# ASSESSMENT OF THE IMPACT OF INFORMATION AND COMMUNICATIONS TECHNOLOGY (ICT) ON EDUCATIONAL DEVELOPMENT: A STUDY OF SELECTED SENIOR SECONDARY SCHOOLS IN KADUNA STATE, NIGERIA

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**June, 2015**

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**A THESIS SUBMITTED TO THE SCHOOL OF POSTGRADUATE STUDIES, AHMADU BELLO UNIVERSITY, ZARIA, IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF A MASTER OF SCIENCE DEGREE IN PUBLIC ADMINISTRATION (M.Sc.)**

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NIGERIA

**June, 2015**

## Declaration

I declare that, the work in this thesis entitled "Assessment of the Impact of Information and Communications Technology (ICT) on Educational Development: A Study of Selected Senior Secondary Schools in Kaduna State, Nigeria" has been carried out by me in the Department of Public Administration. The information derived from the literature has been duly acknowledged in the text and a list of references provided. No part of this thesis was previously presented for another degree or diploma at this or any other institution.

Sa'idu Kasimu Imam _____ _____

Signature Date

## Certification

This thesis entitled ASSESSMENT OF THE IMPACT OF INFORMATION AND COMMUNICATIONS TECHNOLOGY (ICT) ON EDUCATIONAL DEVELOPMENT: A STUDY OF SELECTED SENIOR SECONDARY SCHOOLS IN KADUNA STATE, NIGERIA, by Sa'idu Imam KASIMU meets the regulations governing the award of the Degree of Master of Science in Public Administration (M.Sc.) of the Ahmadu Bello University, and is approved for its contribution to knowledge and literary presentation.

| | | |
|---|---|---|
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| Dean, School of Post Graduate Studies | (Signature) | Date |

## Dedication

This research work is dedicated to my humble family, to Malam Shehu Ahmadu Rufa'i (Lamido) with whose advice the work picked up but he returned to glory before completion of the work, may his gentle soul continue to rest in peace. The research is also dedicated to Malam Sani Ibrahim the Registrar BUK, who was the foundation of our educational career and it is dedicated to all those who are concerned with the growth and development of present and future generations.

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## LIST OF ACRONYMS

| | |
|---|---|
| CMS | Centre for Media Studies |
| DVD | Digital and Versatile Disc |
| E.g. | Example |
| GGSS | Government Girls Secondary School |
| GSM | Global Service for Mobile |
| GSS | Government Secondary School |
| ICT | Information and Communication Technology |
| IP | International Protocol |
| IRC | Internet Relay Chat |
| NECO | National Examinations Council |
| Snr | Senior |
| SSCE | Senior Secondary Certificate of Education |
| Tv | Television |
| UK | United Kingdom |
| UNESCO | United Nations Education Social and Cultural Organisation |
| US | United States |
| USA | United States of America |
| USAID | United States Agency for International Development |
| USB | Universal Serial Bus |
| USSR | Union of Soviet Socialist Republic |
| VOIP | Voice over IP |
| WWW | World Wide Web |

## Abstract

Information and communications technology (ICT) has recorded a remarkable development in recent years. This development is affecting educational development across the globe in various ways. It has also made Nigerian government to formulate policies on IT. Accordingly the study was conducted to assess the effects of ICT on educational development with reference to senior secondary schools in Kaduna state. Nigerian government through its policies intends to integrate and streamline the country to the main stream of global ICT. The process includes the integration of schools and students to enable them meet the required minimum standard in the ICT age. The study inquired about the students' knowledge of the ICT, its usage, and how it affects their academic activities and performance. The study used Primary source of data, while qualitative and quantitative instruments were used to present and analyse the data. Modernization theory was used to guide the study. Among the findings of the study was that, both urban and rural students are virtually the same in terms of knowledge and usage of ICT, whereby, more than 80% of them have the knowledge and are using it. The study recommends among others that, 'A careful plan should be made by the state ministry of education in collaboration with the schools' authorities to systematically devise a means of guidance and control of students' attitude towards ICT. This is to make their inclination to it more productive to their academic and attitudinal aspects. This can be done by introducing certain changes and innovations in the schools' curriculum that can be attractive and easy to comprehend by the students, that is capable of satisfying their desire for fun and at the same time will enhance their academic capabilities and their mind-set.

# CHAPTER ONE

# INTRODUCTION

## 1.1. Background to the Study

Recent development in Information and Communications Technology (ICT) has resulted in tremendous progress in the area of communication and information dissemination, which contributed in making the world more interactive. This made transactions to emerge between people who may never meet. Also, the ICT is inexpensive and accessible easily throughout the global. Certainly, this permits instantaneous personal dialogue and communication between people around the world.

Education is central in the survival and growth of human being as individual and as society, each with its own ways and means of educating and socialising its members, as dictated by the societal culture. Every culture has a mechanism that adjusts and accommodates new developments happening within and outside the society which ensures continuity and effective transmission of the societal culture from generation to generation and guaranteed and safeguard the survival and development of the society. Mishandling of changes happening within and outside the society may cause significant effect on the culture of the society. The effects may cause retrogression, confusion, acculturation, or even extinction of the society in totality. In this context, each society develops and designs its educational system based on its tradition, culture, norms and values, to suit its environment and generation, and to carter for its immediate and future developmental needs and aspirations. Consequently, as a result of development in ICT,

diverse ideas and cultures interact and interwoven, as such, new knowledge, ideas, cultures and values, are transferred from one place to another.

The manner, by which secondary schools' students in Kaduna state usually glue themselves to ICT, by means of different kinds of devices, and for a considerable proportion of their time, is never unconnected with the availability and affordability of the devices in the country in recent times. Accordingly, the worry here is about what the students are doing on these devices. Findings of some studies revealed a huge patronage of the ICT devices among youths, while other studies revealed some positive as well as negative effects of such inclination on the youths. For instance, youths are becoming more and more overwhelmed by programmes available on the ICT, which in turn facilitate or erode their learning inclination and improve or retard their educational development. Empirical researches have established that, modern technologies such as computers and the Internet have become enmeshed in young people's lives, the Kaiser report, of 2004 as cited in Shu-Sha and Subrahmanyam, (2009) confirmed that:

> 74% of 8-year olds to 18-year olds in the United States had Internet access in their homes, more recently, the 2008 World Internet Project survey of 13 countries revealed that among youth 12-years to 14-years, 88% in the United States used the Internet; the percentage of Internet users in this age group was 100% in the United Kingdom, 98% in Israel, 95% in Canada, and over 70% in Singapore. Among adolescents, the communication applications of the Internet such as instant messaging, blogs, and social networking sites (e.g., MySpace, Face book) are especially popular. As the Internet has become pervasive in the lives of young people, their online activities and interactions have become the focus of intense research. It is becoming evident that the Internet presents risks as well as opportunities to adolescent development (Shu-Sha and Subrahmanyam, 2009).

Also, the Shu-Sha and Subrahmanyam's (2009) study attributed some negative attitudes such as 'Internet addiction' as well as online risks such as 'exposure to sexually explicit materials' and 'online victimisation' including 'harassment' or 'cyber bullying' and 'sexual solicitation' to the youths' inclination toward ICT. These reasons along with the government intention of further developing education in the country by means of ICT, prompted the research to assess the impact of ICT on selected senior secondary schools in Kaduna state. In this regard, schools were selected based on location; urban/rural, and gender; male/female. This is with a view to find out whether there are similarities or differences in their knowledge and usage of the ICT and its impact on their educational development.

## 1.2. Statement of the Research Problem

For the fact that no country can live in isolation, and as the ICT has become part of our daily life, youths are becoming more and more susceptible to its effects. Accordingly, it is imperative for each society to study the effect of ICT on the societal life in order to develop those elements that are beneficial to its survival and avert what is detrimental to its growth and development. ICT is enormously enhancing people's accessibility to knowledge and information across the globe, minimizing time waste, narrowing distance between people, and contributing significantly to the growth and development of societies. It is a known fact that, today's college students have grown up with intrinsic technological innovations that are integrated into modes of communication, education, and socialization, (La Rose, Eastin, and Gregg (2001) in Everhart, (2011). In the same vein, prevalence of negative attitudes among youths, such as pornography, money

laundering, cultism, international terrorism and child abuse, may also be attributed to the unchecked accessibility of the ICT by the youths, (Omekwu 2005, cited in Aduwa, 2006).

Senior secondary schools' students in Kaduna state nowadays commit considerable proportion of their time on ICT which ideally supposed to positively impact on their educational development. However, for the fact that most schools lack an effective method of guidance on issues pertaining to ICT, the students are therefore left with the choice of their preferences on ICT. This made most of them to be carried away by the funny side of it, using most of their time on social media, chatting with friends and many things alike. Consequently, the study was conducted to assess the effect of the ICT on educational development in state through the identification of the level of awareness and utilasation of the ICT and its effect on the students' academic activities and performance.

### 1.3. Research Questions

i. Has ICT impacted positively on educational development of senior secondary schools' students in Kaduna state?

ii. Are there significant variations in terms of knowledge and usage of ICT between senior secondary schools' students in urban areas and their counterparts in the rural areas of Kaduna state?

iii. Is there any significant relationship between academic performance of senior secondary schools' students in Kaduna state and their usage of ICT?

## 1.4. Research Hypotheses

i. ICT has positively impacted on educational development of senior secondary schools' students in Kaduna State.

ii. There are significant variations in terms of knowledge and usage of ICT between senior secondary schools' students in urban areas and their counterparts in the rural areas of Kaduna state.

iii. There is significant relationship between ICT and the performance of senior secondary schools' students in Kaduna State.

## 1.5. Objectives of the Study

Main objective of the study was to assess the impact of ICT on the educational development of senior secondary schools' students of Kaduna State. Other objectives are to:

i. Compare the rate of knowledge and usage of ICT between senior secondary schools' students in the urban areas and their counterparts in the rural areas of Kaduna state.

ii. Study the effects of ICT on the Academic activities of senior secondary schools students' in Kaduna State.

iii. Study the Relationship between ICT and the Academic Performance of senior secondary schools students in Kaduna State.

## 1.6. Scope and Limitation of the Study

Scope of the study in terms of population was limited to some selected senior secondary schools' students in Kaduna State drawn from six secondary schools across the state; two each from the three senatorial zones. While in terms of period, the study covers the period between 2000 and 2014. This enables linkage between the era of little or none availability of GSM and most ICT devices and the epoch of proliferation of such apparatuses in Nigeria. The period that marked an unprecedented public exposure to ICT and its apparatuses became very much available, affordable and accessible to most average Nigerians. Also, with respect to ICT, the study limits itself to Internet and International Satellite Media. In terms of academic performance, the study was limited to the annual progress report provided by the schools on students' performance in final examinations; Senior Secondary School Certificate of Education (SSCE) and National Certificate of Education (NECO). In addition, academic activities were limited to students' attendance of extra lessons, tutorials, going to libraries, and reading at home.

## 1.7. Significance of the Study

i. The study is significant being an attempt to make contribution to the existing body of knowledge by revealing the effect of ICT on educational development of senior secondary schools' students in Kaduna State with a view to fill the existing vacuum in the area.

ii. Proliferation of ICT in Nigeria and the reaction of the youths towards it have constituted a source of concern regarding their academic performance, thereby calling for a careful study to ascertain the effects on them. Hence, this research is a step in that direction.

iii. The study is significant in the sense that it contributes towards enhancing educational policies on factors influencing educational development of senior secondary schools' students in Kaduna state.

In accordance with the foregoing, the choice of some selected senior secondary schools' students in Kaduna state was basically for the fact that, large proportion of the youths are in the senior secondary schools, and they are at the point of transition to tertiary institutions and from childhood to adulthood. In addition, they are the potential reservoir for the Nigeria's human capital. Also, senior secondary schools' students are seen as a depiction of the youths, thus, they can easily be studied to ascertain the effects of the ICT on youths in general. Furthermore, the study attempted a comparison of urban and rural students to identify whether there are areas of convergence or divergence on aspects concerning the effects of ICT on them.

## 1.8. Definition of Key Concepts

Key concepts in the study are: Educational Development, ICT, Internet, Satellite media, and Academic Activities.

Educational Development is multi dimensional concept, while some viewed from a broader perspective; that is, it encompassed instructional, curriculum, organizational, and some aspects of faculty development. Some viewed it from the narrower perspective, that is, it focused on the teaching domain, as opposed to all aspects of academic career development", (Bédard, Clement & Taylor, 2008 P.2).

In this study, Educational Development refers to the narrower view of the concept; that is the focus was on the teaching domain.

Information Technology means computers, ancillary equipment, software and firmware (Hardware) and similar procedures, services (including support services) and related resources. It includes any equipment or interconnected system or subsystem of equipment that is used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission or reception of data or information. (National IT Policy, 2000).

Information and Communication Technology (ICT): ICT according to Gokhe, (2013) is "Technology that supports activities involving information. Such activities include gathering, processing, storing and presenting data. Increasingly these activities also involve collaboration and communication". ICT include any product that will store, retrieve, manipulate, transmit or receive information electronically in a digital form, such as personal computers, digital television, email, or robots.

**Internet**

Online dictionary.com described Internet as:

> the publicly available worldwide system of interconnected computer networks that transmit data by packet switching using a standardised Internet Protocol (IP) and many other protocols. It is made up of thousands of smaller commercial, academic, and government networks. It carries various information and services, such as electronic mail, online chat and the interlinked web pages and other documents of the World Wide Web. Because this is by far the largest, most extensive internet

> (with a small i) in the world, it is simply called the Internet (with a capital I) (Online dictionary.com)

Accordingly, in this study, Internet is referred as 'All available fora that exists on network for public consumption, which can be used for sharing or gaining information or knowledge and can be used instantaneously.

**Satellite media**

A Satellite media is:

> Television programming delivered by the means of communications satellite and received by an outdoor antenna, usually a parabolic reflector generally referred to as a satellite dish, and as far as household usage is concerned, a satellite receiver either in the form of an external set-top box or a satellite tuner module built into a TV set. Satellite TV tuners are also available as a card or a USB peripheral to be attached to a personal computer. In many areas of the world satellite television provides a wide range of channels and services, often to areas that are not serviced by terrestrial or cable providers. (Wikipedia)

Consequently, Satellite media in this study refers to 'those media that always relates their programmes in audio or audio visual forms, without interruption, and are available and accessible globally, and are seldom bounded by laws of any particular nation,'.

**Performance**

Performance according to Microsoft Encarta dictionary, (2009) refers to working effectiveness: the way in which somebody does a job, judged by its effectiveness.

Performance also means, "accomplishment of something: the act of carrying out or accomplishing something such as a task or action".

In this study, Academic performance refers to 'students' SSCE, and NECO examinations outcome'. While academic activities refers to 'students' 'outside classes' activities including extra lessons, tutorial, their attendance of library and their reading at home.

# CHAPTER TWO

# LITERATURE REVIEW AND THEORETICAL FRAMEWORK

## 2.1. Literature Review

### 2.1.1. Introduction

In this chapter, literature review covers issues concerning historical background of education in Nigeria, educational development, ICT and educational development, government policies on IT, effects of Internet on College Students in particular and the youths in general, effects of International satellite media on College Students in particular and the youths in general, and other related issues.

Also, in line with the research design, theoretical framework follows.

### 2.1.2. ICT and Education

The centrality of education in the survival and development of every society can never be overemphasised. And any influence on education in any giving society cans tantamount to significant consequence on that society. It is a fundamental yardstick for measuring development of societies; hence, it is an area of concern to every society. More so, to the developing countries who are trying to catch up with their developed counterparts. In recent years, where the world became opened for unfettered competition under the concept of liberalisation and other related concepts, education has become key tool that enables societies properly compete and yield positive result out of the competition. At present, ICT has become central in educational development throughout the globe, therefore, the ability or lack of it of any society to incorporate ICT and pursue its proper utilization by the citizenry will largely determine the success and growth of that society

or otherwise. In recent times, the use of highly sophisticated means of transportation and information and communications technology has reduced the world to a global village; the use of fax machine, satellite and cable T.V as well as the internet has swept away the national cultural boundaries (Abdulraheem Y. 2012).

> The uses of ICT is making major differences in the learning of students and teaching approaches. Schools in the Western World invested a lot for ICT infrastructures over the last 20 years, and students use computers more often and for a much larger range of applications (Volman, 2005). Several studies reveal that students using ICT facilities mostly show higher learning gains than those who do not use, (Mikre, 2011).

Nigerian government in the year 2000 developed a policy on Information Technology (IT), with the aim of making the country **IT** compliant among African countries. The motive was also to incorporate the use of ICT as a tool for sustainable development in the country. The accomplishment of this mission started with the creation and effective take up of National Information Technology Development Agency (NITDA) in 2000.

### 2.1.3. Concept of Educational Development

Scholars viewed educational development from various view points, while some viewed it from a broader perspective; some viewed it from a narrower perspective. According to Taylor, Frenay, and Clement, (2008), "The term was broader than faculty development, in that it encompassed instructional, curriculum, organizational, and some aspects of faculty development. In another sense, the term was narrower in that it focused on the teaching domain, as opposed to all aspects of academic career development" (Taylor et al P.2). According to (Knight and Wilcox, 1998 in Taylor et al 2008), educational

development entails “all the work that is done systematically to help faculty members to do their best to foster student learning”. In this sense, educational development involves policy, administrative as well as ad hoc decisions concerning education. Each and every stakeholder is expected to play a distinguishing role towards achieving educational development.

### 2.1.4. Nigerian Educational Policy

Educational policy in Nigeria has been shaped by the quest for national development based on political and socio-economic considerations. The first indigenous National Policy on Education in Nigeria after independence was produced in 1977 followed by three revised editions, first in 1981, 1998 and 2004. All with sole aim of making it relevant to the development needs of the country (Imam, 2012). These policies were formulated to achieve sets of objectives as:

i. The inculcation of national consciousness and national unity.
ii. The inculcation of the right type of values and attitudes for the survival of the individual and the Nigerian society.
iii. The training of the mind in the understanding of the world around. and
iv. The acquisition of appropriate skills and the development of mental, physical and social abilities and competencies as equipment for the individual to live in and contribute to the development of the society.

The present day reality has proven that we are living in an ICT age, which made teaching and learning; the core for educational development, to imbibe new culture and dimensions. The employment of new techniques on ways of imparting knowledge, new

ways and issues in counseling, new teaching gadgets and devices and the means of communication between the teacher and the pupil, all reflect the ICT epoch. Soft wires are being developed to satisfy needs in the teaching and learning. Accordingly, the objectives of National Policy on Education in this era cannot be realized without making the society a vibrant IT compliant. In this regard, the country's policy on IT and its fullest implementation is a prerequisite to achieving the stated policy on education. The Nigerian policy on IT has captured this in its vision statement and in its statement of objectives. Thus,

### 2.1.5. Vision of Nigerian IT Policy

Vision of the Nigerian IT policy was 'to make Nigeria an IT capable country in Africa and a key player in the Information Society by the year 2005, using IT as the engine for sustainable development and global competitiveness'. (National IT Policy 2000). While some of the objectives of the IT policy were, to re-engineer and improve urban and rural development schemes, to empower children, women and the disabled by providing special programs for the acquisition of IT skills, to empower the youth with IT skills and prepare them for global competitiveness, to integrate IT into the mainstream of education and training and to create IT awareness and ensure universal access in order to promote IT diffusion in all sectors of our national life.

Actually, the above objectives are all aimed at achieving national development; educational development inclusive. Hence, provision of necessary infrastructure at all levels is a pre-condition for the realisation of these noble objectives. Thus, at state levels the provision of a functional Internet Cafe at schools is a step towards that direction.

However, the effort must not be left at the government hands alone; individuals as well as organisations have an important role to play. Creation of awareness also has a greater effect on achieving some of the stated objectives.

According to a study conducted on availability of Human and Material Resources for the Implementation of the New Basic Education English Language Curriculum in Kaduna State, 'there is insufficient supply of instructional materials (such as students textbooks, teachers guides, charts, slides, projectors, tapes, audio and video, CDs, DVDs etc) and facilities such as language laboratories, ICT and libraries in all the schools visited', (Yusuf, 2013). In a similar study also conducted by Yusuf, (2013) on the availability and management of ICT in secondary schools, it was revealed that, 'ICT facilities are not readily available in most secondary schools in Kaduna metropolis. [In addition] the study revealed that most teachers do not use ICT facilities in teaching English language as teachers lack the basic skills to use the computer and other ICT devices, (Yusuf, 2013). Accordingly, for the policy to be effective, the state should provide in a required content, the necessary material for its smooth implementation. Smooth integration of educational system into the main stream of global ICT requires the basic instruments for becoming ICT compliant. In this situation where the required machinery is not available, or available but greatly insufficient, then the policy objective is seldom realisable. Typically, this is the condition of some schools in the urban areas; where the facilities are available, they are insufficient or dysfunctional, while in most rural areas, they are unavailable.

### 2.1.6. Effects of the Internet

Internet does so many things such as ‘amplifying the human potential’, ‘accelerating the global village effect’, ‘it enhances global connectivity’, ‘it removes barriers between people and places’, and it also ‘bridges the digital divide among people and countries’ (Wali, 2009).

Internet is an international network of computers, it is a collection of private, business, government, academia and individual computers all inter connected for information sharing. The net result is the world’s largest network (Wali, 2006). It contains both negative and positive effects on its users worldwide. According to Slater, the Internet is; “a network of networks, joining many government, university and private computers together and providing an infrastructure for the use of E-mail, bulletin boards, file archives, hypertext documents, databases and other computational resources”, (Slater) cited in Wali, (2006). Internet has evolved, over time, following its commercialisation by the private sector into an independent decentralised information exchange platform (Wali, 2006). Wali was of the view that, ‘as the Web gained popularity among students, researchers and businesses a whole new industry came into existence to create services for the Web. It was out of this new industry that the concepts of; e-commerce, e-governance, Search engines, Blogging, Web hosting, and Web Design emerged.

This rapid growing popularity of the Web and the new array of services running on it further boosted its appeal to users. This then encouraged more users to get connected to the Internet to take advantage of these amazing services. To appreciate the amazing growth rate of the Internet take the fact that in 1994 the world had only roughly 500

decent websites, and in just six years the numbers had escalated to an incredible 3 billion pages. In Nigeria the internet revolution is also taking place at a rapid pace. Nigeria as at 2004 has an estimated 1.8 million Internet users and accounts for about 7.8% of Africa's total internet users (Wali, 2006). The growth rate was further accelerated largely due to the faster and cheaper computers with broadband wireless Internet access on more electronic devices like mobile phones and laptops. Also, ***Email, World Wide Web,*** Internet Relay Chat ***(IRC), and*** Voice over IP ***(VOIP)*** **are** unique services that contributed to the popularity of the internet.

Today, we found ourselves in the Internet age with a powerful force that is changing every aspect of our lives. Bill Gate as cited in Wali (2006, P3) insightfully observed that: "In the years ahead, the Internet will have an even more profound effect on the way we work, live and learn. By enabling instantaneous and seamless communication and commerce around the globe, from almost any device imaginable, this technology will be one of the key cultural and economic forces of the early 21st century". This prophecy of Bill Gate has already become a reality, in the sense that, in the present day, all activities can be done through the Internet, and peoples' lifestyle is gradually being shaped and influenced by the lifestyle, value system and behaviour of others that hitherto the two existed in total isolation. Such activities being carried out on the Internet are now possible from almost all available devices such as laptops, Ipads, cell phones and what have you, which made accessibility and affordability to the Internet quiet easier.

Internet has brought about, integration of all kinds of media known to mankind in to one medium. These media include; telephones, radio, TV and print media, are all integrated into one medium and can be accessed anytime anywhere within the globe. With this feature the Internet has further opened the door for technology to be part of our everyday life. With the Internet today we can make phone calls, video conferences, send text, images and video to anyone on the internet in a matter of seconds at a fractional cost. These characteristics gave the Internet the potentiality of transforming the world we live in and increase the tendency of altering people's behavior and attitude, and impacted on their educational system in a variety of ways. More so, the Nigerian case whereby, there exist no strong control on what is aired in the country both on satellite stations and on the internet, which gave our youths full freedom to access whatever they wish without anybody's intervention. This is a serious threat to our socio-cultural well being, and to our educational system.

The Nigerian senate voted to reject electronic voting for 2007 and various reasons were given for the rejection, including the fear of election rigging, which undermines the legitimacy of election. Wali, (2006) was of the view that, in the very near future, internet will make it possible to minimise or eliminate election rigging by providing opportunity to voters to vote their candidates in the comfort of their homes or offices, without having to go and queue up in the line to vote and the results of such voting are declared instantaneously. Such a time will make it possible for people to participate directly in

decision making process by making know their position on every major national issue, (Wali, 2006).

Wali's prediction has already started taking effect in the Nigerian politics, whereby, at present, the National Assembly had adopted the use of cell phones and other ICT devices in the conduct of referendum to gather public opinion on the ongoing constitutional amendment. In particular, the issue of Local Government Autonomy and other similar issues of public concerns are at the forefront of this process. However, it is not out of place to state that, the Internet like most other human related issues and activities has both positive as well as negative effects. In the case of Internet, the effects will depend on what purpose it was used for, and what goal one intends to satisfy through its use. Some of the negative effects of the Internet have the tendency of causing retrogression and system paralysis to not only individuals, but also to nation states**.** Guana and Subrahmanyam, (2012) opined that, Internet has both negative and positive sides. According to them, the Internet can provide benefits in the areas of cognitive, social, and physical development, and can also be used to deliver treatment interventions. While on the other hand, there are risks such as online risks including addiction, cyber bullying, and sexual solicitation especially in the case of youths, (Guana and Subrahmanyam, 2012).

While some scholars emphasises the positive effects of the Internet, some are concerned with the negative effects which sometimes tends to outweigh the advantages, and is so

devastating. Everhart et.al, (2011) in their analysis, presented some of the views of scholars on the effects of Internet, their submission is that:

> Dysphoric symptoms have been linked to some types of Internet use such as shopping, playing games, or doing research; conversely, increased time involving use of email, chat room discussions, and instant messaging have been linked to a decrease in depressive symptoms (Morgan & Cotton, 2003). Wellman and Gulia (1999) suggest that online relationships may help to broaden and strengthen direct personal relationships. Meanwhile, La Rose, Eastin, and Gregg (2001) found decreased depression in college students who used the Internet to obtain social support. Their conclusion was that, 'Today's college students have grown up with intrinsic technological innovations that are integrated into modes of communication, education, and socialisation - none of which are inevitably negative. Research on college students has shown that online proficiencies can have a positive effect on their college experience, including relationships with their classmates and professors (Oblinger, 2003 cited in Everhart, 2011, P.1).

Everhart (2011) further asserts that, College can be socially and academically challenging for students and may lead to sexual promiscuity, drug experimentation, excessive use of alcohol, and other self destructive behaviors *(*Everhart, 2011). Two studies have reported that people coping with changes in self-concept have been aided by information and social support available on the Internet. Related adaptation and empowerment were shown to increase coping skills. As a means to deal with stressful situations, the Pew Charitable Trusts report that 45% of Internet users say online resources helped them to make difficult decisions or deal with major life episodes, (Society and the Internet, 2006, in Everhart, 2011).

Although the views of Everhart were based on research findings, the case may provably prove contrary in the case of Nigeria. This is so because, while at another part of the globe, parents and teachers are very much conscious on what their children and students

are doing, and at the same time the mode of socialisation they are adopting permits control and constant contact between relevant parties, in Nigeria, most parents are ignorant of what is obtainable at schools, likewise, some parents if not most of them are even ignorant of what is called Internet. In this regard, the students are left helpless at schools and campuses, a situation which increases their vulnerability of being captured by the undesirable elements in the peer group. This situation which the young ones found themselves perhaps sometimes resulted in their initiation into various cult groups and reducing them to nuisance in the society.

According to Amin, et.al, (2014), students see positive effects of cell phone on their study habits , social relationships and study results to be greater than the negative effects, but with little difference, whereas more negative effects on sleeping habits as compared to positive effects. While teachers and parents sees negative effects of cell phone on study habits, sleeping habits, social relationships and study results of the students to be more as compared to the positive effects.

### 2.1.7. Effects of Internet on Nigerian Youths

In an empirical research carried out by Adesemoye, (2012) titled *'ICT: connecting or alienating the Nigerian youths?*' The findings disclosed that 73% of the respondents go on-line; for on-line dating, instant chats with friends and making new relationships via the social networks. This shows that the ICT especially the internet have strong connecting impact on the Nigerian youths and it has great impact on the social life on most of them. Furthermore, the study found that, 62% of the respondents go on-line to

submit assignments and to research for academic materials. However, this can be attributed to the fact that, the study was conducted at an academic environment, which suggests the possibility of environmental influence on how the youths make use of the internet. The research also disclosed that, ladies surf the internet more than the guys with 53% to 42% in favour of the ladies, while, about 18% of the respondents involve in pornography. Also, about 78% of the respondents agreed that the guys engaged more in cyber crime compared to ladies. While 42% percent of the respondents access the internet via their mobile phones, 51% access the net through the public cafes, and 7% have personal laptops with either LASPOTECH hotspot Wifi or dial-up internet facilities. Another thing is that, 86% of the respondents that browse with their phones, do that to the disadvantage of the Providers, that is; they found another way of using their devices to access the internet without paying the due rates to the service providers.

Adesemoye (2012) research further establishes that in terms of addiction, 68% of the respondents declared that, they cannot do without going online each day, others cut across two days, three days or once in a week. The research also gathered that 81% of the total respondents agreed that they are more connected to friends on-line than those they see face-to-face. This may not be disconnected from the fact that, the platform allows for fantasies, secrecy, deceits, lies, since the interaction in taking place in somehow absentia. 84% of the respondents agreed that the internet is fun and that, they are happier going on-line than doing other things. This indicates that, if access and affordability of the internet facilities is enhanced, the Nigerian youths may spend more time on the superhighway. Overwhelmingly, 100% of the respondents are on face book. While 20% do not know what *twitter* is about, 76% have at least two usernames. Given the fact that face book is a

social networking site, it can be concluded that the Nigerian youths' awareness of the potential of the internet for social purposes is on the high side despite their low level access to internet technologies. About 63% listen to on-line music, 21% use internet call facilities such as skype, 23% learn new slangs or languages, while 42% learn fashion online.

Oluwayomi (2012) concluded that, … the priorities of the adolescents at their foundation or preliminary levels is to embrace the euphoria of their admission into the university with exchanging pleasantries among friends and folks on face book, interact on yahoo messengers and make endless email contacts that lead to nowhere particularly with less attention to studying and research.

In many instances, students' leaning to internet is more for social interaction rather than for academic activities. This was the case in so many parts of the globe; perhaps including Nigeria. The most popular among Russian students use of technologies are: social networks and general information resources: Wikipedia and others, (Porshnev and Gies, 2012). Another thing was that, in some places, although Internet is almost accessible to everybody, however, some students' knowledge and usage of it proved to be very low. Students rate their knowledge about different resources such as computerized library search, e-books, E-journals – made available to them, as low to medium. Their level of usage of these resources is also similar to their level of knowledge, (Mohagheghzadeh, 2014).

The preceding presentation is a clear indication of the habit of most Nigerian students towards the Internet and Media stations, and that their inclination to it is more for fun rather than for studies and fruitful transactions. This attitude of the Nigerian students only further aggravated the risks of the country being left behind in the quest for national development.

### 2.1.8. Effects of International Satellite Media on College Students in particular and the Youths in general

International satellite media is gradually replacing local television stations in Nigeria, whereby, most television viewers prefer international media above indigenous media. This may not be unconnected with the nature of the domestic media in terms of availability; uninterrupted programmes, sometimes unbiased presentation of issues, and so on. In addition, television as well as other media has become part and parcel of people's life, whereby, people cannot afford missing them for a long period. Some people have become addicted to media, that, they cannot live one day without it.

> It is time to recognize that the true tutors of our children are no longer the school teachers and university professors, but the filmmakers, advertising executives and pop culture purveyors. Disney does more than Duke; Spielberg outweighs Stanford, MTV trumps MIT, (Howard and Idriss, 2006, P.2).

Television is the strongest and most important medium of communication among all sections of the society irrespective of age, class and education, whereby, about 99% of the respondents in Nandita's research watches T.V regularly (Nandita, 2013). Viewers of TV have access to information from local, national and global levels, while the variety of

channels especially on the satellite gives a surplus of options. Today satellite media stations became a powerful medium with extraordinary reach; there is no doubt that, the medium is a potential catalyst of social change. However, the concern is whether it worked for the betterment of people or not. Unfortunately, the medium is being driven by sheer commercial interests and has become mainly a source of entertainment for the public**.** International satellite media stations are nowadays becoming sources of behaviour influence not only to the youth but to most of their viewers. People are fascinated by the way most of the satellite stations transmit their programmes, and their availability at all times without interruption. This made people to become more inclined to them and to commit significant proportion of their time viewing variety of programmes. In return, these satellite stations affect people in different ways, including behaviour change.

Adenubi et.al, (2010) in their study of the Influence of Satellite Communication Devices on Students' Acquisition of Hidden Curriculum in Nigeria Senior Secondary Schools, concluded that; the results and discussion of the study suggests that both male and female frequently watch satellite programmes due to the interests they developed for them. The findings revealed that the students had interests for watching audio visuals for fun and entertainment rather than watching such to upgrade their knowledge bank academically, (Adenubi et.al, 2010). Television can have considerable effects on its viewers, the viewers that are not confined to specific category of people. Signorielli and Kahlenberg, (2003) while describing Television, observe that:

> Television is the first centralized cultural influence to permeate both the initial and final years of life as well as the years between. Most infants are exposed to Television long before reading. By the time a

> child reaches school, Television is there to keep the elderly company when all else fails. Transcending barriers of literacy and mobility, Television is today's major story teller, telling most of the stories to most of the people. . . As such, it is one of the primary socialization agents in society. Television cultivates, like parents, peers, the clergy and teachers through its stories, common world views, common values and common perspective on how men and women should think, behave and act, (Signorielli and Kahlenberg, 2003, P.5).

Owing to easy access to satellite channels, low cost and a huge interest of television viewership for entertainment purposes have created the rapid growth of satellite television all over the world (Zia, 2007) cited in Shamsher et.al, (2012). Satellite television refers to the way TV programs are transmitted and carried into homes. Communication satellites are used to deliver a signal to a satellite dish and set-top box. Satellite is differentiated from cable TV that sends the signals along a radio frequency through fixed optical or coaxial cables. Cable TV can also carry both digital and HD signals. A satellite broadcast begins at a satellite uplink station owned and operated by a satellite company. The first satellite TV signal occurred in 1962, transmitting from Europe to North America. The first public broadcast of an HD signal happened on July 23, 1996 from Raleigh, North Carolina's WRAL-HD station.

International satellite media stations no doubt constitute what largely occupies the youths and kept them busy in recent times, and the programmes mostly watched by the youths are entertainment programmes and are unconnected to their academic activities. This trend has cut across all categories of students in Nigeria. And for the fact that, when pictures, words and sounds are skillfully combined, they have power to evoke emotions, change attitudes and motivate actions (Kemp and Smellie, 1989), it is therefore not out of

place to focus attention on students attitude of watching satellite programmes; the programmes that are in most cases alien to our society and are parallel to our culture and good morals and is consuming the students' precious time.

Academic activities require absolute attention from the students, and whenever another thing intervenes to distract students' attention, there is the likelihood that the former will suffer. In this regard, when television and reading compete for more time and attention, television often gains mastery as the more attractive (Fehintola and Audu, 2012). In Nigeria, even though there is the inadequacy and instability in electricity supply which limits the time when television is available and accessible, which implies that, reading which is less dependent on electricity would maintain primacy on television viewing, the situation proved contrary. The availability of viewing centres provided the youths another opportunity to exhaust their time on other activities that equally distracts their attention from reading their books. Such activities as playing games, watching European premier league, champions' league, and Spanish Laliga most especially on weekends when they are expected to revise and read their books and solve their take- home assignment (Fehintola, and Audu, 2012).

In analysing the effect of television viewing on children, Ferri (2009) as cited in Fehintola and Audu, submitted that children nowadays as compared before are more exposed to different types of media particularly on the television. They spend most of their time in front of their television sets rather than on reading their books, doing their home-works and mingling with other people. According to Taiwo, (2004) in Fehintola and Audu, (2012), though the television sets are used to entertain, to educate and to gain

exposure to ideas that may never be encountered in other areas, it has now become a threat to the well-being of children especially on the aspect of their behavior and academic performance. It was established that, longer hours dedicated to television watching has been variously criticized for negative impact on academic achievement of students, (Fehintola and Audu, 2012).

Stephenson (1967) in Folarin, (2005) divides man's activities into work and play. The former involving reality and production, while the latter deals with entertainment, relaxation or self satisfaction. Stephenson further asserts that, people use mass communication more as play than as work, more for pleasure and entertainment than for information and serious work (Folarin, 2005). In this vein, it is pertinent to stress the role played by media in this regard, especially, with the mass proliferation of international satellite media stations and its easy accessibility and affordability in Nigeria which ultimately affects all aspects of people's lives especially the senior secondary school students in particular, and the youths in general. Most of the programmes aired on satellite media stations, especially the entertainment programmes, are superficial and are deliberately produced to distract the viewers from the realities of life. In addition, such programmes portray life of complacency and affluence that delude the youths especially, and chased them into a path of confusion; missing direction to follow to achieve desired future for themselves and the society at large. Côté and Allahar, (1996) are of the opinion that,

> Since they [the youth] are bombarded with tantalizing images of the 'good life,' it is not surprising that the young are dispirited by the reality of their poor economic prospects… what lies at the heart of all this activity, however, is the fact that these media can sell young

> people some element of an identity they have been taught to crave… leisure industries such as music, fashion, and cosmetics have a largely uncritical army of consumers awaiting the next craze or fad. Each fad gives them a sense of identity, however, illusory or fleeting. This activity is tolerated or encouraged by larger economic interests because the army of willing consumers also serves as a massive reserve of cheap labour. Furthermore, distracting young people with these trivial identity pursuits prevents them from protesting against their impoverished condition (Côté and Allahar, 1996, P.5).

This is the reality of today's youths, especially the senior secondary school students who supposed to be the leaders of tomorrow; however, they are being captured in such illusion, and are gradually assuming new identity and are pursuing goals that are seldom achieved. On the course of satisfying imaginary life, the youths are increasingly losing focus; they are neither confined by the pursuance of their academic activities, nor were they engaged in constructive activities that will enhance their lives. This tendency in addition to other effects that could be found on satellite media and on internet could be a source for poor academic performance among senior secondary schools' students. Evidence have shown that, College students in recent times are spending less time studying, whereby, only 34% of the entering freshmen have spent six or more hours per week outside of class on academic-related work (e.g., doing homework, studying) during their senior year in high school (Nonis and Hudson, 2006). This trend is could enormously affecting their academic performance.

## 2.2. Theoretical Framework

### **2.2.1.** Introduction

Several theories were used in studying the effects of Media, or the effects of media on lives of the people. Among such theories are, the Technological Determinism Theory and Modernisation theory.

**Technological Determinism Theory**

Marshall McLuhan in his theory; Technological Determinism, posits that, societies have always been shaped more by nature of the media with which people communicate than by the content of the communication. The proposition of this theory is that, the medium is the message. In the view of Adesemoye 'this statement could be used as a peg for the reason why most youths surf the net or join the social networks'. In reality, several young people do not really have a clear cut motive of visiting the Internet, but they took it as an issue of competition or fashion, that since a friend is hooked on the Internet, it is a shame on them not to be online also. In the same development, Meyrowitz (1985) corroborated McLuhan's submission by saying "... the theory suggest that a broad, seemingly chaotic spectrum of social change may be, in part, an orderly and comprehensible adjustment in behaviour patterns to match the new social situations created by electronic media" (Meyrowitz, 1985, P. 3).

The propositions of this theory have shade light on the basis upon which most youths fasten themselves to the ICT. The motive in most cases is not for a specific transaction or interaction that will, in the long run yield positive result for them in terms of knowledge or economic prosperity. In addition, it is obvious that, these ICT system is creating a new

form of behaviour pattern that contends local cultures and values, while those affected do not give much heed to whether or not their new acquired cultures are inimical to their growth and development.

**Modernisation theory**

The development of the Modernisation theory was mainly by the US economists and policy makers in their attempt to:

i. Explain why poorer countries failed to evolve into modern societies. and,
ii. To reduce the spread of communism by presenting capitalist values as the solution to poverty.

The theory was conceived based on the following assumptions, as opined by Moore, that;

i. Post world war two's deepening poverty in some countries
ii. Ideological competition from communism
iii. Increasing unrest in some countries

These factors according to moore, (2009) posed a threat to capitalism, and especially the USA, thus, the basis for the development of the theory. Modernisation theory has become increasingly influential, especially since post collapse of USSR.

Modernisation theory provides certain roles to be performed by both the western developed world and the underdeveloped or developing world. These roles are; the west should:

i. Western investment in factories, expertise and equipment – use loans from World Bank (Trickle down)
ii. Western funding to introduce meritocratic education (values of universalism, individualism and competition
iii. Mass media to disseminate modern ideas e.g. nuclear families
iv. Urbanisation to be encouraged

The theory assumed that, in response to these roles performed by the west, developing countries would develop:

a. Capitalist entrepreneurial middle class to develop business opportunities.
b. High mass consumption.
c. An urban population.
d. Lifestyles of conspicuous consumption.

In this regard, the theory proposed a total transformation of the system obtainable in the developing countries; hence the use of mass media is instrumental in the process. This notion of radical transformation of the developing countries in their entirety resulted in the production of programmes deliberately designed for broadcast by mass media to influence the culture of the people of the developing countries.

**Modernisation Theory**

Modernisation theory emerged in the late 19th century and was especially popular among scholars in the mid-20th century. One foremost advocate was Talcott Parsons' *Mandarins*

*of the Future*. The theory stressed the importance of societies being open to change and saw reactionary forces as restricting development. Maintaining tradition for tradition's sake was thought to be harmful to progress and development (Wikipedia, *2010*).

Modernisation theory is a theory used to explain the process of modernisation within societies. The theory looks at the internal factors of a country while assuming that, with assistance, "traditional" countries can be brought to development in the same manner more developed countries have. The theory attempts to identify the social variables which contribute to social progress and development of societies, and seeks to explain the process of social evolution, (Wikipedia, 2010). Modernisation theory emerged out of mid-century sociological studies, as a process of economic development and social change. The most notable authors in this approach are Seymour Martin Lipset and Samuel P. Huntington, both of whom use quantitative data to argue that modernisation has a profound and positive effect on democracy. Samuel Huntington took an optimistic view of what he calls the 'Grand Process of Modernisation,' he understands modernisation as a complex, systemic, global, lengthy, phased, homogenizing, irreversible, and progressive process that transforms a society from traditional to modern, (Wikipedia, 2010).

Modernisation theory has evolved in three waves. The first wave appeared in the 1950s and 1960s. One made the attempt to explain the diffusion of Western styles of living, technological innovations and individualist types of communication (highly selective, addressing only particular persons) as the superiority of secular, materialist, Western,

individualist culture and of individual motivation and achievement (Lerner, 1958, Schramm, 1964). This first wave of theory produced three variants (McQuail, 2000, P1):

1. Economic development: mass media promote the global diffusion of many technical and social innovations that are essential to modernization (Rogers, 1962). See Diffusion of Innovations theory.
2. Literacy and cultural development: mass media can teach literacy and other essential skills and techniques. They encourage a 'state of mind' favorable to modernity, e.g. the imagination of an alternative way of life beyond the traditional way.
3. National identity development: mass media could support national identities in new nations (colonies) and support attention to democratic policies (elections).

The second wave of modernization theory is a part of the critical theory that was popular in the 1970s and 1980s. It does not support but criticize the influence of Western modernisation. This is held to be a case of Western cultural and economic imperialism or dominance (Schiller, 1976). One of the theory's concern is; media dependency theory. Peripheral (developing) countries are assumed to be dependent on mass media in the core; the Western world.

The third wave of modernization theory rising in the 1990s is the theory of late-, high- or post modernity. It tries to be more neutral, being not in favor or against Western modernization. Rather it attempts to unearth the contradictions in the modernization process and to explain the consequences of modernity for individuals in contemporary

society (Giddens, 1991a, 1991b). Giddens showed that modern society is characterised by time-space distantiation and disembedding mechanisms. Traditional society is based on direct interaction between people living close to each other. Modern societies stretch further and further across space and time using mass media and interactive media. Disembedding mechanisms such as money, symbolic means, English as the *lingua franca* and the Internet help to lift out and activities in an abstract or online form that were once embedded in particular material goods and in places. Benjamin Barber (1996) in his *Jihad versus McWorld: How the Planet is both Falling Apart and Coming Together* tried to explain the clash of Western and non-Western cultures of the world.

**Propositions of modernisation theory**

Modernisation theory assumed that, each society can develop from traditionalism to modernity, and that those that make this transition follow similar paths. More modern states are wealthier and more powerful, and their citizens freer, with a higher standard of living. There have been various versions of modernisation theory; however, most of them were of the view that, modernisation theory depict a gradual and more or less natural transition from ‘‘traditional’’ social structures to ‘‘modern’’ social structures characteristic of Western European and North American societies. More specifically, these theories tend to share to one degree or another, the views that:

i. Modern people, values, institutions, and societies are similar to those found in the industrialized West, that is, the direction of change tends to replicate that which had already occurred in Western industrial societies.
ii. Tradition is opposite to and incompatible with modernity.

iii. The causes of delayed economic and social development (i.e., underdevelopment) are to be found within the traditional society.

iv. The mechanisms of economic development also come primarily from within societies rather than from factors outside of the society.

v. These internal factors (in addition to industrial development) tend to involve social structures, cultural institutions, or personality types.

**Critic of Modernisation Theory**

Critic of modernisation theory sees it as something that is transplanted in the developing countries, hence, the promised benefits are seldom realised. Some scholars are of the view that, Modernisation has been attributed with creating positive development around the world, but in Modern times its ability to promote development, specifically in Africa, has been less than so. Modernisation that has taken place in Africa can be described as something that has yet to benefit most of the African countries, (Gilbert, 2005). A lot of scholars view modernization as a sort of westernisation where western institutions such as national parks and industries are brought into existing cultures where their use does not make as much sense. Along with modernisation comes a loss of culture and society, and the individual is strengthened. Nationalization, as a tool of modernization, was imparted on Africa by colonialists who wanted to westernize and modernize tribal Africa.

Virtually all the existing literature on modernisation is concerned with the virtues of modernity. It focuses on the gains to be derived from modernisation – industrialization, material progress, social welfare, political rationality, among others. But experience suggests that gains are usually achieved at some cost: the drive toward modernity seems

invariably to produce new social and personal problems. In USSR – perhaps the world's most developed underdeveloped country – the modernisation process has been accompanied by massive social costs, (Powell, 1971).

### 2.2.2. Justification for the selection of Modernisation Theory in this work

The choice of modernisation theory in this study was basically for the fact that, the theory is being used to study changes and its process in the society at individual as well as at state levels. And that, media is a strong instrument in the modernisation process, while the theory also explain the changing ways of communication and media use in traditional and post modern societies. Furthermore, 'Modernisation entails the appearance of 'modes of social life or organisation which emerged in Europe from about the seventeenth century onwards and which subsequently became more or less worldwide in their influence', (Giddens, 1991). In addition, these modes are further disseminated through the use of ICT worldwide today. Also, ICT in recent times has become important tool for inducing changes in societies both on individuals and on states in general with or without the knowledge of the affected individuals or states. Therefore, modernisation theory is an appropriate theoretical tool in this study which seeks to inquire on the effect of ICT on educational development of senior secondary schools' students in Kaduna state.

# CHAPTER THREE

# RESEARCH METHODOLOGY

## a. Introduction

This chapter discussed issues concerning methodological procedure followed in the study such as, research design, population of the study, sample and sampling techniques, sources of data, instrument for data collection, data presentation and analysis. Problems of the study and ways of mitigating them, check list also formed part of chapter.

## b. Research Design

The research was an exploratory one; whereby, it studied; knowledge and usage of ICT among selected senior secondary school students in Kaduna state. Also, the research was a descriptive one in which, an attempt was made to describe the nature of usage of ICT by the senior secondary schools' students in Kaduna State. The study use primary and secondary sources of data. Primary data was collected by means of questionnaire administered to the selected sample, and through interview with some stakeholders including education mangers, teachers and parents.

## c. Population of the Study

Population of the study was all the 503 Senior Secondary Schools in Kaduna State as shown in Table 3.1., from which, four schools were drawn from the three senatorial zones of the state, with a total of two thousand and sixty (2060) senior secondary schools' students.

TABLE 3: 1: Demographic distribution of respondents

| Area | Sex | f | % | Total |
|---|---|---|---|---|
| **Urban** | M | 112 | 28.07% | 112 |
| | F | 100 | 25.06% | 100 |
| **Rural** | M | 109 | 27.32% | 109 |
| | F | 78 | 19.55% | 78 |
| TOTAL | | | | 399 (100%) |

Source: Field work, 2014

**Fig. 3- 1: Demographic distribution of respondents as per Table 3.1**

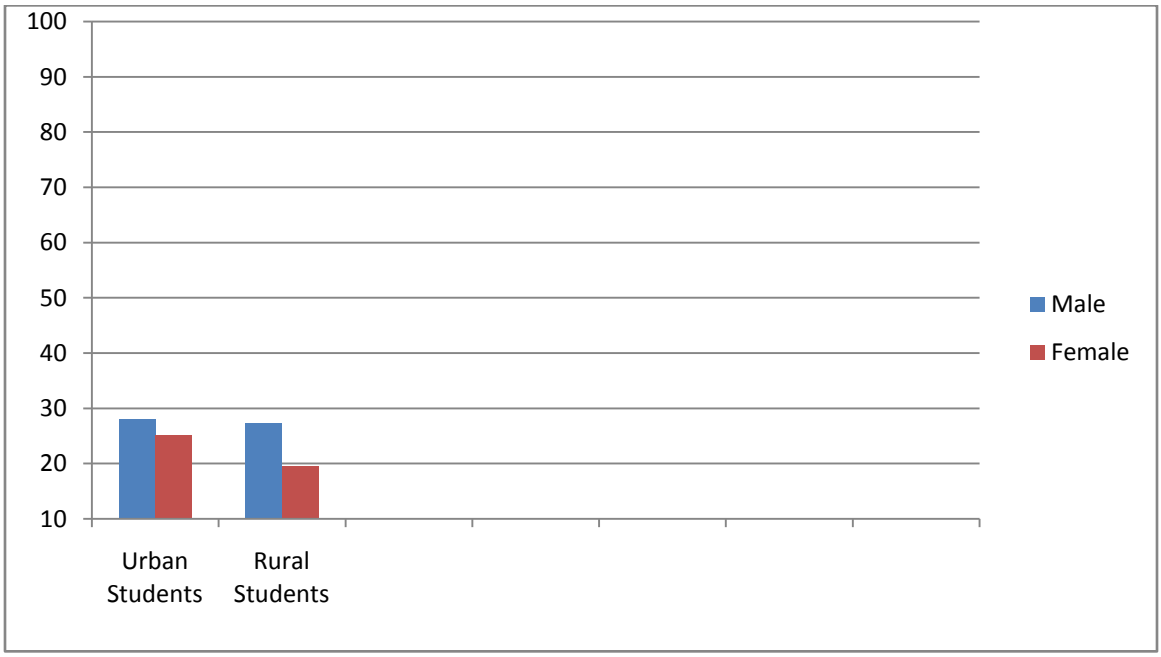



Figure 3.1 illustrated the demographic distribution of the respondents according to location and gender. Whereby, 53.25% are from the urban schools, and 46.75% are from the rural schools. In addition, 56.25% are male while 43.75% are female. Hence, selection of the sample was done in accordance with this distribution.

**Table 3.2: Number of Senior Secondary Schools in Kaduna State according to Senatorial zones**

| **Senatorial Zone** | S/N | L GA | No of schools |
|---|---|---|---|
| **Zone I** | 1 | Zaria | 24 |
| | 2 | Ikara | 16 |
| | 3 | Kubau | 19 |
| | 4 | Kudan | 7 |
| | 5 | Lere | 34 |
| | 6 | Makarfi | 12 |
| | 7 | S/Gari | 22 |
| | 8 | Soba | 15 |
| **Sub-Total** | | | **=149** |
| **Zone II** | 1 | B/Gwari | 17 |
| | 2 | Chikun | 29 |
| | 3 | Giwa | 17 |
| | 4 | Kajuru | 19 |
| | 5 | K/North | 27 |
| | 6 | K/South | 23 |
| | 7 | Igabi | 24 |
| **Sub-Total** | | | **=156** |
| **Zone III** | 1 | Jaba | 17 |
| | 2 | Kachia | 34 |
| | 3 | Kagarko | 29 |
| | 4 | Kauru | 25 |
| | 5 | Kaura | 16 |
| | 6 | Sanga | 17 |
| | 7 | Jama'a | 30 |
| | 8 | Zangon Kataf | 54 |
| Sub-Total | | | = **222** |
| **Grand Total** | | | **527** |

Source: Kaduna State Ministry of Education School Census 2012

The selected schools are:

i. Government Secondary School Kofan Kibo, Zaria - Senatorial Zone One.

ii. Government Day Secondary School, Tudun Saibu - Senatorial Zone One.

iii. Government Girls Secondary School Kawo Kaduna - Senatorial Zone Two.

iv. Government Secondary School Jere - Senatorial Zone Three.

A school each was selected from the tree senatorial zones of the state, while the fourth school was selected randomly from all the schools in the state.

**d. Sample of the study**

The National Education Association Texas University, U.S.A, cited in Akuezuilo and Agu (2004), suggests that in a population of between 1,000 and 1,000,000, a sample of 385 respondents could be used for a study. In the same vein, according to Yamane, (1967) sampling method, our sample for the study was 399, considering the population of the study which stands at two thousand and sixty (2060) that is the total population of the entire senior secondary schools' students of the four selected senior secondary schools. Hence, 399 students were randomly selected from the three senatorial zones of Kaduna state.

Yamane sampling method is as follows:

$$n = \frac{N}{1 + N(e^2)}$$

Where n = Sample size,

N = Total population

e = Level of significance (9%)

Consequently, among the population, 1143 (55.49 %) were male while 917 (44.51%) were female.

The distribution of the sample is thus;

Male: 221 (55.39%) Female: 178 (44.61%).

**e. Sampling Technique**

As earlier mentioned, the study adopted stratified simple random sampling method, whereby, equal percentage was drawn from each school as:

i. **GSS ZARIA (Snr.):** with total population of 580 students; all male, has the sample of 112 (19.31%).

ii. **GGSS KAWO KADUNA (Snr.)**: with total population of 513 all female, hence, the sample picked from the school was 100 (19.49%).

iii. **GSS JERE (Snr.):** which operate coeducation, has a total population of 594: with 346 (58.25%) male, and 248 (41.75%) female. Therefore, total sample picked from the school was 115 representing 19.36% of the total sample. Hence, 67 (58.25%) were male and 48 (41.75%) female.

iv. **GSS TUDUN SAIBU (Snr.)**: Also operating coeducation, with total population of 373, in which 217 (58.18 %) are male and 156 (41.82%) female. Sample picked from the school was 72 representing 19.42% of the total sample. Therefore, 42 (58.18%) were male and 30 (41.82%) female.

**Table 3.3: Illustrates Sample of the Study According to Location and Gender**

| S/N | School | Total No. of Student | | Sample picked | | | | Total % picked from the total population of each school |
|---|---|---|---|---|---|---|---|---|
| | | M | F | M | | F | | |
| | | | | % | f | % | f | |
| 1. | GSS Zaria (Urban) | 580 | 0 | 19.31 | 112 | 0 | 0 | 19.31 |
| 2. | GGSS Kawo (Urban) | 0 | 513 | 0 | 0 | 19.49 | 100 | 19.49 |
| 3. | GSS Jere (Rural) | 346 | 248 | 11.28 | 67 | 8.08 | 48 | 19.36 |
| 4. | GSS Tudun Saibu (Rural) | 217 | 156 | 11.26 | 42 | 8.04 | 30 | 19.30 |
| Total | | 2060 | | | | | 399 | |

**f. Data Collection Instrument**

The study uses primary and secondary sources of data, while the instruments used in data collection were:

i. Questionnaire

ii. Interview

**g. Procedure for Data Analysis**

The study uses quantitative and qualitative measures in the analysis and presentation of data. Also, qualitative measure was used to analyse and present the interview result, and quantitative data were analysed and presented using:

i. Simple percentage.

ii. Bar chat.

iii. T-test.

**h. Sources of Data**

The study collected data from primary source, whereby; education managers, teachers, students, and parents were consulted through the use of questionnaire and interview. Also, records from the schools regarding students' examinations and other related documents were used.

**i. Problems faced during data collection and how it was mitigated**

As was the case in many social sciences research, certain problems do emerge on the course of conducting the research. In this research work the following problems arose on the course of the research:

i. False responses from the respondents.

ii. Inadequate time for the respondents to respond sufficiently to each question especially in the case of specialized interview.

iii. Lack of proper records from schools.

iv. Insufficient fund.

These are some of the problems that arose during the research and they were overcome through the following means:

i. An adequate mobilisation of the respondents was carried out, whereby, respondents were informed about the importance of accuracy in their answers to each question, and they were assured anonymity and confidence on their responses.

ii. The researcher also took time to study the most appropriate time to conduct the interview through careful consideration of the schedules of the respondents, in some cases the interview was rescheduled to a more appropriate time.

iii. The researcher gave more time to some schools whose records are not straight or are incomplete, to get the records updated.

iv. The researcher took a personal loan to cater for insufficient fund to finance the study.

**j. Checklist**

The following consists of the checklist to guide the research questions:

**a. Issues on Educational Development**

i. Availability of functional Internet Café at schools

ii. Using ICT in teaching and learning

iii. Extra Classes

**b. Issues on Internet**

i. Knowledge of the Internet by the students.

ii. Availability of the Internet facilities at the disposal of the students.

iii. Accessibility to the Internet facilities by the students.

iv. Average hours spent by the students on the Internet.

v. Nature of the students' quests on the Internet.

vi. Relevancy of the Internet use by the students to their academic activities.

**c. Issues on International Satellite Media Stations**

i. Availability of satellite media stations at the disposal of the students.

ii. Accessibility to the satellite media stations by the students.

iii. Average hours spent by the students watching/listening to the satellite media stations.

iv. Relevancy of the satellite media programmes watched/listened to by the students to their academic activities.

# CHAPTER FOUR
# DATA PRESENTATION AND ANALYSIS

## 4.1 Data Presentation

The study used primary source of data as earlier stated in chapter three item 3.7. The data was collected by means of questionnaire administered to the selected sample, and through interview with some stakeholders. A total of Three hundred and Ninety Nine (399) questionnaires were administered to the respondents, and 367 (92%) were returned. In the same vein, 16 people were interviewed; Principals of the selected schools, a teacher each from the schools, examination Officers of the selected schools and one parent each from the locations.

The data obtained in the course of the study was presented in two categories:

First category are the data collected by means of questionnaire distributed to the selected sample, which was presented in seventeen tables to illustrate students' knowledge of the Internet and International satellite media (ICT), level of their usage of it, average time they spend on it, and the purpose of their usage of it. In addition, the tables provided information on students' academic activities such as their attendance of extra lessons at schools, their attendance of tutorials, their reading habit at home and the rate of their visit to library. Besides the tables presented progress report on students' academic performance over the period of study. All these are in an attempt to find out the relationship of ICT and the educational development of the students.

Second category are the data collected through interview, which represented answers provided by respondents to the fourteen questions asked.

## 4.2 **Data analysis**

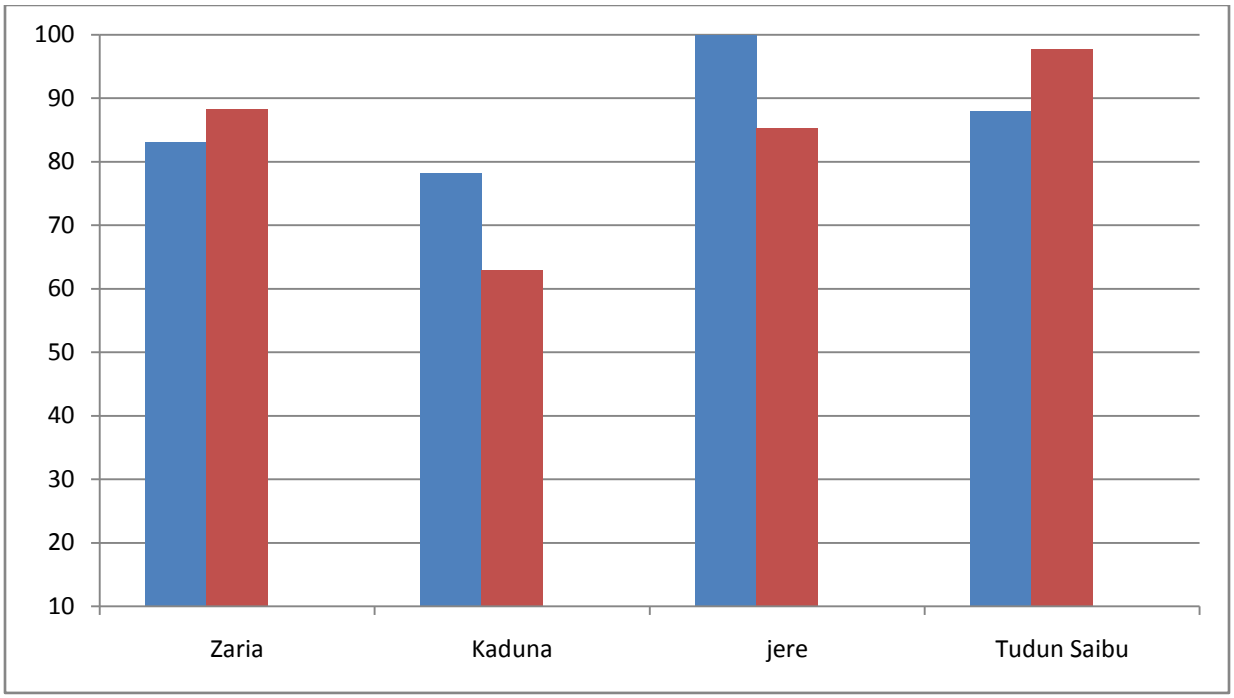
### 4.2.1 **Data collected by means of questionnaire**

TABLE 4: 1: Knowledge about Internet among Respondents

| **Urban Schools** | | | | | | | |
|---|---|---|---|---|---|---|---|
| YES % | | | | f | NO % | f | TOTAL |
| **ZARIA** | Ss 1 | | 82.00 | 41 | 18.00 | 9 | 50 |
| | Ss 2 | | 88.68 | 47 | 11.32 | 6 | 53 |
| **KAD** | Ss 1 | | 80.00 | 32 | 20.00 | 8 | 40 |
| | Ss 2 | | 63.46 | 33 | 36.54 | 19 | 52 |
| TOTAL | | | | 153 (78.46%) | | 42 (21.54%) | 195 (100%) |
| **Rural Schools** | | | | | | | |
| **T/SAIBU** | Ss 1 | M | 90.00 | 18 | 10.00 | 2 | 20 |
| | | F | 86.67 | 13 | 13.33 | 2 | 15 |
| | Ss 2 | M | 94.74 | 18 | 5.26 | 1 | 19 |
| | | F | 91.67 | 11 | 8.33 | 1 | 12 |
| **JERE** | Ss 1 | M | 100 | 35 | 0.00 | 0 | 35 |
| | | F | 100 | 24 | 0.00 | 0 | 24 |
| | Ss 2 | M | 92.59 | 25 | 6.25 | 2 | 27 |
| | | F | 80.00 | 16 | 20.00 | 4 | 20 |
| TOTAL | | | | 160 (92.51%) | | 12 (7.49%) | 172 (100%) |

Source: Field work, 2014

**Fig. 4- 1: knowledge of Internet among respondents as per Table 4.1**




Key:
Category 1 = SS 1
Category 2= SS 2

Figure 4.1: indicates rate of knowledge about Internet among respondents. The result shows that, 153 (78.46%) respondents from the urban schools have knowledge about Internet, while 160 (92.51%) respondents from the rural schools have that knowledge. Hence, there was a slight difference in terms of knowledge about internet between students of the urban schools and their counterparts of the rural schools. Whereby, the rural students are a little bit more conscious about Internet than their urban counterparts.

TABLE 4: 2: Usage of Internet by the Respondents

| **Urban Schools** | | | | | | | |
|---|---|---|---|---|---|---|---|
| YES % | | | | f | NO % | f | TOTAL |
| **ZARIA** | Ss 1 | | 82.00 | 41 | 18.00 | 9 | 50 |
| | Ss 2 | | 88.68 | 47 | 11.32 | 6 | 53 |
| **KAD** | Ss 1 | | 77.50 | 31 | 22.5 | 9 | 40 |
| | Ss 2 | | 61.54 | 32 | 38.46 | 20 | 52 |
| TOTAL | | | | 151 (77.44%) | | 44 (22.56%) | 195 (100%) |
| **Rural Schools** | | | | | | | |
| YES % | | | | f | NO % | f | TOTAL |
| **T/SAIBU** | Ss 1 | M | 85.00 | 17 | 15.00 | 3 | 20 |
| | | F | 60.00 | 9 | 40.00 | 6 | 15 |
| | Ss 2 | M | 89.47 | 17 | 10.53 | 2 | 19 |
| | | F | 66.67 | 8 | 33.33 | 4 | 12 |
| **JERE** | Ss 1 | M | 100 | 35 | 0.00 | 0 | 35 |
| | | F | 100 | 24 | 0.00 | 0 | 24 |
| | Ss 2 | M | 92.59 | 25 | 7.41 | 2 | 27 |
| | | F | 75.00 | 15 | 25.00 | 5 | 20 |
| TOTAL | | | | 150 (87.21%) | | 22 (12.79%) | 172 (100%) |

Source: Field work, 2014

**Fig. 4- 2: Usage of Internet by respondents as per Table 4.2**

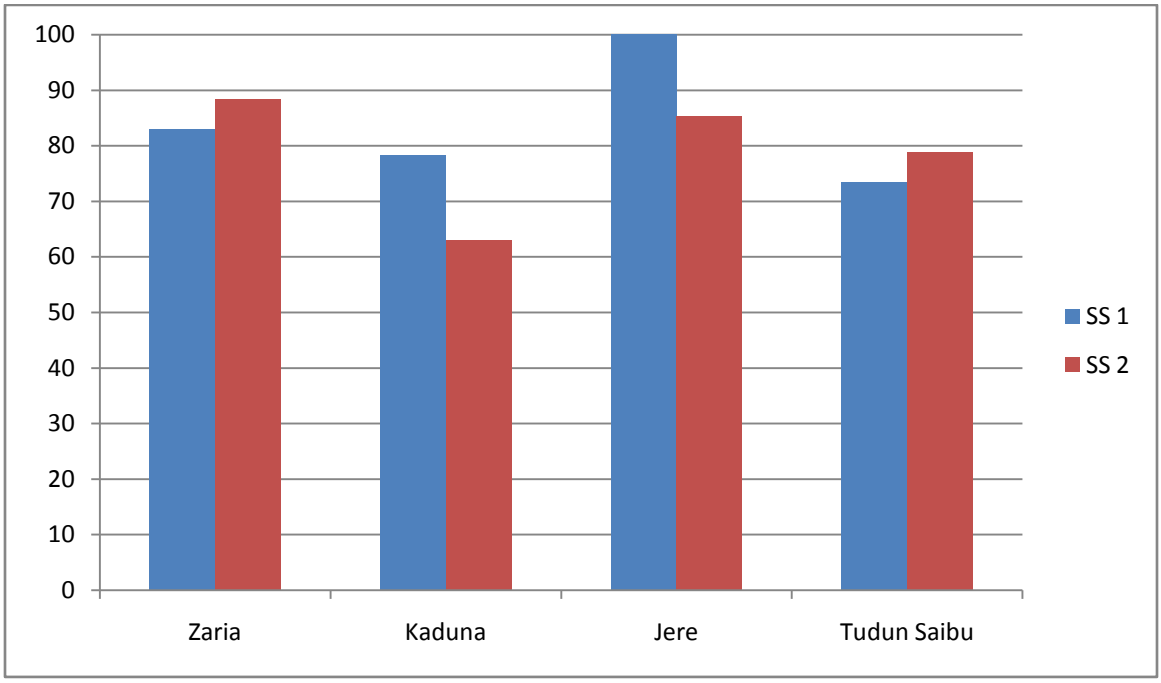



Figure 4.2: indicates rate of usage of Internet among respondents. Here, 151 (77.44%) respondents from the urban schools use Internet, while, 150 (87.21%) respondents from the rural schools use Internet. In this vein, the rural students uses internet slightly more than their urban counterparts.

TABLE 4: 3: Average time spent on the Internet by the Respondents (refer to next file)

Table 4.3: shows average time spent by the respondents. while, 58 respondents (34.73%) from the urban schools use internet for one to two hours daily, 24 respondents (14.37%), 64 respondents (38.32%), and 21 respondents (12.57%) from the urban schools uses the Internet daily for more than two hours, occasionally for one to two hours and occasionally for more than two hours respectively. On the other hand, 61 respondents (36.36%) from the rural schools use Internet for one to two hours daily, while 21 respondents (13.37%), 64 respondents (38.50%), and 18 respondents (11.76%) from the rural schools use the Internet daily for more than two hours, occasionally for one to two hours and occasionally for more than two hours respectively. Therefore, with regard to time spent on the Internet, there exist slight differences between the two categories.

TABLE 4: 4: Purpose for the Use of Internet by the Respondents

| **Urban Schools** | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| LOCATION | | | ACAD % | f | SOCIAL % | f | ALL % | f | TOTAL |
| **ZARIA** | Ss 1 | | 62.50 | 25 | 12.50 | 5 | 25.00 | 10 | 40 |
| | Ss 2 | | 58.33 | 28 | 25.00 | 12 | 16.67 | 8 | 48 |
| **KAD** | Ss 1 | | 69.44 | 25 | 11.11 | 4 | 19.44 | 7 | 36 |
| | Ss 2 | | 22.22 | 6 | 22.22 | 6 | 55.56 | 15 | 27 |
| **TOTAL** | | | | 84 (55.63%) | | 27 (17.88%) | | 40 (26.49%) | 151 (100%) |
| **Rural Schools** | | | | | | | | | |
| LOCATION | | | ACAD % | f | SOCIAL % | f | ALL % | f | TOTAL |
| **T/SAIBU** | Ss 1 | M | 17.65 | 3 | 64.71 | 11 | 17.65 | 3 | 17 |
| | | F | 50.00 | 4 | 0 | 0 | 50.00 | 4 | 8 |
| | Ss 2 | M | 50.00 | 9 | 33.33 | 6 | 16.67 | 3 | 18 |
| | | F | 28.57 | 2 | 0 | 0 | 71.43 | 5 | 7 |
| **JERE** | Ss 1 | M | 50.00 | 16 | 12.50 | 4 | 37.50 | 12 | 32 |
| | | F | 55.00 | 11 | 20.00 | 4 | 25.00 | 5 | 20 |
| | Ss 2 | M | 42.86 | 12 | 0 | 0 | 57.14 | 16 | 28 |
| | | F | 75.00 | 15 | 0 | 0 | 25.00 | 5 | 20 |
| **TOTAL** | | | | 72 (48.00%) | | 25 (16.67%) | | 53 (35.33%) | 150 (100%) |

Source: Field work, 2014

**Fig. 4- 3: Purpose for the use of Internet by the Respondents as per Table 4.4.**

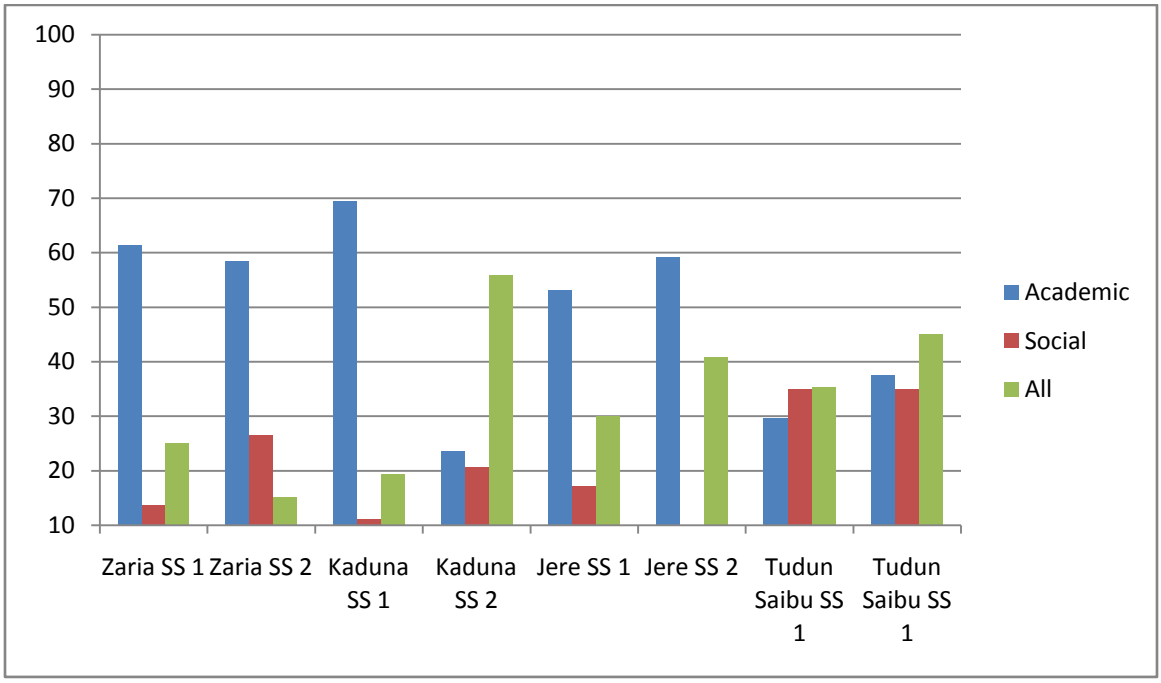



Figure 4.3: indicates the purpose for the use of Internet by the respondents. As 84 (55.63%) respondents from the urban schools use the Internet for academic purpose, 27 (17.88%) respondents use it for social activities, and 40 (26.49%) respondents use it both for academic and social interactions. On the other hand, 72 (48.00%) respondents from the rural schools use Internet for academic, 25 (16.67%) respondents use it for social activities, and 53 (35.33%) respondents use it for both academic and socials relationships. Here also, there exist slight differences in terms of purpose for the usage.

TABLE 4: 5: Knowledge about International Satellite Media among Respondents

| **Urban Schools** | | | | | | | |
|---|---|---|---|---|---|---|---|
| YES % | | | | f | NO % | f | TOTAL |
| **ZARIA** | Ss 1 | | 82.00 | 41 | 18.00 | 9 | 50 |
| | Ss 2 | | 100.00 | 53 | 0.00 | 0 | 53 |
| **KAD** | Ss 1 | | 80.00 | 32 | 20.00 | 8 | 40 |
| | Ss 2 | | 63.46 | 33 | 36.54 | 19 | 52 |
| TOTAL | | | | 153 (78.46%) | | 42 (21.54%) | 195 (100%) |
| **Rural Schools** | | | | | | | |
| YES % | | | | f | NO % | f | TOTAL |
| **T/SAIBU** | Ss 1 | M | 90.00 | 18 | 10.00 | 2 | 20 |
| | | F | 86.67 | 13 | 13.33 | 2 | 15 |
| | Ss 2 | M | 94.74 | 18 | 5.26 | 1 | 19 |
| | | F | 91.67 | 11 | 8.33 | 1 | 12 |
| **JERE** | Ss 1 | M | 100 | 35 | 0.00 | 0 | 35 |
| | | F | 100 | 24 | 0.00 | 0 | 24 |
| | Ss 2 | M | 92.59 | 25 | 6.25 | 2 | 27 |
| | | F | 80.00 | 16 | 20.00 | 4 | 20 |
| TOTAL | | | | 160 (92.51%) | | 12 (7.49%) | 172 (100%) |

Source: Field work, 2014

**Fig. 4- 4: Knowledge about International Satellite Media as per Table 4.5.**

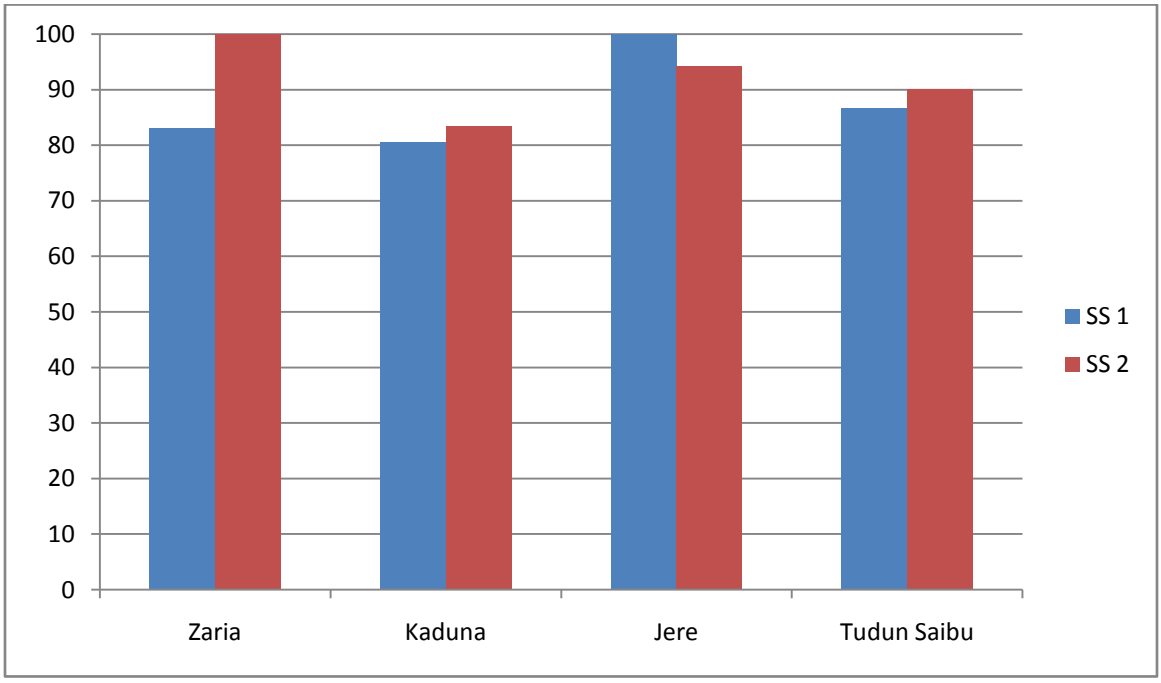



Figure 4.4: indicates rate of knowledge about International satellite media among respondents. While 153 (78.46%) respondents from the urban schools have the knowledge about International satellite media, 160 (92.51%) respondents from the rural schools have such knowledge. In this regard, respondents from the rural schools are a little bit more conscious about International satellite media than their urban counterpart.

TABLE 4: 6: Usage of International Satellite Media among Respondents

| **Urban Schools** | | | | | | | |
|---|---|---|---|---|---|---|---|
| YES % | | | | f | NO % | f | TOTAL |
| **ZARIA** | Ss 1 | | 82.50 | 33 | 17.50 | 7 | 40 |
| | Ss 2 | | 100.00 | 43 | 0.00 | 0 | 43 |
| **KAD** | Ss 1 | | 80.00 | 24 | 20.00 | 6 | 30 |
| | Ss 2 | | 62.50 | 25 | 37.50 | 15 | 40 |
| TOTAL | | | | 125 (81.70%) | | 28 (18.30%) | 153 (100%) |
| **Rural Schools** | | | | | | | |
| YES % | | | | f | NO % | f | TOTAL |
| **T/SAIBU** | Ss 1 | M | 88.24 | 15 | 11.76 | 2 | 17 |
| | | F | 86.67 | 13 | 13.33 | 2 | 15 |
| | Ss 2 | M | 94.12 | 16 | 5.88 | 1 | 17 |
| | | F | 90.00 | 9 | 10.00 | 1 | 10 |
| **JERE** | Ss 1 | M | 100 | 32 | 0.00 | 0 | 32 |
| | | F | 100 | 23 | 0.00 | 0 | 23 |
| | Ss 2 | M | 92.00 | 23 | 8.00 | 2 | 25 |
| | | F | 80.95 | 17 | 19.05 | 4 | 21 |
| TOTAL | | | | 148 (92.50%) | | 12 (7.50%) | 160 (100%) |

Source: Field work, 2014

**Fig. 4- 5: Usage of International Satellite Media as per Table 4.6.**

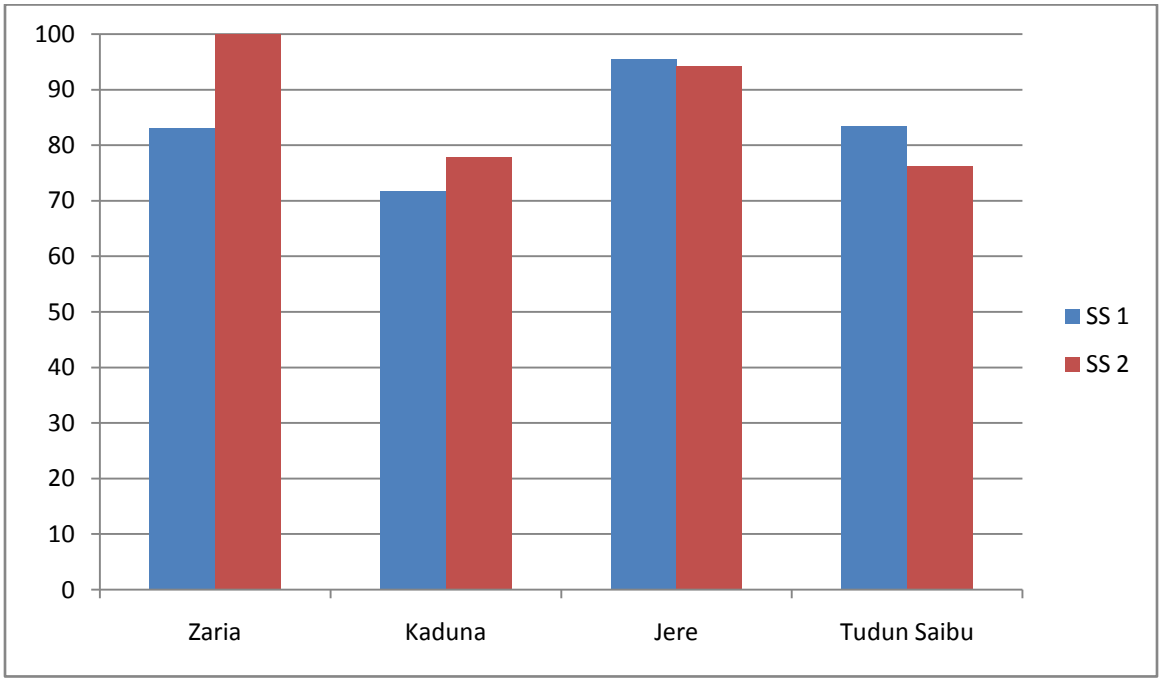



Figure 4.5: indicates rate of usage of International Satellite Media among respondents. While 125 (81.70%) respondents from the urban schools use the International Satellite Media, 148 (92.50%) respondents from the rural schools use it. Therefore, the rate of patronage of International Satellite Media among respondents was virtually similar, although, the rural students patronises it a little bit more than their urban counterparts.

TABLE 4: 7: Average time spent Watching/Listening to International Satellite Media by the Respondents (refer to next file)

Table 4.7: indicates average time consumed by the respondents watching/listing to International Satellite Media. As, 60 respondents (35.93%) from the urban schools watch/listen to International Satellite Media for one to two hours daily, 31 respondents (18.56%), 55 respondents (32.93%), and 21 respondents (12.57%) respectively watch/listen to it daily for more than two hours, occasionally for one to two hours and occasionally for more than two hours. On the other hand, while 49 respondents (29.88%) from the rural schools watch/listen to International Satellite Media for one to two hours daily, 34 respondents (20.73%) 65 respondents (39.63%) and 16 respondents (9.76%) respectively watch/listen to it daily for more than two hours, occasionally for one to two hours and occasionally for more than two hours. Therefore, the average time spent by the respondents watching/listing to International Satellite Media was relatively similar.

TABLE 4: 8: Purpose for watching/Listing to International Satellite Media by the Respondents

| Location | | | Acad. % | f | Social % | f | Sports % | f | All % | f | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **ZAR** | Ss 1 | | 78.79 | 26 | 0 | 0 | 0 | 0 | 21.21 | 7 | 33 |
| | Ss 2 | | 46.34 | 19 | 9.76 | 4 | 21.95 | 9 | 21.95 | 9 | 41 |
| **KAD** | Ss 1 | | 40.00 | 12 | 10.00 | 3 | 0 | 0 | 50.00 | 15 | 30 |
| | Ss 2 | | 57.14 | 12 | 14.29 | 3 | 0 | 0 | 28.57 | 6 | 21 |
| **TOTAL** | | | | 69 (55.20%) | | 10 (8.00%) | | 9 7.20%) | | 37 (29.60%) | 125 (100%) |
| **Rural Schools** | | | | | | | | | | | |
| Location | | | Acad. % | f | Social % | f | Sports % | f | All % | f | Total |
| **T/SAI** | Ss 1 | M | 55.56 | 10 | 27.78 | 5 | 5.56 | 1 | 11.11 | 2 | 18 |
| | | F | 37.50 | 3 | 37.50 | 3 | 12.50 | 1 | 12.50 | 1 | 8 |
| | Ss 2 | M | 50.00 | 9 | 38.89 | 7 | 5.56 | 1 | 5.56 | 1 | 18 |
| | | F | 28.57 | 2 | 28.57 | 2 | 28.57 | 2 | 14.29 | 1 | 7 |
| **JERE** | Ss 1 | M | 10.34 | 3 | 0 | 0 | 0 | 0 | 89.66 | 26 | 29 |
| | | F | 66.67 | 14 | 0 | 0 | 0 | 0 | 33.33 | 7 | 21 |
| | Ss 2 | M | 27.59 | 8 | 27.59 | 8 | 0 | 0 | 44.83 | 13 | 29 |
| | | F | 66.67 | 12 | 11.11 | 2 | 0 | 0 | 22.22 | 4 | 18 |
| **TOTAL** | | | | 61 (41.22%) | | 27 (18.24%) | | 5 (3.38%) | | 55 (37.16%) | 148 (100%) |

Source: Field work, 2014

**Fig. 4- 6: purpose of watching/Listing to International satellite media as per Table 4.8.**

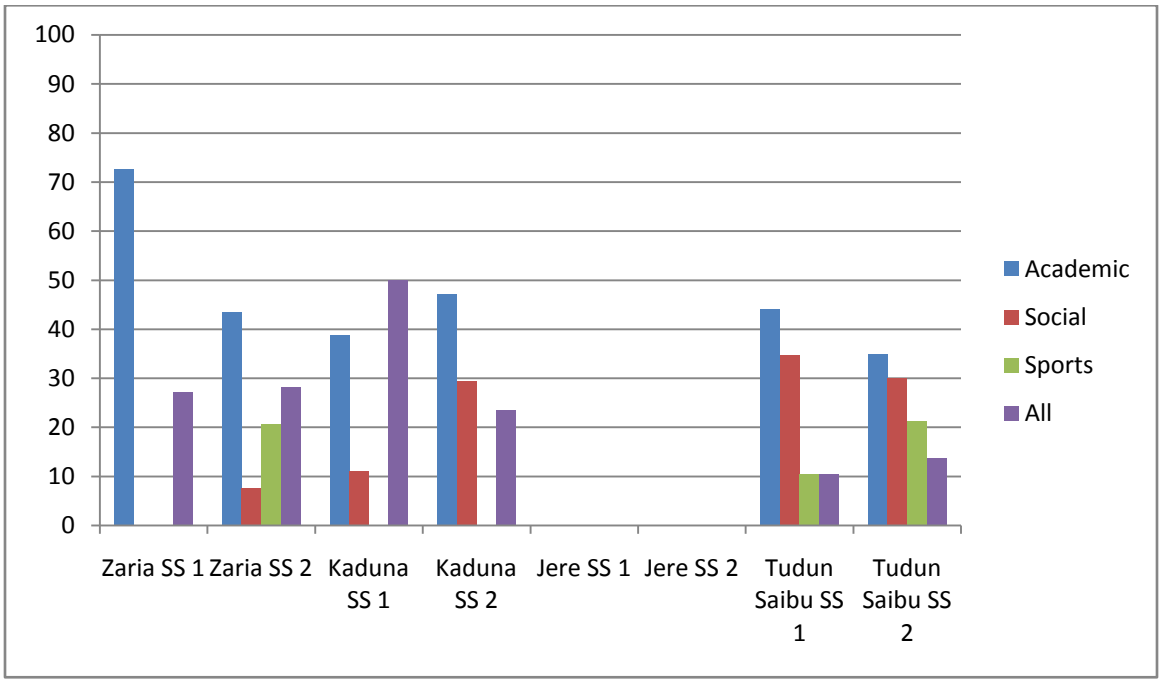



Figure 4.6: indicates purpose for watching/listening to International Satellite Media by the respondents. While 69 (55.20%) respondents from the urban schools watch/listen to International Satellite Media for academic purpose, 10 (8.00%) respondents, 9 (7.20) respondents, and 37 (29.60) respondents respectively watch/listen to it for social, sports, and for all purposes. On the other hand, while 61 respondents (41.22%) from the rural schools watch/listen to International Satellite Media for academic purpose, 27 (18.24) respondents, 5 (3.38) respondents, and 55 (37.16) respondents respectively watch/listen to it for social, sports, and all purposes. Here, there are variations in terms of purpose for the patronage of International Satellite Media among respondents.

## Academic Activities

TABLE 4: 9: Attendance of Extra Lessons at schools by the Respondents

| **Urban Schools** | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| LOCATION | | Avail | | Daily % | f | Occasional % | f | Never % | f | TOTAL |
| **ZAR** | Ss 1 | Yes | | 20.00 | 10 | 46.00 | 23 | 34.00 | 17 | 50 |
| | Ss 2 | Yes | | 12.50 | 7 | 39.29 | 22 | 48.21 | 27 | 56 |
| **KAD** | Ss 1 | Yes | | 31.71 | 13 | 39.02 | 16 | 29.27 | 12 | 41 |
| | Ss 2 | Yes | | 39.58 | 19 | 45.83 | 22 | 14.58 | 7 | 48 |
| **TOTAL** | | | | | 49 (25.13%) | | 83 (42.56%) | | 63 (32.31%) | 195 (100%) |
| **Rural Schools** | | | | | | | | | | |
| LOCATION | | Avail | | Daily % | f | Occasional % | f | Never % | f | TOTAL |
| **T/SAI** | Ss 1 | M | NO | 0 | 0 | 0 | 0 | 100 | 19 | 19 |
| | | F | NO | 0 | 0 | 0 | 0 | 100 | 13 | 13 |
| | Ss 2 | M | NO | 0 | 0 | 0 | 0 | 100 | 20 | 20 |
| | | F | NO | 0 | 0 | 0 | 0 | 100 | 11 | 11 |
| **JERE** | Ss 1 | M | Yes | 56.25 | 18 | 43.75 | 14 | 0 | 0 | 32 |
| | | F | Yes | 100 | 22 | 0 | 0 | 0 | 0 | 22 |
| | Ss 2 | M | Yes | 61.29 | 19 | 38.71 | 12 | 0 | 0 | 31 |
| | | F | Yes | 87.50 | 21 | 12.50 | 3 | 0 | 0 | 24 |
| **TOTAL** | | | | | 80 (46.51%) | | 29 (16.86%) | | 63 (36.63%) | 172 (100%) |

Source: Field work 2014

**Fig. 4- 7: Attendance of Extra Lessons at schools as per Table 4.9.**

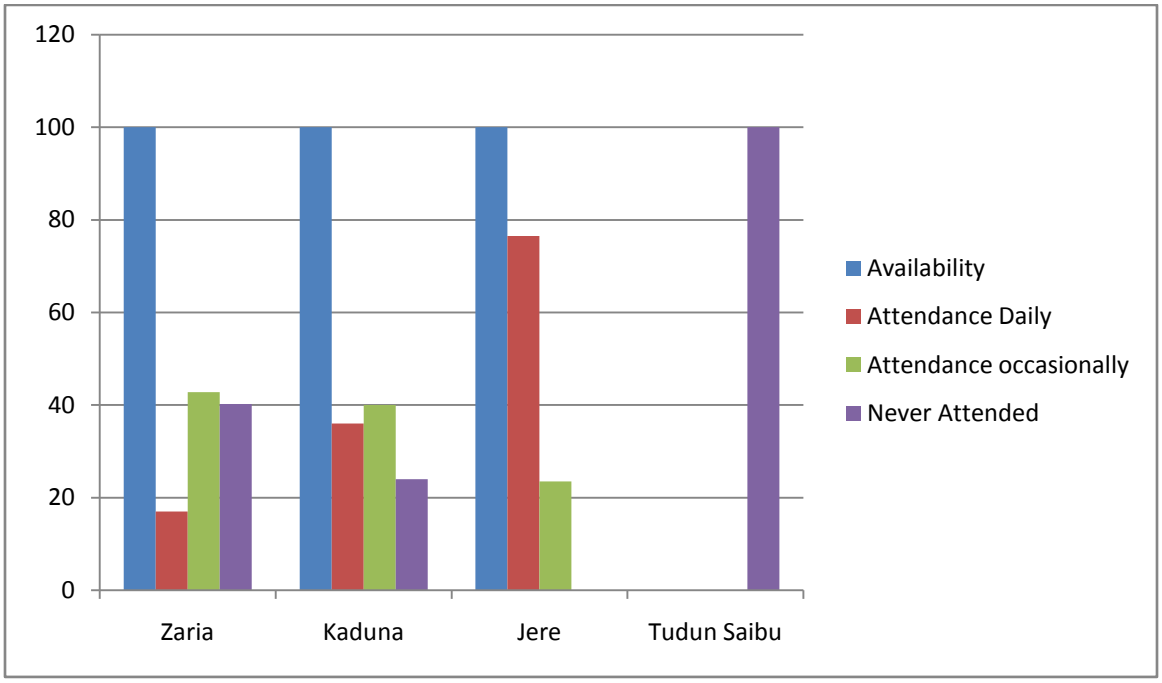



Figure 4.7: indicates availability/attendance of extra lessons by the respondents. While respondents from the urban schools corroborated that, extra lessons are organised 100% at their schools, only 61.50% of the respondents from the rural schools indicated that extra lessons are organised at their schools. Also, while 49 (25.13%) respondents from the urban schools attend extra lessons daily, 83 respondents (42.56%) attend occasionally and 63 (32.31%) respondents never attend. Equally, 80 (46.51%) respondents from the rural schools attend extra classes daily, 29 (16.86%) respondents attend occasionally and 63 (36.63%) respondents never attend.

**TABLE 4: 10: Attendance of Tutorials by the Respondents**

| **Urban Schools** | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| LOCATION | | | Avail | Daily % | f | Occasion % | f | Never % | f | TOTAL |
| **ZAR** | Ss 1 | | Yes | 33.33 | 16 | 25.00 | 12 | 41.67 | 20 | 48 |
| | Ss 2 | | Yes | 36.36 | 20 | 60.00 | 33 | 3.36 | 2 | 55 |
| **KAD** | Ss 1 | | Yes | 20.93 | 9 | 9.30 | 4 | 69.77 | 30 | 43 |
| | Ss 2 | | Yes | 32.65 | 16 | 30.61 | 15 | 36.73 | 18 | 49 |
| **TOTAL** | | | | | 61 (31.28%) | | 64 (32.82%) | | 70 (35.90%) | 195 (100%) |
| **Rural Schools** | | | | | | | | | | |
| LOCATION | | | Avail | Daily % | f | Occasion % | f | Never % | f | TOTAL |
| **T/SAI** | Ss 1 | M | Yes | 19.05 | 4 | 9.52 | 2 | 71.43 | 15 | 21 |
| | | F | Yes | 23.08 | 3 | 15.38 | 2 | 61.54 | 8 | 13 |
| | Ss 2 | M | Yes | 60.00 | 12 | 20.00 | 4 | 20.00 | 4 | 20 |
| | | F | Yes | 44.44 | 4 | 33.33 | 3 | 22.22 | 2 | 9 |
| **JERE** | Ss 1 | M | Yes | 66.67 | 22 | 33.33 | 11 | 0 | 0 | 33 |
| | | F | Yes | 90.48 | 19 | 9.52 | 2 | 0 | 0 | 21 |
| | Ss 2 | M | Yes | 38.71 | 12 | 48.39 | 15 | 12.90 | 4 | 31 |
| | | F | Yes | 58.33 | 14 | 20.83 | 5 | 20.83 | 5 | 24 |
| **TOTAL** | | | | | 90 (52.33%) | | 44 (25.58%) | | 38 (22.09%) | 172 (100%) |

Source: Field work, 2014

**Fig. 4- 8: Attendance of Tutorials by respondent as per Table 4.10.**

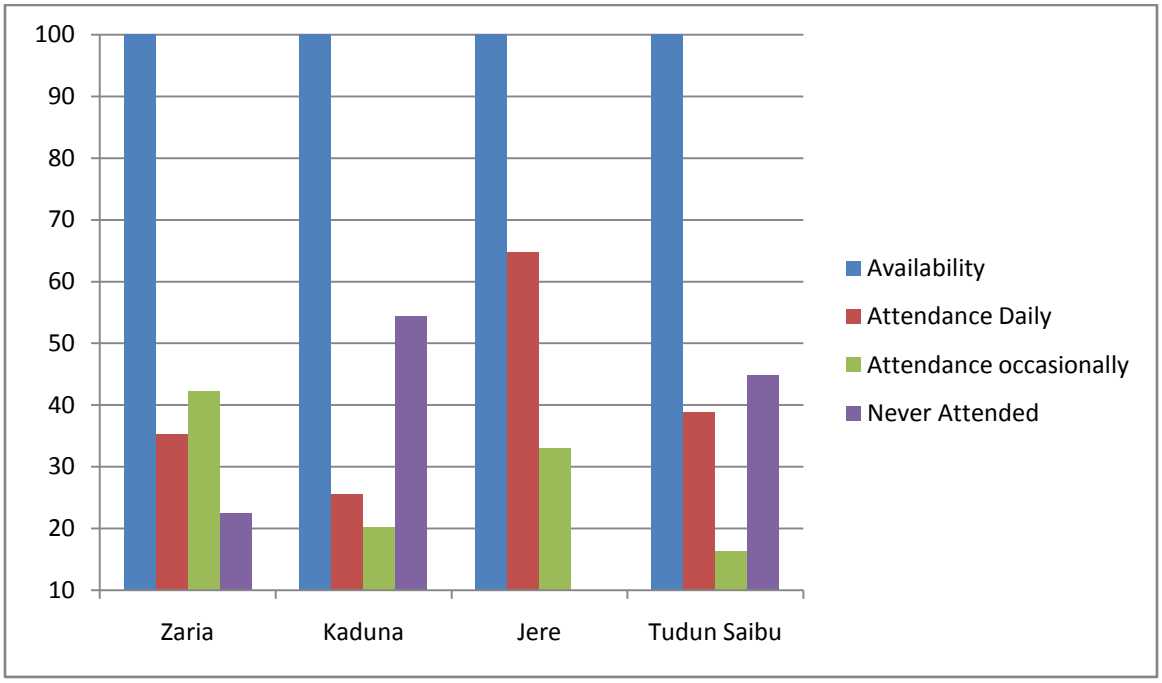



Figure 4.8: indicates availability/attendance of tutorials by the respondents. While 61 (31.28%) respondents from the urban schools attend tutorials daily, 64 (32.82%) respondents attend occasionally, and 70 (35.90%) respondents never attend. At the same time, 90 (52.33%) respondents from the rural schools attend tutorials daily, 44 (25.58%) respondents attend occasionally and 38 (22.09%) respondents never attend.

**TABLE 4:11: Rate of visit to Library by the Respondents**

| **Urban Schools** | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Location | | | Daily % | f | Occasional % | f | Never % | f | TOTAL |
| **ZAR** | Ss 1 | | 36.73 | 18 | 14.29 | 7 | 48.98 | 24 | 49 |
| | Ss 2 | | 11.11 | 6 | 35.19 | 19 | 53.70 | 29 | 54 |
| **KAD** | Ss 1 | | 23.81 | 10 | 35.71 | 15 | 40.48 | 17 | 42 |
| | Ss 2 | | 46.00 | 23 | 14.00 | 7 | 40.00 | 20 | 50 |
| **TOTAL** | | | | 57 (29.23%) | | 48 (24.62%) | | 90 (46.15%) | 195 (100%) |
| **Rural Schools** | | | | | | | | | |
| Location | | | Daily % | f | Occasional % | f | Never % | f | TOTAL |
| **T/SAI** | Ss 1 | M | 28.57 | 6 | 33.33 | 7 | 38.10 | 8 | 21 |
| | | F | 53.85 | 7 | 15.38 | 2 | 30.77 | 4 | 13 |
| | Ss 2 | M | 28.57 | 6 | 38.10 | 8 | 33.33 | 7 | 21 |
| | | F | 60.00 | 6 | 20.00 | 2 | 20.00 | 2 | 10 |
| **JERE** | Ss 1 | M | 50.00 | 16 | 50.00 | 16 | 0 | 0 | 32 |
| | | F | 65.00 | 13 | 30.00 | 6 | 5.00 | 1 | 20 |
| | Ss 2 | M | 58.06 | 18 | 41.94 | 13 | 0 | 0 | 31 |
| | | F | 62.50 | 15 | 20.83 | 5 | 16.67 | 4 | 24 |
| **TOTAL** | | | | 87 (50.58%) | | 59 (34.30%) | | 26 (15.12%) | 172 (100%) |

Source: Field work, 2014

**Fig. 4- 9: Rate of visit to Library by the Respondents as per Table 4.11.**

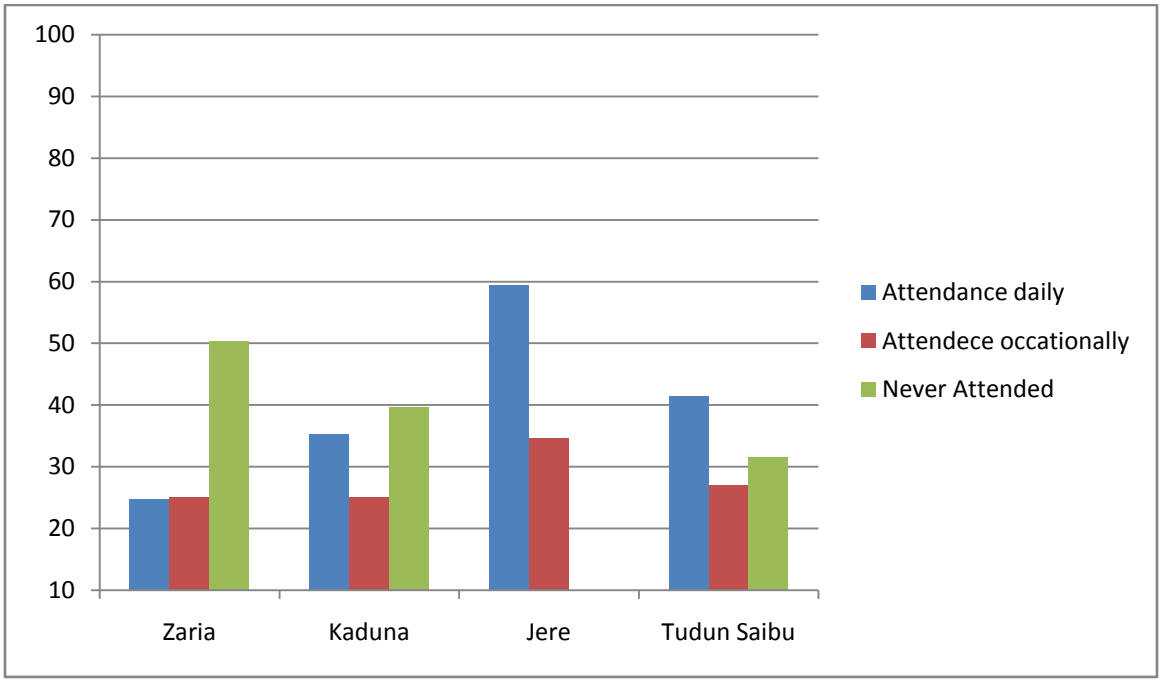



Figure 4.9: indicates rate of visit to Library by the respondents. While 63 respondents (29.58%) from the urban schools visit library daily, 54 respondents (25.35%) visit it occasionally and 96 respondents (45.07%) never visit it. Also, 95 respondents (50.80%) from the rural schools visit library daily, 63 respondents (33.69%) visit it occasionally and 29 respondents (15.51%) never visit it. Here, there is significant difference in the respondents' attitude to library. The respondents from the rural schools visit it more frequently than their urban counterparts.

TABLE 4: 12: Rate of reading books at home by the Respondents

| **Urban Schools** | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Location | | | Daily % | f | Occasional % | f | Never % | f | TOTAL |
| **ZAR** | Ss 1 | | 62.00 | 31 | 14.00 | 7 | 24.00 | 12 | 50 |
| | Ss 2 | | 87.27 | 48 | 7.27 | 4 | 5.45 | 3 | 55 |
| **KAD** | Ss 1 | | 19.05 | 8 | 38.10 | 16 | 42.86 | 18 | 42 |
| | Ss 2 | | 81.25 | 39 | 10.42 | 5 | 8.33 | 4 | 48 |
| **TOTAL** | | | | 126 (64.62 %) | | 32 (16.41%) | | 37 (18.97%) | 195 (100%) |
| **Rural Schools** | | | | | | | | | |
| Location | | | Daily % | f | Occasional % | f | Never % | f | TOTAL |
| **T/SAI** | Ss 1 | M | 55.00 | 11 | 10.00 | 2 | 35.00 | 7 | 20 |
| | | F | 69.23 | 9 | 23.08 | 3 | 7.69 | 1 | 13 |
| | Ss 2 | M | 47.37 | 9 | 31.58 | 6 | 21.05 | 4 | 19 |
| | | F | 50.00 | 6 | 33.33 | 4 | 16.67 | 2 | 12 |
| **JERE** | Ss 1 | M | 100.00 | 32 | 0 | 0 | 0 | 0 | 32 |
| | | F | 100.00 | 21 | 0 | 0 | 0 | 0 | 21 |
| | Ss 2 | M | 86.67 | 26 | 6.67 | 2 | 6.67 | 2 | 30 |
| | | F | 100.00 | 25 | 0 | 0 | 0 | 0 | 25 |
| **TOTAL** | | | | 139 (80.81%) | | 17 (9.88%) | | 16 (9.30%) | 172 (100%) |

Source: Field work, 2014

**Fig. 4- 10: Rate of reading books at home by the Respondents as per Table 4.11.**

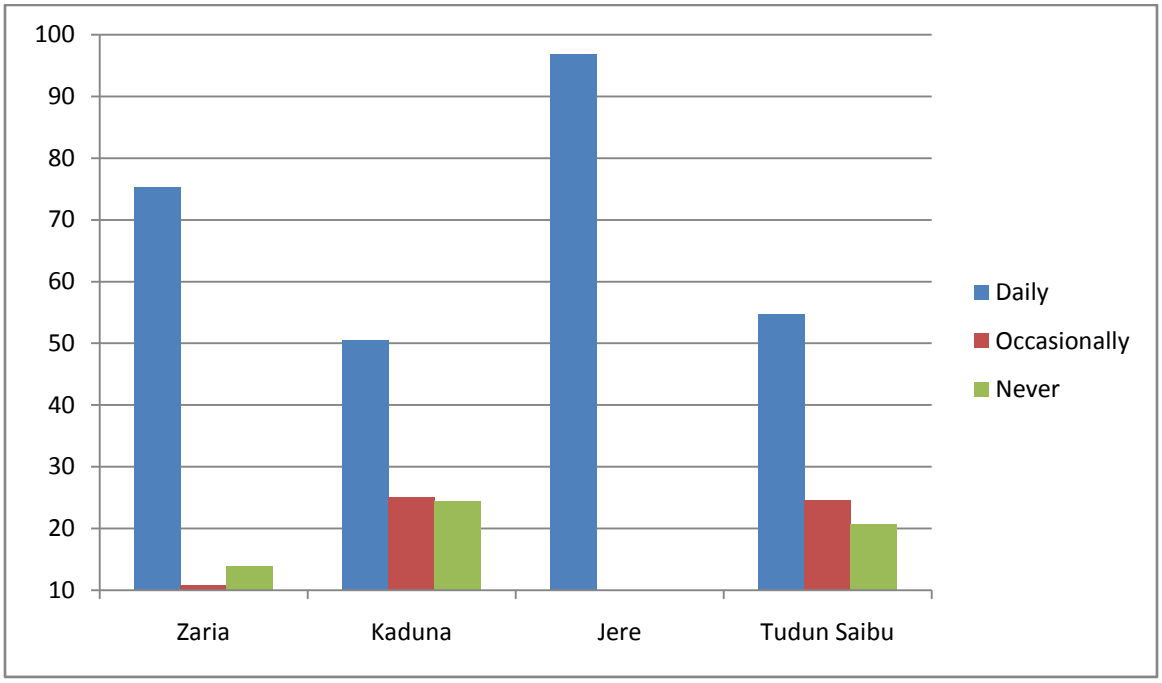
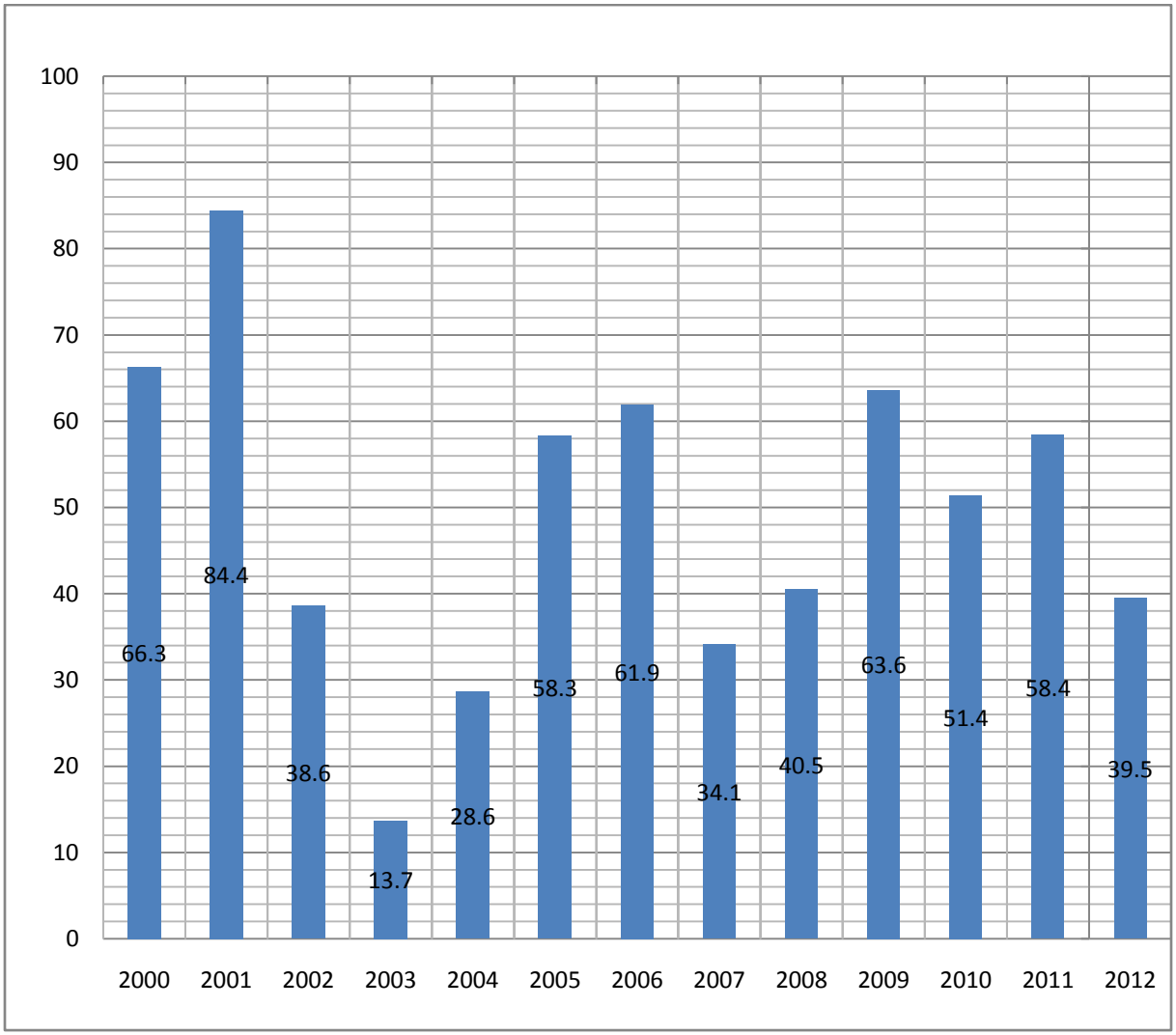


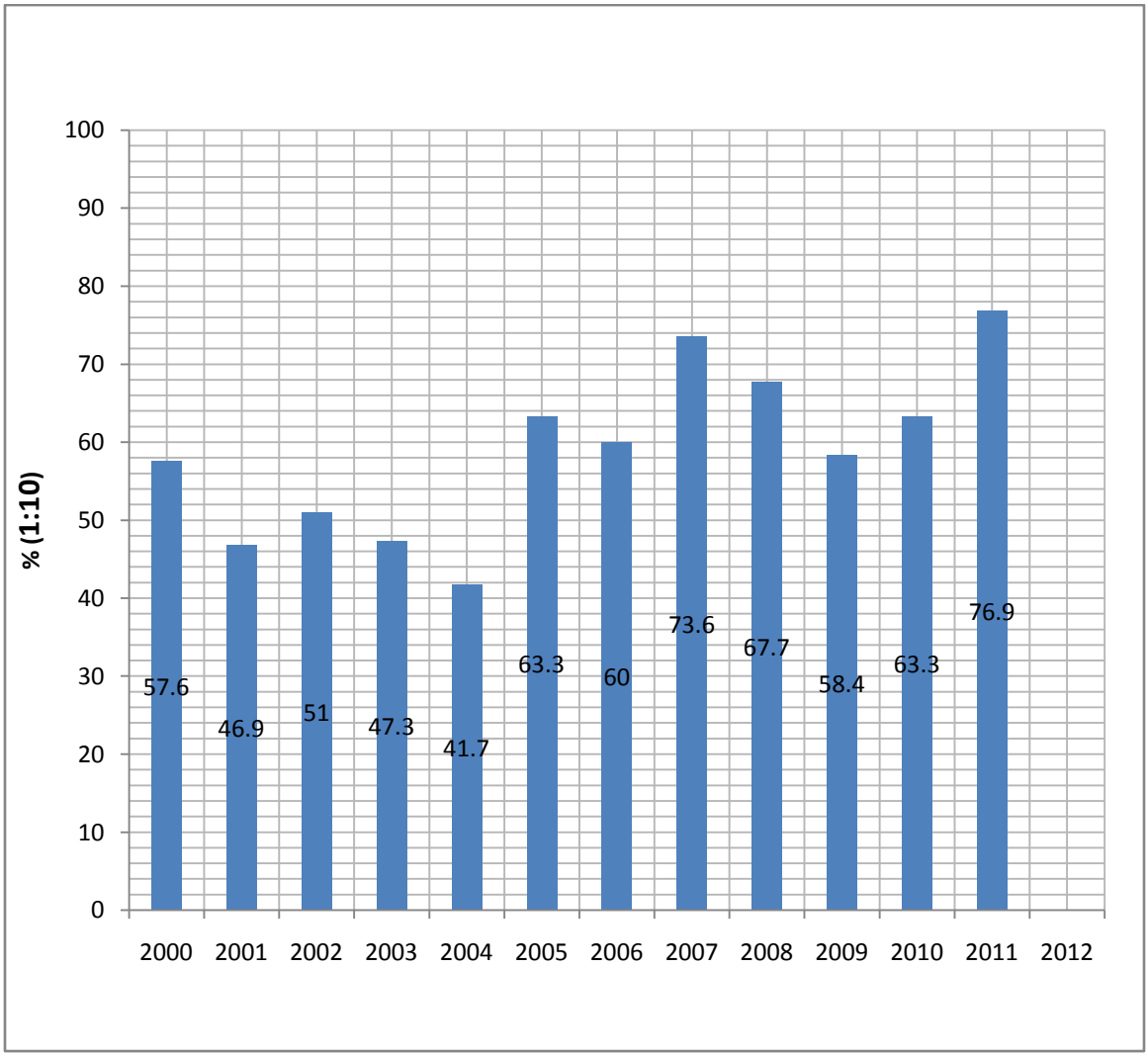

Figure 4.10: indicates rate of reading books at home by the respondents. While 126 (64.62 %) respondents from the urban schools read their books at home daily, 32 (16.41%) respondents read it occasionally, and 37 (18.97%) respondents never read their books at home. In the same vein, 139 (80.81%) respondents from the rural schools read their books at home daily, 17 (9.88%) respondents read it occasionally and 16 (9.30%) respondents never read their books at home.

**Fig. 4-11: Progress chart showing summary of performance of Students in WASSCE examination in % term: 2000 to 2012 for GSS Kofar Kibo – Zaria, Kaduna State.**



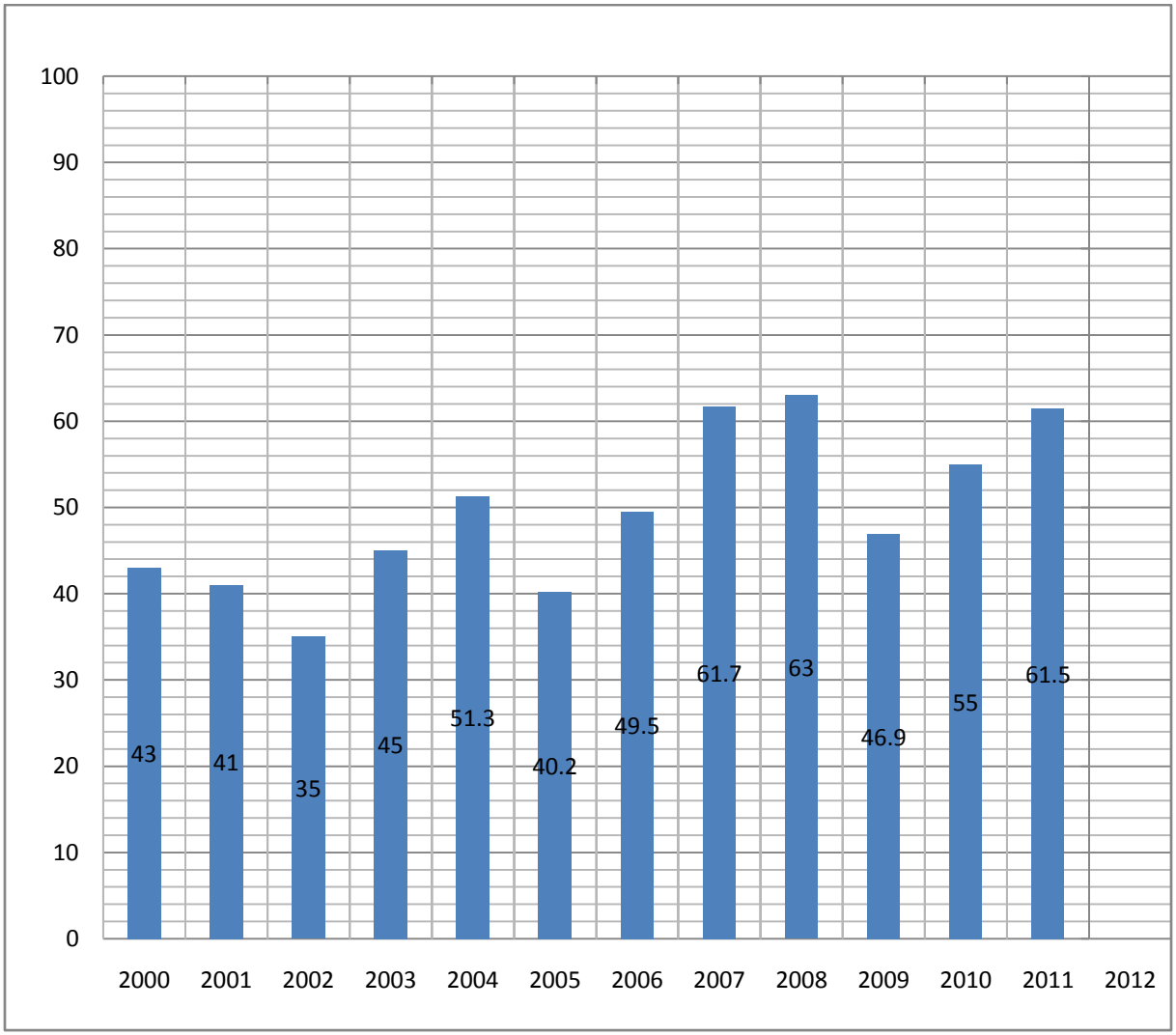

Source: GSS Kofar Kibo (2014)

**Fig. 4- 12: Progress chart showing summary of performance of Students in WASSCE examination in % term: 2000 to 2011, for Government Girls Secondary School (GGSS) Kawo Kaduna.**



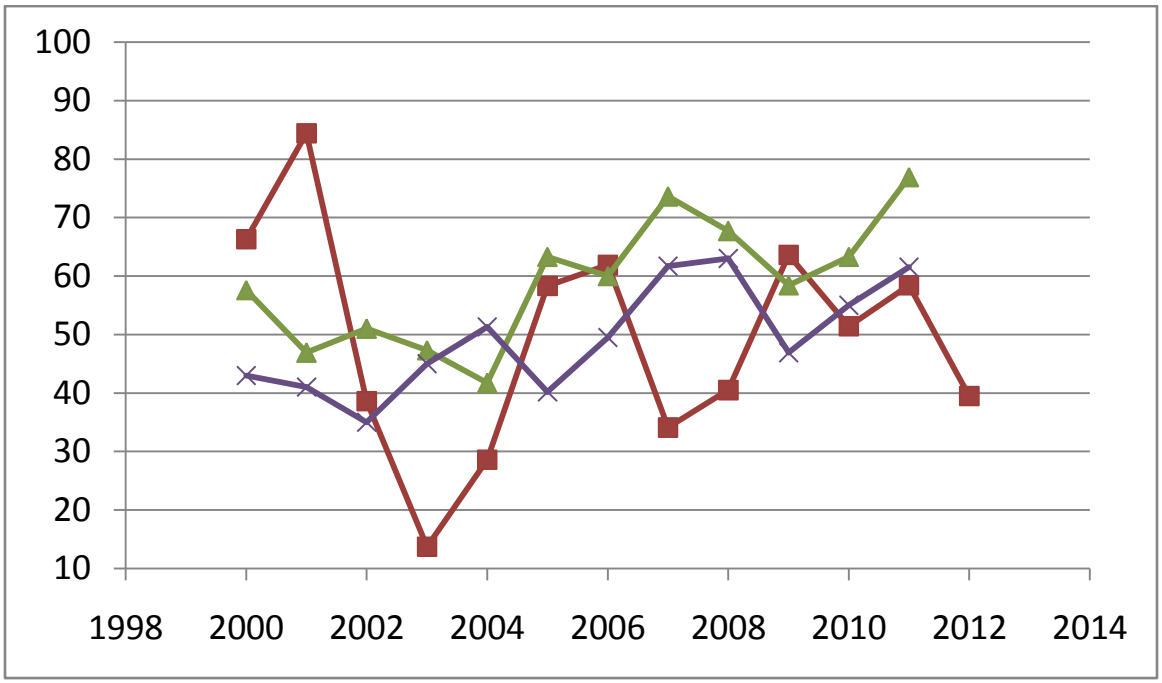

Source: GGSS Kawo Kaduna (2014)

**Fig. 4- 13: Progress chart showing summary of performance of Students in WASSCE examination in % term: 2000 to 2011 for Government Secondary School Jere – Kagarko Local Government, Kaduna State**




Source: GSS Jere (2014)

**Fig. 4- 14: Scattered graph showing nature and direction of students' academic performance over 12 years (2000 – 2012) for GSS Kofar Kibo Zaria, GGSS Kawo Kaduna and GSS Jere.**




Source: Field work 2014

Key:

1. ☐ GGSS Kofar Kibo, Zaria
2. △ GGSS Kawo Kaduna
3. X GSS Jere

Figures 4.11 to 4.14: Describe the inconsistent disposition in the performance of the students throughout the period under study. There were no remarkable differences in the trend between students of the urban areas and their counterparts of the rural areas over the period of study.

## Test of hypothesis

### T-Test

**Fig. 4 – 15: Knowledge of Internet among Respondents**

**Paired Samples Test**

| | Paired Differences | | | | | t | df | Sig. (2-tailed) |
|---|---|---|---|---|---|---|---|---|
| | Mean | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference Lower | Upper | | | |
| Pair 1 VAR00001 - VAR00002 | 6.84500 | 29.49944 | 14.74972 | -40.09519- | 53.78519 | .464 | 3 | .674 |

According to Fig. 4 -15 the calculated value is less than the critical value. Hence, the alternate hypothesis which states that "There are significant variations in terms of knowledge and usage of ICT between senior secondary schools' students in urban areas and their counterparts in the rural areas of Kaduna state" should be discarded.

**Fig. 4 -16: Usage of Internet among Respondents**

**T-Test**

**Paired Samples Test**

| | Paired Differences | | | | | t | df | Sig. (2-tailed) |
|---|---|---|---|---|---|---|---|---|
| | Mean | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference Lower | Upper | | | |
| Pair 1 VAR00001 - VAR00002 | -6.26000E0 | 18.24614 | 9.12307 | -35.29368- | 22.77368 | -.686- | 3 | .542 |

According to Fig. 4 -16 the calculated value is less than the critical value. Hence, the alternate hypothesis which states that "There are significant variations in terms of

knowledge and usage of ICT between senior secondary schools' students in urban areas and their counterparts in the rural areas of Kaduna state" should be discarded.

**Fig. 4 -17: Knowledge of International Satellite Media among Respondents**

**T-Test**

**Paired Samples Test**

| | Paired Differences | | | | | t | df | Sig. (2-tailed) |
|---|---|---|---|---|---|---|---|---|
| | Mean | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference Lower | Upper | | | |
| Pair 1 VAR00005 - VAR00006 | -1.76500E0 | 18.79115 | 9.39558 | -31.66592- | 28.13592 | -.188- | 3 | .863 |

According to Fig. 4 -17 the calculated value is less than the critical value. Hence, the alternate hypothesis which states that "There are significant variations in terms of knowledge and usage of ICT between senior secondary schools' students in urban areas and their counterparts in the rural areas of Kaduna state" should be discarded.

**Fig. 4 -18: Usage of International Satellite Media among Respondents**

**T-Test**

**Paired Samples Test**

| | Paired Differences | | | | | t | df | Sig. (2-tailed) |
|---|---|---|---|---|---|---|---|---|
| | Mean | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference | | | | |
| | | | | Lower | Upper | | | |
| Pair 1 VAR00005 - VAR00006 | -4.19250E0 | 21.07482 | 10.53741 | -37.72724- | 29.34224 | -.398- | 3 | .717 |

According to Fig. 4 -18 the calculated value is less than the critical value. Hence, the alternate hypothesis which states that "There are significant variations in terms of knowledge and usage of ICT between senior secondary schools' students in urban areas and their counterparts in the rural areas of Kaduna state" should be discarded.

**Fig. 4 -19: Performance of the Students of GSS Kofar Kibo, before and after the advent of Internet and International Satellite Media**

**T-Test**

**Paired Samples Test**

| | Paired Differences | | | | | t | df | Sig. (2-tailed) |
|---|---|---|---|---|---|---|---|---|
| | Mean | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference Lower | Upper | | | |
| Pair 1 VAR00001 - VAR00002 | -1.53500E1 | 8.46800 | 3.45705 | -24.23662- | -6.46338- | -4.440- | 5 | .007 |

According to Fig. 4 -19 the calculated value is less than the critical value. Hence, the alternate hypothesis which states that "There is significant relationship between ICT and the performance of senior secondary schools' students in Kaduna State" should be discarded.

**Fig. 4 -20: Performance of the Students of GGSS Kawo – Kaduna, before and after the advent of Internet and International Satellite Media**

**T-Test**

**Paired Samples Test**

| | Paired Differences | | | | | t | df | Sig. (2-tailed) |
|---|---|---|---|---|---|---|---|---|
| | Mean | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference Lower | Upper | | | |
| Pair 1 VAR00001 - VAR00002 | -3.33333E0 | 33.15495 | 13.53545 | -38.12732- | 31.46065 | -.246- | 5 | .815 |

According to Fig. 4 -20 the calculated value is less than the critical value. Hence, the alternate hypothesis which states that "There is significant relationship between ICT and the performance of senior secondary schools' students in Kaduna State" should be discarded.

**Fig. 4 -21: Performance of the Students of GDSS Jere, before and after the advent of Internet and International Satellite Media**

**T-Test**

**Paired Samples Test**

| | Paired Differences | | | | | t | df | Sig. (2-tailed) |
|---|---|---|---|---|---|---|---|---|
| | Mean | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference Lower | Upper | | | |
| Pair 1 VAR00001 - VAR00002 | -1.36833E1 | 10.97569 | 4.48080 | -25.20161- | -2.16506- | -3.054- | 5 | .028 |

According to Fig. 4 -21 the calculated value is less than the critical value. Hence, the alternate hypothesis which states that "There is significant relationship between ICT and the performance of senior secondary schools' students in Kaduna State" should be discarded.

Accordingly, going by the above presentation, it is clear that ICT has impacted very little on educational development of senior secondary schools' students in Kaduna state.

### 4.2.2 **Result of the Interview**

From the interview conducted, the responses provided by the stakeholders connote the following information:

4.2.2.1. There was a unanimous agreement among interviewees that, there is a strong inclination to the ICT among senior secondary schools' students in Kaduna state. Some teachers admitted that, despite the fact that, their schools do not have functional Internet Café, however, students' leaning to the Internet is very high. In the teachers' view; this helped the students to acquire new knowledge and access vital information, which in turn impacted positively on their studies and comprehension ability.

4.2.2.2. Some education managers admitted that, sometimes a slight decline and instability in the students' performance do occurred in recent years, however, it was an attribute of many factors, including lack of required teachers in some fields sometimes. Hence, students' inclination to the ICT and none regulation of their penchant to it may be part of the aspects affecting their academic performance.

4.2.2.3. Some parents argued that, the manner by which senior secondary schools' students were enmeshed by the ICT may be the basis for the students' inability sometimes to cope with their routine academic activities, resulting in the decline in their performance. A parent while buttressing his argument on what he termed 'negative effects of ICT on students' academic activities', maintained that, he sometimes do spend substantial part of his time on ICT and just for fun. He said "I sometimes spend up to eight hours a day, watching International football matches over the Television, and many students are of such habit. Therefore the time they waste on such things cannot go without any impact on their studies".

4.2.2.4. Some teachers while responding on whether there are notable changes in students' academic activities and performance if comparison is to be made; between the epoch of little or none availability of ICT and the present epoch. They confessed that, although information and access to knowledge have increased and simplified with the advent of ICT, however, the rate of students' performance academically does not show much remarkable progress; may be due to students' concern with the social part of the ICT and neglecting the educational advantages contained in it.

4.2.2.5. Teachers while responding on whether there are visible changes in the academic performance of senior secondary schools' students, most of them admitted that, although internet has opened door for knowledge and information sharing, but the students are more leaned to the social part of it. This may be the cause for little improvement in their academic performance.

4.2.2.6. The general remarks of the interviewees differs, while most teachers are optimistic that ICT is a significant means of achieving improved knowledge, some parents entertained fear that the ICT is to a large extent polluting students.

## 4.3 **Major Findings**

The study revealed that,

4.3.1 Senior Secondary Schools' Students of urban and rural schools in Kaduna state are virtually the same in terms of knowledge about ICT.

4.3.2 Both urban and rural students are virtually the same in terms of usage of ICT.

4.3.3 There are divergent views on the purpose of the ICT usage by the students. While both urban and rural students claimed spend substantial amount of their time on ICT on academic activities, some teachers as well as parents believed that the students are mostly concerned with the funny side of the ICT.

4.3.4 Most urban schools have functional Internet cafés provided either by the government or other bodies and individuals. While most rural schools don't have Internet cafés which made the students to use any personal device available to them.

4.3.5 Rural students appeared to be more active on academic activities than their urban counterparts.

4.3.6 There was no significant variation in the performance of the students, prior to; and after the advent of the ICT. Their performance continues to fluctuate without stable trend.

# CHAPTER FIVE

# SUMMARY, CONCLUSION AND RECOMMENDATION

## 5.1. Summary of the study

This research work was inspired by the recent development recorded in the area of ICT, which gave people greater access to information and knowledge. This development in return exposes the younger generations to various forms of effects springing out from the contents of these ICT. Hence, the study explores the effect of ICT on educational development of senior secondary schools' students in Kaduna state. Therefore, the study answered among others, the question; 'To what extent are variations in terms of knowledge and usage of ICT between senior secondary schools' students in urban areas and their counterparts in the rural areas in Kaduna state?' Main objective of the study was to assess the impact of ICT on the educational development of senior secondary schools' students of Kaduna State.

Population of the study was; all the senior secondary schools in Kaduna state from which all the senior secondary schools' students of the four schools selected from the three geopolitical zones of the state formed the main population of the study. While three hundred and ninety nine (399) was the sample size of the study, and the study covered the period between 2000 and 2014. In addition, the study used primary source of data generated by means of questionnaire, interview and primary documents obtained from the schools. Bar charts, simple percentage, graphs and student T Test were used in data presentation and analysis.

## 5.2. Conclusion

As per the findings of the study, virtually there was a little development recorded on the educational development of the senior secondary schools students in Kaduna state which can be attributed to effect on ICT. Also, there are virtually no significant variations in terms of knowledge and usage of ICT between students of the urban areas and their counterparts of the rural areas. In addition, performance of the students both in the urban and in the rural areas remains relatively the same, before and after the advent of the ICT. Their performance continues to fluctuate throughout the period under study; hence, the ICT has negligible impact on their performance. While in terms of academic activities, the ICT is not retarding their academic activities; more so, most of them says they use ICT for academic purposes. In terms of government intervention, the effort wasn't sufficient to effectively streamline the schools to the main stream of IT world.

## 5.3. Recommendations

5.3.1. A careful plan should be made by the state ministry of education in collaboration with the schools' authorities to systematically devise a means of guidance and control of students' attitude towards ICT. This is to make their inclination to it more productive to their academic and attitudinal aspects. This can be done by introducing certain changes and innovations in the schools' curriculum that can be attractive and easy to comprehend by the students, which is capable of satisfying their desire for fun and at the same time will enhance their academic capabilities and their mind-set.

5.3.2. A periodic gathering in form of workshop or seminar should be arranged by the Zonal Education Offices across the state, so as to bring together students, the teachers and

resource persons from outside, to discuss issues pertaining ICT. This will avail the students an opportunity to learn things to benefit from the ICT, and what to aloof from it.

5.3.3. Schools, especially the rural schools should introduce a compulsory extra lessons and tutorials so as to enhance learning among their students. This will compliment their patronage of the ICT and will reduce time waste on the funny side of the ICT.

5.3.4. Both at schools' levels and at ministerial level, adequate plan should be made to provide schools with required personnel at the right time and in the right quantity, so as to curtail the incidence of shortage of man power in specific fields e.g. ICT. This will have far reaching impact in the stabilization and enhancement of students' academic performance.

5.3.5. Government as well as individuals and organizations should join hands to facilitate the provision of the required ICT materials to enable effective implementation of the IT policies.

## 5.4. Recommendations for Further Studies.

5.4.1. An in-depth research should be conducted on students' activities on the ICT and the impact it has on their academic performance and their behaviour.

5.4.2. A research should also be conducted on the level of awareness of parents on what their children are using the ICT for, and how to effectively involve the parents in the process of guidance and control of their children to be able to yield positive result.

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## APPENDIX I

### Introductory Letter

**DEPARTMENT OF PUBLIC ADMINISTRATION**
**FACULTY OF ADMINISTRATION**
**AHMADU BELLO UNIVERSITY (ABU) ZARIA**

**CONDUCTING ACADEMIC RESEARCH**

With reference to the above subject matter, I wish to crave for your kind indulgence to use some of your time to fill the attached questionnaire. As stated above, the research is purposely and purely for academic pursuit, hence you may kindly wish to give accurate and correct answers to each question. Please be assured of full anonymity, while we repose strong confidence in your responses.

Thank you.

**Sa'idu Kasimu Imam**
M.Sc./ADMN/5230/2011-2012

**APPENDIX II**

**QUESTIONNAIRE**

**DEPARTMENT OF PUBLIC ADMINISTRATION**
**FACULTY OF ADMINISTRATION**
**AHMADU BELLO UNIVERSITY (ABU) ZARIA**

**Questionnaire for M. Sc. Thesis**

**Section A: Personal Profile:**

**1. Name:**

**……**

**2. Sex: M** ☐ **F** ☐

**3. School:**

**a. Government Secondary School Kofan Kibo, Zaria** ☐

**b. Government Girls Secondary School, Kawo, Kaduna** ☐

**c. Government Day Secondary School Tudun Saibu, Soba** ☐

**d. Government Day Secondary School Jere – Kagarko** ☐

**j. Class: SS 1** ☐ **SS 2** ☐ **SS 3** ☐

**Section B: Environment:**

1. Availability of Internet and International Satellite Media Stations.

i. Internet facilities are available in our environment: Yes ☐ No. ☐

ii. Internet facilities are affordable in our environment: Yes ☐ No. ☐

iii. There is access to International Satellite Media Stations in our environment: Yes ☐ ☐
No.

**Section C: Utilisation**

1. Do you use Internet? Yes ☐ No. ☐
2. What means do you use to access Internet?

i. Cyber café ☐

ii. Laptop Computer ☐

iii. Cell Phone (Hand set) ☐

iv. **Others specify:**

……..…

……..……

…….

**3. How frequent do you use Internet?**

i. Every day ☐

ii. Every week ☐

iii. Once a while ☐

**4. How much time do you spend on the Internet each time you log on?**

i. One to Two hours ☐

ii. More than two hours ☐

**5. What is the average time do you spend on the Internet each week?**

i. One to five hours ☐

ii. Five to Ten hours ☐

iii. Above Ten hours ☐

**6. For what purpose do you usually use the Internet?**

i. Academic research ☐

ii. Social activities ☐

iii. All of the above ☐

**7. Do you visit any of the following social fora?**

i. Face Book ☐

ii. Twitter ☐

iii. To Go ☐

iv. chat room ☐

v. All of the above ☐

vi. None of the above ☐

**8. How frequent do you visit the above sites?**

i. Every day ☐ one to Two hours ☐ more than Two hours ☐

ii. Every week ☐ one to Two hours ☐ more than Two hours ☐

iii. Once a while ☐ one to Two hours ☐ more than Two hours ☐

**9. What is the average time do you spend each week on the above?**

iv. One to five hours ☐

v. Five to Ten hours ☐

vi. Above Ten hours ☐

**10. How frequent do you use the Internet for research?**

i. Everyday ☐

ii. Once a week ☐

iii. Once a while ☐

iv. Never ☐

v. Others specify:

……

**11. Do you watch satellite TV stations? Yes ☐ No ☐**

**12. Where do you watch the satellite TV stations?**

i. At home ☐ ii. At viewing centre ☐ iii. All of the above ☐

**13. How frequent do you watch satellite stations?**

i. Once a while ☐

ii. Every day ☐

iii. Every week ☐

**14. What are your favorite programmes**

i. Sports ☐

ii. Entertainment ☐

iii. News ☐

iv. Current affairs ☐

v. Others specify

……

……

……

**15. How much time do you spend watching satellite TV stations?**

i. One to two hours Daily ☐

ii. More than two hours daily ☐

iii. Occasionally ☐

iv. Others specify:

……..…

**16. What benefit do you drive from the programmes watched/listened to, over satellite TV stations?**

i. Entertainment ☐

ii. Fun ☐

iii. Education programmes ☐

iv. Others specify: ☐

……

……

……

17. **Who are your role models amongst those you watch over the satellite TV stations?**

……

……

……

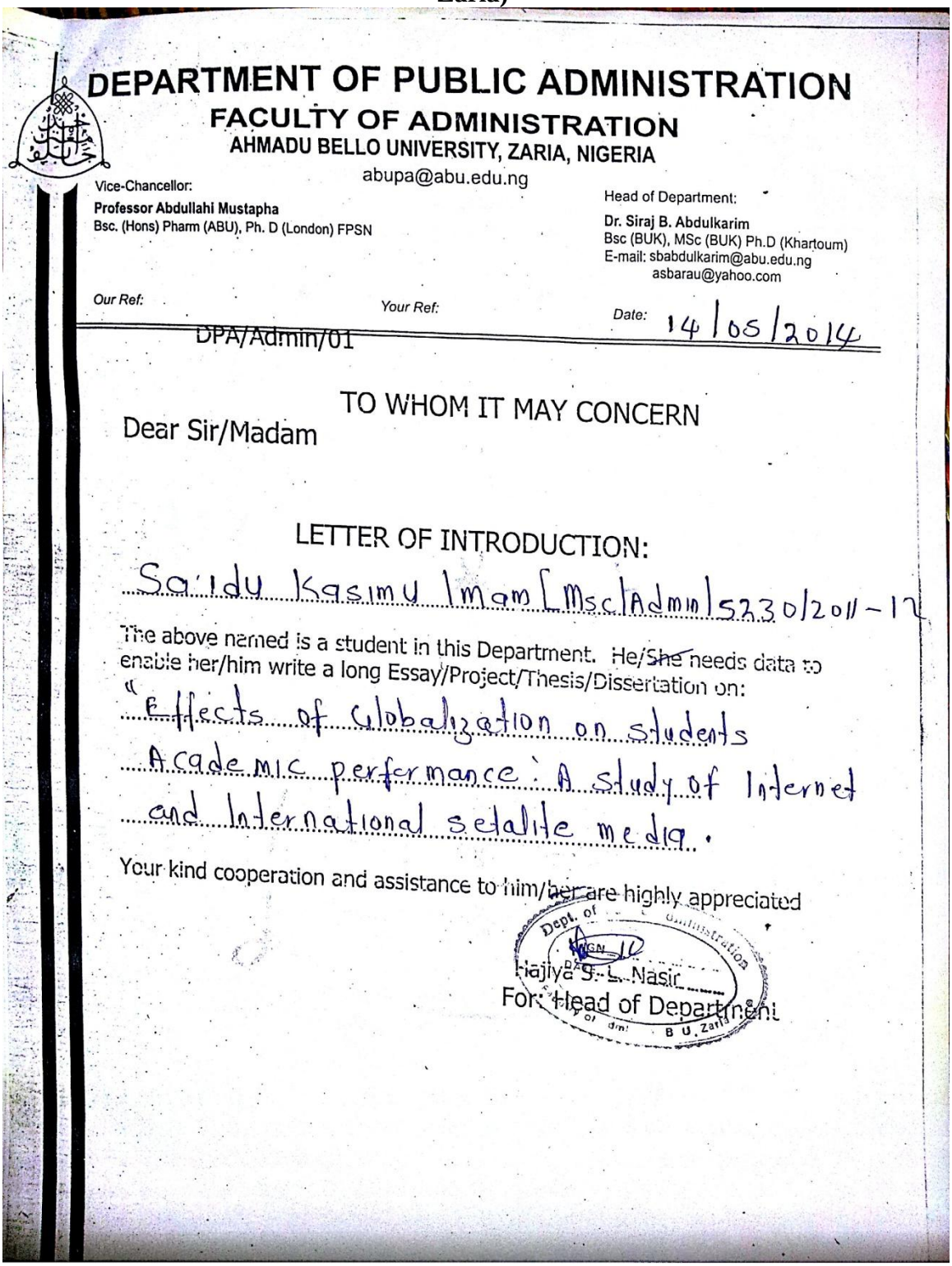
## APPENDIX III

### Interview Questions

1. Name:…….
2. Profession:……
3. Status:…….
4. Years of experience:…….
5. Do you have an Internet café in your school? (teachers/Managers) Yes ☐ No ☐
6. What is government playing in the provision of necessary materials for successful integration of ICT in the teaching and learning process?
7. What method do you use in training your students on the usage of Internet?
8. What are your observations in respect of senior secondary schools' students' inclination to the Internet?
9. In your own view what do most of the senior secondary schools' students use Internet for?
10. In your own view, how do Internet affects senior secondary schools' students' academic activities?
11. How would you compare the academic performance of the senior secondary schools' students before and after the advent of the Internet and International Satellite Media?
12. What is the trend of the academic performance of the Senior Secondary Students in your school in recent years; from 2000 to 2012? (With supporting documents).
13. What is your general remark on the effect of Internet and International Satellite Media on the academic performance of senior secondary schools' students?

**APPENDIX IV**

**Introduction Letter obtained from the Department of Public Administration (ABU Zaria)**



DEPARTMENT OF PUBLIC ADMINISTRATION
FACULTY OF ADMINISTRATION
AHMADU BELLO UNIVERSITY, ZARIA, NIGERIA
abupa@abu.edu.ng

Vice-Chancellor:
Professor Abdullahi Mustapha
Bsc. (Hons) Pharm (ABU), Ph. D (London) FPSN

Head of Department:
Dr. Siraj B. Abdulkarim
Bsc (BUK), MSc (BUK) Ph.D (Khartoum)
E-mail: sbabdulkarim@abu.edu.ng
asbarau@yahoo.com

Our Ref: DPA/Admin/01
Your Ref:
Date: 14/05/2014

TO WHOM IT MAY CONCERN

Dear Sir/Madam

LETTER OF INTRODUCTION:

Sa'idu Kasimu Imam [MSc/Admin/5230/2011-12

The above named is a student in this Department. He/~~She~~ needs data to enable her/him write a long Essay/Project/Thesis/Dissertation on:

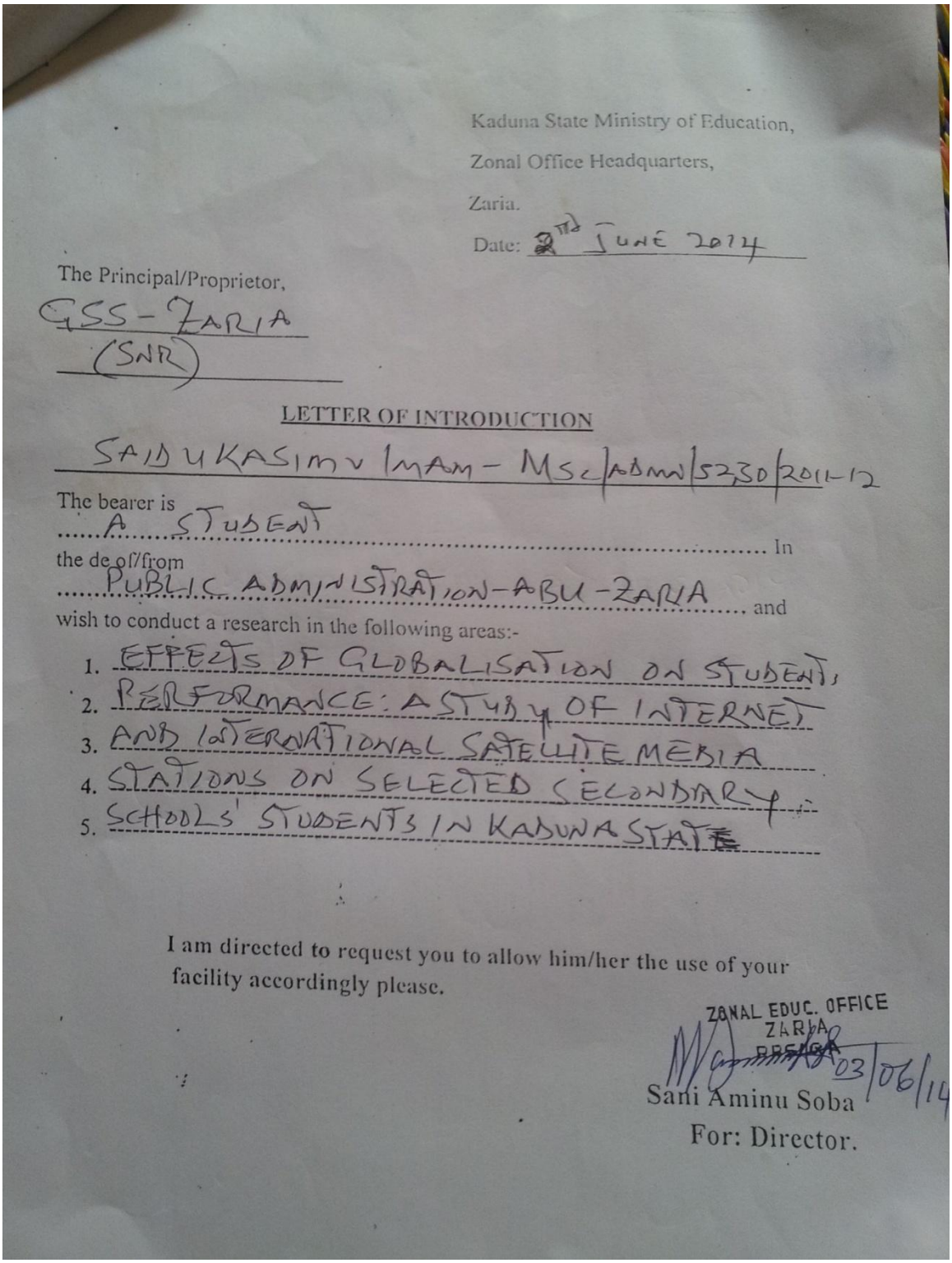
"Effects of Globalization on students Academic performance: A study of Internet and International setalite media."

Your kind cooperation and assistance to him/~~her~~ are highly appreciated

Dept. of Administration
SIGN
Hajiya S. L. Nasir
For: Head of Department
Dept. of Admin. B U, Zaria

## APPENDIX V

### 4.6.1. Introduction letter obtained from Zonal Educational Office Zaria to Government Secondary School KofarKibo – Zaria



Kaduna State Ministry of Education,
Zonal Office Headquarters,
Zaria.
Date: 2nd JUNE 2014

The Principal/Proprietor,
GSS - ZARIA
(SNR)

LETTER OF INTRODUCTION

SAIDU KASIM V IMAM - MSc/ADMN/5230/2011-12

The bearer is
.....A STUDENT..... In
the de of/from
.....PUBLIC ADMINISTRATION-ABU-ZARIA..... and
wish to conduct a research in the following areas:-

1. EFFECTS OF GLOBALISATION ON STUDENTS
2. PERFORMANCE: A STUDY OF INTERNET
3. AND INTERNATIONAL SATELLITE MEDIA
4. STATIONS ON SELECTED SECONDARY
5. SCHOOLS' STUDENTS IN KADUNA STATE

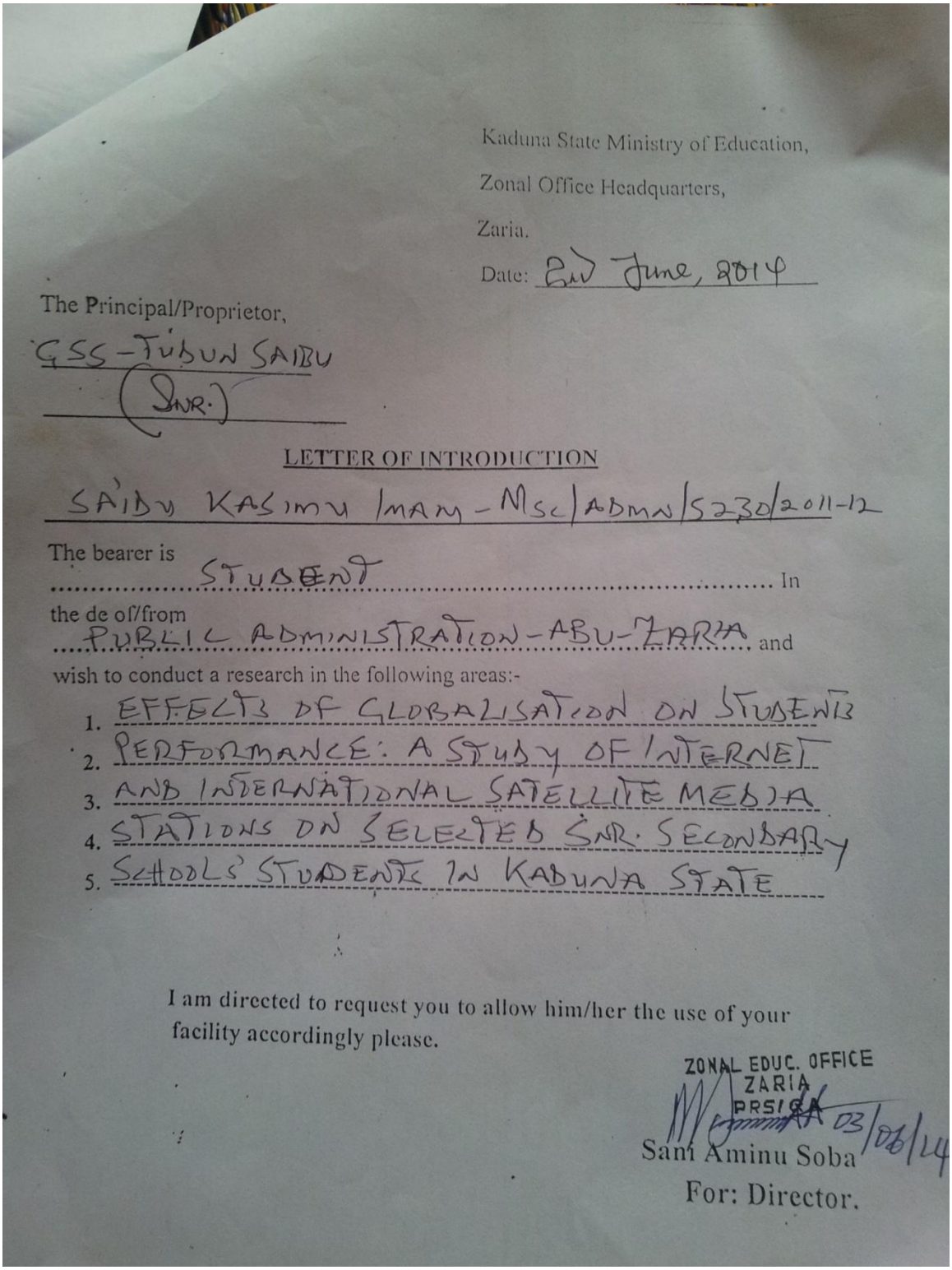
I am directed to request you to allow him/her the use of your facility accordingly please.

ZONAL EDUC. OFFICE
ZARIA
03/06/14

Sani Aminu Soba
For: Director.

**APPENDIX VI**

**Introduction Letter obtained from Zonal Educational Office Zaria to Government Secondary School Tudun Saibu – Soba L.G.A.**



Kaduna State Ministry of Education,

Zonal Office Headquarters,

Zaria.

Date: 2nd June, 2014

The Principal/Proprietor,

GSS - TUDUN SAIBU

(SNR.)

LETTER OF INTRODUCTION

SAIDU KASIMU IMAM - MSC/ADMN/5230/2011-12

The bearer is STUDENT ..... In

the de of/from PUBLIC ADMINISTRATION - ABU-ZARIA ..... and

wish to conduct a research in the following areas:-

1. EFFECTS OF GLOBALISATION ON STUDENTS
2. PERFORMANCE: A STUDY OF INTERNET
3. AND INTERNATIONAL SATELLITE MEDIA
4. STATIONS ON SELECTED SNR. SECONDARY
5. SCHOOLS' STUDENTS IN KADUNA STATE

I am directed to request you to allow him/her the use of your facility accordingly please.

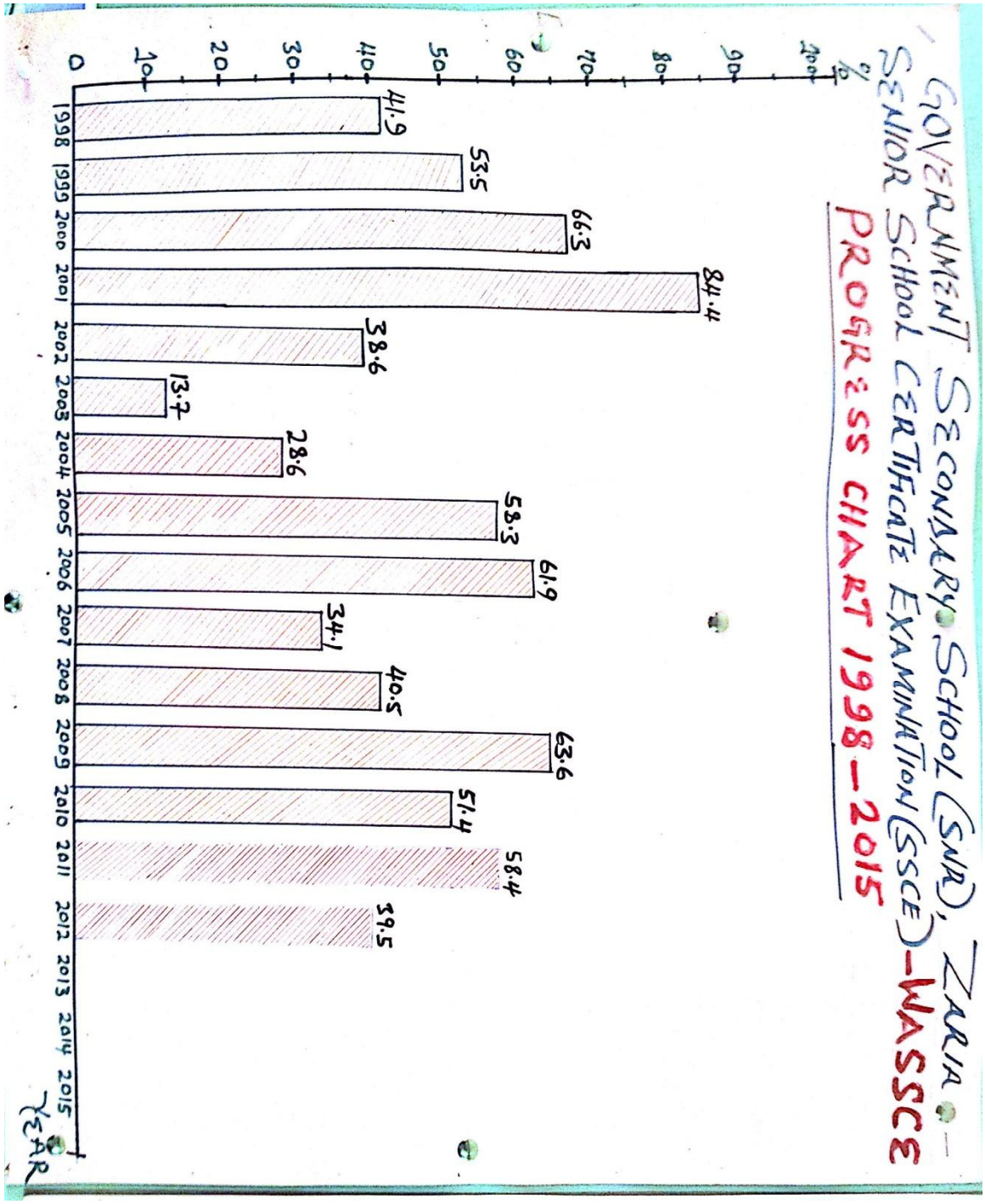
ZONAL EDUC. OFFICE
ZARIA
PRS/RA 03/06/14

Sani Aminu Soba

For: Director.

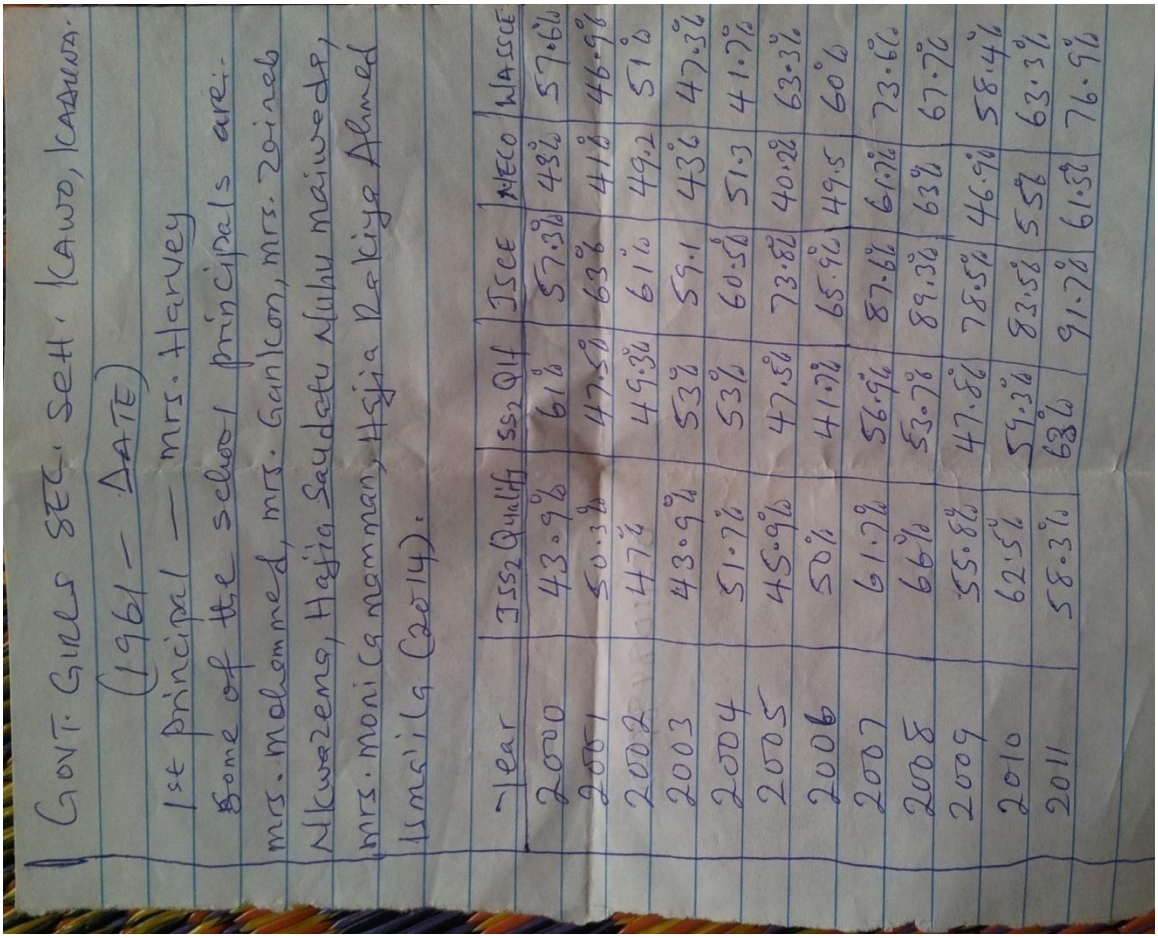
## APPENDIX VII

### 4.6.2. Progress chart obtained from Government Secondary School KofanKibo - Zaria



## APPENDIX VIII

**Summary of students' performance obtained from Government Girls Secondary School Kawo Kaduna**



1 GOVT. GIRLS SEC. SCH. KAWO, KADUNA.
(1961 – DATE)
1st Principal — Mrs. Harvey
Some of the school principals are:
Mrs. Mohammed, Mrs. Gankon, Mrs. Zoinab
Nkwazema, Hajia Saudatu Nuhu Maiwada,
Mrs. Monica Gomman, Hajia Rakiya Ahmed
Umaru (2014).

| Year | JSS2 Qualify | SS2 Qlf | JSCE | NECO | WASSCE |
|---|---|---|---|---|---|
| 2000 | 43.9% | 61% | 57.3% | 43% | 57.6% |
| 2001 | 50.3% | 47.5% | 63% | 41% | 46.9% |
| 2002 | 47% | 49.3% | 61% | 49.2 | 51% |
| 2003 | 43.9% | 53% | 59.1 | 43% | 47.3% |
| 2004 | 51.7% | 53% | 60.5% | 51.3 | 41.7% |
| 2005 | 45.9% | 47.5% | 73.8% | 40.2% | 63.3% |
| 2006 | 50% | 41.7% | 65.9% | 49.5 | 60% |
| 2007 | 61.7% | 56.9% | 87.6% | 61.7% | 73.6% |
| 2008 | 66% | 53.7% | 89.3% | 63% | 67.7% |
| 2009 | 55.8% | 47.5% | 78.5% | 46.9% | 58.4% |
| 2010 | 62.5% | 54.3% | 83.5% | 55% | 63.3% |
| 2011 | 58.3% | 68% | 91.7% | 61.5% | 76.9% |