

**IMPACT OF INFORMATION AND COMMUNICATION  
TECHNOLOGY (ICT) ON THE ADMINISTRATION OF KWARA  
STATE COLLEGES OF EDUCATION IN NIGERIA**

**BY**

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I certify that this research work was conducted, written and compiled by me. I also certify that to the best of my knowledge, this work has never been presented wholly or partially for the award of any degree or for publication elsewhere.

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## **DEDICATION**

This research work is dedicated to my lovely and caring parents Malam Mohammed Manzuma, Aminat Manzuma and my son Abdulmalik Sa'ad

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## ABSTRACT

*This study examined the impact of Information and Communication Technology (ICT) on the administration of Kwara State Colleges of Education. The research design adapted for the study was descriptive survey. The subjects of the study comprised three hundred academic and non academic staff. The instrument used for data collection was a self-designed questionnaire for both academic and non-academic staff which was validated and pilot tested to establish its reliability coefficient of 0.65. The data collected were analyzed using frequency and simple percentage. The study revealed that 1. Computer was the common type of information and communication technology (ICT) used in the administration of Kwara State Colleges of Education 2. Information communication technology (ICT) influences general activities of the administration 3. Planning and allocation of budget in to different departments and sections of Kwara State Colleges of Education could be enhanced with the use of ICT 4. The application of ICT could improve the planning and designing of school academic activities 5. School records and reports are well kept with the use of ICT. Based on the above findings, some recommendations were offered. 1. There is need for Kwara State Government to make available other ICT facilities such as internet connection, standby generators, printing machines etc to school administrators. 2. ICT centers need to be created and equipped in school to serve as a training center for both academic and non-academic staff. 3. School administrators need to show more interest in the use of ICT to carry out their administrative activities such as budget planning, budget allocation etc. 4. There is need for both administrative and academic staff to be more acquainted with the use of ICT in terms of planning and organizing of school academic activities. 5. School administrators should build more confidence in the capability of ICT to handle and process valuable data/information within a desirable period of time.*

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## **CHAPTER ONE: INTRODUCTION**

### **1.1 Background to the Study**

Change has been happening at an uneven pace in any growth-oriented industry and the education sector is no exception. Rapid development in the field of education has made governance in education a very complex task. 21<sup>st</sup> century has witnessed tremendous advancements in technology which has led to far-reaching developments in the administrative system. Cost effective technology combined with flexibility in learning and administrative activities is essential to enhance efficiency. (Krishnaveni.R and Meenakumari.J).

Computer can be used extensively for educational administration. Computer is the best to known example of the use of ICT in education. ICT is a generic term that refers to technologies which are being used for collecting, storing, editing, and passing on information in various forms (SER, 1997). ICT which stand for Information and Communication Technology is also an umbrella term that includes any communication device or application, encompassing: radio, television, cellular phones, computer and network hardware and software, satellite systems and so on, as well as the various services and applications associated with them, such as video conferencing and distance learning. Information and Communication Technology (ICT) is technology that supports activities involving the creation, storage, manipulation and communication of information, together with the related methods, management and application. In other words, ICT enables us to record, store, process, and retrieve and transmit information. Modern technologies includes computer, telecommunication, facsimile and microelectronics. Older technologies such as document filing systems, mechanical accounting machines, printing and care drawings are also included in the term information technology. Information and Communication Technology in today's world refers to those technologies that determine the efficiency and effectiveness with which we communicate and the devices that allow us to handle information. Information and Communication Technology (ICT) has

become a key tool in acquiring, processing and disseminating knowledge. ICT is playing a major role in the acquisition and diffusion of knowledge which are fundamental aspects of the education process.

In recent years, there has been a groundswell of interest in how computers and the internet can best be harnessed to improve the efficiency and effectiveness of education at all levels and in both formal and non-formal settings. The availability of the internet has given rise to an electronics approach to the educational system called e-learning. Tertiary educational institutions have always been at the forefront of new scientific discoveries and innovation brought about by the activities of teaching, learning and research. E-learning is becoming increasingly prominent in tertiary education, e-learning is being delivered on the platforms of ICT infrastructure promise to widen access to education and at reduced cost. Apart from electronics learning, ICT infrastructure are being widely used to support teaching, learning, administration and research activities in tertiary institutions, such infrastructure include personal computers, specialized software, handheld devices, interactive whiteboard, internet and visual literacy. Therefore, the researcher decided to look into the impact of application of Information and Communication Technology (ICT) in the administration of Kwara State Colleges of Education.

## **1.2 Statement of the Problem**

It has been observed that effective management of higher education has been a matter of concern to many educationists (Aghenta, 2001; Awe, 2000). Therefore, as a result of increasing population of staff and students in Nigerian Colleges of Education in which Kwara State Colleges of Education are no exception. It is observed that there exist numerous management problems. The problems include delay or long processing of administrative activities, that is to say, administrative activities are too slow and therefore, concerned has been on what kind

of Information and Communication Technologies (ICT) are available and whether or not they are well utilized. There is also the problem of poor planning, poor organizing, poor monitoring and poor evaluating of both school administrative and academic activities. More over, there is consistent irregularities in school policies and programs.

Consequently, other problems observed include data management problem. The inadequate and inability of storage facilities to accommodate large number of school documents, records and reports. As a result of the above stated problems, It has therefore become necessary to investigate the impact of Information and Communication Technology (ICT) on the administration of Kwara State Colleges of Education.

### **1.3 Objectives of the Study**

The study was set to

1. Examine the impact of the application of ICT in the administration of Colleges of Education in the area under study,
2. Find out the impact of the application of ICT on budget planning in Kwara State Colleges of Education,
3. Examine the impact of the application of ICT in organizing and planning of academic activities in Colleges of Education in the areas under study, and
4. Find out the impact of the application of ICT in record keeping and reports in Kwara State Colleges of Education.

## **1.4 Research Questions**

The study sought to answer the following questions

1. How does ICT application influence the administrative activities in Kwara State Colleges of Education?
2. How does the application of ICT influence budget planning in Kwara State Colleges of Education?
3. How does the application of ICT improve organization and planning of academic activities in Kwara State Colleges of Education?
4. How does the application of ICT guarantee record keeping and reports in Kwara State Colleges of Education?

## **1.5 Significance of the Study**

The outcomes of this study will be significant to the following:

- a. School administrators
- b. School proprietors
- c. Lecturers
- d. Students
- e. Researchers in education

The findings of this study will benefit school administrators (Provosts) and other school heads when they are not limited by time and space to carry out their duties. It will equally help school administrator to solve problem of long administrative processes involved in the management of the increasing population of staff and students in the Nigerian Colleges of Education

The findings of this study will create awareness to the government, Ministry of Education and other educational agencies, including non-governmental educational set up on the need to provide ICT to various school heads on the basis to effectively carry out their duties.

The finding of the study will benefit lecturers. This is because the school administrators and Heads of Department utilize technology in planning and to a large extent in the supervision and evaluation of academic affairs. Lecturers because more focused, competent and dedicated.

Students would also benefit from the outcome of this research work. This is because when school administrators and school lecturers with the help of ICT discharge their duties effectively, students therefore, become more academically sound, disciplined and useful.

The findings of this study will also benefit researchers in education. This is because it will serve as a reference material to them when they intend to conduct further research in the same area.

### **1.6 Scope and Delimitation of the Study**

This study focuses on the impact of application of Information and Communication Technology (ICT) in Kwara State Colleges of Education administration in Nigeria. The study covered both academic and non-academic staff of Kwara State Colleges of Education.

Therefore, administration or management of primary, secondary education and other tertiary education such as Universities and Polytechnics in Kwara State are delimited from this study.

## **CHAPTER TWO: REVIEW OF RELATED LITERATURE**

### **2.1 Introduction**

This chapter presents literature review related to this study. The review, therefore, was organized under the following subheadings: Conceptual framework, review of empirical studies as well as summary and uniqueness of the study.

### **2.2 Conceptual Frame Work**

Conceptual frame work presents the following: Concept of Information and Communication Technology, Administration/Educational Administration, Historical Evolution of ICT, Application of ICT, Importance of ICT

#### **2.2.1 Concepts of Information and Communication Technology (ICT)**

As a result of globalization, the rate of inter dependency among nations of the world has increased tremendously. Such inter dependency is facilitated by Information and Communication Technology (ICT) which has transformed the entire universe in to a global village. Every facet of human endeavor requires adequate information for sustainable growth and development. This is easily provided by ICT. ICT encompasses a range of new technologies and their application including all aspects of the use of computers, micro-electronic devices, satellite and communication technology. InfoDev. (2005). Modern day technological devices are used in ICT to store and retrieve information needed by various facets of the society. Obanyan (2002) also defined ICT as a broad term that has to do with the harnessing of process, the methods and the product of electronic and communication related technologies (and other related sources in today's knowledge driven society), for enhancing the productivity, the spread and efficiency of a set of programmed activities geared towards the achievement of clearly determined goals.

United Nations Educational Scientific and Cultural Organization (UNESCO) defined informatics as the science dealing with the design realization, evaluation, use and maintenance of information processing system (which include hardware and software, organization and human aspects, and the industrial, commercial, governmental and political implications). ICT is the range of 162 technologies that are applied in the process of collecting, storing, editing, retrieving and transfer of information in various forms. (UNESCO, 2012). Technology, according to Hornby (2006), is the practical scientific knowledge used to ease human task in an organization. It is the knowledge about tools, materials and processes that makes work easier.

Ijaiya (2002) described communication as a purposeful and active process of shared experience between two or more people through verbal and non-verbal means. Alebiosu (2000) saw it as an occurrence that involves the attachment of meanings to signs between two or more individuals. Cole (2006) considered it a process of creating, transmitting and interpreting ideas, facts, opinions and feelings, activity of exchange facts between two or more persons.

It involves any medium to record information (whether paper, pen, magnetic disc, flash, etc.), broadcasting technology via television, radio and any visual and audio visual communication technology like microphones, camera, loudspeaker, telephone, etc. Again, in the words of tutor 2 (2006), ICT is all embracing term that includes any communication device or application about radio, television, cellular phones, computer and network hardware and software, satellite systems as well as the various services and applications associated with them such as video conferencing and distance learning. Rodriguez and Wilson (2000) viewed ICT as the set of activities which facilitate, by electronic means, the processing, transmission and display of information. In addition, the economic and social commission for Asia and the Pacific (ESCAP) (2000) identified Information and Communication Technologies as the technologies, people use to share, distribute, gather information and to communicate through computers and computer networks. Ogunsola and Aboyade (2005) perceived information and communication

technologies as a complex varied set of goods, applications and services used for producing, distributing, processing, transforming information (including) telecoms, TV and radio broadcasting, hardware and software, computer services and electronic media.

Hence, information and communication technology is the scientific means or the use of scientific knowledge in acquiring, processing, storing and disseminating information in hard copy and/or soft copy forms. The various definitions considered imply that ICT involves the use of a wide range of technologies such as computers, mobile telephones, satellite, world wide web among others in collection, storage, retrieval and transfer of information for human use. In the context of education, ICT involves the use of combination of technologies in generating information required for effective teaching – learning process.

### **2.2.2 Concept of Administration/Educational Administration**

According to Opadokun (2006), Administration is a component part of management which is concerned with facilitating the accomplishment of the objectives of an organization through the systematic management of constraints and careful utilization of the available limited resources which include human, material, equipment, supplies, finance, space and work techniques or technology. In addition, Ajiboye (2002) viewed administration as an art or practice of carrying out a policy in government, business or public affairs. Specifically, Administration is concerned with the performance of executive duties, the carrying out of policies or decisions to fulfill purpose and the controlling of the day to day running of an organization. Opadokun (2006) asserted again that administration is concerned with the implementation and carrying out of the procedures by which programmes, plans and targets are laid down and communicated and then checked against them. Administration occurs in every organization with the school not being exception. In the school system, the process is referred to as educational administration or school administration. According to opedokun, Educational administration is a discipline that enhances teaching and learning. It is concerned with using

methods, principles and practice to establish, develop and implement the plan, policies and programmes geared toward educational objectives.

Educational administration is the specialized activity which learns, organizes and directs human and material resources and supports the teaching and learning situations that are appropriate to the goals of the institution and the needs and purpose of the students, teachers, administrators and society. An educational administration, therefore, can be said to be that person who is concerned with implementing educational plans, programmes or policies in the educational enterprise such as the school. Ogunsaju (2006), highlighted that basically the term administrator refers more appropriately to the direction of public affairs rather than private activities. It also refers to the guidance, leadership and control of the effort of a group of individual towards some common goals.

Administration like management is moreover generally used to mean two things;

- (a) A provision of services and system such as provision of rules and regulations, grievances procedure or discipline, for example, administration in justice.
- (b) Administration is used collectively in this sense, it is used to imply the various organ of the organization that provide and maintain their services and systems such as personnel administration, the health services or the administrative department.

Educational administration is regarded as the process of integrating the appropriate human and material resources that are made available and made effective for achieving the purposes of a programme of an educational institution. The term “Administration” doesn’t refer to any simple process or act. It is like a broad umbrella encompassing a number of processes such as; planning, organizing, directing, coordinating, controlling and evaluating the performance. The same situation occurs in the field of educational administration. The concept of educational administration is applicable in case of an educational organization which has

certain purposes or goals to fulfill. In order to achieve these purposes or goals, the head of educational organization plans carefully various programmes and activities.

Educational administration has the following nature;

(a) Educational administration doesn't refer to any single process rather different processes or aspects constitute administration. These are planning, organizing, directing, coordinating and evaluation.

(b) Educational administration is a non-profit making task.

(c) Educational administration is primarily a social enterprise as it is more concerned with human resources than with material resources.

(d) Educational administration is more of an art than a science. The reason is that human relationship which prevailed here cannot be maintained by any set of formulae.

(e) Educational administration is similar to general administration in many ways, but it is dissimilar to general administration in any more ways.

(f) Educational administration is a complex affair.

### **2.2.3 Historical Evolution of ICT in Nigeria**

It is of advantage to retrospect a little on the development of the Information and Communication Technology and the attempts made to introduce the programme in Nigeria. Information and Communication Technology has come a long way from the first development of the modern electronic digital computers in the 1940s (Fasanmi, 2000). Idowu (2003) recorded that the first information and communication technology (ICT) initiated in Nigeria started in the 1950s with focus on print and electronic media. There was no major policy or other outcome achieved because of strict government control. Idowu and Sofoluwa

(2003) stated further that the full awareness of the importance of ICTs was absent. Only the private sector demonstrated ICT initiatives. However, the Obasanjo administration in 2001 established the National Information Technology Development Agency (NITDA) to serve as a bureau for the implementation of National Policy on information technology trying to increase the internet penetration level in Nigeria.

Today, on the other hand, computerization, a major component of Information and Communication Technology (ICT) has gained access to almost every area of the society in nations with advanced technology. Computers are available in various designs for use in industries, businesses, hospitals, schools, universities, transport networks and individual homes. Small or large, a computer exists to provide computer users with the means of communicating and transferring information electronically. The use of Information and Communication Technology has revolutionized access to information for the business world, education and individuals. A few of the most popular include E-mail (electronic mail), World Wide Web (www), FTP (File Transfer Protocol), Usenet, and Telnet.

The Information and Communication Technology continues to have a profound effect in promoting the sharing of information especially in the academic world, making possible rapid transactions among business, and supporting global collaboration among individuals and organizations (Ogunsola and Aboyade, 2005). Information and Communication Technology (ICT) tools have shattered the defensive barriers of time, space and language. It has compressed the world into a global village with a common outlook, access, colour and taste. Therefore, it is pertinent for every educational organization to embrace ICT since it grew out of the need for fast and efficient communication, which prior to this period was dominated by the analog telephone system, facsimile (fax) technology with its attendant costs, limitations and low coverage.

Ahiakwo (2002) opined that in Nigeria, the information technology break through could not have come at a more opportune time. Subscribers were already frustrated with the monopolistic tendencies of the Nigerian Telecommunication Commission (NITEL) which was plagued with inefficiency, poor quality of service and exorbitant cost of owning telephone lines. Repairs on NITEL lines took weeks and phone lines were the exclusive revenue of the privileged few Nigerians therefore heaved a sigh of relief when internet services and the global system for mobile communication (GSM) in particular placed at their disposal great opportunities to communicate, interact and become part of ongoing Information Technology revolution around the world. In that wise, any organization that need effective management, higher institutions not excluded, has to embrace the new way of doing it better – the Information and Communication Technology. However, if any innovation is to be useful (ICT not excluded) it must be accepted. Chiemeka (2007) observed that the acceptance of any innovation such as ICT determines its usefulness and effectiveness.

#### **2.2.4 Application of Information and Communication Technology (ICT) in School (Tertiary Institution) Administration**

IEA, the International Association for the Evaluation of Educational Achievement, conducted a study of computers on education. The study was a two stage study in 1989 and in 1992. Based on result, “the most notable finding regarding administrative uses of computers in schools is that it is considerably lower than instructional uses of computers. At all population levels and in all countries, the use of computers for administration only is decidedly lower than instructional uses” (Pelgrum and Plump, 1993:152).

ICT has played a major role in reducing operational efficiency and improving decision making in many areas of governance. According to Christina maki (2008), Administrative sub-system includes personnel administration, student administration, resources administration, financial administration and general administration. Ulfredriksson and Elzbieta Gajek (2009)

mentioned that communication and general administration are the two main areas in which ICT is used in the management of education institutions.

According to Hussein Zainally (2008) Information and Communication Technology provides several facilities and possibilities for educational administrators to do their tasks. There is a mention that communication and information systems have changed the very nature of higher education, allowing information to be transferred, stored, retrieved, and processed by almost all who work, study or interact with a given institution. The researcher also quoted from other research work that there is an increase in managerial effectiveness and efficiency through usage of information and communication technologies. The various research studies conducted to evaluate the extent of usage of Information and Communication Technologies in multiple aspects of higher education revealed that Heads of Faculties utilized technology in planning, and to a large extent in the supervision and evaluation of academic affairs, students' affairs, financial affairs and administrative affairs. It is mentioned that ICT is used in administration to support the business strategies and processes of higher institutions, and a dynamic new shift occurred in higher education due to the application of ICT in school administration. It is also mentioned that usage of ICT in higher education administration involves harnessing technology for better planning, setting standards, effecting change and monitoring results of the core functions of colleges of education. One of the key conclusions arrived at is that the integration of ICTs in higher education is inevitable. (UNESCO, 2009).

Olive Mugenda (2006) said ICT fosters the dissemination of information and knowledge by separating content from its physical location. This flow of information is largely impervious to geographic boundaries allowing remote communities to be integrated into global networks and making information, knowledge and culture accessible, in theory, to anyone. ICT is used in maintenance of students and staff records and for communication and document management (OECS 2001). ICT facilitated contact and information exchange and also promoted access to

higher education. ICTs included systems for student admission and records, examination results and transcripts, finance database, human resources database, and management information.

**STUDENTS ADMINISTRATION:** - this involves various activities commencing from the admission process to learning activities to processing of results and performance analysis. The integration of ICT in to this process enhances the overall admission activities of higher education institution by making it more accessible to many (Thomas KwakwuObeng 2004). Based on the literature reviewed, the important items identified under this category relates to the automation of admission process through e-media. This includes admission enquiry by students, applying for admission through electronic media, registration/enrollment using computers, course allotment, and availability of information like time table/class schedule in electronic form and attendance monitoring/maintenance through e-media. It also includes the various communications relating to transport, hostel accommodation and other communication to guardians/parents. The integration also helps in expansion of the geographical boundaries or students intake, thus facilitating cross border higher education.

**STAFF ADMINISTRATION:-** this includes recruitment and work allotment of faculty staff in the institution, their attendance and leave management, and performance appraisal. This also includes relevant communication to and from the Information and Communication Technology (ICT) helps in processing of voluminous records in a quick, meticulous and impeccable manner thereby making data retrieval easier (Thomas KwakuObeng 2004).

**GENERAL ADMINISTRATION:** - in general, a good communication system should also be in place for the overall effectiveness of administration. ICT helps in providing a good communication system in higher education system (Malagni 2009). ICT helps in providing timely information to all concerned. Communication could be for internal and external

information acquisition and dissemination. It includes communication between the important stakeholders of the system such as sending e-circulars to students, faculty and staff. It also includes the various day to day activities of the entire system. It is evident that the integration of ICT in to general administration has brought increased efficiency and optimal resource utilization (Hassan et al, 2007).

### **2.2.5 Basic Principles of Institutional Administration**

The administration of an institution of higher education has the responsibility for bringing together its various resources and allocating them effectively to accomplish goals. Blunt and Collins (1994) referred to institutional administration as all those activities carried out to provide for both the day – to – day functioning and long range viability of the institution as an operating institution. The overall objective of the institutional administration is to promote efficiency and provide for the institution's organization efficiency and continuity. Good and effective organization does not exist in a vacuum or by mere coincidence, instead, it is the outcome of considerations of some fundamental principles or rules.

The basic principles that are essential for the realization and administration of formal institutions are identified and discussed below: -

- A. Principle of Single Executive: - the effectiveness of an organization is enhanced by having a single executive head. The executive has to provide central coordination for all the activities of an institution. It is not uncommon to have several leaders in an organization but one of them would serve as the coordinating head of the institution. This is because, it would be impossible to achieve the goals of an institution where central leadership is divided. The principle enhances responsibility and accountability. In a school for instance, there were different departmental and faculty heads as well as sectional/unit head but one

central administration (provost – in case of a College of Education). The organogram of every institution reflects the structure and line of interaction.

- B. Principle of Unity of Purpose : - the effectiveness of an institution is enhanced by clear definition of goals and purpose. It is obvious that unless goals are clearly defined in a complex institution like school system, there is a likelihood of conflict among members of groups within the system.
- C. Unity of Command: -this principle emphasizes that order and instructions to a staff in any institution should come from only one superior officer so as to afford organization's efficiency. Organization efficiency is pronounced when members know what is expected of them and to whom they are responsible. Also, this principle averts conflict and confusion, which often lead to poor performance.
- D. Division of Labour : -since it is not possible for a head of an institution to perform all tasks and functions alone, there is need, therefore, to divide or break the work down in to number of task, such that others are charged with the responsibilities of carrying out those tasks. This principle leads to specialization and engenders high efficiency and productivity.
- E. Span of Control : - this is otherwise known as span of administration, management or supervision. Institutional Administration can only be effective and efficient in the course of achieving goals and objectives of the institution when he has under him the required number of staff that can be directed or supervised. Span of control must not be too large and/or too small. It is determined by a number of interacting factors such as :-
  - i- Administrator's ability and competency.
  - ii- Nature of the job.
  - iii- Experience of the administrator.
  - iv- Qualification.
  - v- Physical/Technical of the organization and

vi- Stability of operation.

- F. Delegation of Authority and Responsibility: - this principle demands that all responsibilities must be accompanied with commensurate authority. The effectiveness of the institution is enhanced when the administrator delegates work to his/her subordinates and with appropriate authority to carry them out successfully. Apart from making administrative functions fast and timely, it equally strengthens confidence of the subordinates as well as preparing them for administrative functions.
- G. Standardization: -this is the development of a uniform standardized procedures for routine administrative operation and measuring the performance of an individuals against the standards so as to determine the level of efficiency and effectiveness. Several operations within the institution such as accounting, data gathering, and statistical reporting and record keeping could be standardized. Standardization saves labour and the procedure is essential for data collection and the establishment of management information systems.
- H. Stability: - the rationale behind this principle is that an institution should continue with policies and programmes until the results or outcomes can be evaluated. It emphasized that constant changes of policies that are not based on sound institutional principles would render the organization ineffective and committed resources become wasted. Also, such an act does not help in establishing a favorable ratio between input and output.
- I. Flexibility: - this principle makes provision for innovative ideas and changes. The need for flexibility of an administration and organization increases in the period of rapid change and development. School policies, programmes and procedures must be broad in order to allow innovations and accommodate necessary change when the need arises.
- J. Defined Structure: - the principle maintains that a defined and definite structure should be established such that a clear system of selecting members and leaders would be known.

There is also the need to state and define in an unequivocal terms, the functions of each staff.

- K. Security of Tenure: - institutional effectiveness is guaranteed when there is provision for security of staff. Although individual needs vary, the need for security is universal. The need has to be met regardless of the nature of the organization. When security is adequately provided, employees can devote their utmost attention to their duties without having to bother about this universal need of man.
- L. Proper Setting: - proper setting and conduciveness of an institution determine to a greater extent the efficiency and effectiveness of such institution and the promotion of individual professional development. A school system for instance is established to promote knowledge and to develop individual members. This could be achieved only when there is proper setting and conducive working environment as well as adequate opportunities for advancement and training.
- M. Personnel Policies: - as a complement to the proceeding principle of proper setting, good personnel policies evolve from good personnel administration. Good and effective policies and programmes relating to staff welfare should be incorporated to allow job satisfaction for the member of staff and increase productivity. These policies include selection of competent staff, training and good reward system. All these combine to reduce labour turn-over and increase efficiency of labour.
- N. Evaluation: - this allows the review of performance and the juxtaposition of both plan and implementation to know what has been achieved and what has not been achieved. Evaluation should be a constant system to enable the institution achieve its objectives and goals.

## **2.2.6 Importance of ICT to Administration of Institutions**

Kumar and Kumar (2005) highlighted the importance of Information and Communication Technology (ICT) as a modern day techno-management tool that would benefit tertiary institutions. It was also affirmed that user-satisfaction is a widely used measure for effectiveness of ICT. Information and Communication Technology is used in administration to enhance the business strategies and processes of tertiary education institution in order to bring about a dynamic new shift in tertiary Education as a result of the application of ICT in its administration. This also allows the creation of large and complex institutions that could function with increased efficiency and user friendliness. In addition, the usage of ICT in tertiary education administration would entail harnessing technology for better planning, setting standard, effecting change and monitoring results of the core functions of institutions. Zainally (2008) pointed out that ICT offers numerous facilities and possibilities for educational administrators to accomplish their jobs. Communication and information systems have changed the very nature of higher education, allowing information to be transferred, stored, retrieved, and processed by almost all who work, study or interact with a given institution.

Krishnaveni and Meenakumar (2010) also stated that the Spanish and indian higher educational institutions have been changing fast because of the development of Information and Communication Technology. Zainally (2008) also observed that the utilization of information and communication technology (ICT) has enhanced administrative effectiveness and efficiency. Various studies in the area of utilization of Information and Communication Technologies in multiple aspects of higher education show that Heads of Departments utilize technology in planning, and to a large extent in the supervision and evaluation of academic affairs, student affairs, financial affairs and administrative affairs (Krishnaveni and

Meenakumar, 2010). It was observed that Information and Communication Technologies have greatly influenced the scientific level of staff members and students.

It was also emphasized at the UNESCO 2009 conference that the integration of ICTs in tertiary institutions is inevitable. Okiki (2011) held that ICT promotes the dissemination of information and knowledge by separating content from its physical location. This flow of information is largely resistant to geographic boundaries allowing remote communities to become integrated in to global networks and making information, knowledge and culture accessible, in theory, to everyone. Information and Communication Technology utilization allows the enhancement of the day-to-day administration of institutions and the different functional areas such as:

1. Timetabling
2. Student admission and tracking
3. Financial management
4. Medical services
5. Procurement and Store management
6. Data distribution and management

Students and staff records, communication and document are easily kept and managed through the utilization of information and communication technology (Kkrishnaveni and Meenakumar, 2010). Kumar and Kumar (2005) also observed that evidence abound concerning positive perceptions towards the utilization of ICT in education. It was remarkable that in the various studies students of different institutions of higher education reported the usage of ICT for communication and for on-line discussion forums. The different studies established that ICT made contact and information exchange possible as well as advanced access to higher education. Information and Communication Technologies allow for the creation of systems for student admission and records, examination results and transcripts, finance database, human resources database, and management information.

Several studies reviewed have shown that Information administration is an important aspect of the overall administration of educational institutions which generally include general and routine operational activities. For this reason, it could be affirmed that information administration cycle comprises three major components namely, student administration, staff administration, and general administration (Krishnaveni and Meenakumar, 2010).

Information administration in this context refers to activities relating to the administration of tertiary educational institutions which is frequently referred to in management literature as managerial activities in post-secondary educational institutions. The administrative systems consist of personnel administration, student administration, resources administration, financial administration and general administration (Maki, 2008).

#### **2.2.7 Historical Background of College of Education in Nigeria**

The coming of the missionaries according to Fafunwa (1974), into Nigeria in the 1840s marked the beginning of the development of modern western education. Right from its inception, missionary education which more later metamorphosed into western education, the need for teachers became obvious. The quality and quantity of teachers being churned out from the mission houses through the tutelage of pastors and reverends in charge of various church denominations was simply not enough.

According to Taiwo (1980), the Church Missionary Society (CMS) established the first teacher training institution in Abeokuta, western Nigeria, in 1859. The Baptist Mission also founded the Baptist Training College Ogbomosho in 1897, and the Wesleyan Mission establishing the Wesley College in Ibadan in 1918. In the Eastern part of Nigeria, the Hope Waddell Institute was founded in Calabar in 1892. Later in 1909, the then colonial government established the Nassarawa school in Northern Nigeria. Kastina and Toro Teachers Colleges were later established in 1927 and 1929 respectively. The Church Missionary Society (CMS) also

set up Teacher Training Institutions. The Grade III teachers certificate was the qualification most of these Institutions award. Later on, Teachers Colleges awarding the grade II sprang up. The grade I Teacher Training was later introduced and aspired by ambitious teachers willing to enhance their status to qualify for teaching in secondary schools.

The earliest curriculum for the early Teacher Training consisted of subjects like; English, Arithmetic, Writing, Geography, Hygiene, General Studies, Geometry, Agriculture, Nature Study, Local Languages. The Ashby Commission report however observed a lot of anomalies in the then colonial education in Nigeria, including Teacher Training that was seen to be highly inadequate. Many teachers were un-certificated and improperly trained (Ashby, 1960). This resulted in the recommendation for massive expansion of intermediate education for teachers aimed at upgrading the existing teaching force. This brought about the existence and emergence of Advanced Teachers Colleges, and which later metamorphosed into Colleges of Education.

The first of these Advanced Teachers Colleges designed and established by the Federal Government with the assistance of UNESCO, were meant to produce well-qualified non graduate teachers for secondary schools to replace the older well established Grade II teachers who were not qualified to perform the task (UNESCO, 1996). The scheme provided teachers with the NCE (Nigeria Certificate in Education), that are of good quality and the right quantity to meet the educational needs as at that time. The number of these Colleges gradually increased to cater for expansions in demands for education and qualified teachers. As at 2003, there were 68 Colleges of Education owned by the Federal and State Governments, privately owned and also by the military. There is one such College designated for women only and one for special education as well as Colleges of Education Technical. These Colleges award the NCE certificate with some of them upgraded to award B.Ed degrees of affiliated universities.

The duration of the NCE is usually three years for the full time students, while the part time students spend upwards to five years to complete their programme of studies.

### **2.3 Review of Empirical Studies**

Several studies were conducted on the impact of information and communication technology in the school administration and some of them were reviewed below:

In a study conducted by Adebayo (2014), on the impact of application of Information and Communication Technology (ICT) in the administration of Polytechnics in Ogun State, Nigeria. The study was to model a critical analysis of the impact of Information and Communication Technology (ICT) in the administration of polytechnics. The study adopted survey design which was considered appropriate for collecting data from a given population with an intention to determine the opinion, attitudes and perception of personnel. Five (5) out of ten (10) polytechnics were selected through random sampling techniques. The research instrument was questionnaire which was statically analyzed with contingency table, which the hypothesis were both tested at 0.05 level of significance using the mean statistic. Result showed that there is a significant relationship between ICT and the administration of Polytechnic. The study suggested that administrators of Polytechnics should place greater emphasis on ICT in their respective institutions to foster capacity building of human resources, material resources and financial resources. The above study reviewed was therefore related to the researcher's study because they were both conducted to investigate the impact of application of Information and Communication Technology (ICT) on school Administration. The two (2) studies both adopted survey design with the use of questionnaire as data collection instrument.

Another study conducted by Agu, Onyishi and Okoro (2012) on information and communication technology (ICT) and administrative processes in the universities of south-

eastern Nigeria. The study investigated the ICT and administrative processes among staff of universities in south-eastern Nigeria. Survey research technique was adopted. Three hundred and twenty seven (327) respondents were selected from two (2) universities in south-east Nigeria. The results showed that availability of ICT which is one of the administrative processes, contributed 11% to the unique variance in impact of ICT on administration ( $B = .32$ ,  $t(235) = 6.22$ ,  $p < .001$ ). The study also revealed that there is a strong relationship between usage and impact of ICT on administration in South-Eastern Nigeria. The gender and universities of the respondents were also significantly related to the level of impact. This study was related to researcher's study as the study also investigated the Information and Communication Technology and Administrative processes among school staff, questionnaire was also used as data collection instrument

Ayoade O. Bamidele (2014) conducted a study on the access and use of Information and Communication Technology for administrative purposes by institutional administrators in colleges of Education in Nigeria. This study aimed to determine the extent of access and use of ICT of institutional administrators in Emmanuel Alayande college of Education, Oyo for administrative purpose. The study adopted a descriptive research design of the survey type. A sample of forty five (45) institutional administrative personnel were drawn from the college. Structured questionnaire which involved three (3) sections were used to collect the data needed for the study. The reliability coefficient was calculated to be 0.86 using the Kuder Richardson formula 21 on the data collected. Data collected was analysed using simple percentage, frequency count, Pearson correlation coefficient and t-test analysis at 0.05 level of significant. The result of this study revealed as follows: There are inadequate ICT facilities in the Colleges which institutional administrators can use to perform different administrative activities effectively. Also the findings showed that the level of ICT usage by the institutional administrators for administrative purposes is very low. The findings also revealed that a

significant relationship exists between ICT usage and administrative effectiveness of College of Education administration.

Based on the above findings, recommendations were suggested that need assessment should be carried out to facilitate development and development of ICT in Colleges of Education and government should look in to issues of funding of education in general and ICT in particular. Also the institutions administrators should be encouraged to be ICT driven so as to boost their productivity. This study reviewed was also related to the researcher's study. It was conducted to access the use of Information and Communication Technology for Administrative purposes by school administrators in Colleges of Education in Nigeria. The study also adopted descriptive survey design, with the use of questionnaire as a data collection instrument.

#### **2.4 Summary and Uniqueness of the Study**

From the literature reviewed, it could be noted that information and communication technology (ICT) is defined as the set of activities which facilitate, by electronic means, the processing, transmission and display of information (Rodriguez and Wilson, 2000). Information and Communication Technology is a process of creating, transmitting and interpreting ideas, facts, opinions and feelings, activity of exchange facts between two or more persons (Cole, 2006). Economic and Social Commission for Asia and Pacific (ESCAP, 2000) identified Information and Communication Technology as the technology, people use to share, distribute, gather information and to communicate through computer and computer networks while Administration is concerned with the implementation and carrying out of the procedures by which programs, plans and targets are laid down and communicated and then checked against them (Opadokun 2006). Institutional administration is defined as all those activities carried out

to provide for both day – to – day functioning and long range viability of the institution as an operating institution (Blunt and Collins, 1994).

Educational Administration is also seen as the specialized activity which learns, organizes and directs human and material resources and supports the teaching and learning situations that are appropriate to the goals of the institution and the needs and purpose of the students, teachers, administrations and society. Basic principles of institutional administration were also reviewed which includes: Principle of single executive, Principle of unity of purpose, Unity of command, Division of labour, Span of control, Delegation of authority and responsibility, Standardization, Stability, Flexibility, Define structure, Security of tenure, Proper setting, Personnel policies and Evaluation. Related literature was also reviewed on the open system theory. Empirical study on the impact of information and communication technology in the administration of higher institutions was also reviewed in different studies.

However, the research of this kind of study is unique because of its nature. Several studies reviewed were conducted outside Kwara state, Nigeria, while this research was conducted across the Kwara State Colleges of Education.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

This chapter describes the general methods and procedures for the conduct of the study. It discusses the research type, population, sample and sampling technique, instrumentation, procedure for data collection and data analysis technique.

### **3.2 Research Design**

The descriptive survey design was used for this study. Daramola (2006) asserts that descriptive survey research is a systematic attempt to describe the characteristics of a given population or areas of interest factually. It focuses on people and their belief, opinion, perception, motivation and behavior. The descriptive survey method was considered the most appropriate for this study because it enables the researcher to pass judgment on the population based on the data from a representative sample with the aid of questionnaire. It is also used when the researcher wants to describe specific behavior as it occurs in the environment and is often used because of the low cost and easy accessible information.

### **3.3 Population of the study**

Population is the total number of human or non-human subjects that are of interest to the researcher. The population of this study covers all the three (3) Kwara State Colleges of Education academic and non-academic staff, with a total number of 548 Academic and 836 Non-Academic staff respectively (Kwara State Colleges of Education, 2015).

Table 3.1 shows the distribution of the population of both academic and non-academic staff across the three (3) Kwara State Colleges of Education.

S/N	Name of schools	No. of Acc. Staff	No. Of Non-Acc. Staff
1	College of Education, Ilorin	301	494
2	College of Education (Technical) Lafiagi	115	205
3	College of Education, Oro	132	137
	Total	548	836

*Source: Kwara State Colleges of Education Registry (2015)*

### **3.4 Sampling technique and sample size**

Sampling is sub-divided in to sampling technique and sample size

#### **3.4.1 Sampling Technique**

Sampling technique is a technique or procedure the researcher follows in selecting his sample for the purpose of the study. Simple random sampling technique was used in selecting the sample for this study. Simple random sampling is a kind of sampling technique in which every member of the population has an equal chance of being selected.

#### **3.4.2 Sample Size**

Sample is a portion or fraction of the population. This can also be considered as the limited number of elements selected from the population which can serve as representative of that population. Considering the size of the population, which was five hundred and forty eight (548) academic and eight hundred and thirty six (836) non-academic staff. Therefore, the sample of this study consist of three hundred (300) of both academic and non-academic staff selected from the three Kwara State Colleges of Education based on the research advisor

(2006) table for sample size. Forty (40) academic and sixty (60) non-academic staff were selected randomly from each of the three (3) selected schools as shown in table 3.2

Table 3.2 SAMPLE SIZE TABLE

S/N	Name of schools	No. of Acc. Staff	No. Of Non- Acc. Staff
1	College of Education, Ilorin	40	60
2	College of Education (Technical) Lafiagi	40	60
3	College of Education, Oro	40	60
	Total	120	180

*Source: Kwara State Colleges of Education Registry (2015)*

### 3.5 Data collection Instrument

The research instrument used for this study was a researcher designed questionnaire titled: “The impact of Information and Communication Technology (ICT) on the administration of Kwara State Colleges of Education questionnaire”. Best and Kahn (2005) Opined that questionnaire enables a researcher to collect information quickly and cheaply from people about specific events or aspects of behavior. The instrument consists of two sections A and B.

Section A requires some demographic information of the participants such as name of institution, department, academic qualification, marital status, sex, academic qualification and work experience. Section B consists of twenty (20) items questionnaire with a four point rating scale consisting of strongly agreed, agreed, disagreed and strongly disagreed.

### **3.6 Validation of the instrument**

Validity is the ability of a data collection instrument or test to measure what it ought to measure. A self-developed questionnaire was constructed and therefore, both supervisor and expert judgment were used to establish the face and content validity of this instrument. In which their corrections, comments and suggestions were incorporated in the final copy of the questionnaire before administering to the respondents.

#### **3.6.1 Reliability of the instrument**

Reliability of a questionnaire is its ability to remain consistent in measuring what it is intended to measure. To establish the reliability of this instrument, a pilot test was carried out by administering the instrument to some different samples of ten (10) academic and fifteen (15) non-academic staff twice at the interval of two weeks at Muheedeem College of Education, Ilorin and the results of the two administrations were correlated using Spearman Ranking Order correlation and reliability coefficient value of 0.65 was obtained. The instrument is, therefore, reliable for conducting this study.

### **3.7 Procedure for Data Collection**

The questionnaires were personally administered to the respondents by the researcher with the help of one (1) research assistant. The purpose of the study was carefully explained to all the respondents. The respondents were assured of the confidentiality of their responses, that their identities would not be revealed since their names were not written on the instrument (questionnaire). It was also explained to the respondents that the purpose was strictly based on research study and not for any other purpose.

The completed copies of questionnaires were retrieved from the respondents by the researcher with the help of one (1) research assistant each from the selected school.

### **3.8 Procedure for Data Analysis**

The researcher used descriptive statistical method of analyses. This involved the use of frequency count, simple percentages for the purpose of data analyses which was generated from the field. This statistical tool was used because of its appropriateness and the nature of the data collected which was nominal and categorical and there was no hypotheses tested.

## **CHAPTER FOUR: DATA PRESENTATION AND ANALYSIS**

### **4.1 Introduction**

This chapter presents the result of data collection from respondents, with different tables showing the responses of the respondent using frequency count and sample percentages.

### **4.2 Data Presentation**

The data collected from the administration of the instrument of the study was on the sample of academic and non-academic staff of Kwara State Colleges of Education. Therefore, the collected results were presented on a tabular form. Each table consists of four (4) questionnaire items for the five research questions with four (4) parts rating scales of Strongly Agreed (SA), Agreed (A), Disagreed (D), and Strongly Disagreed (SD).

### **4.3 Data Analysis**

The data collected from the administration of the instrument were analyzed using frequency count and simple percentages, and the results were presented in a table.

#### 4.3.1 Research question one

RQ1: How does ICT application influence the administrative activities?

Table 4.1: Frequency count and simple percentages of the responses on how ICT application influences administrative activities of Kwara State Colleges of Education.

S/N	ITEMS	N	STRONGLY AGREED	AGREED	DISAGREED	STRONGLY DISAGREED	TOTAL
1	ICT application improves general administration action	300	171 [57%]	126 [42%]	0 [0%]	3 [1%]	300 100%
2	ICT application improves facilities exchange of information	300	189 [63%]	105 [35%]	6 [2%]	0 [0%]	300 100%
3	ICT application enhances budget planning	300	117 [39%]	159 [53%]	15 [5%]	9 [3%]	300 100%
4	ICT application helps evaluate general academic activities	300	123 [41%]	147 [49%]	18 [6%]	12 [4%]	300 100%

From the above table 4.1, four (4) questionnaire items in form of statements were responded to, as strongly agreed, agreed, disagreed and strongly disagreed.

Item 1 shows one hundred and seventy one (171) respondents representing 57% strongly agreed, out of the total number of three hundred (300) respondents, one hundred and twenty six (126) respondents representing 42% agreed, zero (0) respondents representing 0% disagreed while three (3) respondents representing 1% strongly disagreed to the same statement.

Item 2 shows one hundred and eighty nine (189) representing 63% strongly agreed out of the total number of three (300) respondents, one hundred and five (105) respondents representing 35% agreed, six (6) respondents representing 2% disagreed, while zero (0) respondents representing 0% strongly disagreed to the same statement.

Item 3 shows One Hundred and Seventeen (117) respondents representing 39% strongly agreed, out of the total number of Three Hundred (300) respondents, One Hundred and Fifty nine (159) respondents representing 53% agreed, Fifteen (15) respondents representing 5% disagreed, while Nine (9) respondents representing 3% strongly disagreed to the same statement.

Item 4 shows One Hundred and Twenty Three (123) respondents representing 41% strongly agreed, out of the total number of Three Hundred (300) respondents, One Hundred and Forty Seven (147) respondents representing 49% agreed, Eighteen (18) respondents representing 6% disagreed, while Twelve (12) respondents representing 4% strongly disagreed to the same statement.

#### 4.3.2: Research Question Two

RQ2: How does the application of ICT enhance budget planning in the College of Education.

Table 4.2: Frequency count and simple percentages of the responses on how ICT application enhances budget planning in Kwara State Colleges of Education.

S/N	ITEMS	N	STRONGLY AGREED	AGREED	DISAGREED	STRONGLY DISAGREED	TOTAL
1	ICT allocation of resources	300	81 [27%]	83 [61%]	27 [9%]	9 [3%]	300 100%
2	ICT prevents financial management	300	96 [32%]	117 [39%]	75 [25%]	12 [4%]	300 100%
3	ICT facilitate payment of salaries	300	111 [37%]	153 [51%]	27 [9%]	9 [3%]	300 100%
4	ICT enhances monitoring of financial resources	300	108 [36%]	159 [53%]	21 [7%]	12 [4%]	300 100%

From the above table 4.2, four (4) questionnaire items in form of statement were responded to as strongly agreed, agreed, disagreed and strongly disagreed.

Item 1 shows eighty one (81) respondents representing 27% strongly agreed, out of the total number of three hundred (300) respondents, eighty three (83) respondents representing 61% agreed, twenty seven (27) respondents representing 9% disagreed, while Nine (9) respondents representing 3% strongly disagreed to the same statement.

Item 2 shows ninety six (96) respondents representing 32% strongly agreed out of the total number of three hundred respondents, one hundred seventeen (117) respondents representing

39% agreed, seventy five (75) respondents representing 25% disagreed, while twelve (12) respondents representing 4% strongly disagreed to the same statement.

Item 3 shows one hundred and eleven (111) respondents representing 37% strongly agreed out of the total number of three hundred (300) respondents, one hundred and fifty three (153) respondents representing 51% agreed, twenty seven (27) respondents representing 9% disagreed, while Nine (9) respondents representing 3% strongly disagreed to the same statement.

Item 4 shows one hundred and eighty (108) respondents representing 36% strongly agreed, out of the total number of three hundred (300) respondents, one hundred and fifty nine (159) respondents representing 53% agreed, twenty one (21) respondents representing 7% disagreed, while twelve (12) respondents representing 4% strongly disagreed to the same statement.

### 4.3.3: Research Question Three

RQ3: How does the application of ICT improve planning of academic activities.

Table 4.3: frequency count and simple percentages of the responses on how ICT application improves planning of academic activities.

S/N	ITEMS	N	STRONGLY AGREED	AGREED	DISAGREED	STRONGLY DISAGREED	TOTAL
1	ICT enhances preparation of school curriculum	300	72 [24%]	204 [68%]	18 [6%]	6 [2%]	300 100%
2	ICT facilitate evaluation of academic activities	300	102 [34%]	168 [56%]	24 [8%]	6 [2%]	300 100%
3	ICT enhances overall students admission	300	111 [37%]	141 [47%]	36 [12%]	12 [4%]	300 100%
4	ICT provides teaching and learning resources	300	141 [47%]	135 [45%]	18 [6%]	6 [2%]	300 100%

From the table 4.3, four (4) Questionnaire items in form of statement were regarded to, as strongly agreed, agreed, disagreed and strongly disagreed.

Item 1 shows seventy two (72) respondents representing 24% strongly agreed, out of the total number of three hundred (300) respondents, two hundred and four (204) respondents representing 68% agreed, eighteen (18) respondents representing 6% disagreed, while six (6) respondents representing 2% strongly disagreed with the same statement.

Item 2 shows one hundred and two (102) respondents representing 34% strongly agreed, out of the total number of three hundred (300) respondents, one hundred and sixty eight (168) respondents representing 56% agreed, twenty four (24) respondents representing 8% disagreed, while six (6) respondents representing 2% strongly disagreed to the same statement.

Item 3 shows one hundred and eleven (111) respondents representing 37% strongly agreed, out of the total number of three (300) respondents, one hundred and forty one (141) respondents representing 47% agreed, thirty six (36) respondents representing 12% disagreed, while twelve (12) respondents representing 4% strongly disagreed to the same statement.

Item 4 shows one hundred and forty one (141) respondents representing 47% strongly agreed, out of the total number of three hundred (300) respondents, one hundred and thirty five (135) respondents representing 45% agreed, eighteen (18) respondents representing 6% disagreed, while six (6) respondents representing 2% strongly disagreed to the same statement.

#### 4.3.4: Research Question Four

RQ4: Does application of ICT guarantee record keeping and reports in Colleges of Education?

Table 4.4: Frequency count and simple percentages of the responses on whether ICT application guarantees record keeping and reports in Kwara State Colleges of Education.

S/N	ITEMS	N	STRONGLY AGREED	AGREE	DISAGREE	STRONGLY DISAGREED	TOTAL
1	ICT enhances data processing	300	201 [67%]	84 [28%]	12 [4%]	3 [1%]	300 100%
2	ICT facilitates adequate data storage of academic records	300	237 [79%]	54 [18%]	6 [2%]	3 [1%]	300 100%
3	ICT produces accurate data/information	300	180 [60%]	111 [37%]	9 [3%]	0 [0%]	300 100%
4	ICT facilitates data storage of administration	300	195 [65%]	99 [33%]	0 [0%]	6 [2%]	300 100%

From the above table 4.4, four (4) questionnaire items in form of statements were responded to, as strongly agreed, agreed, disagreed and strongly disagreed.

Item 1 shows two hundred and one (201) respondents representing 67% strongly agreed, out of the total number of three hundred (300) respondents, eighty four (84) respondents representing 28% agreed, twelve (12) respondents representing 4% disagreed while three (3) respondents representing 1% strongly disagreed to the same statement.

Item 2 shows two hundred and thirty seven (237) respondents representing 79% strongly agreed, out of the total number of three (300) respondents, fifty four (54) respondents representing 18% agreed, six (6) respondents representing 2% disagreed while three (3) respondents representing 1% strongly disagreed to the same statement.

Item 3 shows one hundred and eighty (180) respondents representing 60% strongly agreed, out of the total number of three hundred (300) respondents, one hundred and eleven (111) respondents representing 37% agreed, nine (9) respondents representing 3% disagreed while zero (0) respondents representing 0% strongly disagreed to the same statement.

Item 4 shows one hundred and ninety five (195) respondents representing 65% strongly agreed, out of the total number of three hundred (300) respondents, ninety nine (99) respondents representing 33% agreed, zero (0) respondents representing 0% disagreed while six (6) respondents representing 2% strongly disagreed to the same statement.

#### **4.4: Summary of the Findings**

The data analyzed and presented in this chapter were obtained from respondents with respect to research questions raised in the study. Thus, from the findings the study revealed that:

1. Computer is the common type of Information and Communication Technology (ICT) used in the administration of Kwara State Colleges of Education, and at the same time used in solving administrative problems which increases efficiencies,
2. Information and Communication Technology (ICT) influences general activities of the administration of Kwara State Colleges of Education,
3. Application of Information and Communication Technology (ICT) influences planning and allocation of budget in to different departments and sections of Kwara State Colleges of Education,

4. Use of Information and Communication Technology (ICT) could improve the planning and designing of school academic activities such as course outline, time table etc, and
5. Information and Communication Technology (ICT) is relevant in record keeping to the administration of Kwara State Colleges of Education.

#### **4.5: Discussion of Findings**

This section aims at discussing the result of the finding of the research with a view of giving meaningful interpretation to them. Consequently, the research question is discussed in relation to the data presented.

From the analyses made, the finding from the research question one revealed that the type of Information and Communication Technology (ICT) commonly used in the administration of Kwara State Colleges of Education is computer. Computer was found to be the most common Information and Communication Technology (ICT) available in every administration of all three Kwara State colleges of Education in Nigeria. The finding also indicates that computer could be more relevant in providing solution to some of administrative problems which in turn increases efficiencies. Of course, it was discovered to have make administrative activities more easy and faster. My findings support Hussein zainally's (2008) opinion, who says that computer provides several facilities and possibilities for Educational administration to do their tasks.

The second finding of this study indicates that application of information and communication technology (ICT) influences general activities of administration which includes planning, organizing, directing, coordinating and evaluating programs in a bid to achieve goals and objectives of the administration. Planning, organizing as well as evaluating become more effective and efficient with the application of Information and Communication Technology (ICT) in the activities of Administration of Kwara State Colleges of Education in Nigeria. The finding supports the view of sonaye (2014), who says the usage of ICT in tertiary

Educational administration would entails harnessing technology for better planning, setting standard, effecting changes and monitoring results of the core function of institutions.

The third finding of this research question revealed that Information and Communication Technology (ICT) is also relevant in the aspect of school budget planning, facilitating allocation of resources, accurate monitoring of financial resources, preventing of financial mismanagement and misappropriation. The uses of Information and Communication Technology equally make it easy to realized available institutional resources and allocate them to different sectors or departments. Consequently, payment of staff salaries and allowances are well processed and fastened with the use of computer. Disbursement are made without inviting each staff over for table or hand to hand payment.

The fourth finding of the study revealed that Information and Communication Technology (ICT) is relevant in designing school academic activities of Colleges of Education. School calendar, timetable, staff and students registration/enrolment form etc are well designed and made available with the application of Information and Communication Technology (ICT). The head of faculties utilizes technology in planning and to a large extent the supervision and evaluation of academic affairs. That is to say, teachers/lecturers academic activities could be supervise at a sit, as well as students performance evaluation are made available and accessible to students (semester results). This in relation to Abu and Adu(2007) that using Information and Communication Technology (ICT) will promote issues of students admission, students records and transcript, examination records, teaching, research and commonly services.

The fifth finding of the study revealed that Information and Communication Technology (ICT) justified more speed and accuracy in data management of Colleges of Education. School records, reports and documents could be processed, secured and produced any time when needs arises. The news of loss of school important documents is minimal. Information and Communication Technology (ICT) enhances data processing by creating,

storing and produces data at a fastest speed. ICT helps administrators perform school duties effectively. This finding is in line with Zainet al. (2004) who affirm that ICT increases and provides information to the finger tips of administration.

## **CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS**

### **5.1 Summary**

This study investigated the impact of Information and Communication Technology (ICT) on the administration of Kwara State Colleges of Education. Chapter one, part of the study deals with basic elements such as introduction, background to the study, statement of the problem, objectives of the study which include 1. To identify the type of ICT commonly used in the administration of Kwara State Colleges of Education, 2. To examine the impact of the application of ICT in the administration of Kwara State Colleges of Education, 3. To find out the impact of the application of ICT on budget planning in Kwara State Colleges of Education, 4. To examine the impact of the application of ICT in planning of academic activities in Kwara State Colleges of Education, 5. To find out the impact of the application of ICT in records keeping and reports in Kwara State Colleges of Education, Research questions, significance of the study, scope and delimitation of the study as well as the definition of terms.

Chapter two reviewed literature related to the topic to avoid replica study. The review of related literature includes, conceptual frame work as well as empirical studies related to the study were reviewed.

Chapter three outlined the procedures for the collection of data relevant to the study which includes research design, population of the study, sample technique, sample size, data collection instruments, data collection procedure and data analysis procedure. The descriptive survey research design was used for the study, instrument used was a questionnaire titled impact of Information and Communication Technology in the administration of Kwara State Colleges of Education questionnaire, the respondents were both academic and non-academic staff which were randomly selected from the three (3) Kwara State Colleges of Education. A spearman ranking order was used to test the reliability of the instrument used for the study.

Chapter four analyzed and present the data collected in accordance with the objectives of the study. It was discovered that majority of the respondents were both senior and junior administrative staff as well as lecturers with qualifications of masters, degree, NCE and ND. The data collected were analyzed using frequency count and simple percentages and the finding from the research revealed that the type of Information and Communication Technology (ICT) commonly used in the administration of Colleges of Education is computer, the application of Information and Communication Technology (ICT) in the administration of Colleges of Education has great influence in administrative activities. The continuous use of Information and Communication Technology (ICT) in College administration helps monitor allocation of financial resources as well as prevents mismanagement, the application of Information and Communication Technology (ICT) is relevant to general academic activities. It was also revealed that Information and Communication Technology (ICT) is used to process, store and produce large quantity of data, information and reports in the school administration.

## **5.2 Conclusion**

Considering the findings of the study, it was concluded that:(1) Information and Communication Technology (ICT) have significant impact in the administration of Kwara State Colleges of Education, Nigeria. The impact was found to be relevant to both academic and administrative staff of Kwara State Colleges of Education on the type of ICT used in the administration is computer that is to say computer is seen to be the common type of Information and Communication Technology (ICT) applied to carry out administrative activities of Kwara State Colleges of Education and which also helps provide solution to some specific academic and administrative problems. (2) ICT influences general activities carried out in the administration in which it makes the activities less tedious and effective to various departments and sections of the school. (3) ICT enhances planning of school budget and allocation of resources. (4) ICT improves planning of academic activities, that is, preparation,

monitoring and evaluation of school curriculum. (5) ICT has the capacity to process, store and produce quantitative and qualitative data/information at a fastest speed. In addition, it minimizes unnecessary loss of school documents.

### **5.3 Recommendations**

As a result of above findings, recommendations were profounded as follows:  
Recommendations from the study, Recommendations for further studies.

#### **5.3.1 Recommendations from the study**

Based on the findings of the study and conclusion made, the following recommendations were given as follows:

1. There is need for Kwara State Government to make available other ICT facilities such as internet connection, standby generators, printing machingsetc to school administrators.
2. ICT center needs to be created and equipped in school to serve as training center for both academic and non-academic stafffor the purpose of acquiring ICT knowledge.
3. School administrators need to show more interest in the use of ICT to carry out their administrative activities such as budget planning, budget allocation etc.
4. There is need for both administrative and academic staff to be more acquainted with the use of ICT in terms of planning and organizing of school academic activities.
5. School administrators should build more confidence in the capability of ICT to handle and process valuable data/information within a desirable period of time.

### **5.3.2 Recommendation for further studies**

This study was carried out in Kwara State Colleges of Education. I am therefore, recommending that a similar research be carried out in some other states such as Niger State, Kogi State, Osun Statee.t.c. The justification is based on location differences

Consequently, a similar study should also be carried out using similar instrument in private owned Colleges of Education in KwaraState so as to have a wider assessment of the Impact of Information and Communication Technology (ICT) in the administration of Colleges of Education in Kwara state.

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## **APPENDIX A**

**DEPARTMENT OF EDUCATION,  
FACULTY OF EDUCATION,  
BAYARO UNIVERSITY, KANO.**

### **QUESTIONNAIRE ON**

**Impact of Information and Communication Technology (ICT)  
on the Administration of Kwara State Colleges of Education.**

Dear Sir/Madam,

I am a postgraduate student carrying out a research on Impact of Information and Communication Technology (ICT) on the Administration of Kwara State Colleges of Education.

I humbly request your kind assistance by way of responding to the questions bellow, as you think is correct, with a tick [✓] on your choice. You are assured that whatever information provided will strictly be used for research purpose only.

#### **SECTION A: Personal Information**

1. Name of institution:-.....
2. Department:-.....
3. Marital status:           Single [   ]           Married [   ]
4. Sex:                       Male [   ]           Female [   ]
5. Academic qualification: ND [   ]           NCE [   ] HND [   ]           Degree [   ]  
                                  Masters [   ]   Ph.D [   ]
6. Work Experience 1-5 years [   ]           5-10 years [   ] 10-20 years [   ]  
                                  20 years and above [   ]

## SECTION B

For every statement in the instrument bellow, you are to choose between the four (4) alternatives provided. They represents as follow: SA= Strongly Agreed, A= Agreed, D=Disagreed, SD=Strongly Disagreed.

Indicate strictly with a tick (✓) in the appropriate columns under one of the alternatives that best express your opinion.

S/N	SECTION 1: INFORMATION AND COMMUNICATION TECHNOLOGY(ICT)	SA	A	D	SD
1	ICT is indispensable tool in the administration.				
2	Computer is the best known example of ICT				
3	ICT solves some specific administrative problems.				
4	Computer increases efficiency in an organization				
	<b>SECTION 2: ICT APPLICATION</b>	SA	A	D	SD
1	ICT application improves general administrative activities.				
2	ICT application facilitates exchange of information.				
3	ICT application enhances budget planning.				
4	ICT application helps evaluates general academic activities				
	<b>SECTION 3: BUDGET PLANNING</b>	SA	A	D	SD
1	ICT facilitates allocation of resources				
2	ICT prevents financial mismanagement.				
3	ICT. facilitates payment of staff salaries				
4	ICT enhances monitoring of financial resources.				
	<b>SECTION 4: ACADEMIC ACTIVITIES</b>	SA	A	D	SD
1	ICT enhances preparation of school curriculum				
2	ICT facilitates evaluation of academic activities				
3	ICT enhances overall students admission				
4	ICT provides teaching and learning resources.				
	<b>SECTION 5: RECORDS KEEPING AND REPORTS</b>				
1	ICT enhances data processing				
2	ICT facilitates adequate data storage of academic records				
3	ICT produces accurate data/information				
4	ICT facilitates data storage of administrative records.				

APPENDIX B

Department of Education

3011

State

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e : 09/11/2015

**B.U.K.**

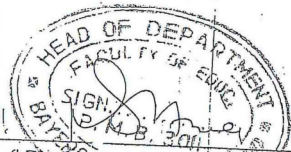
*Bayero University, Kano*

ar Sir,

LETTER OF INTRODUCTION

is is to certify that: Malik MANZUMA with Registration  
number: SPS/12/mcd/00003 is our student in the Department  
Education. Bayero University, Kano.

ndly render any assistance he/she may require from you.



of Talatu M. Garba  
ad of Department

## APPENDIX C

### SPHERE MAN RANKING

N	Test 1	Test 2	R1	R2	R1-R2	D
1	60	41	1	7	-6	36
2	39	51	12	2.5	9.5	90.25
3	29	27	18	18	0	0
4	42	35	9	13	-4	16
5	40	32	11	15	-4	16
6	18	26	25	19	6	36
7	32	40	16	8	-2	4
8	20	21	24	23	1	1
9	37	51	14	2.5	11.5	132.25
10	45	38	8	10	-2	4
11	21	24	23	20	3	9
12	41	39	10	9	1	1
13	50	43	6	5.5	0.5	0.25
14	23	23	22	21	1	1
15	34	30	15	16	-1	1
16	52	28	4	17	-13	169
17	51	37	5	11	-6	36
18	24	22	21	22	-1	1
19	55	43	2.5	5.5	-3	9
20	30	61	17	1	16	256
21	26	19	19	25	-6	36
22	38	36	13	12	1	1
23	46	34	7	14	-7	49
24	25	20	20	24	4	16
25	55	50	2.5	4	-1.5	2.25

$\Sigma D^2=913$

$$\text{Rho} = \frac{1 - 6\Sigma D^2}{n(n^2 - 1)} = \frac{1 - 6 \times 913}{25(25^2 - 1)}$$

$$= \frac{1 - 5478}{25(625 - 1)} = \frac{1 - 5478}{25 \times 624}$$

$$= \frac{1 - 5478}{15600} = 1 - 0.35$$

$$= \underline{\underline{0.65}}$$