necessary infrastructures at the study centers.

The study is similar to the present research by focusing on electronic media utilization by learners and teachers as well. The difference between Ashwini and

Ramesh's study and this study is that while their study focused on University students, the current focused on senior secondary schools students and teachers in Kaduna state, Nigeria.

Gulbahar and Guven (2008), in a research titled, Information and Communication Technology usage and the perception of Social Studies Teachers in Turkey with the following objectives: to explore ICT usage, factors that support the use, barriers that hinder the use and self-perceptions of efficacy and level of expertise. Their population consisted of 326 social studies teachers in grade 4 and 5 levels in the primary schools. The result showed that although teachers were willing to use ICT resources and were aware of the existing potentials, they were facing problems in relation to accessibility to ICT resources and lack of in-service training opportunities. The study and the current research are both on availability and usage of electronic media in teaching social studies, the research like this one used the survey research design. However, while the research was conducted in Turkey, this study was carried out in Kaduna state, the present study is on English language in senior secondary schools while the reported research used primary school teachers and pupils.

Hennessy, Harison and Wamakote (2010), studied teacher's use of information and Communication Technology (ICT) in primary and secondary schools in sub-Saharan Africa, with a particular emphasis on improving the quality of subject teaching and learning. The research focused on the internal factors of influence on teachers' use, or lack of use, of technology in the classroom. The study tried to determine the perceptions and beliefs about ICT and their motivating effects, technological literacy and confidence levels, pedagogical expertise related to technology use, and the role of teacher education. Factors are discussed in light of significant infrastructure and other external issues. The method adopted in conducting the research descriptive design.

Research findings showed that new digital technologies have the potential to revolutionize the quality of subject teaching and learning when carefully integrated into the classroom. Yet a primary barrier to teachers readiness and confidence in using ICT, despite general enthusiasm and belief in benefits for learners, is their lack of relevant preparation, either initially or in-service. Research indicates that, until recently training opportunities have remained limited in availability and inconsistent in quality. The research applied a synthesis of literature on the area of concern, primary schools were used as population of the study, and it covers sub Saharan Africa, while the current research adopted descriptive research method and concern senior secondary schools in Kaduna state.

Adedeji (2011), investigated the level of availability and use of ICT in some South-western Nigeria Colleges of Education. The study revealed low level of usage of ICT gadgets and non-availability of some ICT equipments. The data for the study were gathered through questionnaire administered to 200 respondents who were accessible in the School of Education in the Colleges of Education in the South-Western part of Nigeria. The research looked at the following issues as a basis: (1) Nigeria as a nation came late and slowly into the use of ICT in all sectors of the nation's existence more especially in teacher education; (2) A majority of male and female teachers in Federal Government Colleges do not have needed competence in basic computer operations; (3) Most of the teachers in Federal Government Colleges do not have needed skills and knowledge in the use of common computer software; and (4) There is no significant difference between male and female teachers in their experience in using computers, their level of proficiency in computer operations and in their use of common software.

This was as a result of chronic limitations brought about by economic disadvantages and government policies. These factors have direct consequences on the

nation's educational development. The results of the survey on College of Education staff on the level of availability, use of and perception of the impact of ICT on teacher education in Nigeria revealed and suggested a low level of usage of ICT gadgets; non availability of ICT equipment and that the respondents were disgruntled with the sluggish use and integration of ICT. The above research have many things in common with the present research, in areas of instruments, problems and similar area as in teacher education, however the point of divergence is while the reviewed research was conducted in the south west, the current research was carried out in Kaduna state of North West Geo-Political Zone of Nigeria.

Duru and Orji (2011) investigated the utilization of ICT and its applications in teaching computer studies in secondary schools in Owerri educational zone. The objective of the study was to investigate the extent of utilization of (ICT) electronic media devices, in teaching computer studies in secondary schools in general and specifically to find out, the extent to which teachers utilize internet in teaching computer studies, the problems associated with utilizing information and communications technology in teaching and to proffer solutions to these problems. The researchers adopted survey design and used questionnaire for gathering relevant information. The population consisted of all the secondary schools in Owerri Municipal, sample was made up of 150 students and 90 teachers. Mean score and standard deviation were used to compute the data. Part of the findings reveals that, computer teachers in secondary schools do not utilize computer hardware and internet applications in lessons; that teachers lack the required skills to operate these resources; secondary schools lack the necessary infrastructures required for utilization of the resources and applications. The study is similar to the current study in that both focused on the utilization of electronic media. Both studies adopted the survey research design. The differences are however in

the nature of population, and the research was carried out in Owerri Municipal, while the present study focused on senior secondary school and the teaching of English language using electronic media resources in Kaduna State.

Muideen (2011) also undertook a research titled "An Assessment of student's usage and availability of ICT facilities in colleges of education: Problems and prospects". The study assessed the student's usage and availability of ICT facilities in colleges of education, the population of the study comprised of students. The research methodology was a descriptive survey, and the instrument for gathering data used was a questionnaire. The study found that, students made use of the available facilities of the college. ICT facilities were widely used in instruction. Students had access to ICT facilities. There were also problems encountered by the students in terms of electricity supply. The study is similar to the present by focusing on issue of technology for Instruction purpose. The objectives, methodology and instruments are also similar. The difference between Muideen's study and the present one is that while his study focused on the students' usage of electronic media, the present study focused on teachers' usage of electronic media.

Okobia (2011) conducted a research on Availability and Teachers' Use of Instructional Materials and Resources in the Implementation of Social Studies in Junior Secondary Schools in Edo State, Nigeria. The study was designed to assess the availability and teachers' use of instructional materials and resources in the implementation of junior secondary school social studies curriculum in Edo state. Three research questions were raised and one hypothesis was formulated. The study adopted survey research design. A sample of fifty social studies teachers were randomly selected from fifty junior secondary schools in five local government areas of Edo State. Data analysis was carried out using t-test for the hypotheses and simple percentages for

question one and two. The results showed that instructional materials and resources available were grossly inadequate. It was also observed that there was no difference in the use of instructional materials between specialist social studies teachers and non-specialist teachers. It is therefore recommended that instructional materials and resources be made available for the teaching of social studies. This study is similar to the present study in terms of use and availability of instructional materials. However it differs in subject and area of coverage. The study under review was carried out in Edo state while the present study was conducted in Kaduna state.

In all the reviewed empirical studies, none was undertaken to cover Kaduna State Nigeria, most of the research summarized actually discussed the availability or nature of utilization, and none combined availability and effectiveness of the resources in teaching and learning of English language of secondary schools. While most researchers were interested in finding either the relation or effect of electronic media in teaching, the current research is specifically on issue of what are available and how the available is effectively utilized to bring about effective teaching and learning English language at secondary school level.

2.9 Summary

The chapter reviewed different literature related to the area of study. It started with a theoretical framework on the work on cognitive theory of multimedia learning: the meaning of media and technology as cognitive tools, learning with technology; constructivist perspective, learning from technology: behaviourist perspective, electronic media: concept, types of electronic media, history background of electronic media in teaching, sources of electronic resources and effective application, teaching and learning using electronic media, role of electronic media in teaching and learning, electronic media usage, electronic media in teaching English language, problems of

electronic media in teaching and learning English language and reviewed empirical studies conducted by scholars that have bearing on the study.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

This chapter described the procedure employed in carrying out the research which includes research design, population of the study, sample and sampling techniques, instruments for data collection, validation of instruments, pilot study, reliability of the instrument, procedure for data collection and procedure for data analysis.

3.2 Research Design

The researcher adopted a survey research design. The choice of the design is to allow the researcher gather information about the target population. It is a research design that is good for both small and large population (Hale, 2011). Survey design generally deals with current phenomenon, spread over a wide area for the purpose of getting clearer understanding of the study on focus.

3.3 Population

The study population is three thousand eight hundred and ninety five (3895). Which comprise one hundred and fifty two (152) Teachers of English language and three thousand seven hundred and forty three (3743) SS II students in the study area. Table 1 present the population distribution of the study.

Table 1: Population of the Study

S/N	Schools	English Teachers	SS II Students	Total
1.	G.G.S.S. Kofan KuyanBana	4	124	128
2.	G.S.S. Tudun Jukun	4	106	110
3.	G.S.S. Kofandoka	4	111	115
4.	G.S.S. Aminu	2	98	100
5.	G.S.S Muchiya	3	105	108
6.	G.S.S Chikaji	2	74	76
7.	G.S.S Dakaci	3	86	89
8.	G.G.S.S Pada	3	84	87
9.	G. G.S.S Dogon Bauchi	5	124	129
10.	G.S.S Gyellesu	4	116	120
11.	Alhuda Huda College	5	128	133
12.	Barewa College	5	150	155
13.	G. G.S.S Chindit	4	112	116
14.	G.S.S Magayiya	4	104	108
15.	G.G.S.S Zaria	4	118	122
16.	G. G.S.S Kofan Gaya	4	114	118
17.	Dagama's Legacy Senior School Zaria	5	140	145
18.	Buks International Zaria	5	92	97
19.	Hallmarks International Zaria	4	68	72
20.	Aunty Grace Zaria	5	88	93
21.	Alhudahuda Zaria	3	76	79
22.	Diamond Academic Zaria	5	86	91
23.	Vitage Secondary School	3	64	67
24.	Victory International Zaria	4	88	92
25.	Judy International School Zaria	2	48	50
26.	Demonstrational Secondary Schools, A.B.U	5	124	129
27.	Comprehensive Secondary School Zaria	5	110	115
28.	GSS Basawa	4	104	109
29.	GSS Bomo	4	96	100
30.	GSS Kwangila	5	102	107
31.	GSS Jama'a	3	86	89
32.	GSS Kaura	3	94	97
33.	GSS Kugu	2	79	81
34.	Lawal Aliyu Academy	5	120	125
35.	Pride Academy	5	94	99
36.	Therbow Sec. School	5	120	125
37.	Godday Sec. School	5	110	115
	Total	152	3743	3895

Source: Ministry of Education, Kaduna State, Statistics and Planning Department, 2016.

3.4 Sample and Sampling Techniques

The sampled size is three hundred and fifty (350) which represents (9%) of the total targeted population. Oche (2008) viewed that (9%) of total population is adequate to serve as sample. Five schools in two local government areas, Zaria and Sabon Gari are purposely selected for the study. There are thirty seven (37) senior secondary schools in the two local governments areas based on the records obtained from Zaria Zonal Inspectorate. From each school, thirty (30) students were randomly selected through hat and pick techniques, whereas five (5) Teachers of English Language in each sampled schools were used as respondents. Table 2 presented the sample size of the study.

Table 2: Sample Distribution

S/N	Inspectorate Zone	Sample Schools	Sample Students	Sample Teachers	Total
1.	Sabon Gari L.G.A	G.F.S.S Muchiya	30	05	35
		G.G.S.S.D/Bauchi	30	05	35
		Comprehensive Secondary school	30	05	35
		Therbow Secondary School	30	05	35
		Dagamas Legacy Secondary school	30	05	35
2.	Zaria L.G.A.	G.G.S.S. Zaria	30	05	35
		Lawal Aliyu Academy	30	05	35
		Pride academy secondary school	30	05	35
		Godday secondary School Kofar Kibo Zaria	30	05	35
		Alhudahuda Secondary School	30	05	35
Total Sample Size		**10**	**300**	**50**	**350**

Source: Researcher field survey, 2016.

3.5 Instrumentation

The research instruments for this study consisted of checklists, observation and a researcher designed questionnaire for English language teachers and students. The English language teachers' questionnaire tagged "Teachers Assessment of Electronic Media Availability and Utilization in Schools (TAEMAUS)" consisted of seven sections that is, A-G. Section 'A' focuses on the demographic information of the respondents which sought the name of school, (position, rank, subject, academic qualifications and working experiences). Section 'B' the checklist, consists twenty-two (22) items in types of electronic media for teaching English language. Sections C–G consists of items that answer research questions on quality, utilization, proficiency and barriers to effective utilization of electronic media. On the other hand Students Assessment of Electronic Media Availability and Utilization in Schools (SAEMAUS) consists of section 'A' demographic information, Section 'B' contains checklist on the availability, Section 'C' usability, while 'D' is on Quality of available electronic media (see Appendix II).

3.5.1 Validity of the Instrument

The instrument was validated by the researcher's supervisors and English language teachers in the department, of educational foundations and curriculum, Faculty of Education, Ahmadu Bello University, Zaria. Based on their input, the drafts of the instruments were corrected and a final copy was drafted. The essence of the validation was to ensure that the questionnaire items generate the information that will help answer the research questions as well as the research hypotheses.

3.5.2 Pilot Study

A pilot study was conducted using thirty (30) respondents containing ten (10) teachers of English language and twenty (20) SS II students from both public and

private schools in G.S.S Chikaji and Aunty Grace Secondary School in Sabon Gari Local Government Area which are not part of the study sample. The essence is to avoid the target respondents of being in contact with the items before commencement of the field study.

3.5.3 Reliability of the Instrument

The data collected from the pilot study was subjected to statistical analysis for the purpose of determining the reliability co-efficient of the instrument. The Cronbach alpha reliability coefficient method was used for testing the questionnaire since the study design is a survey. Consequently, reliability co-efficient of 0.88 was obtained for teachers questionnaires and 0.94 was obtained for the students questionnaire instrument. This reliability co-efficient was considered adequate for the internal consistency of the instruments. William (2006) postulated that an instrument is considered reliable if it lies between 0.5 and 1.0 and that the closer the calculated reliability co-efficient is to zero, the less reliability is the instrument while the close the calculated reliability coefficient is to 1, the more reliable is the instrument. This therefore confirms the reliability of the instrument used for the study.

3.6 Procedures for Data Collection

The researcher sought permission from ministry of education through the zonal inspectorate of the division of the affected local governments, Zaria and Sabon Gari with an introductory letter collected from the department of Educational Foundations and Curriculum, Faculty of Education, Ahmadu Bello University, Zaria. Two trained research assistants were employed in the administration of the questionnaires and checklist under the supervision of the researcher so as to reach the teachers and students from their various schools and working places. This method permits direct distribution

of the instruments to the teachers and students to be filled at spot and retrieval immediately to avoid loss in transit.

3.7 Procedure for Data Analysis

Data collected from the respondents was analysed using frequency, count, percentages, means and tables; while the four hypotheses were analysed using non-parametric statistic of chi-square. This statistical tool was used because the sample were obtained from random sampling with a normal distribution to determine whether there are significance difference in the respondents opinions. The hypotheses were tested at 0.5 level of significance.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 Introduction

The study dealt with students and teachers responses on the availability and utilization of electronic media in teaching and learning English language in senior secondary schools in Kaduna State, Nigeria. The first part of the chapter contains a descriptive respondents demographic characteristics, considered to be associated with their expressed opinions. In the analysis of the research questions, frequencies and percentages were used for the respective items. Decisions on the items and the mean variable of the investigations were based on the mid-point of (2.5). The mid-point is based on the level of the internal scales used. The rest of the chapter was on hypotheses testing with the discussion of findings.

4.2 Description of Study Variables

A total of 300 students of SSII and 50 teachers teaching at senior secondary level in Kaduna state were involved in the study. Essentially, all its respondents were involved in teaching and learning of English language.

Table 3: Frequency distribution of respondents by gender

Sex	Frequency	Percentage (%)
Male	200	57
Female	150	43
Total	350	100

Table 3 revealed that there are more male respondents than their female counterparts. The study is suggestive that there is need to strike a balance between male

and female in both students and teachers in English classes and other stakeholders so as to be gender sensitive to meet up with global demand in gender quality.

Table 4: Frequency distribution of the marital status of the respondents

Marital status	Frequency	Percentage
Married	50	14
Single	300	86
Total	350	100

Result on table 4 showed that 86% of respondents were single mostly students and 14% married, which are teachers teaching at senior secondary school level.

Table 5: Frequency Distribution of Respondents according to Age

Age Group	Frequency	Percentage
10-20	220	62
21-30	30	9
31-40	45	13
41-50	35	10
51-60	20	6
Total	350	100%

Table 5 on the age group indicated the following trend, 10-20 years (62%) 20-30 years (9%), 40-50 years (23%), 51-60 years (6%). Thus ages 10-20 years together form 62%, which indicated that the respondents are active youth mostly students, while age 21-60 years (38%) comprised of teachers, principals and supervisors in secondary schools in Kaduna states.

4.3 Response to Research Questions

The main objective of this study is to assess the availability and utilization of electronic media Resources in the Teaching English language in senior secondary schools in Kaduna State, Nigeria. This objective was restructured and investigated with the following research questions:

Research Question One: What are the types of electronic resources used in teaching English language in senior secondary schools in Kaduna State?

The objective here is to determine the various electronic media available in senior secondary schools in Kaduna State, Nigeria. The assessment was done by examining the respondents' opinion on the available electronic media for the teaching and learning of English in secondary schools. Table 6 shows the opinions of respondents on the selected electronic media. The opinions of the students and the teachers were presented together in the table but the percentages were computed for each group. Decisions on items are based on the percentage scores for availability and good condition or not available at all. The notation for availability is indicated at the right hand side of the table as "A" while non-availability is indicated with "NA".

Table 6: Opinions of the respondents on the available electronic media for the teaching and learning of English language in senior secondary school

		Available/good		Available/not good		Not available	
Availability of electronic media	**Status**	**F**	**%**	**F**	**%**	**F**	**%**
Electronic board	Teachers	17	15.3	16	14.4	78	70.3
	Students	118	9.4	195	15.5	943	75.1
Overhead projector	Teachers	32	28.8	30	27.0	49	44.1
	Students	160	12.7	281	22.4	815	64.9
Opaque projector	Teachers	22	19.8	23	20.7	66	59.5
	Students	144	11.5	244	19.4	868	69.1
Slide projector	Teachers	30	27.0	21	18.9	60	54.1
	Students	167	13.3	265	21.1	824	65.6
Filmstrip	Teachers	26	23.4	20	18.0	65	58.6
	Students	188	15.0	273	21. 7	795	63.3
Pc projector	Teachers	24	21.6	26	23.4	61	55.0
	Students	201	16.0	293		762	60.7
Multimedia	Teachers	26	23.4	23	20.7	62	55.9
computer	Students	363	28.9	307	24.4	586	46.7
Computer system	Teachers	63	56.8	30	27.0	18	16.2
	Students	497	39.6	399	31.8	360	28.7
Internet/web	Teachers	46	41.4	28	25.2	37	33.3
environment	Students	424	33.8	371	29.5	461	36.7
Television	Teachers	69	62.2	20	18.0	22	19.8
	Students	373	29.7	268	21.9	608	48.4
Video	Teachers	60	54.1	20	18.0	31	27.9
	Students	327	26.0	272	21.3	661	52.6
Radio	Teachers	54	48.6	27	24.3	30	27.0
	Students	330	26.3	272	21.7	654	52.1
Cassette	Teachers	56	50.5	21	18.9	34	30.6
recorder/player	Students	312	24.8	275	21.9	669	53.3
Video camera/still	Teachers	42	37.8	18	16.2	51	45.9
camera	Students	309	24.6	265	21.1	682	54.3
Microphone/speaker	Teachers	55	49.5	27	24.3	29	26.1
system	Students	342	27.2	300	23.9	614	48.9
Telephone/intercom	Teachers	32	28.8	17	15.3	62	55.9
	Students	296	23.6	259	20.6	701	55.8
Fax machines	Teachers	23	20.7	10	9.0	78	70.3
	Students	171	13.6	296	23.6	789	62.8
Any other	Teachers	13	11.7	10	9.0	88	79.3
	Students	209	16.6	191	15.2	856	68.2

Table 6 on the types of electronic resources used in teaching English language in senior secondary schools in Kaduna State indicated that Electronic board, Overhead projector, Opaque projector, Slide projector, Filmstrip and PC projector were all not available. This is indicated in the table with high percentage scores by both groups, however, multimedia computer, computer system, Internet/web environment, Television, Video were said to be available by the respondents. But electronic media devices like the Microphones and speakers system, Telephone/intercom, Fax machines and other such electronic devices were not available. In all it could be said that most of the electronic media devices required for the teaching and learning of English language at senior secondary were not available and where they were available, they were not fully functional for effective usage due to inadequate maintenance of these electronic resources.

Research Question Two: To what extent are the electronic resources available for use in teaching and learning English language in senior secondary school Kaduna state, Nigeria?

The specific objective here is to find out the quality of the available electronic resources in the senior secondary schools for the teaching and learning English language. The assessment took into consideration the organization of the information contained in the electronic media, the availability and quality of sound and vision, appropriateness of such information access and retrieval among others. The opinions of the two groups of respondents on the items used for assessing the availability and quality are presented in Table 7. The assessment here was based on the four point interval scale. The decision on each of the items is therefore based on the mean score with 2.5 and above for high availability and quality and below for non- availability and low quality of the available electronic media.

Table 7: Opinions of the respondents on the available electronic resources for the teaching and learning of English language in Senior Secondary Schools

	Electronic media	Status	Very high		High		Low		Very low		
			F	%	F	%	F	%	F	%	Mean
1.	Organisation of information contained in the electronics media	Teachers	23	20.7	33	29.7	29	26.1	26	23.4	2.48
		Students	274	21.8	247	19.7	280	22.3	455	36.2	2.27
2	Quality of the sound production of electronic media	Teachers	15	13.5	42	37.8	30	27.0	24	21.6	2.43
		Students	217	17.3	266	21.2	310	24.7	463	36.9	2.19
3	Acquiring of information contained in the electronic media	Teachers	12	10.8	44	39.8	34	30.6	21	18.9	2.42
		Students	240	19.1	253	20.1	309	24.6	454	36.1	2.22
4	Appropriateness of the information contained in the electronic media	Teachers	14	12.6	39	35.1	36	32.4	22	19.8	2.41
		Students	259	20.6	258	20.5	288	22.9	451	35.9	2.26
5	Clarity of projection of the electronic media	Teachers	17	15.3	31	27.9	41	36.9	22	19.8	2.39
		Students	237	18.9	232	18.5	296	23.6	491	39.1	2.17
6	Accessibility of the information contained in the electronic media	Teachers	17	15.3	28	25.2	43	38.7	23	20.7	2.35
		Students	212	16.9	289	23.0	296	23.6	459	36.5	2.20
7	Ability of the electronic media to appeal to the interest of the students	Teachers	14	12.6	29	26.1	43	38.7	25	22.5	2.29
		Students	265	21.1	255	20.3	276	22.0	460	36.6	2.26
8	Durability of the electronic media device	Teachers	17	15.3	33	29.7	38	34.2	23	20.7	2.40
		Students	223	17.8	226	18.0	298	23.7	509	40.5	2.13
9	Accuracy of the information contained in the electronic media	Teachers	20	18.0	39	35.1	34	30.6	18	16.2	2.55
		Students	241	19.2	253	20.1	290	23.1	472	37.6	2.21
10	Irretrievability of the information contained in the electronic media	Teachers	18	16.2	36	32.4	35	31.5	22	19.8	2.45
		Students	234	18.6	213	17.0	303	24.1	506	40.3	2.14
	Total Mean										**2.31**

In terms of the available and quality of the organization of information contained in the electronic media, both groups were of the view that the availability and quality of the sound production for teaching and learning of the subject in the senior secondary schools was low. These deduced from the frequencies and percentage scores for low and

very low in the table as well as the man scores for the first two items of the table. The respondents were of the opinion that the process of acquisition of the information contained in the electronic media was low and that the information contained in the electronic media could not be termed to be very appropriate. Apart from these limitations, the clarity of the projection of the electronic media available in the senior secondary schools were not considered good enough for the teaching and learning of the subject.

The quality of access to the information contained in the electronic media was also considered to be very poor and as such the available electronic media are not considered to have much appeal to the interest of the students. The durability of the electronic media devices were considered to be very low by the two groups of respondents and this is translated into their poor rating of the qualities in relatively mean scores. However, the teachers were of the view that the accuracy of the information contained in the electronic media were of relatively high quality but the students did not share this opinion as indicated by their means cores of 2.55 and 2.21 for teachers and students respectively or item 9 in the table. But both teacher and students were of the view that the information contained in the electronic media for the teaching and learning of the subject in the senior secondary schools were not easily retrievable. From the expressed opinions of the respondents, it could not be said that the available electronic media for teaching and learning of English language was considered low at senior secondary schools in Kaduna state, Nigeria.

Research Question Three: To what extent are the teachers and students aware of Electronic Media resources available in senior secondary schools?

This objective is aimed at determining the level of English language teachers and students awareness of usage of electronic media devices for the teaching of English language in senior secondary schools. But the teachers and students were therefore involved in this assessment. Their opinions on the awareness of usage of electronic devices are presented in table 8. Decision on whether they were aware in the usage of the respective devices was determined with a mean of 2.5 and above while mean below 2.5 implies not aware in the usage.

Table 8: Opinions of the teachers and students awareness in the usage of the available electronic media resources for the teaching and learning of English language in the senior secondary schools

Available electronic media	Status	Very often		Often		Occasionally		Not at all		
		F	%	F	%	F	%	F	%	Mean
Electronic board	Teachers	28	25.2	9	8.1	22	19.8	52	46.8	2.12
	students	301	24.0	87	6.9	126	10.0	742	59.1	1.96
Overhead projector	Teachers	6	5.4	17	15.3	41	36.9	74	42.3	1.84
	students	201	16.0	155	12.3	201	16.0	669	55.7	1.89
Opaque projector	Teachers	8	7.2	17	15.3	34	30.6	52	46.8	1.83
	students	201	16.0	159	12.7	182	14.5	714	56.8	1.88
Slide projector	Teachers	6	5.4	17	15.3	35	31.5	53	47.7	1.78
	students	205	16.3	148	11.8	212	16.9	691	55.0	1.89
Filmstrip	Teachers	9	8.1	19	17.1	32	28.8	51	45.9	1.87
	students	197	15.7	157	12.5	224	17.8	678	54.0	1.90
Pc projector	Teachers	10	9.0	14	12.6	40	36.0	47	42.3	1.88
	Students	225	17.9	178	14.2	219	17.4	634	50.5	2.00
Multimedia computer	Teachers	16	14.4	20	18.0	27	24.3	48	43.2	2.04
	Students	250	19.9	216	17.2	248	19.7	542	43.2	2.14
Computer system	Teachers	31	27.9	28	25.2	35	31.5	17	15.3	2.66
	Students	360	28.7	210	16.7	290	23.1	396	31.5	2.43
Internet/web	Teachers	29	26.1	23	20.7	20	18.0	39	35.1	2.38
environment	Students	331	26.4	197	15.7	261	20.8	467	37.2	2.31
Television	Teachers	27	24.3	30	27.0	33	29.7	21	18.9	2.57
	Students	310	24.7	186	14.8	192	15.3	568	45.2	2.19
Video	Teachers	22	19.8	28	25.2	31	27.9	30	27.0	2.38
	Students	276	22.0	175	13.9	222	17.7	583	46.4	2.11
Radio	Teachers	29	26.1	21	18.9	32	28.8	29	26.1	2.45
	Students	294	23.4	171	13.6	204	16.2	587	46.7	2.14
Cassette	Teachers	21	18.9	25	22.5	35	31.5	30	27.0	2.33
recorder/player	Students	255	20.3	168	13.4	222	17.7	611	48.6	2.05
Video camera	Teachers	21	18.9	16	14.4	39	35.1	35	31.5	2.21
	Students	244	19.4	150	11.9	266	21.2	596	47.5	2.03
Microphone/speaker	Teachers	20	18.0	25	22.5	38	34.2	28	25.2	2.33
system	Students	254	20.2	169	13.5	298	23.7	535	42.6	2.11
Telephone/intercom	Teachers	21	18.9	20	18.0	15	13.5	55	49.5	2.06
	Students	264	21.0	163	13.0	207	16.5	622	49.5	2.05
Fax machines	Teachers	13	11.7	13	11.7	23	20.7	62	55.9	1.79
	Students	229	18.2	136	10.8	181	14.4	710	56.5	1.91
Total Mean										**2.10**

Table 8 showed that the students were not aware in the usage of electronic media devices like the Electronic board, Overhead projector, Opaque projector, Slide projector, Filmstrip, PC projector, Multimedia computer, Internet/web environment, Telephone/intercom and Fax machines for the teaching and learning of English language in the senior secondary schools. But the teachers were aware in the use of

Computer system, Television, Video, Radio, Cassette record/player, Video camera and Microphone/speaker system. The non awareness in the use of some of the electronic media devices could partly be attributable to their non-availability in the secondary school. But were relatively adequate, was obtained like the computer system awareness because of usage tended to be relatively high as obtained in the table. It could be said that the teachers were aware in some of the electronic media devices that were available in the secondary school but lack the skill for some especially where such devices were not available.

Research Question Four: To what extent do English language teachers effectively utilize electronic media resources in the teaching and learning of English language in senior secondary schools in Kaduna state, Nigeria?

The assessment here is to determine the extent of utilization of electronic media resources in the senior secondary schools for the teaching and learning of English language. The two groups of respondents were assessed on this basis and their expressed opinions on the extent of usage of the devices were presented in Table 9. The decision on the items was based on the mean scores of 2.50 for used and below for not really used.

Table 9: Opinions of the respondents on the extents of utilization of available electronic media for the teaching and learning of English language in the senior secondary schools

Awareness of Available electronic media	Very efficient		Efficient		Moderate		Poor		
	F	%	F	%	F	%	F	%	Mean
Electronic board	19	17.1	13	11.7	29	26.1	50	45.0	2.01
Overhead projector	14	12.6	22	19.8	38	34.2	37	33.3	2.12
Opaque projector	8	7.2	18	16.2	34	30.6	51	45.9	1.85
Slide projector	12	10.7	23	20.7	30	27.0	46	41.4	2.01
Filmstrip	7	6.3	18	16.2	35	31.5	51	45.9	1.83
Pc projector	15	13.5	17	15.3	31	27.9	48	43.2	1.99
Multimedia computer	19	17.1	23	20-.7	34	30.6	35	31.5	2.23
Computer system	34	30.6	31	27.9	26	23.4	20	18.0	2.71
Internet/web environment	23	20.7	32	28.8	27	24.2	29	26.1	2.44
Television	34	30.6	30	27.0	28	25.2	19	17.1	2.71
Video	28	25.2	26	23.4	34	30.6	23	20.7	2.53
Radio	26	23.4	33	29.7	31	27.9	21	18.9	2.58
`cassette recorder/player	28	25.2	27	24.3	31	27.9	25	22.5	2.52
Video camera	31	27.9	25	22.5	28	25.2	27	24.3	2.54
Microphone/speaker system	25	22.5	31	27.9	33	29.7	22	19.8	2.53
Telephone/intercom	26	23.4	20	18.0	20	18.0	45	40.5	2.24
Fax machines	9	8.1	15	13.5	31	27.9	56	50.5	1.79
Total Mean									**2.27**

As revealed in table 9, the only electronic media device that could be said to have met adequate usage or utilized in the table is the computer system. Even in the

utilization of the computer system, only the teachers of secondary schools agreed that the devices was often used for the teaching and learning of the subject in the secondary schools but the students did not agree with the teachers. From the expressed mean scores on all the other devices listed in the table none meet the criteria for effective utilization for the teaching and learning of the subject in the senior secondary school going by the mean scores by the two groups. From the opinions of the respondents therefore, it could be said that the necessary electronic media devices for the teaching and learning of English language in the senior secondary school are not effectively used even where they were available.

4.4 Hypotheses Testing

The hypotheses formulated on the quality and utilization of the electronic media resources for the teaching and learning of English language in senior secondary school were tested for statistical significance. The tests were conducted as follows:

Hypothesis One: There is no significant difference on types of electronic media resources for teaching English language in senior secondary school in Kaduna State.

The availability of the type of electronic media devices for the teaching and learning of English language in senior secondary school were examined in table 10. In the test of this hypothesis, chi-square was used to investigate whether distributions of categorical variables differ from one another. A summary of the test is presented in table 10.

Table 10: Summary of Chi-square test on types of available electronic media resources for the teaching and learning of English language

Number	χ^2 cal.	χ^2 crit.	α	df	P-value	Decision
350	30.31	219.4	0.05	70	.217	Retained

(χ^2 cal. 30.31 < χ^2 crit. 219.4)

Table 10 revealed that the χ^2 cal. (30.31) is lower than the χ^2 crit. (219.4) at 70 degree of freedom and 0.05 level of significance. Therefore, these observations are clear indication that the teachers and students did not differ statistically in their opinions on the type of available electronic media for the teaching and learning of the subject in secondary school. With these observations, there is no evidence to reject the null hypothesis. Therefore the null hypothesis which states that there is no significant difference between the opinions of teachers and students on type of available electronic media resources for teaching and learning of English language in senior secondary school in Kaduna State is thus retained.

Hypothesis Two: There is no significant difference on the available electronic media in senior secondary school in Kaduna State.

The test of this hypothesis was conducted comparing the opinions of students and teachers of English language in senior secondary school on available electronic media for the teaching and learning of English language. The result of chi-square used for the test is summarized in table 11.

Table 11: Summary of Chi-square test on the available electronic media for the teaching and learning of English language in senior secondary school

Number	χ^2 cal.	χ^2 crit.	α	df	P-value	Decision
350	232.76	22.88	0.05	57	0.00	Rejected

(χ^2 cal. 232.76 > χ^2 crit. 22.88)

Table 11 revealed that the χ^2 cal. (232.76) is higher than the χ^2 crit. (22.88) at 57 degree of freedom and 0.05 level of significance. This means that the respondents differed significantly in their opinions on the available electronic media resources for the teaching and learning of English language in the senior secondary school. Therefore,

the null hypothesis which states that there is no significant difference on the available electronic media in senior secondary school in Kaduna State is thus rejected.

Hypothesis Three: There is no significant difference in the awareness level of teachers and students on the availability of electronic media resources in senior secondary schools in Kaduna State.

The test of this hypothesis was conducted with the scores of the two groups of respondents (teachers and students) determine whether distributions of categorical variables differ from one another on the awareness level of teachers and students on the availability of electronic media resources. Chi-square statistical tool was used to test the hypothesis. Table 12 presented the summary of this analysis.

Table 12: Summary of Chi-square test on the awareness level of teachers and students on the availability of electronic media resources

Number	χ^2 cal.	χ^2 crit.	α	df	P-value	Decision
350	218.44	41.02	0.05	99	0.03	Rejected

(χ^2 cal. 218.44 > χ^2 crit. 41.02)

Table 12 revealed that the χ^2 cal. (218.44) is higher than the χ^2 crit. (41.02) at 99 degree of freedom and 0.05 level of significance. This result therefore means that there is significant difference in the awareness level of teachers and students on the availability of electronic media resources. The implication of this result is to reject the hypothesis which says that there is no significant difference in the awareness level of teachers and students on the availability of electronic media resources in senior secondary schools in Kaduna State.

Hypothesis Four: There is significant difference in the utilization of electronic media resources for the teaching of English language by teachers and students in secondary schools in Kaduna state, Nigeria.

The test of this hypothesis was conducted comparing the opinions of students and teachers of English language in the utilization of electronic media resources for the teaching of English language. The result of chi-square used for the test is summarized in table 13.

Table 13: Summary of Chi-square test on the utilization of electronic media for the teaching and learning of English language in senior secondary schools

Number	χ^2 cal.	χ^2 crit.	α	df	P-value	Decision
350	11.26	81.10	0.05	48	0.19	Retained

(χ^2 cal. 11.26 < χ^2 crit. 81.10)

As indicated in table 13, the groups did not differ in their opinion on the utilization of electronic media for the teaching and learning of English language. This is deduced from the χ^2 cal. (11.26) which is less than the χ^2 crit. (81.10) at 48 degree of freedom and 0.05 level of significance. By these observations, the hypothesis which states that there is no significant difference in the utilization of electronic media resources for the teaching of English language in senior secondary schools in Kaduna State**,** Nigeria is thus retained.

4.5 Summary of Major Findings

The major findings from the analysis of the data and test of the hypotheses are that:

1. There was no difference between the opinions of teachers and students on type of available electronic media resources for teaching and learning of English language in senior secondary school in Kaduna State.

2. There was difference in the opinions of respondents on the available electronic media resources for the teaching and learning of English language in the senior secondary school in Kaduna State.
3. There was difference in the awareness level of teachers and students on the availability of electronic media resources.
4. There was no difference in the opinions of respondents on the utilization of electronic media for the teaching and learning of English language.

4.6 Discussion of Findings

In the course of assessing the availability and utilization of electronic media in the Teaching and learning of English language in senior secondary schools from the perspective of the teachers and students, it was observed that most electronic media required were not available and where they were available they were not effectively utilized due to a number of constraints. A total of four null hypotheses were tested to establish possible significant differences in the opinions of the respondents in the assessment of the variable used in line with the research objectives and questions.

Hypothesis 1 was tested for the differences in the opinions of teachers and students based on the types of electronic media available for the teaching and learning of English language senor secondary schools. The result did not reveal significant difference in the opinions of the teachers and students based on the opinions. The null hypothesis was there retained. The findings from the related data revealed that apart from the computer system and its related appendages, all other electronic media assessed were not available in secondary schools. This agrees with Okobia (2011) on a research titled Availability and Teachers' Use of Instructional Materials and Resources in the Implementation of Social Studies in Junior Secondary Schools in Edo State. The results showed that instructional materials and resources available were grossly

inadequate. The study also revealed that most instructional materials and resources are not available in the schools for the teaching of social studies. The most available instructional materials are textbooks and chalkboards.

In hypothesis 2, the significant difference between teachers and students' view on the available electronic media for the teaching and learning of English language in senior secondary schools was tested. The teachers were found to have rated the availability of electronic media in secondary schools significantly higher than the student. The null hypothesis was therefore rejected. However, the rating of the two groups was only found to differ significantly because the level of both scores was still within the range of not adequately available. This means that though there was difference in the level of rating of the available electronic media resources but both groups shared the common opinion that most required electronic media for teaching the subject in senior secondary schools were not adequate and qualitative. The finding agreed with Esimaje and Amanze (2011) from a study on availability of ICT in teaching and learning of English language in secondary schools in Okigwe educational zone, Imo state, Nigeria. The report stated that the ICT facilities found in the schools were very few, except for hand-sets. The study also revealed that the available ICT facilities are to a great extent used by the teachers in the schools. The study also confirms that teachers acquire the skills of manipulating the ICT equipment but do not exhibit the skills in classroom pedagogy.

Hypothesis 3 was tested for opinions of teachers and students on awareness level on the availability of electronic media in senior secondary schools. The teacher had a higher rating of the available electronic media for the teaching and learning of the subject in secondary schools more than the students. The observed variability in the mean scores clearly showed that the teachers tended to have a significantly higher rating

of the available electronic media in secondary schools more than the students. This means that the null hypothesis which states that there is no significant difference in the opinion of teachers and students on the awareness level of available electronic media for teaching was rejected. This finding reflected the report of Gulbahar and Guven (2008), in which it was stated that although teachers may be willing to use ICT resources and were aware of the existing potentials, they were facing problems in relation to accessibility to ICT resources and lack of in-service training opportunities for the teachers to familiarize themselves with electronic media resources.

Hypothesis 4 was tested for significant difference on teachers utilization of the available electronic media for the teaching and learning of English language studies in the senior secondary schools. The result of the test revealed no significant difference in the level of utilization of the available electronic media resources by the teachers teaching English language in senior secondary schools. The null hypothesis was therefore retained. From the mean scores it was observed that the level of utilization by the teachers was very low. The observation was found to be consistent with the non-availability of the required electronic media earlier observed in the study. The finding agrees with Duru and Ozoji (2011) who reported that computer teachers in secondary schools do not utilize computer hardware and internet applications in lessons; that teachers lack the required skills to operate these resources; secondary schools lack the necessary infrastructures required for utilization of the resources and applications.

CHAPTER FIVE
SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter summarizes the assessment of the availability and utilization of electronic media resources in the teaching and learning of English in senior secondary schools in Kaduna State, Nigeria. Among others, the chapter presents the conclusion and offers recommendations based on the outcome of the study, as well as providing suggestions for further study on the subject.

5.2 Summary

The research on the Assessment of the Availability and Utilization of Electronic Media Resources in Teaching English Language in Senior Secondary Schools in Kaduna State, Nigeria was undertaken to find answers to the following research questions on types of electronic media resources available, effective utilization and awareness of the electronic media by teachers and students.

From the various literature reviewed, it was observed that, there is a lot of emphasis on electronic media application in the teaching and learning process. The issue of electronic media in teaching is not a new phenomenon in classroom pedagogy; it has been applied in developed countries and developing and even in some cases, under developed nations for over a decade now. It covers a wide range of issues on availability, effective utilization, impact and acceptability. It was also revealed that many scholars are unanimous about its necessity and usefulness in bringing about effective instruction; the researchers are also of the opinion that there are problems of availability, expertise and maintenance of the gadgets.

The researcher adopted a survey design. The choice of the design was to allow the researcher gather information about a target population without undertaking a complete enumeration of the whole population. The study population consisted of two thousand eight hundred and forty (2,840) respondents. A total of 350 respondents were sampled through simple random sampling technique.

The research instruments for this study were checklist, questionnaire for lecturers and students and interview constructed by the researcher. Data collected were analysed with the Statistical Package for the Social Sciences (SPSS) version 17. Procedures adopted were frequencies and percentages for describing the demographic characteristics of the respondents. In the assessment of the investigated variable relating to the availability, quality and utilization of electronic media in the colleges, frequencies and percentages along with means scores were used.

A total of four null hypotheses were tested using Chi-square in order to establish possible significant differences in the opinions of the respondents in the assessment of the variable used in line with the research objectives and questions. In hypothesis 1, the result did not reveal significant difference in the opinions of the teachers and students based on their responses. The null hypothesis was therefore retained. Hypothesis 2; the teachers were found to have rated the available electronic media resources in the secondary schools significantly higher than the students. The null hypothesis was therefore rejected. Hypothesis 3 observed that variability in the mean score was statistically difference as the teachers tended to have a significantly higher rating of the awareness level on available electronic media in the secondary schools more than the students. This means that the null hypothesis that there is no significant difference in the opinions of teachers and students on the awareness level of available electronic media resources for teaching is rejected. Hypothesis 4 was tested for significant difference on

the utilization of the available electronic media resources. The result of the test revealed no significant difference in the level of utilization. The null hypothesis was therefore retained.

5.3 Conclusion

In view of the findings from this study, it can be concluded that there are inadequate supplies of the various electronic media resources (such as computer system, television, video, radio, cassette recorder player, microphone and speaker system) that can be used in the teaching of English language in secondary schools within the area of study. This few available and in good condition are not effectively utilized in the actual process of teaching in the schools.

There is also the problem of awareness of the relevant electronic media resources by both teachers and students. For instance, some students were not aware of the existence of some media resources but some teachers are aware of them in some secondary schools. Even where the teachers and students are aware of the availability of these electronic media resources, there was no effective utilization of resources by teachers and students.

5.4 Recommendations

From the analysis of the data collected for this study and result of the hypotheses tested, the following recommendations were made:

1. Ministry of Education of Kaduna state should as a matter of urgent importance provide various types electronic media resources such as overhead projectors, filmstrip, internet web, electronic board, cameras multimedia computers, among others for the teaching and learning of English language in schools.

2. There is a need for in-house training and periodic orientation on the use of acquired available electronic resources for the teaching and learning of English language in secondary schools.
3. There is a need for an enabling policy to improve awareness level of both teachers and students on the use of electronic media, especially on pedagogical application in the teaching and learning of the subject (English language).
4. Government should imbibed in the use of motivation strategies through seminars and workshops for teachers to fully utilize electronic media devices for effective teaching and learning of English language in secondary school.

5.5 Contribution to Knowledge

The study identified the state of availability and utilization of electronic media resources in senior secondary schools in Kaduna State in respect of:

1. Identifying that there are few various types of electronic media resources such as computer system, television, radio cassette recorder, microphone and speaker system in senior secondary school in Kaduna state to be used in teaching and learning English language.
2. The study identified shortage of available electronic media resources which continue to affects classroom instruction in teaching and learning English language in senior secondary schools in the study area.
3. The study revealed that teachers have high awareness level than students in the use of electronic media resources in teaching and learning English language.
4. The study discovered poor utilization of electronic media resources by both teachers and students in teaching and learning English language in senior secondary schools in Kaduna State.

5.6 Suggestions for Further Research

Every research is an attempt to bring out a new dimension of knowledge, it is however often inconclusive in itself, and there are always gaps to be filled in order to have a holistic view of a dimension in question. The following areas can be further pursued by subsequent researches.

1. Comparison of availability and effective usage of electronic media resources in public and private secondary school in Kaduna state, Nigeria.
2. An assessment of student academic outcome through the use of electronic media resources in primary schools in Kaduna state.
3. A comparison between the rural schools and urban schools teachers' availability and usage of electronic media resources in Nigeria

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APPENDIX I

Department of Educational Foundations &
Curriculum
Faculty of Education
Ahmadu Bello University Zaria.
November, 2015.

Dear Respondent,

I am an M.Ed student of the above named University undertaking a research on Assessment of Availability and utilization of electronic media Resources in Teaching English Language in senior secondary schools in Kaduna State, Nigeria.

Kindly go through the questionnaire objectively and indicate your views. I guarantee that all information supplied will be treated in strict confidentiality.

Thank you for the kind gesture.

Orusengha Timinepre Joy
P13EDFC8111

Department of Educational Foundations &
Curriculum
Faculty of Education
Ahmadu Bello University Zaria.
November, 2015.

Availability of electronic media for Teachers TAUMAUS

Topic: Availability and utilization of electronic media in the Teaching and learning of English Language in Senior Secondary School in Kaduna State, Nigeria

There are two sections; section A and B. Section A seeks background information of respondents while B contains items on the variables of the study. Kindly tick and fill

Section A: Background Information on the respondents

1. Name of School_____
2. Position/Rank (please tick (√) as appropriate 2-6)
   a. Principal [ ]
   b. Head of Department [ ]
   c. English Lab/Studio Attendant [ ]
3. Unit
   a. English Language [ ]
   b. Literature [ ]
4. Highest Academic Qualification
   a. PhD [ ]
   b. M.Ed, M.Sc [ ]
   c. B.Ed/B.Sc/B.A (Ed) [ ]
   d. Others (specify)_____
5. Working Experience:
   a. 1-5 years [ ]
   b. 6-10 years [ ]
   c. 11-15 years [ ]
   d. 16-20 years [ ]
   e. 21 years and above [ ]

APPENDIX II

Section B. Checklist

Indicate the level of availability by ticking the appropriate column for each item as it relates to your schools

S/N	List of electronic media for Teaching	Not available	Available not in good condition	Available and in good condition
1.	Electronic board			
2.	Overhead Projector			
3.	Opaque Projector			
4.	Slide projector			
5.	Filmstrip			
6.	PC Projector			
7.	Multimedia Computer			
8.	Computer System			
9.	Internet/Web Environment			
10.	Television			
11.	Video			
12.	Radio			
13.	Cassette Recorder/Player			
14.	Video Camera/still Camera			
15.	Microphone/Speaker system			
16.	Telephone/Intercom			
17.	Fax Machines			
18.	Any other, please specify			

Section C: Please rate the quality of the following electronic media in your school

Note: The Response options are:

VH = Very High H = High L= Low VL = Very Low

S/N	Quality	VH 4	H 3	L 2	VL 1
19.	Organisation of information contained in the electronic media				
20.	Quality of the sound production of electronic media				
21.	Acquiring of information contained in the electronic media				
22.	Appropriateness of the information contained in the electronic media				
23.	Clarity of projection of the electronic media				
24.	Accessibility of the information contained in the electronic media				
25.	Ability of the electronic media to appeal to the interest of the students				
26.	Durability of the electronic media device				
27.	Accuracy of the information contained in the electronic media				
28.	Retrievability of the information contained in the electronic media				

Section D: Tick (√) *the option that best describe the frequency you use electronic media in teaching*

S/N	Available electronic media	Used very often 4	Used often 3	Used on occasions 2	Not used at all 1
29.	Electronic Board				
30	Overhead Projector				
31.	Opaque Projector				
32.	Slide projector				
33.	Filmstrip				
34.	PC projector				
35.	Multimedia Computer				
36.	Computer System				
37.	Internet/Web Environment				
38	Television				
39	Video				
40	Radio				
41	Cassette Recorder/Player				
42	Video Camera/still Camera				
43	Microphone/Speaker system				
44	Telephone/Intercom				
45	Fax Machine				

Section E: Please score(√) in *the most appropriate column that best suit your level of proficiency in the use of the following electronic media*

VE = Very Efficient E = Efficient M = Moderate P = Poor

S/N	Proficiency Level of Teachers in using electronic media in teaching	VE 4	E 3	M 2	P 1
46	Electronic Board				
47.	Overhead Projector				
48.	Opaque Projector				
49.	Slide projector				
50.	Filmstrip				
51.	PC projector				
52.	Multimedia Computer				
53.	Computer System				
54.	Internet/Web Environment				
55.	Television				
56.	Video				
57.	Radio				
58	Cassette Recorder/Player				
59	Video Camera/still Camera				
60	Microphone/Speaker system				
61.	Telephone/Intercom				
62.	Fax Machine				

Section F: Tick the option that best describe the extent to which you agree with the statement as motivators for the use of electronic media in Teaching and Learning English language

SA = Strongly Agree A = Agree D= Disagree SD = Strongly Disagree

S/N	Factors responsible for Motivating Teachers' use of electronic media in Teaching	SA 1	A 2	D 3	SD 4
63.	Participating in seminars or taking courses in electronic media application				
64.	Technical support units in the schools to encourage the electronic media usage				
65.	Investments of the institution on infrastructure of instructional technology				
66.	Developing the policies and plans for diffusion of the instructional technology				
67.	Reduction of work load to provide opportunities for teachers to develop instructional materials.				
68.	Other agencies support teachers for training in electronic media for instruction				
69.	Loans to teachers for acquisition of electronic media appliances				
70.	Personal interest in electronic media usage				

Section G: ***Tick the option that best describes the extent to which you agree with the statement as barriers to the effective utilization of electronic media in Teaching and Learning English Language in Schools.***

SA = Strongly Agree A = Agree D= Disagree SD = Strongly Disagree

S/N	Barriers to effective utilization of electronic media resources	SA 4	S 3	D 2	SD 1
71.	Insufficient Time To Prepare Electronic-Based Materials				
72.	Insufficient technical teachers' technical knowledge				
73.	Problems of accessibility to existing hardware (computer, overhead project etc)				
74.	Shortage of electronic media devices for effective use in teaching				
75.	Poor technical and physical infrastructure of learning environment				
76.	Inadequate guidance and support in electronic media usage by institutions				
77.	Inadequate funding for electronic media integration				
78	Inefficiency in the use of instructional software/electronic				
79.	Scarcity of resources on electronic media for obtaining information				
80	Inadequate provision for professional development opportunities in electronic media				
81	Lack of interest of teachers in electronic media usage				
82.	Ineffectiveness in erratic power supply areas				
83.	High acquisition and maintenance cost of equipment				
84.	Believe in electronic media as propagator of social vices				
85.	Long time requires to master skills in the use of electronic media				
86.	Most electronic software easily becomes obsolete				

APPENDIX III

Students Questionnaire

Department of Educational Foundations &
Curriculum
Faculty of Education
Ahmadu Bello University Zaria.
November, 2015.

Electronic Media Availability for Students SAUMAUS

Topic: ***Availability and utilization of electronic media in the Teaching and Learning of English Language in Schools of Kaduna State Nigeria***

There are two sections, Section A and B. Section A seeks background information of the respondents while section B contains items on the variables of the study

Section A = Background Information on the respondents

1. Name of School_____
2. Location: a. Rural b. Urban
3. Level
   a. SS I
   b. SS II
   c. SS III
4. Class Format
   a. Arts
   b. Science
   c. Technical/vocational

Section B

Indicate the level of availability by ticking the appropriate column for each item as it relates to your schools

S/N	List of electronic media for Teaching	Not available 1	Available not in good condition 3	Available and in good condition 3
1.	Electronic board			
2.	Overhead Projector			
3.	Opaque Projector			
4.	Slide projector			
5.	Filmstrip			
6.	PC Projector			
7.	Multimedia Computer			
8.	Computer System			
9.	Internet/Web Environment			
10.	Television			
11.	Video			
12.	Radio			
13.	Cassette Recorder/Player			
14.	Video Camera/still Camera			
15.	Microphone/Speaker system			
16.	Telephone/Intercom			
17.	Fax Machines			
18.	Any other, please specify			

Section C: ***Please rate the quality of the following electronic media in your school***

Note: The Response options are:

VH = Very High H = High L= Low VL = Very Low

S/N	Quality	VH 4	H 3	L 2	VL 1
19.	Organisation of information contained in the electronic media				
20.	Quality of the sound production of electronic media				
21.	Acquiring of information contained in the electronic media				
22.	Appropriateness of the information contained in the electronic media				
23.	Clarity of projection of the electronic media				
24.	Accessibility of the information contained in the electronic media				
25.	Ability of the electronic media to appeal to the interest of the students				
26.	Durability of the electronic media device				
27.	Accuracy of the information contained in the electronic media				
28.	Retrievability of the information contained in the electronic media				

Section D: Tick (√) ***the option that best describe the frequency you use electronic media in teaching and learning English Language in schools.***

S/N	Available electronic media	Used very often 4	Used often 3	Used on occasions 2	Not used at all 1
29.	Electronic Board				
30	Overhead Projector				
31.	Opaque Projector				
32.	Slide projector				
33.	Filmstrip				
34.	PC projector				
35.	Multimedia Computer				
36.	Computer System				
37.	Internet/Web Environment				
38	Television				
39	Video				
40	Radio				
41	Cassette Recorder/Player				
42	Video Camera/still Camera				
43	Microphone/Speaker system				
44	Telephone/Intercom				
45	Fax Machine				